

DEPARTMENT OF LABOR AND INDUSTRIES

STATE OF WASHINGTON

ELEVATOR TECHNICAL ADVISORY COMMITTEE MEETING

TRANSCRIPT OF PROCEEDINGS

February 8, 2022

Day 1

Taken Before:

Mary Jo Fratella, RPR, CCR #2083

of

CAPITOL PACIFIC REPORTING, INC.

2401 Bristol Court S.W., Suite C-103, Olympia, WA 98502

Tel (360) 352-2054 Toll Free (800) 407-0148

www.capitolpacificreporting.com

admin@capitolpacificreporting.com

A G E N D A

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

AGENDA ITEMS

PAGE NO.

Meeting Purpose	4
Agenda	6
Rules of Engagement	9
Roles and Responsibilities - Voting Members and non-voting/observing participants	9
Microsoft Teams How-To/Housekeeping	11
Turn Camera On	11
Raise Hands	12
Mute	14
Housekeeping	14
Questions/Clarifications	18
Safety Tip	21
Introductions	26
WAC Rule Review	33
Adjourn	282

1 BE IT REMEMBERED that Day 1 of an Elevator
2 Technical Advisory Committee Meeting was held via
3 Microsoft Teams videoconferencing at 8:30 a.m. on
4 Tuesday, February 8, 2022, before Mary Jo Fratella,
5 Washington State Certified Court Reporter.

6 The Technical Advisory Committee
7 facilitators were Melissa Eriksen and Paoakalani
8 Naipo.

9

10 * * * *

11

12

13

14 P R O C E E D I N G S

15

16

17 MR. NAIPO: All-righty. So, with that,
18 we'll get started. So, I just want to thank everyone
19 for their time and willingness to partake in this work
20 that we're going to be doing over the next three days.
21 Hopefully it will not take the whole three days, but
22 it's going to be a lot of work and it's all dependent
23 on the effort that you guys put in and how quickly
24 we're able to come to a consensus on these things.
25 What we're going to do real quickly is, first and

1 foremost, I'm going to swap our agenda around a little
2 bit. I'm going to go over this stuff first and then
3 we'll go to the safety tip and introductions.

4

5

6

7

Meeting Purpose

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

So, the purpose for today's meeting is, like it says it says right up here, start review of all WAC changes and garner a vote for the stakeholder group you represent by either voting yea, nay, or abstain. One of the -- One of the biggest things I want people to understand, and I sort of alluded to it in e-mails that I'd sent out, is this TAC Committee is not here to really discuss or find out how our program is going to do this. The how comes after we define the why, okay. And then there's going to be the what, so that's what we're doing, is what is being proposed something that is going to positively effect either the safety of those that are riding conveyances, working on them, or you as the stakeholder, as a building owner, general contractor, so on so forth.

1 So, I don't mean to cut off anybody when people start
2 asking, you know, "How is the program going to do
3 that?" or I see that the conversation is going that
4 way. Those are conversations that will be had. It's
5 just right now, without knowing whether or not we're
6 going to do this or not, we don't really need to
7 discuss the how, and a lot of people want to figure
8 how you're going to do that, "This isn't place for
9 this", "Well, this isn't the place for that." Those
10 conversations will be had at the ESAC level, as well
11 as when the program finally gets the list from the TAC
12 from the recommendations you guys put forward and ESAC
13 signs off on them, and our program knows, hey, our
14 stakeholders want this, so how do we make this happen,
15 and that's when we define the how.

16 We will be reaching out to stakeholders and let
17 them know, "Hey, this is what's going -- You guys
18 submitted this stuff. This is our plan to get this
19 implemented", whether it's a time frame, whether it's
20 a budget change that we're going to have to make.
21 Those conversation will be had. It's just this is not
22 the place for that.

23 ///

24 ///

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Agenda

As far as our agenda goes, how it breaks down is so we're starting with our meeting purpose, going over the agenda, rules of engagement, and what this is is, hey, these are the rules of our conversation today, how it's going to go. Yes, this is not set in stone, things can change. Just understand that, as well as understanding the roles and responsibilities of the people who are here.

As you can see, we have quite a few people in attendance. A lot of people are here just to observe what's going on, which is totally fine and great because we want them to understand the process that we're going through or that you guys are going through as the Technical Advisory Committee and the conversations you have and whether we're going to move forward on these things or not. I'll give you guys the opportunity to ask any questions and clarifications on things regarding the rules of engagement or the whole meeting purpose. Then we will go over the safety tip that Melissa will be giving you hopefully here in the next few minutes. And then

1 we'll take about 15 minutes to go over the
2 introductions, and the introductions I don't know if
3 we want do just the voting members of the TAC or
4 everyone in attendance, I'm not quite sure, so just
5 the TAC, I'm assuming. Okay, so just the voting TAC
6 members. Melissa will be going over the introductions
7 for it.

8 We will be having breaks. Right now I have
9 breaks scheduled for 9:30, 11:00, 1:30, and 3:00. We
10 can take more, okay. Because this is a virtual
11 environment, I want to make sure everyone stays
12 engaged. If I see you guys start falling off and
13 fading out, hey, if we need to take a break we'll take
14 a break. If a discussion starts getting a little
15 heated, we will take a break, you know, come back and
16 reconvene, and let people take a breath, and, you
17 know, relax a little bit, and we'll come back. So,
18 there will be multiple breaks allotted for everyone.
19 We'll take lunch at about 12 o'clock, depending on
20 where the conversation is. Again, if we end a big
21 conversation maybe prior to 12:00 we may take it a
22 little early or, if there's a conversation going on,
23 it may be pushing past noon, but at least you
24 understand, hey, around noon-ish we'll be having a
25 half hour lunch.

1 We hope to begin everything, the WAC review at
2 about 9:30 -- oh, I skipped over that, sorry -- and
3 then lunch at 12:00. We'll come back at 12:30,
4 continue that, hoping to close and review all the
5 stuff that we got done and close by about 4:50, and
6 then adjourn at five o'clock. And, then, we'll start
7 back up at 8:30 tomorrow morning, and tomorrow morning
8 we're going to just jump right in where we left off
9 today and hit the ground running with what I'm
10 hoping -- In a perfect world I'm hoping that we can
11 get through all the WAC changes today and get a
12 consensus on your stakeholder vote on whether you're
13 voting, yea, nay, or abstaining from it, so that way
14 tomorrow we can start with what I believe is a heavy
15 load of codifying both 17.1 and the changes in 18.1.

16 All right. With that being the plan for today
17 and the agenda, does anybody have questions about
18 this? Does anybody -- Does everybody understand, hey,
19 this is the framework that we're going to try to work
20 under, these are some of the roles that we're going to
21 be doing, anybody have questions for that? Nothing?
22 Can I get a thumbs up from people who, "Hey, I got
23 this. I understand where we're going." All right,
24 cool. I appreciate it. Thank you, everyone.

25 Yes, Jan?

1 MS. GOULD: Sorry, just raised my hand
2 instead of waving. Sorry.

3 MR. NAIPO: No worries, no worries. All
4 right.

5

6

7

8

Rules of Engagement

9

10

11

Roles and Responsibilities - Voting Members and

12

Non-Voting Members/Observing Participants

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. NAIPO: Rules of Engagement. I know that terms sounds a little quite military-ish and militant, but it's not. It's just the rules that we're going to try to get this work done. The main thing is, if you can, we're here for eight hours for three days, okay, please try not to work on work items and try not to answer any phone calls, e-mails. Please leave your cell phone away from your purview as much as possible because we want you guys to be -- we want you to participate as much as possible, okay, and

1 if we have those other distractions, unfortunately it
2 can take us away from you possibly hearing something
3 or something that you can address maybe for another
4 stakeholder as far as a question they have, you may
5 the have answer; so, please, out of respect for
6 everyone, if you could, we're all here, we're all
7 staring at each others' mugs from the chest up, let's
8 just get through this stuff as quick as we can. But
9 at the same time I need people to understand the value
10 of the vote that you have, okay.

11 We are giving you guys the opportunity to vote
12 yes, no, or if you want to abstain from voting, okay.
13 Yes means, hey, you understand that this is a positive
14 thing, whether it be for safety or whether it's
15 positive for your stakeholder group, great, move
16 forward with it. If you don't believe it's covering
17 anything that really is going to help your
18 stakeholders out, but you can see the value in it, it
19 doesn't mean you have to vote nay. If you can step
20 outside your box and the people that you represent,
21 and you can look at, hey, this doesn't affect us, but
22 it possibly can affect those guys possibly over there,
23 you can feel free to vote yea for that as well. Just
24 because it doesn't affect you directly doesn't mean
25 you have to vote nay or abstain from anything, okay.

1 Nay means, hey, exactly that, I don't think this is a
2 positive thing for my stakeholder group, which is
3 totally fine, and you can vote no for that.

4 Abstain. I don't know if we'll get a lot of
5 abstaining on this, but if you totally feel like, hey,
6 I -- I don't feel educated enough on this, I don't
7 understand the impact to it, I really don't believe it
8 impacts us in a positive or negative way, and you can
9 remove yourself from that vote by abstaining from it.

10 Once we get to vote tallies, depending how some
11 thing -- some things weigh out, we may have to
12 re-vote, that's fine, but we'll try to make, again,
13 the voting process as quick as possible.

14

15

16

17

Microsoft Teams How-To

18

19

Turn on Camera

20

21

22

23

24

25

 Please make sure your camera is on, again just
out of respect for everyone. I know not everyone can
see everyone, but once someone starts talking they're
going to pop in to how ever many tiles you have on

1 your -- on your screen. So, just because you can't
2 see someone doesn't mean we can't -- they don't have
3 their camera on.

4

5

6

7

Raise Hands

8

9

10 MR. NAIPO: Sergey's got a question. Yes?

11 MR. DOLGIKH: Yes, Paoa. You're speaking of
12 voting mechanism, but how do we physically vote to
13 reflect what we're voting on, like is there a specific
14 checkmark somewhere that everybody sees or a hand up
15 for a yea and we do thumbs down for nay? I mean
16 what's -- what do we do?

17 MR. NAIPO: So, what I'm thinking is that
18 when -- Yes, Melissa?

19 MS. ERIKSEN: What Paoa would like you to do
20 is when he says, "If you vote yea," if you're voting
21 yea, raise your hand. When he asks if you're voting
22 nay, raise your hand, is anybody abstaining, raise
23 your hand. That's how we're going to count.

24 MS. DOLGIKH: That's fabulous. Thank you.

25 MR. NAIPO: But since we can't see

1 everybody, because right now I don't have 25 tiles on
2 my screen, should they raise their hand physically or
3 should they raise their hand like they're going to ask
4 a question?

5 MS. ERIKSEN: So, I need everybody to raise
6 your hand like you're going to have a -- like you have
7 a question, and the reason why that works is because I
8 have the participation list up and I can count
9 everybody.

10 MR. NAIPO: Okay. So, if everyone doesn't
11 know, up in the top right hand corner you're going to
12 see a little smiley face with a little hand on it. If
13 you click on that, it'll drop down different icons
14 that's presented to you, the one on the far right, or
15 if you also hit Control, Shift, and K that will also
16 raise your hand letting people know, hey, this is how
17 you're voting. And, then, when you hear that, "Hey,
18 the votes have been counted for yea", go ahead and
19 remove your hand so that way we can go on to the
20 people who are voting nay, all right.

21 So, please make sure your camera is on.

22 ///

23 ///

24 ///

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Mute

MR. NAIPO: Please make sure when you're not speaking to mute your mic. Unfortunately in a virtual real-- virtual reality -- in a virtual setting if multiple people are having a conversation someone is going to cut off because this does not capture stuff in stereo and broadcast it out in stereo. It's really just one channel. So, if three or four people are talking, someone's not -- we're not going to be able to hear one of the people saying stuff; so, please, out of respect for everyone, try to stay muted, and when you need to -- you have something to interject, raise your hand, raise your hand and we'll call on you, or you can just unmute yourself and when the opportunity arises you can start to speak.

Housekeeping

MR. NAIPO: Yes, Dylan, did you have a question?

MR. LATHE: Yes. How soon after you vote do

1 you lower your hand because that's going to be
2 important.

3 MR. NAIPO: Once Melissa gives you the okay
4 that she's counted all of the yeas, the nays, and so
5 forth, at that point then you'll be able to lower your
6 hand.

7 MR. LATHE: Thanks.

8 MR. NAIPO: I figure it might take us a
9 couple rounds to get used to this; so, it's okay.
10 Feel free to ask clarifying questions, okay. Like I
11 said, each vote counts, okay. Just because it doesn't
12 maybe impact your stakeholders, they still are going
13 to impact someone else that's represented here. So,
14 if you can think outside the box and, hey, I can see
15 where this would be a positive for them, please feel
16 free to do that because I don't want people to feel
17 like they're voting emotionally or anything like that.
18 I want you guys to feel like you're making an educated
19 vote, and if you don't feel, like I said, that you got
20 it, you can abstain from it or ask more clarifying
21 questions to see if you can get to that point to where
22 you feel confident in making a recommendation of yea,
23 nay, or an abstain.

24 Yes, Carl?

25 MR. CARY: Do we need to introduce ourselves

1 before we speak or anything like that, or do we
2 need -- because I know there's a court reporter, so do
3 we need to say, "Carl Cary", blah, blah, blah, or
4 something like that?

5 MR. NAIPO: Yes, yeah, as best as possible.
6 So, yes, when you raise your hand or you ask a
7 question and you start to speak, like you said, "Hey,
8 Carl, this is Carl Cary", and then state your question
9 and everything like that, and, then, whoever is going
10 to answer that, do the same thing, so...

11 So, as far those TAC members in attendance, you
12 are able to speak and conversate on these changes and
13 the like. ESAC members or anyone else that's
14 observing, unless you're called upon, please make sure
15 you stay muted, all right. I know in an in-person
16 type setting, you know, it's a lot easier to just have
17 conversation and call upon people, but in this -- the
18 intent of this is really to have the people who
19 volunteered for this, the TAC members, to be able to
20 have the conversations on their feelings for these WAC
21 changes, okay.

22 Once we start going over the WAC rule changes,
23 as well as the code changes, questions and
24 clarifications are going to be open, so what's going
25 to happen is I'm going to tell you guys the proposal

1 number, the WAC rule that's being amended or changed,
 2 and then we will go over the rationale and then the
 3 change for it. I want you guys to understand that
 4 rationale and intent is, I believe, one of the most
 5 important things in writing law because once people
 6 lose sight of the rationale that this law was put in
 7 place, it then becomes someone's opinion on what it
 8 is, and we've just gone through something like that
 9 because someone had a differing opinion that's been --
 10 this is the opinion of previous people because they
 11 understood the intent of it, well, then, this new
 12 person had read it and didn't understand the intent,
 13 and, therefore, they made a totally different judgment
 14 on something because of how they believed it was read.
 15 So, we want to look at the rationale and the intent
 16 first and foremost, and, hey, do we understand that,
 17 is that good, all right, cool, does this change to the
 18 WAC create that and do what this person was trying to
 19 have done.

20 So, we're going to give you guys the opportunity
 21 to ask questions. Once questions are posed, anybody
 22 who is giving an answer you will have two minutes,
 23 okay, to give that answer and to reply. We will then
 24 have to take on additional questions, and, again,
 25 anyone who replies to that question you will have two

1 minutes to give that reply to the question. Again,
2 this was just in time to help us get the amount of
3 volume of work that we have.

4 Does anybody have questions about that? Once
5 questions are done, then we'll take time to vote. But
6 does anybody have questions about how this process is
7 going to work when we go from each line item, anybody?

8 All right. The main thing is please have
9 respect for those who are -- who may have differing
10 opinions than you, okay. The job of this TAC is not
11 to change people's minds. It's just to educate them
12 and let them make an educated decision on whether this
13 change to them is going to impact their stakeholders
14 in a positive or negative way. That's it. We're not
15 here to change people's minds, just really educating
16 them and then letting them make that educated
17 decision, all right.

18
19

20 Questions/Clarifications

21
22

23 MR. NAIPO: So, outside of that, does
24 anybody have any questions about the agenda, rules of
25 engagement, or anything like that that we've gone over

1 so far? Any questions, going once, going twice. All
2 right. Well, thank you guys very much again. Looking
3 forward to --

4 MS. ERIKSEN: Hold on.

5 MR. NAIPO: Did someone have their hand
6 raised? I'm sorry, I missed it.

7 MR. BARNHART: This is Paul Barnhart from
8 UL, and I apologize, I don't recall who is a TAC
9 member and who is not. I think I am, but I wanted to
10 verify that before voting started.

11 MR. NAIPO: You are. You are a voting,
12 member, Paul.

13 MR. BARNHART: Okay. And I've got my
14 associate, Tim Evans, with me and, obviously, I think
15 we should just have one vote; is that correct?

16 MR. NAIPO: Yeah. We have you both down as
17 a voting member for -- Melissa, how would that be
18 handled when each of their -- Is it safe to say that
19 you both represent the same thing and that if one
20 votes yea the other one is going to vote yea, as well?

21 MR. BARNHART: Oh, yeah, I'm certain of --

22 MR. NAIPO: Okay. The reason Tim got
23 involved was because I wasn't sure I was going to make
24 anything; so, we're both here.

25 MR. NAIPO: Got it.

1 MR. BARNHART: We'll have one vote. I'll do
2 the voting unless I assign it to Tim, thank you.

3 MR. NAIPO: All right. Anybody else have
4 any questions? All right, moving on. Safety tip and
5 then introductions.

6 MS. ERIKSEN: Candace, you had a question?

7 MS. LAU: Yeah, just a quick question. I
8 know in the past we had friendly amendments to some of
9 these things. Are we doing that this year or is that
10 something that we're not able to do?

11 MR. NAIPO: So, I think it is unfair for us
12 to think that people who submitted these changes know
13 how to write laws, and rules, and so forth, so the
14 main thing is, time permitting, we will do as much
15 editing to this as we can so that we can hand out the
16 best product to the ESAC as possible, but, if we don't
17 have time to make those edits, which we were going to
18 do on the very last day if we have time, then that
19 will be part of the work that the ESAC has to do,
20 unfortunately, is to get this verbiage correct. But,
21 yes, we will be tracking which ones you, as the TAC,
22 feel need, hey, a little tweaked. We're trying to get
23 together as much notes as we can, but I don't want to
24 make this an editing session because editing becomes
25 people's opinions and it can draw this process out a

1 little bit longer than the tight time frame that we
2 have, so... But, yes, will be allowing edits to be
3 done.

4

5

6

Safety Tip

7

8

9 MS. ERIKSEN: All right. Cool. Hi, I'm
10 Melissa. Let's talk safety. So, for those of you who
11 have never attended an L & I function, this is a fun
12 thing we like to do. So, I'm sitting there this
13 morning going, "Crap, I still have no idea what I'm
14 going to talk to you guys about", and then I pulled
15 out my straight hair. Thankfully I did not burn
16 myself this time, however I have in the recent past.
17 So, I'm like, "getting burned", yes, let's talk that.
18 So, that's what we're doing.

19 There are four types of burns. There's first,
20 second, third, and fourth degree burns. Fourth is
21 something that was new to me. And what are your
22 symptoms. Symptoms of burns: Your first degree is
23 red, and it's painful, and your skin is there's no
24 blistering. Second is red and painful skin. There is
25 blistering and there's swelling. Third degree burns

1 to skin can be white, black, deep red, or charred
2 unfortunately, and it could be painful, and it could
3 be numb. Fourth degree is there is zero feeling and
4 that's because it's pretty horrific.

5 What are causes? So, we all know the sun burn
6 I'm probably the most pale person you'll ever meet in
7 your life and I can burn thinking about the sun. So,
8 there's that. That's obvious. Cooking, we all get
9 burned during cooking. There's thermal burning,
10 radiation, friction. If we all have ever had a rug
11 burn or a wood burn, not fun. Electricity, chemicals
12 and cold.

13 So, how do you treat this? First degree
14 everybody goes to aloe. So, aloe is a great topical
15 treatment for a burn. Grab your grandma's cold cream,
16 if there are those of us who are old enough to
17 remember what that is sitting on the bathroom counter,
18 it's always a great go-to. There's neosporin, there's
19 burn cream, you have your acetaminophen and your
20 Ibuprofen for pain and swelling. Second degree, same,
21 neosporin, and burn cream, acetaminophen, and
22 Ibuprofen. Third and fourth degree you need to see a
23 doctor.

24 So, what can you do if someone gets burned? And
25 I think we need to remember that sometimes everybody

1 will get burned differently because we all -- our skin
 2 and what have you is different. So, it can be, you
 3 know, like I said, sunburn, it can be you're cooking
 4 and you spill water on you, or you touch the element
 5 or a hot pan. For those of us who are parents or
 6 grandparents or who have been around children at all,
 7 there is multi-tasking involved and a lot of times
 8 you'll have a baby in one arm and you'll be cooking in
 9 another and the heat coming from what you're cooking
 10 it can hurt that baby's skin because it's a lot
 11 thinner than ours. There's that. There's seatbelts.
 12 Seatbelts and the interior of your car on a hot summer
 13 day, we all know that this is hot. Metal slides and
 14 going to the park.

15 One of the newest trends is -- in the beauty
 16 world is freezing your fat off; so, that's really,
 17 really cold, and the cold can burn you just as much.
 18 Just being cognizant of your surroundings and what
 19 you're doing so that you can be careful.

20 What can you do? If you're not the one burned
 21 and you're with somebody get them away from whatever
 22 that cause is. If it's an electrical burn make sure
 23 that the electricity is turned off before you're going
 24 near them or around them. In some cases remove
 25 anything that might be rubbing or constricting; so,

1 this is for like your first and second degree burns,
2 which is what we're all basically going to be dealing
3 with, for the most part. Make sure that nothing is
4 rubbing. Cover the burned area with a clean cool
5 washcloth or a slightly wet, not dripping, slightly
6 wet bandage. That will help protect the burn area.
7 Don't put large serious burns in water, and there's
8 two reasons for that, actually. Your skin is super
9 duper hot and you dunk that area in cold and it can
10 actually lead to hypothermia, which is a whole
11 different thing that you don't want to deal with.
12 Just like when you get hurt, if you can keep the
13 burned area above the heart as much as possible. And,
14 then, depending on the type of burn and again who that
15 person is because we all react differently, watching
16 for signs of shock; so, that looks like fainting,
17 dizziness, pale skin, shallow breathing. If you
18 notice any of these things, try raising the -- putting
19 the feet and legs, elevating them, and if somebody is
20 going to get sick, which is a natural reaction, if
21 they're laying down roll them over.

22 So, what do you not do? This first one kind of
23 surprised me because the first thing I was ever taught
24 about getting burned when cooking is, oh, you burned
25 yourself, put it under water, and where, yes, that's a

1 good go-to, it's not always the best go-to. Using
 2 really cold water, using ice, it actually damages the
 3 burn and your skin a lot more, and we don't want to do
 4 that. Another thing you don't want to do is, if it's
 5 a burn that breaks the skin, you don't want to put it
 6 under water or have water introduced to it because it
 7 introduces bacteria and you're dealing with a whole
 8 different type of infection there.

9 Like I said, I can burn thinking about the sun,
 10 which means I have probably had every, you know,
 11 remedy used on me known to man and then some. My
 12 favorite was when we lived in Louisiana. The first
 13 thing they grabbed for was the butter. I'm not a
 14 steak; please don't cook me. It doesn't -- It smells
 15 good, it smells way better than the vinegar, but it's
 16 bad, and if there's any chance that your burn is going
 17 to get worse or if it's open, it's layered in butter,
 18 lard, vasoline, that's all stuff that has to be
 19 removed by a doctor; so, just save the person some
 20 trouble. Even if that's you, don't do that.

21 If something is not -- I told you earlier if
 22 something is going to rub against the burn, remove it;
 23 however, if that thing you're trying to remove is not
 24 removing immediately, do not remove it. I'm not even
 25 going to get into why, but just don't. And, then,

1 depending upon how intense the burn is, do not give
2 that person anything by mouth, no water, no food, and,
3 as much as we might want to comfort them, don't put a
4 pillow or something underneath their head because what
5 that's going to need for -- because what we're most
6 likely looking at there is a serious burn needing a
7 doctor's help. It can impair their airway.

8 So, in conclusion, be careful. If -- Just be
9 aware of your surroundings and hopefully you'll never
10 have to use any of those tips I gave you. Thank you.

11 MR. NAIPO: Do you want to do the
12 introductions? You're muted. You're muted.

13
14

15

16

Introductions

17

18

19

20

21

22

23

24

25

 MS. ERIKSEN: Hi, I'm Melissa, and I talk
while being muted. Oh, wrong group. This is not that
support group. Sorry. So, introductions. I'm going
to call on people so that you can -- not everybody is
talking at once, and if you would please say your
first and last name and where you're from that would
be helpful. So that people do not feel left out, I am

1 going to call on active TAC participants. For those
2 of you, like I said earlier, who are observers, we
3 really appreciate that you're here and thank you for
4 joining us, but I'm not going to call on you. So,
5 just know that in advance.

6 Let's start -- Let's start with Russ. And don't
7 be like me and talk while muted. Russ Larson, are
8 you there?

9 MR. NAIPO: You're muted.

10 MS. ERIKSEN: All right.

11 MR. NAIPO: Oh, there he is.

12 MR. LARSON: Can you hear me now?

13 MS. ERIKSEN: Uh-hmm.

14 MR. LARSON: All right. Perfect. Good
15 morning, everyone. My name is Russ Larson and I am in
16 Connecticut right now where it is 12:03 p.m. So, glad
17 to be part of the group. Thank you for having me.

18 MS. ERIKSEN: Thank you. James Alexander.

19 MR. ALEXANDER: James Alexander, Elevator
20 Inspector 1 with Labor and Industries. Happy to be
21 here today.

22 MS. ERIKSEN: Thank you. Paul.

23 MR. BARNHART: Paul Barnhart with
24 Underwriters Laboratories.

25 MS. ERIKSEN: Thank you. Bob, Bob Oury.

1 MR. OURY: Oops, sorry, I hit the wrong
2 button. Bob Oury, Pace Material Handling, electrical
3 contractor.

4 MS. ERIKSEN: Thank you. Gerald.

5 MR. NAIPO: He said he just stepped away.

6 MR. BROWN: Oh, I'm back. Hi, I'm Gerald
7 Brown, the Chief Elevator Inspector for Washington
8 State, and, once again, thanks everybody for being
9 here.

10 MS. ERIKSEN: Thank you. Elena.

11 MS. CAMPBELL: Good morning. I'm Elena
12 Campbell. I'm one of the chief elevator inspectors
13 for the city of Seattle.

14 MS. ERIKSEN: Thank you. John Carini.

15 MR. CARINI: Good morning. My name is John
16 Carini. I'm with Sound Transit and I'll be
17 representing the building owners and property
18 managers.

19 MS. ERIKSEN: Thank you. Carl.

20 MR. CARY: Carl Cary with Lerch Bates,
21 elevator consulting, and I will also be representing
22 building owners.

23 MS. ERIKSEN: Sergey.

24 MR. DOLGIKH: Sergey Dolgikh, Elevator
25 Inspector II, L & I, in Olympia area. Glad to be

1 here.

2 MS. ERIKSEN: Thank you. Dylan Montgomery.

3 MR. MONTGOMERY: Dylan Montgomery. I am
4 with the State Fire Marshall's Office.

5 MS. ERIKSEN: Thank you. Dylan Turner.

6 MR. TURNER: Dylan Turner, Greenbusch
7 Engineering representative.

8 MS. ERIKSEN: Thank you. Eric.

9 MR. MILLS: Which one?

10 MS. ERIKSEN: You.

11 MR. MILLS: Eric Mills, field mechanic,
12 Local 19.

13 MS. ERIKSEN: Thank you.

14 MS. ERIKSEN: Tim Evans. Okay, maybe he
15 stepped away. We'll come back to him. Jan.

16 MS. GOULD: Greetings. Jan Gould, City of
17 Seattle, strategic code advisor. Welcome all.

18 MS. ERIKSEN: Thank you. James Cline.

19 MR. CLINE: Hi, good morning. James Cline,
20 Pace Material Handling representing Category 5.

21 MS. ERIKSEN: Thank you. Jonathan Quiett.

22 MR. QUIETT: Good morning. Jon Quiett at
23 Port Orchard, Washington. Well, I guess -- I think
24 it's technically I'm representing the company now, but
25 it should have been field mechanic. Dylan's spot.

1 MS. ERIKSEN: Thank you. Jonathan Madison.

2 MR. MADISON: Jon Madison, field mechanic,
3 basically of Washington area.

4 MS. ERIKSEN: Thank you. Kevin.

5 MR. BRINKMAN: Good morning. I'm Kevin
6 Brinkman. I live in central Illinois. The list, I'm
7 a representing ASME panel member. I just need to make
8 it clear because I don't officially represent ASME.
9 I'm -- Basically my experience is based on my 25+
10 years working with the ASME committees and serving on
11 various committees and stuff. So, I can't officially
12 speak for them, but I'm speaking in my personal
13 experience.

14 MS. ERIKSEN: Thank you so much. Dylan
15 Lathe.

16 MR. LATHE: Dylan Lathe, L & I. I represent
17 elevator inspectors.

18 MS. ERIKSEN: Thank you. Candace.

19 MS. LAU: Candace Lau, elevator technical
20 specialist for the Department of Labor and Industries.

21 MS. ERIKSEN: Thank you. Duane.

22 MR. LEOPARD: I'm Duane Leopard, elevator
23 inspector extraordinaire for the wonderful city of
24 Spokane.

25 MS. ERIKSEN: Thank you. Perry.

1 MR. MCKENZIE: Perry McKenzie, Region 2,
2 elevator inspector supervisor for Labor and
3 Industries.

4 MS. ERIKSEN: Thank you. Mike Wilson.

5 MR. WILSON: Mike Wilson. I'm representing
6 elevator mechanics.

7 MS. ERIKSEN: Thank you, Mike. Patrick.

8 MR. STRAFER: Good morning, everybody,
9 Patrick Strafer, IUEC, representing labor. I am not
10 happy to be here. I'd much rather be in person, but
11 adapt or die, I guess; so, here we are. Thanks for
12 being here.

13 MS. ERIKSEN: We are right there with you,
14 Patrick. Scott Rudder.

15 MR. RUDDER: Scott Ruddder, elevator tech
16 specialist, Labor and Industries.

17 MS. ERIKSEN: Scott Cleary.

18 MR. NAIPO: You're muted. Scott, you're
19 muted.

20 MR. CLEARY: You told me I couldn't talk;
21 so, I took it serious. Scott Cleary, Mobility
22 Concepts. I'm the Chair of the ESAC and I'm a
23 non-voting member.

24 MS. ERIKSEN: Thank you. Tom Hawks.

25 MR. HAWKS: I'm Tom Hawks. I'm in southeast

1 Washington. I represent the grain industry and work
2 for Northwest Grain Growers.

3 MS. ERIKSEN: Thank you, Tom. Wade.

4 MR. FRIESEN: Wade Friesen, Vertical
5 Options, elevator contractor.

6 MS. ERIKSEN: Thank you. Is Tim back, Tim
7 Evans?

8 UNIDENTIFIED SPEAKER: He unmuted and now
9 I'm not sure he's here yet or not.

10 UNIDENTIFIED SPEAKER: He's popped up.
11 There he is.

12 MR. EVANS: Tim Evans representing UL, and
13 technically illiterate this morning. It's a pleasure
14 to be here.

15 MS. ERIKSEN: Thank you so much. You're in
16 good company. We all are. Some of us just make it
17 better. All right. So, Paoa, do you want to
18 officially introduce yourself?

19 MR. NAIPO: So, yeah, my name is Paoakalani
20 Naipo. I am a program specialist with the elevator
21 program and here to herd all you cats in getting this
22 work done, so... No, you're not cats. Maybe some of
23 you are dogs. I don't know. My brain is mush right
24 now. So, we're just going to keep going. So, I
25 appreciate you guys and thank you guys for all the

1 work you guys are about to do.

2 MS. ERIKSEN: Thank you. So, I'll finish it
3 off. I'm Melissa. I'm with the elevator program. I
4 have talked with all of you, and, like I said, if you
5 have anything specific you need to reach out to, I'm
6 your girl, reach out.

7 MR. NAIPO: All-righty. So, with that, our
8 first scheduled break is at 9:30 and what we'll do is
9 we will just work through these first couple and then
10 around 9:30 take that break. So, here's where the
11 work starts, guys and ladies.

12

13

14

15

WAC Rule Review

16

17

18

19

20

21

22

23

24

25

MR. NAIPO: We're going to start with
proposal 2022.0022. It's regarding WAC 296.96.00650
and it's about removing the guide for inspection of
elevators, escalators, and moving walks, ASME A17.2
2017. The justification is, "This is intended to be a
guide for the inspection process by inspectors, not as
a reference code per the section two and the
introduction under application. The second sentence

1 states, 'It is not intended to serve as a basis for
2 government regulations.' This guide can be referenced
3 elsewhere in our WAC, but because of where it is
4 housed now it is confusing as it gives the perception
5 we are to be using it as a reference for issues that
6 may arise in different -- differing inspections.
7 Which is not the intent of this guide.

8 Any questions regarding that rationale? Any
9 clarifications needed? Are there any comments
10 regarding that? Okay. Then, with no one asking
11 questions and no one asking for any type of
12 clarifications, I feel like we'll take the first vote.

13 So, for those voting yea on having the A17.2
14 guide removed from our list of adopted codes that our
15 program enforces, those voting members voting yea
16 please raise your hand. I'll call again. Those
17 voting for yea, please make sure that your hand is
18 raised.

19 Are you good?

20 MS. ERIKSEN: Thank you.

21 MR. NAIPO: Okay. So, those who voted yea
22 can put your hands down. Those voting nay please
23 raise your hand. All right. Again, if anybody else
24 is wanting to vote nay please raise your hand. All
25 right. So, it looks like we have a vote cast for

1 that.

2 And if anybody would like to abstain, please
3 raise your hand at this point, at this time. All
4 right. Thank you. And moving on.

5 675(10) is being asked to strike out the "and to
6 allow alternative test methodologies". Right now it's
7 stated in paren ten: "The Department will not allow
8 the 8.6.11.10 'Category 5 tests without load via
9 alternative test methodologies' portion of the ASME
10 A17.1 to be followed in Washington. Standard testing
11 as outlined in ASME A17.1 shall be followed."

12 "Alternative testing should be allowed.
13 Alternative testing was added in the 2013 edition of
14 A17.1 after passing the rigorous consensus process.
15 The code recognizes that certain technology allows
16 safety tests to be performed without the need for
17 elevator personnel to move heavy weights, thereby
18 reducing the likelihood of injury to elevator
19 personnel. Strains and sprains, which are often the
20 direct result of moving the thousands of pounds of
21 weights required for these tests, account for over
22 half of all injuries to elevator personnel.
23 Additionally, the Department retains the ability to
24 authorize any alternative testing before it is
25 implemented in the jurisdiction."

1 And I apologize. That is regarding proposal
2 2022.0045. Any questions for clarifications needed on
3 this? Kevin?

4 MR. BRINKMAN: Yeah, Kevin Brinkman. I
5 think proposal 0001 is basically the same; so, there's
6 some additional comments there and rationale, and it
7 might be wise to handle these two together. But I'd
8 just like to say that, you know, alternate testing,
9 you know, has been in the code for a while, and I
10 think it's something that really can help improve
11 safety and should be considered very seriously here,
12 that obviously maintaining the control by the
13 jurisdiction so that any tests that -- test methods
14 that are proposed throughout the testing should be
15 approved by the jurisdiction. They should have the
16 final say. But I think it's an important addition
17 that was put in A17 and I think it should be allowed
18 here. Thank you.

19 MR. NAIPO: All right. And he is correct.
20 So, what I'll do is I'll read the rationale on 0001.
21 Let's see, where's that at? There it is. Okay.
22 Submitted rationale for striking, again, the
23 alternative test methodologies, that's been amended.
24 The rationale on 2022.0001 is: "There is no rationale
25 to prevent using alternative testing. The

1 alternative -- alternate test methods are not
2 mandatory, but simply permitted by code. It has been
3 demonstrated that these alternative testing methods,
4 if performed properly, will yield accurate test
5 results without the use of weights. Persons using
6 such test equipment must, of course, be properly
7 trained in its use in order to obtain useable results.
8 Concerns over inaccuracies by untrained persons
9 performing such tests with alternative test equipment
10 are no different than concerns over untrained persons
11 performing conventional tests. I recommend this
12 portion of the above rule be repealed."

13 So, there are two regarding striking paren ten
14 and allowing for alternative test methodologies to be
15 used in the State.

16 We have a couple questions. It looks like Wade.
17 Wade, if you'd like to ask your question.

18 MR. FRIESEN: Wade Friesen, Vertical
19 Options. It's not so much a question as it is a
20 comment. In 2022.0080 there is some contradictory
21 language where it says that weights are going to be
22 required under all testing, which seems to contradict
23 this allowance of the alternate test methods. I think
24 we should address that in conjunction with these other
25 sections.

1 MR. NAIPO: Duane, you had a question, as
2 well?

3 MR. LEOPARD: No, it's more or less a
4 comment about these alternative methods. I was able
5 to witness a bunch of them like on the 15 elevators.
6 The equipment used comes out with so much more
7 information that's hard to obtain in an actual load
8 test. It gives out the slide distance, if the brake
9 needs adjusting, or if it failed the test. This is
10 something the State really needs to allow, that's all.

11 MR. NAIPO: Okay. Thank you. Eric.

12 MR. MILLS: I'd like to speak out against
13 this.

14 THE COURT REPORTER: I'm sorry, this is the
15 court reporter, can you please identify your name?

16 MR. MILLS: I'm sorry. Eric Mills, field
17 mechanic. I'd like to speak out against it. As a
18 person that used to do a lot of testing I've had
19 multiple pieces fail from sheared linkage, broken
20 safeties, I've had cars not even stop, and without the
21 weights we don't know if it would have been caught.
22 The weights are what saved people and stopped the
23 public from being hurt. I personally have never been
24 hurt by rolling weights around and I've rolled tens of
25 thousands, if not hundreds of thousands, of pounds of

1 weight both as an apprentice and as a journeyman.
2 Testing is to save the public and to find pieces of
3 equipment that have stresses that break, that will
4 fail when needed. So, I, for one, think we should say
5 nay on this.

6 MR. NAIPO: Jonathan Quiett.

7 MR. QUIETT: Jonathan Quiett. I have to
8 agree with Eric Mills on this. I've personally been
9 involved with many tests where we have actually had
10 safety devices break under load with weights that had
11 been previously tested without weights at speed and
12 have shown no signs of not functioning properly. I
13 would have my reservation to know, you know, kind of
14 what this said and that this -- we're getting the
15 training and testing to do it properly for existing
16 equipment. So, I also am speaking to vote nay against
17 this.

18 MR. NAIPO: Thank you. Sergey.

19 MR. DOLGIKH: So, I raised my hand recently
20 and then I took it down just to hear a difference of
21 opinions, but I will second and third what Eric and
22 Jonathan spoke to. I'm physically -- I'm -- I'm
23 physically experienced with what happens when a brake
24 is not properly adjusted when you're rolling weight
25 into the elevator because it took off from underneath

1 me and I was walking with that weight in the elevator.
2 By sheer luck I didn't get hurt. But at the same
3 token, if the weights were not going to be present we
4 would never find out how the malfunction of the brake
5 or, like they said, linkages break and such like that,
6 there is a mechanical failure. So, you can do all the
7 alternative testing you want from software, but
8 mechanical failure is going to be mechanical failure.
9 So, I would -- I would definitely vote yea -- nay on
10 that one.

11 MR. NAIPO: Okay. Jan.

12 MS. GOULD: I'm with the three previous.
13 The last two code cycles the City of Seattle has
14 scratched the allowance of no weights for similar
15 concerns. That's it.

16 MR. NAIPO: Before we -- Patrick, before we
17 get to you, I wanted to -- Melissa had her hand up.
18 Yes, Melissa.

19 MS. ERIKSEN: This is Melissa. I have to
20 remind you guys that when -- even though when we're
21 calling on you and saying it's your turn, "so-and-so
22 it's your turn", we do need you to say your name
23 before you say your comment, please.

24 MR. NAIPO: Patrick.

25 MR. STRAFER: Okay. Good morning. Patrick

1 Strafer, IUEC, representing labor. Like that,
 2 Melissa? I did good? I'm going to piggyback off the
 3 other ones and I would be a nay, as well. These tests
 4 are not like a bolt stream test where you're -- where
 5 you're wrenching on it in order to see when it breaks.
 6 If it doesn't break, then it's doing its job. If it
 7 breaks with a load in there that's what's saving the
 8 public. So, I've moved many weights, as well, not
 9 recently, in the last six years in this position, but
 10 it's there for it to be written that there is concerns
 11 of people getting hurt. Is there a lot of L & I
 12 claims for Workman's Comp from pushing test weights,
 13 because this was addressed years ago and it got shot
 14 down and now we're just trying to bring it in to other
 15 language. I would be a nay on this, absolutely.

16 MR. NAIPO: Thank you, Patrick. Jonathan.

17 MR. MADISON: Jonathan Madison. The same on
 18 the (inaudible/indiscernible) testing. I've done that
 19 for multiple codes, maybe it's the last 16 or 18
 20 years. With the newer equipment we're seeing the
 21 lighter duty, if you will, we're seeing multiple
 22 failures that the factory is not following, and this
 23 is for more than one manufacturer. There have been
 24 recalls out on safeties that they know are failing, so
 25 they switch to other types while these units are still

1 being installed. And the valves, I've -- I've had
2 failures with Jan in Seattle with full load testing on
3 circuits. The reason we're putting weights in is to
4 go to that at a straight level to see if that
5 equipment can handle the stress of the riding public.
6 With the newer equipment that's being put out now I
7 think this is absolutely the wrong direction and I
8 would speak nay against it.

9 MR. NAIPO: Thank you. Candace.

10 MS. LAU: Hi. Candace Law. I want to make
11 a comment that I agree this should be a nay in that we
12 don't have witnessing of tests in this state; so, so
13 many things can happen that we're not even witnessing
14 the alternative testing. So, it's really important
15 that we use full load and do the testing that way as
16 before.

17 And, then, the second thing I think we need to
18 clarify exactly, I know we're saying nay and yea, but
19 we need to clarify that currently the code is written
20 that we are not allowing alternative testing and this
21 vote is to get rid of "not allowing". So, we have to
22 be really clear on what we're voting for. I know what
23 we're saying, but we need to be clear on how we vote
24 this because currently in the code, am I correct, I'm
25 not sure if I'm correct, but currently in the code to

1 not allow alternative testing and these proposals are
2 to get rid of the not allowing, which will allow it.
3 So, that's just a comment.

4 MR. NAIPO: Thank you for that
5 clarification, Candace, and I will definitely make
6 sure to address that before we vote. Thank you.
7 Thank you, though. Carl.

8 MR. CARY: Yes, Carl Cary, and I rise in
9 support of removing this section which will allow
10 alternate testing. Alternate testing has been
11 allowable in the code since 2013, as stated in the
12 notes. There was a robust process and a large
13 discussion that allowed that alternative testing. If
14 removal of that will save billionaires, who I
15 represent, costs, certainly allow that testing to be
16 completed in a safe manner that will actually provide
17 additional information that you don't necessarily get
18 with standard weight testing. Thank you.

19 MR. NAIPO: Wade.

20 MR. FRIESEN: Wade Friesen, Vertical
21 options. I wanted to discuss a couple of things here.
22 The one -- One is the notion that perhaps during new
23 turnover, if this were to be allowed, that the full
24 load weight testing be required for initial turnover
25 on new equipment. You know, addressing Candace's

1 concern about verification of the -- of the test, I
2 think the -- Some of this technology, I am -- I am
3 quite familiar with the machinery that is used to do
4 this testing, would allow for reports to be printed
5 and sent to the State for analysis of the data, which
6 is not currently being done with full load testing.

7 The other thought that I have regarding this
8 stuff is that I know there's some manufacturers out
9 there that are currently using safeties that are,
10 quote/unquote, disposable. After four or five sets of
11 the safeties they must be replaced. This would also
12 allow for those safeties to have a longer life span.

13 MR. NAIPO: Thank you. Russ Larson.

14 MR. LARSON: Good morning. I just want to
15 reiterate some of those comments. I guess a couple
16 points. One of them is that alternate testing is
17 currently allowed by 17.1, as my colleague pointed
18 out, that in fact the premise of 17.1 allows the
19 flexibility to consider new technology for technology
20 such as this. I feel it's an overreach to disallow it
21 all together, with the caveat that's in the proposal
22 that the AHJ has the ability to review and approve
23 specific alternative means. Thank you.

24 MR. NAIPO: Sergey.

25 MR. DOLGIKH: Sergey Dolgikh, Elevator

1 Inspector to Olympia L & I. To the latest point that
 2 was brought up with Wade and Russ, yes, granted we
 3 could get the reports, and granted the reports are
 4 present on the job sometimes of five year testing
 5 being done, and the parameters are being listed on
 6 there, however with the weights, even with the full
 7 load testing, a lot of times what happens the county
 8 puts the data on the sheets, but it fails the actual
 9 test, and so what happens is I'm looking at a one inch
 10 slide on a 300 foot per minute car and I'm going, "How
 11 did that happen?" And then -- and then you're looking
 12 at that data and it's -- technically it's a fail. So,
 13 there is no specific information whether those
 14 safeties had been adjusted during the test. So, if we
 15 already have this type of shortcomings as it stands to
 16 verify the test, and we are short-handed as it stands
 17 to witness every single five year safety test, we at
 18 least have to give the ability to the mechanics to
 19 physically do an actual physical test because,
 20 granted, you can do it on the new inspection, that's
 21 great, but then this elevator runs under certain
 22 conditions in throughout five years and, as we know,
 23 it -- since it governs depending on weather
 24 conditions, or type of use, or type of equipment, and
 25 so on and so forth, it has specific intervals for

1 maintenance and such. So, I think five year safety
 2 tests with full load on are imperative to actually
 3 bring out those particular items that may fail
 4 physically as a mechanical device. So, I just wanted
 5 to make that comment because, yeah, we can focus on
 6 the data that can be provided through alternative
 7 testing, but even with today's testing procedures that
 8 data doesn't necessarily pass the test and we don't
 9 know if that test failure item was actually adjusted
 10 to do the test, to pass the test, so, and it was
 11 re-tested. So, that's just my version of comment, but
 12 I just wanted to kind of throw that in there.

13 MR. NAIPO: All right. So, we've got two
 14 more comments and then I'd like to take a consensus on
 15 whether we're ready to vote. Remember that these
 16 conversations you can state a point, but it's not to
 17 sit there and have rebuttal conversations back and
 18 forth to try to skew someone, you know. We're all
 19 trying to give each other the opportunity to, you
 20 know, ask a question, clarify anything that may be
 21 stated. Opinions can happen, as well, that's fine,
 22 but we're not here to try to sway someone one way or
 23 the other; so, I want to make sure people understand
 24 that. But we have now three more comments and then
 25 hopefully we'll take a consensus on whether we're

1 ready to vote or not.

2 Kevin, go ahead.

3 MR. BRINKMAN: Yeah. Kevin Brinkman. Just
4 wanted to respond to a question that Wade raised about
5 acceptance testing. All of the alternate testing
6 methods that I'm aware of would require a full load
7 test and acceptance that helps establish the baseline
8 that's used for later testing. So, to his point about
9 the caveat to have the full load test initially,
10 it's -- it wouldn't be required to make this work.
11 Thank you.

12 MR. NAIPO: Thank you, Kevin. Jonathan
13 Quiett.

14 MR. QUIETT: Yeah, Jonathan Quiett. My
15 concern with this, to kind to add to what I did
16 earlier, I personally have gone and done the first
17 Category 5 test on equipment after its been installed
18 and have ran into multiple situations, both slide
19 distance on safeties have been egregiously short and
20 overly long, and, while understanding how the
21 alternative testing method works, there are times
22 where there's been recalls that have not been
23 completed on pieces of equipment and you may not find
24 that unless you're actually stressing the system the
25 way it's designed to be stressed with weights on it.

1 With that being said also, we start talking about with
2 hydraulic elevators there's sometimes you physically
3 cannot produce enough back pressure to properly set
4 overspeed valves without using weights.

5 MR. NAIPO: Dylan Turner.

6 MR. TURNER: Dylan Turner, Greenbusch. I
7 guess this is a question for folks on both sides of
8 the fence. Have any of you witnessed both the
9 alternative and the full load test on the same
10 elevator side by side and are basing this off of an
11 apples to apples comparison, just curious.

12 MR. NAIPO: So, before we move on to Wade,
13 unless Wade has a direct reply to that addressing
14 Dylan's comment, does anybody -- has anybody witnessed
15 the test where it sounds like a full load safety test
16 is being done on maybe one in a bank on one side and
17 an alternative was being done on the other; is that
18 correct, Dylan?

19 MR. TURNER: Yes.

20 MR. NAIPO: Is that what you're asking?
21 Okay. Has anybody witnessed anything like that or be
22 able to give comments toward that?

23 MR. LEOPARD: I was trying to raise my hand,
24 but, yeah, I'll chime in here. I have witnessed side
25 by side testing. One of the elevators I mentioned of

1 the 15 did fail. They may have failed emergency
2 stopping distance. We put weights on it and it slid
3 20 feet, something like that, before it even came to a
4 stop, and it's only a 300 foot elevator. So, yeah,
5 I've seen them both and they both basically give us
6 the same results.

7 MR. NAIPO: Okay. Thank you. Wade.

8 MR. FRIESEN: Wade with Vertical Options. A
9 couple of things. One thing I don't think that we're
10 necessarily talking about is whether or not repeated
11 tests are causing damage to the equipment. There's
12 been multiple comments made that, you know, that
13 testing done after the initial acceptance test has
14 found failures, and I'm not arguing that fact at all,
15 I'm sure that's the case, but, you know, it brings a
16 question to mind whether or not, you know, the test
17 every five years with a full load is causing damage
18 and over a period of time the equipment fails because
19 of the testing. And the last point that I'd like to
20 make is that the ASME committee reviewed this quite
21 thoroughly and I'm pretty darn sure that if they
22 hadn't shook this all out that this wouldn't even be
23 in the code; so, you know, I think that should be
24 considered, as well, that there's been a lot of
25 analysis done to this testing equipment.

1 MR. NAIPO: Thank you. Okay. So, what I'd
 2 like to do now since no one else has their hand
 3 raised, is there anybody who is not ready to cast a
 4 vote on this and, if so, please raise your hand. All
 5 right. And what I propose is that we are going to be
 6 voting on removing the current WAC that states, "We do
 7 not in the State of Washington allow alternative
 8 testing." So, if you are voting yea for this that
 9 means that you are okay with alternative testing being
 10 done in some form or fashion in the state. If you
 11 vote nay, you are voting that, no, this needs to stay
 12 in the WAC rule the way it is now and that's your vote
 13 on that. If you don't understand it or you don't --
 14 feel like, hey, it sounds like this is a pretty
 15 serious thing and you don't quite -- you're on the
 16 fence and you don't know where to go either left or
 17 right, then you can feel free to abstain from this.
 18 But for right now, again, we'll be casting a vote on
 19 vote proposal 2022.0001, let me put this one and I'll
 20 highlight that, and 2022.0045, which are both for
 21 removing alternative testing.

22 For those voting yea for removing alternative
 23 testing, please cast your vote now by raising your
 24 hand.

25 MS. ERIKSEN: This is Melissa. I need to

1 confirm what we're voting on. You're voting on
2 keeping allowing it or not allowing it.

3 MR. NAIPO: We're voting now to remove WAC
4 296-96-00675(10) that does not allow alternative
5 testing. So, if someone is voting yes for this, they
6 are voting to remove that we allow it, that we allow
7 alternative testing to be done.

8 So, again, I ask if anyone is wanting to vote
9 yea, please cast your vote now. All right. Thank
10 you. Please put your hands down.

11 And those who are ready to vote -- those who are
12 ready to vote nay, please raise your hands now, and
13 you are voting to keep paren ten, which states: The
14 State of Washington does not allow alternative testing
15 at this time. All-righty. And, if you can, please
16 lower your hands.

17 And for those who feel they need to abstain from
18 this vote, please raise your hands now. All right.
19 Thank you very much.

20 So, votes have been cast for 2022.0045 and
21 2022.0001.

22 All right. It is 9:40; so, at this time we're
23 going to take our first five minute break. Melissa,
24 do you have that five minute timer?

25 MS. ERIKSEN: Scott has had his hand up.

1 MR. NAIPO: Oh. Yes, Scott. Sorry.

2 MR. CLEARY: Just a point of clarification.
3 All the proposals that aren't passed the ESAC will or
4 will not see those? Are we only going to see the ones
5 that are approved coming to the ESAC?

6 MR. NAIPO: It's my understanding that all
7 you guys were going to vote on was the ones that
8 passed. I don't know how it was done in the --
9 previously, but that is something that we can confer
10 on offline.

11 MR. CLEARY: Okay.

12 MR. NAIPO: You, Ricky, Gerald, Melissa, and
13 I, we can talk about that.

14 MR. CLEARY: Okay. Thank you.

15 MR. NAIPO: All right. So, with that, go
16 ahead and toss up, Melissa, the five minute timer and
17 we will see you guys back in five minutes and we'll be
18 starting abruptly as soon as it starts. So, you guys
19 have that timer going.

20 (Recess taken)

21 MR. NAIPO: And we are back. So, does
22 anybody have any questions so far, concerns about how
23 the first couple have gone, anything, comments? Oh, I
24 need to get another job. It's okay, I'm a big dude,
25 I've got thick skin, I can take it. Have you got any

1 suggestions on how you want this to change? All
2 right. Then we'll hit the ground running. Oh,
3 Sergey, sorry. You've got your hand up. What's up,
4 man?

5 MR. DOLGIKH: So, I just wanted to make sure
6 I understand. When you put green on it does it mean
7 we voted on it or does it means that it passed?

8 MR. NAIPO: It's just for me to reference
9 that we're done with that one and we're moving on.

10 MR. DOLGIKH: I gotcha. That's what I
11 wanted to make sure. It was kind of confusing. Green
12 means usually pass and red not pass, but, anyway,
13 I don't know what the scheme is.

14 MR. NAIPO: Well, it's just because I know
15 that there's some, like sort of Wade alluded to
16 earlier, you know, that this change here may be
17 affected by another change that's down below. I want
18 to make sure I try to capture that as much as
19 possible, so... But, yeah, the green is just a
20 reference for me, like, hey, this one's done and I
21 don't need to come back to it, so...

22 So, at this time what I'd like to do is have
23 Melissa read the vote tallies for proposal 2022.0022.
24 Melissa.

25 MS. ERIKSEN: Thank you. This is Melissa.

1 So, the vote tallies for 2022.0022, there were 26
2 yeas, 1 nay, and 0 abstains.

3 MR. NAIPO: And now the voting results, and
4 this is regarding two proposals since they were
5 regarding the same change, regarding proposal
6 2022.0045 and proposal 2022.0001, can you please read
7 the vote tallies for both of those.

8 MS. ERIKSEN: Thank you. For those two
9 proposals there were 7 yeas, 19 nays, and 1
10 abstention.

11 MR. NAIPO: All right. Thank you. So,
12 moving on to the next one, we have proposal number
13 2022.0047. It's regarding an amendment to a code
14 that's being adopted. The person would like to add
15 that ASME A18.1 requirement 11.1.12(c) is amended to
16 change weekly operational checks to monthly
17 operational checks.

18 The rationale: "The operational checks impose
19 an undue burden on lift owners to conduct and document
20 weekly operational checks of their lift equipment
21 without adding increased safety for the riding public.
22 Weekly checks are not considered necessary for higher
23 priority conveyances such as elevators. Many of these
24 accessibility lifts are only present for code
25 compliance and never get used by anyone other than

1 lift mechanics or state inspectors. Additionally,
2 many of these lifts are in facilities that are only
3 occupied for a few hours a week such as churches,
4 event centers, etc.

5 Jan?

6 MS. GOULD: Jan Gould. Again, I'd like to
7 get clarification of which edition of the A18 we're
8 talking about.

9 MR. NAIPO: That's a very good question.
10 Let me see if I can pull it for you, unless someone
11 knows exactly. I'll call on -- Oh, Lyall.

12 MR. WOHLSCHLAGER: Both the current edition
13 of the A18.1 requires it, as well as the proposed
14 newly adopted A18.1. So, both editions currently have
15 a weekly requirement.

16 MR. NAIPO: Thank you. Dylan, I saw you had
17 your hand up.

18 MR. MONTGOMERY: I'm Dylan
19 (inaudible/indiscernible) with the State Fire
20 Marshall's Office. So, I am actually pretty against
21 this.

22 THE COURT REPORTER: I'm sorry, before you
23 continue, I know your first name is Dylan. Can you
24 give me your last name, please?

25 MR. MONTGOMERY: Sorry. Montgomery.

1 THE COURT REPORTER: Thank you.

2 MR. MONTGOMERY: Yeah. So, like I was
3 saying, I'm pretty against this because I don't think
4 the reasoning to be against it is in the rationale for
5 it because this -- where it states that, "Weekly
6 checks are not considered necessary for higher
7 priority conveyances such as elevators", that's
8 because they get used all the time, whereas with these
9 lifts that are only used a few hours a week and these
10 aren't occupied they want weekly because they're not
11 being run as consistently as elevators. So, I would
12 think you'd want to maintain the weekly checks.

13 MR. NAIPO: Thank you. Kevin.

14 MR. BRINKMAN: Kevin Brinkman. Yeah, I just
15 would echo what Dylan Montgomery just said in that the
16 reason that it was put into A18 was concern that these
17 lifts do sit for long periods of time without being
18 used, so it was helpful to have a weekly check, just
19 and it takes, you know, a couple minutes for somebody
20 to run it up and run it down just to make sure that
21 everything is still operational so that if somebody
22 does come in that needs the lift it's available to
23 them. That was the intent.

24 MR. NAIPO: Thank you, Kevin. Jan.

25 MS. GOULD: Yes. Again, the question is:

1 Are we talking about the 2017 A18.1 and then the 2020
2 A18.1 was the question, which edition are discussing?

3 MR. NAIPO: Lyall -- Lyall addressed that,
4 stating that it's written that way in both of the --
5 both of those editions of the code. But if -- You're
6 saying that it needs to be amended to show what, like
7 what reference?

8 MS. GOULD: No. I was just clarifying.

9 MR. NAIPO: Oh, okay.

10 MS. GOULD: Because it didn't say edition.
11 It says current. Anyway, so I got my question
12 answered.

13 MR. NAIPO: All right. Thank you. Any
14 other questions or clarifications needed before we
15 cast a vote? Okay. We're going to cast a vote on
16 proposal 2022.0047 as far as amending ASME A18.1,
17 11.1.2(c) to change from weekly to monthly operational
18 checks.

19 Those in favor of it vote yea now and raise your
20 hand. Again, if would like to cast your vote for yea,
21 please do that now and raise your hand. All right.
22 Thank you. Go ahead and lower your hand.

23 Those who would like to vote nay, please raise
24 your hand now. Anyone who would like to vote nay
25 please raise your hand now. All right. Thank you. Go

1 ahead and lower your hands.

2 And then anyone who would like to abstain please
3 raise your hand now. There was no one wanting to
4 abstain.

5 Votes have been cast, and, Melissa, will you
6 please read the results of proposal 2022.0047?

7 MS. ERIKSEN: Thank you. This is Melissa.
8 There were 12 yeas, 14 nays, and 0 abstentions.

9 MR. NAIPO: All right. Thank you very much.
10 Moving on to the next one, proposal 2022.0048, again
11 an amendment to WAC 296-960-00675, they would like to
12 add that "ASME A18.1 requirements 11.3(c) requiring
13 that instructions for performing examinations and
14 tests be kept on site as part of on-site documentation
15 is not adopted."

16 "The requirement to have instructions for
17 performing examinations and tests as a part of a
18 written maintenance plan is a valid requirement, but
19 the need to keep it, quote/quote, 'on-site', other
20 than while performing the examinations and tests,
21 should not be mandated as many of these instructions
22 could be considered elevator company proprietary
23 procedures."

24 Is there any clarifying questions that or
25 comments that people would like to pose? All right.

1 So, it looks like we've got two starting. So, Jan, go
2 ahead.

3 MS. GOULD: Per ASME, this is owned by the
4 owner, not the elevator company.

5 MR. NAIPO: Okay. Wade.

6 MR. FRIESEN: Wade Friesen, Vertical
7 Options. That's precisely what I was going to
8 mention, as well, is that if this -- if the
9 information is proprietary in some nature and that's
10 the rationale for not leaving it, you know, for the
11 building owner or building maintenance people to get
12 their hands on, it should be available from the owner.
13 It's ultimately the -- the owner's elevator.

14 MR. NAIPO: Thank you. Carl.

15 MR. CARY: Yeah, Carl Cary. I rise to urge
16 the committee members to also vote no on this for the
17 reasons stated that the instructions for this are the
18 property of the owner.

19 MR. NAIPO: Thank you. Lyall.

20 MR. WOHLISCHLAGER: So, currently do -- when
21 you have a high rise elevator, all the procedures for
22 how to perform the tests and how to perform the exams,
23 are they currently left on site for the owner's use,
24 as well?

25 MR. NAIPO: Carl.

1 MR. CARY: I was going to say, yes, they
2 are.

3 MR. NAIPO: Sergey.

4 MR. DOLGIKH: I mostly just have a confusion
5 a little bit and need some clarification on what are
6 we voting on. And the other part of this whole thing
7 is that we are talking about 18.1 here. So, my
8 understanding is the elevators are not part of that.
9 I mean this is accessibility systems we're talking
10 about, right? So... And the other part of that
11 question would be so by voting, by getting this
12 amendment to a (inaudible/indiscernible) standard,
13 we're basically saying that we should not require
14 documentation to be kept on site, is that my
15 understanding?

16 MR. NAIPO: For A18.1 equipment, yes, that
17 doesn't need to be kept on-site.

18 MR. DOLGIKH: Right. And so -- And so prior
19 we spoke about alternative testing for full load tests
20 and things like that. So, if the documentation is
21 not -- Obviously, we're -- we're putting it out there
22 that we are voting nay on the -- And, I'm sorry, this
23 is Sergey Dolgikh, Elevator Inspector, Olympia, so on
24 and so forth. But so the question is: If we are so
25 much relying on alternative testing, and some people

1 voiced their opinions here on that, but we are not
 2 going to leave anything behind for A18.1 specialized
 3 equipment testing procedures and the whole thing, that
 4 is kind of -- kind of contradictory to what we wanted
 5 or a few people here wanted to say about alternative
 6 testing, and now saying that, well, we shouldn't leave
 7 any documentation that expresses the alternative or,
 8 you know, information useful for alternative testing.
 9 So, this is where my confusion comes from. That's why
 10 I'm kind of bringing up that question. As for -- So,
 11 question number one, this particular item, if we vote
 12 yea, we're basically saying we need to not adopt the
 13 on-site documentation. If we were voting nay that
 14 means we are for the on-site documentation to be
 15 present for A18.1 equipment; so, no elevators there.
 16 That's -- that's kind of where my confusion came from.

17 MR. NAIPO: So, the way that this reads
 18 remember people are saying on-site documentation,
 19 that's a lot of documents, and what we're really
 20 talking about here is what's addressed in 18.1,
 21 11.3(c), which is requiring that instructions for
 22 performing examinations and tests be kept on-site.
 23 What they're asking is that doesn't have to be part of
 24 the code, that they don't have to keep the
 25 instructions for the performing of examinations and

1 tests to be kept on site. Other on-site documentation
2 that's covered in 11.3 or wherever documentation stuff
3 is housed, that's not being affected by this and we're
4 just mainly talking about the instructions for
5 performing examinations and tests.

6 Outside of that, Lyall, is there anything else
7 that you would like to add regarding that?

8 MR. WOHLSCHLAGER: Yes. I think that might
9 be some -- This is Lyall Wohlschlager. Yeah, I think
10 that might be some of the confusion here. This
11 proposal appears to be only looking to exempt the
12 requirements for the procedures on how to perform an
13 exam or how to perform a test. It does not exempt the
14 necessity to have maintenance logs, or tests and
15 examination results, or exam forms. It is just that
16 particular company's procedures necessary to perform
17 those tests. So, similar to an elevator when you have
18 to have your own written procedures in your MCP, a lot
19 of the times those MCPs are kept with the mechanic and
20 not left on site, although all the logs are required
21 to be left on site. So, this was an attempt to get
22 rid of the requirement that all the company-specific
23 procedures on how they want to perform the tests how
24 to get that excluded from being left on site.

25 MR. NAIPO: Thank you. Kevin.

1 MR. BRINKMAN: Yeah, Kevin Brinkman. There
2 was a question that or a comment made about
3 alternative testing and tying into this. A18 does not
4 include alternative testing; so, this has nothing to
5 do with alternative testing. But this would be more
6 your traditional test and whether or not the
7 procedures should be kept on-site.

8 MR. NAIPO: Thank you, Kevin. Mr. Quiett.

9 MR. QUIETT: Jonathan Quiett. Yeah, with
10 having done testing on different pieces of A18.1
11 equipment when there has not been specific procedures,
12 wiring diagrams, anything like that on-site, I think
13 with having -- with removing this it would put another
14 undue burden on the ownership group to be able to
15 provide whomever, the servicing personnel, on the
16 proper documentation to safely and effectively perform
17 the testing on the equipment. So, my suggestion would
18 be to vote nay on it.

19 MR. NAIPO: Thank you. Carl.

20 MR. CARY: Yeah, point of clarification. I
21 believe this is referencing the wrong code
22 requirement. It seems it's specifically wanting to
23 remove the instructions for performing examinations
24 and tests. That is 11.3.1(b), not (c) in the two
25 thousand -- in the 2020 and 2019 version of 18.1.

1 (b) says instruction manual containing procedures for
2 performing required examination and tests. (c) is
3 only the operational instructions that include the
4 operation of the manually lowering device, if
5 provided.

6 MR. NAIPO: So, while I believe someone is
7 probably looking at it real quick, Carl, if you don't
8 mind, we will come back to that when I get
9 notification that someone has an answer for that.

10 Dylan, what's your question?

11 MR. LATHE: Yes, Dylan Lathe representing
12 elevator inspector, I think it's very important to
13 leave this documentation on-site for the reason that
14 the company performing the maintenance might not
15 necessarily be the company that installed the lift.
16 That company could potentially go out of business or
17 not have the contract anymore and then the next
18 elevator company that comes to service these lifts
19 has no documentation on how to properly test this
20 equipment. So, I would -- I would recommend to vote
21 nay on this. Thank you.

22 MR. NAIPO: Sergey.

23 MR. DOLGIKH: Yes, I re-raised my hand real
24 quick and then basically Jon Quiett -- This is Sergey
25 Dolgikh -- Jon Quiett spoke my mind. It's absolutely

1 true that a lot of times when the providers have
2 changed for a specific piece of accessibility
3 equipment they're unable to specifically test that
4 equipment if there is a specific procedure of that
5 testing and basically chasing their tail trying to
6 figure that out, and I don't think those tests will
7 represent the accuracy of what needs to be tested.
8 So, I kind of wanted to just throw that comment in
9 there that, yes, I agree with Jon Quiett and with
10 Dylan Lathe.

11 MR. NAIPO: Okay. Mr. Brinkman.

12 MR. BRINKMAN: Yeah, Kevin Brinkman. I can
13 confirm that it should be 11.3(b) as in baker, if
14 they're looking for the test procedures.

15 MR. NAIPO: Mike Wilson.

16 MR. WILSON: Yeah, Mike Wilson here. This
17 is -- The thing with this is that the State of
18 Washington requires you to be a licensed technician to
19 work on this equipment, it's on for elevators, as
20 well, and you have licensing categories specifically
21 for different parts of equipment is what you're --
22 what this is saying is that we are to supply the
23 owners with the procedures to do all this work and
24 they are not licensed, and some of this equipment is
25 not necessarily put into a commercial atmosphere, it's

1 put into a residential atmosphere, and for that reason
2 it should not be part of a person that is not
3 qualified or licensed to work on the equipment. Thank
4 you.

5 MR. NAIPO: All-righty. With that, so I
6 made a note here, so a possible change should be, you
7 know, changing the code reference from 11.3 to eleven
8 point-- or 11.3(c) to 11.3(b). I'm assuming
9 everyone's good with that, is that correct? Oh, got a
10 couple people. All right. Mike, did you just raise
11 your hand again? Nope. Okay. Bob.

12 MR. OURY: Yeah, I just wanted to agree with
13 Mike on this point that, you know, you're talking
14 about equipment that is put into residential
15 environments and if you leave that kind of
16 information -- I mean homeowners try and do a lot of
17 things on their own and this is just giving them
18 information that could get themselves in trouble, and
19 I think it's better left in the hands of the
20 professionals so that the homeowner has to go to a
21 professional that is licensed to get this
22 accomplished.

23 MR. NAIPO: Candace.

24 MS. LAU: Candace Lau. I just want to
25 mention that I put in the chat what the 2020 A18.1

1 code says. And the other thing is that it's not just
 2 11.3, it's 11.3.1 Baker that we are talking about or
 3 (c) Charlie; so, whichever one we're talking about
 4 we're just -- we're still missing a number. So, it's
 5 not just 11.3, it's 11.3.1 and then (b) or (c),
 6 whichever one we determine it to be, and this is out
 7 of the 2020 A18.1 code. I have it on the chat.

8 MR. NAIPO: So, if no one has access to the
 9 chat, I'll read it out real quick. 2021 A18.1, 11.3,
 10 is regarding on-site documentation. 11.3.1, the
 11 on-site documentation shall include, but is not
 12 limited to the following: (a) wiring diagram; (b)
 13 instruction manual containing procedures for
 14 performing required examination and tests; (c)
 15 manufacturers' operational instructions that include
 16 the operation of the manual lowering device, if
 17 provided; (d) the log as required by 11.2.1.

18 So, since -- It sounds like to me that since
 19 A18.1 covers both commercial and residential
 20 conveyances that can be used, is the intent of this
 21 you guys feel more to effect residential homeowners
 22 then who have the capability -- you know, we're trying
 23 to stop them from being able to do things that they
 24 really shouldn't do or are we trying to again ask for
 25 this across all 18.1 equipment? Again, this is just

1 a question for clarification. Is this, do you guys
2 feel, aimed more towards residential or both
3 commercial and residential A18.1 equipment?

4 So, Sergey.

5 MR. DOLGIKH: I think that you just brought
6 up a really good question. I think those two shall be
7 separated by intent. The other part of this
8 conversation is that as an authority of having
9 jurisdiction we are not regulating residential annual
10 inspections in residential, you know, consequent
11 inspections unless we're being requested by the owner
12 to conduct those inspections. So, it's really if the
13 concern here is for the residential owner not to take
14 matters into their own hands and to play a mechanic
15 and conduct those type of tests so that they -- but
16 there is no one to check them. There's no one to go
17 back and to check those things. So, we can't be
18 policing it in that sort of way. So, in -- in the
19 residential section if this particular rule can be
20 omitted and taken out, that would be fine. As far as
21 commercial, I think that we should be able to, as
22 authority of having jurisdiction, have the ability to
23 access those types of documentations and procedures as
24 there might be such that are very unique and specific
25 to that specific equipment. And, you know, it's part

1 of the code; so, I don't think we should strike it
2 out. So, my suggestion would be to look at it from
3 two different angles, residential versus commercial,
4 based on the uniqueness of both authority of having
5 jurisdiction in the State of Washington and what we
6 regulate and what we don't on the annual basis. Thank
7 you. This is Sergey Dolgikh. I'm sorry.

8 MR. NAIPO: Thank you. Duane.

9 MR. LEOPARD: Duane Leopard, city of
10 Spokane. Sergey asked a question on it being
11 considered commercial or residential. I think this
12 just basically applies to commercial only. Even with
13 the residential stair climbers and lifts they have to
14 keep in mind that once they're in the residence the
15 residents can have anybody look at them and it's kind
16 of like having an owner's manual, per se. And that's
17 all I can say is that, you know, this only applies to
18 residential or, um, commercial.

19 MR. NAIPO: All right. Thank you. Paul.
20 Paul, did you not have a question? Oh, he must have
21 put his hand down. All right. Candace.

22 MR. BARNHART: I'm sorry, I was on mute. I
23 apologize.

24 MR. NAIPO: Oh, no worries.

25 MR. BARNHART: Paul Barnhart from UL. I am

1 opposed to the motion to take this out. I don't care
 2 if it's commercial or residential. I believe the
 3 instructions for tests need to be there. If it's a
 4 residential, I believe the instructions for tests need
 5 to be there. If it's residential and the customer
 6 decides to use those instructions, that's one thing,
 7 but, if he doesn't use them, so what. The issue is
 8 anybody who comes in there and is going to do the test
 9 needs to know how to do the test. If it's commercial
 10 the building owner that's got the lift in his
 11 possession needs to have that there so whoever he
 12 contracts with can do the test properly. If it's
 13 residential, the same thing applies. Having the
 14 instructions for test does not say, "Mr. Residential
 15 Person, do these tests", it says, "Here's how these
 16 tests are supposed to be done, and when you hire
 17 someone to do the test he needs to be licensed and
 18 qualified and do the test according to the
 19 instructions." If it's not the person that put the
 20 lift in, he's got to have access to it somehow. Thank
 21 you.

22 MR. NAIPO: Thank you, Paul. Candace.

23 MS. LAU: Paul, I haven't verified that, but
 24 I don't believe section 11 is for commercial only.
 25 I'm looking -- I'm trying to look that up right now.

1 And 11, I think, applies to both commercial and
2 residential, and if we are saying that we want to only
3 apply this for commercial we need to say it in code.
4 I don't believe it says that. That's just a comment.

5 MR. NAIPO: All right. Thank you. Wade.

6 MR. FRIESEN: Wade Friesen, Vertical
7 Options. We've worked on a lot of A18.1 equipment and
8 some of the equipment that we run across is old and
9 one can even say obsolete, the company's out of
10 business or something of that nature, and I think if
11 the documentation is unobtainable, if it's not left
12 with the homeowner or the business owner, it puts the
13 mechanic in a -- in a tough spot. You know, the
14 situation is can the mechanic perform the test right
15 not having the company's special procedures or special
16 equipment, if there is any in this. So, if we have
17 that documentation at our disposal, I think it allows
18 the mechanics to do their job, do their job well, and
19 not -- I don't know, for lack of a better term, fake
20 it because they don't have the proper documentation at
21 their disposal. Thank you.

22 MS. ERIKSEN: Thank you. Sergey. Or,
23 Kevin, I apologize, Kevin Brinkman.

24 MR. BRINKMAN: Kevin Brinkman. Somebody
25 made a comment regarding whether or not 11 -- part of

1 11 of the A18 code applies to residential or not. In
2 the preamble to that section it does say that our --
3 actually 11.1 it does say that the weekly operational
4 checks do not apply to parts five through seven, which
5 are the residential sections, but the rest pretty much
6 applies. And, then, in 11.2 for the logs it does
7 exclude a couple items, but eleven point -- I'm sorry,
8 that's 11.2. It's probably a typo there. I think it
9 should have said 11.3. But, basically, it does not
10 exclude this provision. So, the answer to the
11 question is, as written today, A18 would require this
12 documentation be left on-site.

13 MS. ERIKSEN: Thank you. Sergey.

14 MR. DOLGIKH: I just want to make a quick
15 clarification.

16 MS. ERIKSEN: Please announce yourself.

17 MR. DOLGIKH: I'm sorry. I'm sorry I'm
18 forgetting it. Sergey Dolgikh, Elevator Inspector 2,
19 Olympia L & I. So, I just want to make that we're on
20 the same page. Chapter 11 only applies for 2017 and
21 onward equipment, okay, and now I'm sure everybody
22 knows that, and the chapter twenty-- A18.1 2017 was
23 adopted in the State of Washington on October 1st of
24 2018, to my knowledge. So, any gear and equipment
25 prior to that this doesn't apply for, any equipment

1 that was installed prior. Chapter 11 doesn't exist
2 for that equipment. That's the way I see it and I
3 think that's the way a lot of people see it, but I
4 just wanted to make that clarifying note. Thank you.

5 MR. NAIPO: Is there any other questions or
6 clarifications needed before we're ready to cast the
7 vote? All-righty. So, we're casting a vote on
8 proposal 2022.0049 WAC 296-96-00675, oh, excuse me,
9 sorry, 2022.0048. I put the green mark there before
10 we cast the vote, I'm sorry. Voting on proposal
11 2022.0048 --

12 MS. ERIKSEN: Carl has his hand up.

13 MR. NAIPO: Oh, Carl, yes?

14 MR. CARY: I just wanted to quickly clarify
15 so before we vote are we going to amend that to say
16 (b) instead of (c), which is the appropriate place, or
17 we're going to leave it that way?

18 MR. NAIPO: I have it noted to --

19 MR. CARY: Sorry, Carl Cary. I should have
20 said that before I started talking.

21 MR. NAIPO: So, regarding the instructions
22 for performing examinations and test be kept on site
23 as part of on-site documentation to not be adopted,
24 we're going to cast our votes on that.

25 So, if you are voting for that, please vote yea

1 now by raising your hand. If you're voting yea for
2 that, please raise your hand now. All right.
3 There's -- Please -- Thank you for casting your yea
4 vote. If you can, please lower your hand.

5 And those voting nay please raise your hand at
6 this point. All right. Thank you. Please lower your
7 hands. And if anybody's needing -- Oh, I'm sorry.
8 I'm sorry, please keep your hand up.

9 MS. ERIKSEN: I got it.

10 MR. NAIPO: All right. Sorry about that.
11 If anybody is abstaining from the vote, please raise
12 your hand now.

13 All right, can you please read the vote results.

14 MS. ERIKSEN: Yeah. This is Melissa. So,
15 for 2022.0048 the votes were 5 yeas, 22 nays, and 0
16 abstentions.

17 MR. NAIPO: Moving on to proposal 2022.0049,
18 Amendment to Adopted Standards, about adding,
19 "Amending A18.1 requirement 11.2.1 to include
20 paragraph (g) as follows: Paragraph (g) records of
21 one year and five year periodic tests", the rationale
22 being, "Licensed elevator mechanics are currently
23 perform annual and five year tests, but there is no
24 requirement for the records to be part of the logs to
25 be maintained on-site. This adds that requirement."

1 Are there any questions or clarifications or any
2 comments that would like to be made? All-righty. Oh,
3 yes, Dylan.

4 MR. LATHE: Dylan Lathe, L & I. So, this
5 adding the five year records is going to be addressed
6 in WAC 23701. I think it would be more effective to
7 have it addressed in that WAC instead of in the 06 --
8 00675 section because it's already a WAC code.

9 MR. NAIPO: Okay. Thank you. Wade.

10 MR. FRIESEN: Wade Friesen, Vertical
11 Options. So, am I to understand that the test tags
12 are not being left on the equipment, but -- or they
13 are and there's no record to be -- to go along with it
14 in the MCP? I just wanted some clarification.

15 MR. NAIPO: Kevin, are you making a comment
16 or possibly making a comment and answering Wade's
17 question?

18 MR. BRINKMAN: Kevin Brinkman. I was going
19 to answer -- Well, I had a different comment; so, I'll
20 wait.

21 MR. NAIPO: Okay. Wade, can you pose your
22 question again real quick and see if we can have
23 anybody who may have an answer for that?

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. My question was are test tags being left on

1 this equipment, annual and five year test tags, with
2 no notes in the MCP that the work was actually done?
3 I'm just trying to understand kind of where this is
4 coming from. It seems inappropriate that we're not
5 logging this information if we're tagging the annual
6 and five years as being completed on the equipment.

7 MR. NAIPO: Jonathan Quiett.

8 MR. QUIETT: Yeah, Jonathan Quiett. I can
9 only speak for the company that I work for, but we --
10 we are still currently applying metal test tags to the
11 equipment for Category 1 and Category 5 testing, and
12 we also do have a testing page as part of our MCP in
13 service for this equipment that is getting filled out.

14 MR. NAIPO: So, we'll start it back up at
15 the top. Kevin. Mr. Brinkman.

16 MR. BRINKMAN: Sorry, I had a little trouble
17 getting unmuted. Kevin Brinkman. My only comment is
18 that the proposal suggests adding this as item (g) as
19 in Geronimo. There is already an item (g) in the 2020
20 edition; so, I would recommend, if we do want to vote
21 on this or approve this, we should move it to item (i)
22 as in igloo.

23 MR. NAIPO: Mike, Mike Wilson.

24 MR. WILSON: Mike Wilson here. This is to
25 add the test records in to become part of the written

1 maintenance program. It is currently not in there.
2 It does not have to do with test tagging. Tags have
3 always been there. It's just a matter of adding the
4 documentation to the written maintenance program.

5 MR. NAIPO: All right. Lyall.

6 MR. WOHLISCHLAGER: Yeah, I'm Lyall
7 Wohlschlager. Earlier I think James Alexander had
8 suggested this also could be handled in a WAC, in
9 23701, I believe. That's probably the more
10 appropriate place to deal with this and actually
11 remove it from section 00675. As opposed to amending
12 an ASME code, we should just be adding it as a WAC
13 code, if we choose to do this.

14 MR. NAIPO: So, it sounds like I hear a
15 proposal that because of another WAC submission that
16 we have and the impacts of this, and that one pretty
17 much getting the same result, that we remove this one
18 from the proposal list and address it with the WAC
19 change that has been -- that we'll get to later on
20 this afternoon hopefully; is that correct? Is
21 everyone okay with that? So, if you're okay with
22 that, please raise your hand and vote yea. All right,
23 yeah, that is definitely more than -- So, all right.
24 With that majority vote, we are going to hold off on
25 adopting or even voting on this and moving on to the

1 next one because it is felt by the TAC Committee that
2 what's being asked to be changed here is already going
3 to be referenced in another WAC rule change that we'll
4 be getting hopefully later on this afternoon. So,
5 with that, we are moving proposal 2022.0049 because it
6 is felt that would be addressed later on.

7 Moving on to proposal 2022.0-- Yes?

8 MS. ERIKSEN: Paoa, this is Melissa. So,
9 which one are we addressing later with this, 2022
10 what?

11 MR. NAIPO: Dylan, you had -- I think you
12 had made that original comment on --

13 MR. LATHE: Yes. Dylan Lathe, L & I. So,
14 the -- the WAC I was referring to was 23701. As far
15 as the proposal for that, I'm not sure what the
16 proposal number is for that. I can find it, but...

17 MS. ERIKSEN: That's fine. Thank you.

18 MR. NAIPO: 23701. It looks like we've got
19 a few of them in here, so... Okay, Dylan Turner.

20 MR. TURNER: Dylan Turner, Greenbusch. I
21 guess I'm just wondering. I'm looking at 23701 and
22 doesn't part three of that already address this? It
23 states documentation of tests, examinations, and all
24 maintenance shall be readily accessible on-site.

25 MR. NAIPO: Yeah, I think that's what they

1 were talking about, yeah.

2 MR. TURNER: And I guess my point was is
3 there anything -- I mean it's already there. It's not
4 an amendment to be made to it. It seems to me that
5 what was being proposed already exists.

6 MR. NAIPO: So, it looks like we have 23701.
7 Lyall, what is your thought on that, on his statement?

8 MR. WOHLSCHLAGER: This is Lyall
9 Wohlschlager. If it's already there, I'm trying to
10 read it here, it looks like it's there. So, it
11 doesn't differentiate between category one or category
12 five test results; so, it -- I believe item three in
13 that 23701 already covers it. I don't think there's a
14 need to amend it because I see it being there, as
15 well.

16 MR. NAIPO: Okay. All right. Thank you.
17 And just so everyone else understands, I really want
18 to -- I want to appreciate you guys doing that stuff
19 because that's -- that's really what this TAC is is
20 that people can have conversations, and other people
21 have done their job and, you know, reviewed the rest
22 of these things, and they can see, hey, this connects
23 sort of to that after the conversations are had. So,
24 thank you very, very, very much for that work because
25 that honestly takes a lot of work off of what the

1 Program does because one of the things that I and the
2 technical -- technical specialists, and as well as
3 Gerald, is going to do is that we're going to have to
4 make sure that all of this stuff coincides, that this
5 change here that we make isn't affected by something
6 else in another WAC rule. So, I really appreciate
7 that preliminary work you guys are doing and bringing
8 these things forward to us; so, thank you.

9 So, with that, again, moving on to 2022.0069,
10 exempting 5.2.1.4.2.2 states, "Where machinery space
11 or control space is located in the pit, 2.7.5.2
12 applies."

13 "Elevator driving machines and controller shall
14 be located in a room or space. This is for worker
15 safety and avoids confined space protocol.

16 Any questions or clarifications on removing and
17 exempting this piece of code? Wade?

18 MR. FRIESEN: Wade Friesen, Vertical
19 Options. So, this is -- To my understanding, this is
20 addressing LULAs and I guess my question is: Is
21 this -- The folks that proposed this, I'm not aware of
22 any LULA that has a complete MRL package where the --
23 where the machine is located in the pit, but, if it
24 was, why would this differentiate from the commercial
25 code where it is permitted with commercial? Thanks.

1 MR. NAIPO: Is anybody able to address
2 Wade's comment or question? Oh, Duane, yes. Duane, I
3 think you're muted.

4 MR. LEOPARD: Can you hear me now? All
5 right. This is Duane Leopard. Thinking about this,
6 if this applies to LULAs we probably need go ahead and
7 incorporate it that they can't have any equipment in
8 the pit. You know, as far as the safety factor goes,
9 that's one thing, but Spokane occasionally gets lots
10 of water from the melting snow, and I've had now lots
11 of elevators with lots of water in the pit, and it'll
12 do damage to anything that's controls, or hydro tanks,
13 or anything.

14 MR. NAIPO: Thank you, Duane. Sergey.

15 MR. DOLGIKH. Sergey Dolgikh, Elevator
16 Inspector with L & I. So, I just have a question
17 regarding MRLs, and, granted, to what Wade mentioned,
18 there's not very many MRL LULAs that we can think of,
19 but there's also a very strong desire to bring in
20 hydro MRLs in this state and I don't know if this may
21 in some way, shape, or form trickle into
22 (inaudible/indiscernible) world at some point, and so
23 I think we should give that consideration also when we
24 are adopting or when we are voting for this particular
25 exemption. Thank you.

1 MR. NAIPO: Thank you. Kevin.

2 MR. BRINKMAN: Yeah, I guess I was just
3 trying to look up a little bit more what the rest of
4 that paragraph said on the LULA code, but my concern
5 would be if we delete this we then might have no rules
6 at all for equipment put into the hoistway and I'd
7 prefer to have the same rules that we have for -- in
8 27 for a passenger elevator rather than having
9 nothing. So, I guess my leaning at this point would
10 be to say this would not be a good change. It might
11 reduce safety because we'd have no rules.

12 MR. NAIPO: Paul.

13 MR. BARNHART: Yes. I was sitting here
14 trying to figure this out and the more I looked at it,
15 the more I ended up in Kevin's position. You strike
16 that clause as it's shown here in the proposal you
17 basically eliminated any requirement on control on --
18 on equipment that's in the pit. So, striking -- doing
19 this doesn't work. If the goal is to make sure that
20 there's no equipment in the pit, you need to state
21 that. Just striking this sentence does not say it
22 doesn't have equipment in the pit. It just says
23 there's no requirements, like Kevin said. Thank you.

24 MR. NAIPO: Thank you very for that. Okay.
25 So, this is part of the -- I knew we were going to get

1 to it at some point. So, it sounds like, to me, that
 2 some of you guys understand the rationale, but you
 3 don't feel like the verbiage that is presented is
 4 going to complete that rationale. If you guys are
 5 okay with the rationale, you just think the verbiage
 6 needs to be changed, that is something else that this
 7 TAC can do. We're not just going to throw this whole
 8 thing out because if you guys feel there's merit to
 9 where this change is coming from then we need to
 10 address that. That's what we will build the verbiage
 11 off of. But I don't know if we were going to -- I
 12 don't -- I don't want to do that exercise now, but we
 13 will work on that, okay. Paul, yes?

14 MR. BARNHART: Yeah. I just wanted to
 15 clarify. I don't necessarily agree with the rationale
 16 as written.

17 MR. NAIPO: Okay.

18 MR. BARNHART: What I -- What I was
 19 suggesting is if the group believes that equipment
 20 should not be located in the pit we need to write a
 21 rule for that. I don't agree with the -- necessarily
 22 with the rationale that just says avoid confined space
 23 protocol because you can have equipment in the pit if
 24 it's done correctly and prevent somebody from getting
 25 hurt while they're in the pit working on that

1 equipment. That's already covered in the elevator
 2 code. So, I just want to clarify that I don't
 3 necessarily agree completely with the rationale. I
 4 just -- I know what's being written is not what's
 5 intended, I think. So, thank you. And I forgot to
 6 introduce myself. It's Paul Barnhart.

7 MR. NAIPO: You're doing great, Paul, thank
 8 you. Candace.

9 MS. LAU: Candace Lau. I agree that -- that
 10 if we struck it that there would be no code, but this
 11 is what I was asking about earlier whether we can do
 12 friendly amendments because we see -- Now, I'm not
 13 saying I'm agreeing with this rationale or disagreeing
 14 with the rationale, but I'm looking at the rationale
 15 and to me I believe whoever wrote this probably had
 16 wanted to not have equipment in the pit, and that's
 17 what I was asking about earlier is this a good time
 18 where we can have a friendly amendment to this and
 19 say, hey, instead of just striking it, I think this
 20 person meant to say strike it and say that equipment
 21 in the pit is not -- is prohibited, or something like
 22 that. That's kind of what I was alluding to earlier
 23 about friendly amendments.

24 MR. NAIPO: So, what I suggest we do is we
 25 take a vote on the rationale, as well as, hey, just

1 amending what it says because you feel like -- you
2 feel like, hey, so I see what they're trying to do
3 here, and whether or not you agree with it, if you
4 don't agree with it, then vote nay, if you agree for
5 it, then, you know, vote for it, and then from there
6 we can go on to definitely editing and making sure
7 that it's casting the right light and saying the
8 correct thing that we need to. Like everyone has
9 alluded to so far, you don't want to strike a whole
10 piece of code, it's mainly amend it how we need to,
11 and we could do that in this TAC committee.

12 So, Wade, do you have a question?

13 MR. FRIESEN: Wade Friesen, Vertical
14 Options. So, I guess my confusion is this is
15 considered to be a commercial piece of equipment, and,
16 while I am not an advocate of putting machines in the
17 pit, I just want to make that clear, I don't -- I
18 don't think that's where they belong for worker safety
19 or ease of service, but, regardless of that opinion,
20 why are we regulating these differently than we are a
21 commercial MRL hydro? I don't -- I don't understand
22 why this would be regulated any different. I was
23 hoping somebody might be able to speak to that.

24 MR. NAIPO: Any comments on that? Yes,
25 Duane.

1 MR. LEOPARD: Duane Leopard. I have to
2 agree with Wade. I think somebody was looking to
3 exempt 5.2.1.4.2.2, and I think we should probably
4 just leave 5.2.1.4.2.2 as not adopted and that way it
5 wouldn't be in line with the rationale and also
6 coincide with other equipment in the pit and other
7 sections of the code.

8 MR. NAIPO: Okay.

9 MR. DOLGIKH: Sergey Dolgikh, Elevator
10 Inspector L & I. I -- I agree with Wade also. We
11 are -- I don't even understand what we are voting on
12 really because what we were pretty much looking at is,
13 hey, let's exempt the LULA from the requirement of
14 2.7.5.2. That's what we're basically looking -- I
15 mean that's how I'm reading what's being proposed. It
16 seems like the majority of people that I heard agree
17 that LULAs are part of the commercial -- commercial
18 designation of the conveyance, and so why are we
19 pulling it out of the 17.1 overall commercial code
20 requirement, and -- and regardless whether we can do a
21 friendly amendment or not, we need to figure out why
22 do we have it here, why are we talking about this,
23 because we -- we're specifically isolating a very
24 specific portion of the code and putting it here and
25 saying, no, that's not -- that's not applicable. Yes,

1 it is applicable as part of the whole code, so... And
 2 that's my personal view, my personal opinion, but what
 3 I'm trying to figure out is what's the reasons for it,
 4 and I agree with many people that spoke here, too, as
 5 to rationale as to why we should exempt this. But,
 6 anyway, it's really hazy why do we need it, why do we
 7 even need to bring it in. But that's just my personal
 8 comment on that one. Thank you.

9 MR. NAIPO: So, Kevin, before I call on you
 10 real quick, so, again, this is one of those times to
 11 where if you don't feel like the rationale is written
 12 well enough, the change you guys don't feel makes
 13 sense, we can vote on it all being nay. I mean
 14 there's nothing wrong with that, as well. You know,
 15 we don't have to vote on just one piece or another,
 16 and then amending it, and doing all this work. If you
 17 really feel like you guys don't understand, hey, this
 18 rationale doesn't really make sense with this code
 19 reference, the rationale doesn't make sense overall,
 20 we don't have to accept it. You guys have to realize
 21 that I didn't go and edit any of these. I just cut
 22 and pasted exactly what this person wanted onto the
 23 spreadsheet. I cut and pasted exactly their rationale
 24 onto this document for you, and I tried to understand
 25 it as best I could, and, but from the questions you

1 guys and the comments you guys are making, it sounds
2 like, hey, there's a lot of ambiguity to this and
3 we're not quite sure about it, and that's okay, as
4 well.

5 Kevin, go ahead.

6 MR. BRINKMAN: Yeah, Kevin Brinkman. I
7 think you covered pretty well what I was thinking,
8 just -- but a couple quick points. One, saying it's
9 not adopted to me is no different than exempting it.
10 We still have -- We just eliminated the code
11 requirements, which is worse than what we have. I
12 don't believe the rationale justifies why LULAs should
13 be different, don't really have a -- don't understand
14 why it should change, and I don't think we should take
15 what the proponent is looking for and try to amend
16 this. I think we're -- we're getting beyond what we
17 should be doing here and I'd recommend we just vote
18 this down because I don't think as written it's really
19 going to help safety. Thank you.

20 MR. NAIPO: Jonathan Quiett.

21 MR. QUIETT: Yeah, Jonathan Quiett. I'm in
22 the same boat. We're -- We don't need to make stuff
23 less safe. And also with this only addressing the
24 5.2.1.4.2.2 it's only addressing electric LULAs. It
25 doesn't do anything for hydraulic LULAs.

1 MR. NAIPO: Okay. Thank you. Jan.

2 MS. GOULD: Yeah, Jan Gould, City of
3 Seattle. It could be, I haven't read all the
4 proposals, that there is sections that affect part two
5 or three where they want to retain, shall we say,
6 machine or control room. So, maybe put this on hold
7 or vote it down. That's it.

8 MR. NAIPO: All right. Thank you for that.
9 So, what I suggest we do is we cast our votes and
10 we're casting it as written. As it's written, if you
11 don't feel it's written correctly or makes sense even
12 overall, this is your opportunity to vote this down as
13 nay. If you feel like, hey, you know, there is some
14 validity to this, whether it's, hey, I believe in the
15 rationale, I understand that, hey, there's some
16 editing that needs to be done, but I do believe in
17 that, please vote yeah and we'll work on this
18 accordingly if we have enough at the end of this
19 process on day three.

20 So, we are going to be casting our vote on
21 proposal 2022.0069, exempting 5.2.1.4.2.2. So, for
22 those in favor of striking that out and, you know,
23 you're okay with the rationale, please vote yea now by
24 raising your hand. Please vote yea now if you are for
25 this change. All-righty. Thank you for those who

1 have cast your vote for yea.

2 Please at this time those who oppose of this
3 change, please vote nay by raising your hand now.
4 Please vote nay now. All right. Good. All right, so
5 please lower your hand all those who voted nay.

6 And at this time if you would like to abstain
7 from this please raise your hand now. Please raise
8 your hand now if you would like to abstain.

9 All right. And thank you. And, with that, we
10 will move on to the next.

11 MS. ERIKSEN: So this is Melissa. Just
12 to --

13 MR. NAIPO: Oh, I'm sorry.

14 MS. ERIKSEN: -- put the button on this one.

15 MR. NAIPO: Sorry.

16 MS. ERIKSEN: For 2022.0069, the official
17 vote were 2 yeses, 22 nos, and 1 abstention.

18 MR. NAIPO: Sorry about that. Thank you.

19 MS. ERIKSEN: You're good. Team work.

20 MR. NAIPO: Nice team work, right. All
21 right. Moving on to proposal 2022.0070, WAC
22 296-96-00675, amending 5.2.1.13, Power Operation of
23 Hoistway Doors and Car Doors. "Power operation of
24 hoistway doors and car doors shall conform to section
25 2.13." They want to strike, "except that vertically

1 sliding doors shall not be permitted", and adding "(a)
2 2.13.5.3" -- point 5.3, excuse me, "Detection of
3 approaching objects does not apply. (b) Vertically
4 sliding doors shall not be permitted."

5 The rationale is, "Safety is of the utmost
6 concern for the user(s). It should also be applied in
7 the same manner. A typical commercial elevator will
8 see tens, if not hundreds, of uses a day; whereas, a
9 LULA may see one or two a week. LULAs are a rarity
10 due to their limitations of use and application.
11 Speed is limited to 30 feet per minute, rise is
12 limited to 25 feet, and car size is limited to 18
13 square feet/1,400 pounds. Having such restrictive use
14 limitations, some commercial requirements like this
15 one can go too far", or, excuse me, "some commercial
16 requirements like this one go too far. The proposal
17 only eliminates the requirement to have 'Approach
18 detecting means'. Detection of objects in the door
19 path will be required per 2.13.5.4."

20 Any questions, or clarification, or comments on
21 this one? Okay, Paul, go ahead.

22 MR. BARNHART: Paul Barnhart from UL. I
23 find it interesting that the very first sentence of
24 the rationale is "Safety is of the utmost concern for
25 the user...", and then he's proposing to remove a

1 safety requirement. Just because it's limited use
2 doesn't mean that the hazard doesn't still exist. So,
3 I speak in opposition of the proposal. I think we
4 leave it as it is. And vertical sliding doors are not
5 permitted, but you still need to have detection of
6 approaching objects. Thank you.

7 MR. NAIPO: Thank you. Sergey.

8 MR. DOLGIKH: Sergey Dolgikh, Elevator
9 Inspector at L & I. Frankly, I'm looking at this
10 requirement to be amended and the rationale behind it,
11 and I agree, I don't know at which end to approach it.
12 I don't even understand what specifically it tells me
13 not to do. In one sent-- On one sentence it says,
14 "except vertical sliding doors shall not be permitted"
15 and strike it out, but then it's suggesting that
16 vertical shall -- sliding doors shall not be
17 permitted; so, kind of contradictory in my view or
18 ambiguous at least. But I'm not trying to critically
19 acclaim the writing style; I'm just saying the way
20 it's written and I'm just reading it. And, yes, to a
21 previous point, to speak to a previous point, a person
22 who is safety and then we're basically taking away the
23 safety. Vertical sliding doors are very dangerous and
24 should be always considered as a danger, and there
25 should be means of detecting an object in -- in -- in

1 view. So, anyway, I am against that also.

2 MR. NAIPO: Candace.

3 MS. LAU: Yeah, Candace Lau. I agree with
4 the last two speakers. Vertical sliding doors are
5 extremely dangerous and dumb. Passenger elevators,
6 LULAs, should not -- we should keep the way it's
7 written in ASME that it shall not be permitted.

8 MR. NAIPO: So, I just want to make sure
9 people understand it's not that they're wanting --
10 that they don't agree with the vertically sliding.
11 What they're doing is they were adding (a) to it and
12 just broke off the, "Vertical sliding doors shall not
13 be permitted" to (b). So, all they were adding was
14 2.13.5.3 detection of approaching objects does not
15 apply. That's really the only change that they're
16 really making to this, other than the formatting of
17 what it looks like. So, I just wanted to put that in
18 there. Mr. Brinkman.

19 MR. BRINKMAN: This is Kevin Brinkman. That
20 was the point I was going to make. They're really not
21 changing the vertically sliding doors part. It
22 just -- It's a simple change to eliminate the
23 approaching object detection. And I guess I -- I have
24 a tendency to lean towards stick with the ASME
25 standard as written, unless there's a valid reason for

1 not; so, I think I will support or will vote nay on
2 this only because I think we should -- you know, if it
3 needs to be changed, we should change it there. I
4 agree there may not be as much usage and maybe it's
5 not as important for that reason, but I think sticking
6 to the standard makes more sense.

7 MR. NAIPO: Thank you. Candace. Oh, okay.
8 Mr. Quiett.

9 MR. QUIETT: Yeah, really all this -- This
10 is Jon Quiett. All this seems to me is what we're
11 really trying to gain from this is not having to put
12 some sort of a 3D door detector on a LULA, which
13 inherently is going to make it less safe.

14 MR. NAIPO: All right. So, thank you.
15 Does anyone else have any additional questions or
16 comments? Sergey.

17 MR. DOLGIKH: Yeah, Sergey Dolgikh,
18 Elevator Inspector L & I. And Jon made the perfect
19 point here is we -- we -- The WAC should not
20 necessarily diminish the standard of safety. We, in
21 fact, have to bring it up. If anything, we make it
22 more stringent within authority of having jurisdiction
23 because 17.1 provides the minimum safety standards for
24 the industry that we are looking at as the authority
25 having jurisdiction saying here in our state we do

1 this and we consider this because of the type of gear,
2 the type of environment, so on and so forth. So, we
3 do not want to diminish the safety. And I agree with
4 Jon Quiett on this one. And that's just the
5 additional comment I wanted to throw in there. Thank
6 you for listening.

7 MR. NAIPO: Carl.

8 MR. CARY: Yeah, hi, Carl Cary, Lerch Bates.
9 I rise to encourage members of the TAC to vote against
10 this amendment as someone who has a LULA in my place
11 of worship and that is always used by someone who is
12 not nearly as mobile or able. The 3D door protection
13 edge certainly allows a modicum of safety and I think
14 that that should be continued. Thank you.

15 MR. NAIPO: All right. So, with that, we
16 will be casting our votes, casting our votes on
17 proposal 2022.0070, pretty much just adding that LULA
18 equipment doesn't have to have detection of
19 approaching objects, that they're trying to strike
20 that and so it doesn't apply to those conveyances.

21 For those in favor of that, please, at this
22 time, vote yea. If you are for this, please raise
23 your hand and vote yea. All right. Thank you for
24 those.

25 If you are voting nay on this, please raise your

1 hand now. Did you get those, Melissa?

2 MS. ERIKSEN: Thank you.

3 MR. NAIPO: And for -- Go ahead and lower
4 your hands. Thank you very much for your vote.

5 And if there is anyone who feels they need to
6 abstain from this vote, please raise your hand at this
7 time. If you are abstaining from this vote, please
8 raise your hand at this time.

9 All-righty. And with that, Melissa, will you
10 read the vote tally for proposal 2022.0070.

11 MS. ERIKSEN: Yes. Thank you. So, the vote
12 came out 0 yea, 26 nay, and 0 abstentions.

13 MR. NAIPO: All-righty. It is eleven
14 o'clock. With that, we're going to take a quick five
15 minute break. So, thank you everyone for your
16 participation and see you guys back in five minutes.

17 (Recess taken)

18 MR. NAIPO: All-righty. And with that, we
19 will jump right back in to proposal 2022.0071, "Amend
20 2.5.1.27, Emergency Operations and Signaling Devices.
21 Emergency operation and signaling devices shall
22 conform to section 2.27", and instead of there -- yes,
23 they're striking that through, but all they're doing
24 is dropping that requirement down and creating two
25 parts to this one statement. So, (a), meaning

1 2.27.3.3., Phase II, emergency in car operations shall
2 not be provided", which is stated above, but as well
3 as adding "(b) 2.27.1.1.3(c)-(e) and (k) do not
4 apply."

5 Rationale being, "Video and messaging - Safety
6 is of the utmost concern for the user(s). It should
7 also be applied in the same manner. A typical
8 commercial elevator will see tens, if not..."

9 Okay, that looks like it's the same exact thing
10 from above. "A typical commercial..." -- "LULAs are a
11 rarity due to their limitations of use and
12 application. Speed is limited to 30 feet per minute,
13 rise is limited to 25 feet, and car size is limited to
14 18 square feet/1,400 pounds. Having such restrictive
15 use is limit -- the "use limitations, some commercial
16 requirements, like this one, go too far. This
17 proposal only eliminates the requirement to have
18 video/messaging capabilities within the car and on the
19 phone."

20 Any clarifying comments or questions? I'm
21 looking at the gallery. Nothing. All-righty. So, is
22 everybody ready to vote on this? Paul.

23 MR. BARNHART: Thanks. This is Paul
24 Barnhart. I question why removing the video and
25 messaging capabilities is appropriate just because

1 it's limited limit use. Limited use or not, if
2 somebody is trapped inside, they need to have those
3 capabilities. So, I speak in opposition to this
4 amendment.

5 MR. NAIPO: Thank you. Mr. Brinkman.

6 MR. BRINKMAN: Kevin Brinkman. Just a
7 little background on this. The requirement for
8 enhanced communication was actually incorporated into
9 the IBC in 2018, and I'll have to admit I didn't
10 research to see what edition the current Washington
11 State Building Code is based on, but 2018 and later
12 editions do have a requirement for this video
13 communication. Eliminating it here would not
14 eliminate it in the building code; so, the reality is
15 the requirement would still exist if you're on at
16 least a 2018 or later edition of IBC. So, I'm not
17 sure there's any -- I think this might just create a
18 conflict with the building code if this one is
19 removed. Thank you.

20 MR. NAIPO: Wade.

21 MR. FRIESEN: Wade Friesen, Vertical
22 Options. I agree with Paul's point that I don't
23 really understand why this would be signaled out --
24 singled out specifically for LULAs. With that being
25 said, it's my understanding that there are some

1 technological challenges to getting this equipment to
2 function properly and not to mention monitoring
3 companies that may or may not possess the necessary
4 equipment to enact this. So, you know, personally I'm
5 opposed to this. I think that voice communication at
6 this point is tried and true and is an acceptable
7 means. Thank you.

8 MR. NAIPO: Any other questions or
9 clarifying comments that anyone has? All right. With
10 that, we will be that casting a vote on 2022.0071
11 regarding Phase II emergency in car operation shall
12 not be provided, which is already part of the code, as
13 well as 2.27.1.1.3(c)-(e) and (k), stating it does not
14 apply.

15 For those that are in favor of 2.27.1.1.3(c)-(e)
16 and (k) not applying in this state please vote yea
17 now. Please vote yea if you are for this change of
18 omitting the requirements 2.27.1.1.3(c)-(e) and (k).
19 All right. Thank you for those that have cast your
20 vote for yea.

21 And at this time if you are against that change
22 please vote nay now.

23 MS. ERIKSEN: Sorry, real quick. You can't
24 vote for both.

25 MR. NAIPO: If you have voted for yea

1 already, please remove -- please lower your hand.
2 Sorry I didn't say that, my fault. Are the numbers
3 not adding up?

4 MS. ERIKSEN: Sorry to call you out, Mike
5 Wilson, you have voted for both. Which one do you
6 want me to put you down for?

7 MR. WILSON: Sorry, I forgot to take it
8 down.

9 MS. ERIKSEN: Thank you.

10 MR. WILSON: No worries

11 MS. ERIKSEN: I'm good.

12 MR. NAIPO: Okay. With that, everyone who
13 has voted nay please lower your hands. And if anyone
14 needs to abstain from this vote, do so at this time by
15 raising your hand. All right. Thank you very much.

16 And, so, Melissa, will you read the results of
17 2022.0071.

18 MS. ERIKSEN: Thank you. So, the results
19 are 3 yeas, 22 nays, and 0 abstentions.

20 MR. NAIPO: Okay. Thank you. So, there is
21 a note in the chat from Mr. Wilson, the next proposal
22 is the same, but applied to a hydraulic LULA. So, if
23 anybody has any clarifying questions or comments that
24 are needed for this one, it's the exact same
25 requirement as above, but this is regarding hydraulic

1 LULAs, at this time if there's any questions,
2 comments, please raise your hand. Another couple
3 seconds. All-righty. Then we will move on to voting.

4 If you are voting for this change, which was
5 addressed before, as well, just regarding hydraulic
6 LULAs for proposal 2022.0072, please vote yea now.
7 All right.

8 MS. ERIKSEN: Go ahead.

9 MR. NAIPO: All right. Thank you. Go ahead
10 and lower your hands. And those voting nay, please
11 raise your hands now.

12 MS. ERIKSEN: Thank you.

13 MR. NAIPO: All right. And please lower
14 your hands for those who voted nay. And if anybody
15 needs to abstain from this vote please raise your hand
16 now. Dylan, are you voting to abstain from this?
17 Okay. Thank you. All right. With that, Melissa will
18 you read the votes for 2022.0072.

19 MS. ERIKSEN: Yes. Thank you. So, for this
20 one we have 3 yeas, 23 nays and 0 abstentions.

21 MR. NAIPO: Okay. Moving on to proposal
22 2022.0075, again this is an amendment to an adopted
23 standard. Regarding, "8.4.10.1, Operation of
24 Elevators Under Earthquake Emergency Operations.
25 (a) 8.4.10.1.1(e)(1), A group..." -- They're --

1 they're submitting that they remove group three
2 security and amend it to group one "Security,
3 spring-loaded key switch labeled 'Earthquake
4 Hoistway...'"

5 (b) 8.4.10.1.3(d)(2), removing the verbiage for
6 emergency personnel and amending it to say elevator
7 personnel shall reset the seismic detection device;

8 (c) 8.4.10.1.3(d)(3) again removing the
9 emergency personnel and replacing it with elevator
10 personnel shall make sure the car is empty;

11 (d) 8.4.10.1.3(d)(5), the car traveled from
12 terminal to terminal and back to the starting floor
13 top terminal landing at speed of .75 meters per
14 second, (150 feet per minute) maximum and open its
15 door;

16 (e) 8.4.10.1.3, I don't know how to say that,
17 minus (-a), if the emergency personnel, and replace
18 that with elevator personnel, actuates the "Earthquake
19 Hoistway Scan" key switch again;

20 (4) [sic], as well, 8.4.10.1.3 (-b), If the
21 emergency personnel, remove emergency and replace it
22 with elevator personnel, does not actuate the
23 "Earthquake Hoistway Scan" key switch within.

24 The rationale being, "Earthquake Hoistway Scan
25 and Earthquake Slow Speed operations should be

1 prohibited. If not prohibited, this operation should
 2 be only initiated by elevator personnel. There are
 3 too many unknown conditions that occur in an elevator
 4 hoistway during an earthquake. Many of these unknown
 5 conditions could lead to a catastroph-- could lead to
 6 catastrophe if the scan mode is used. Only elevator
 7 personnel are qualified to enter and inspect a
 8 hoistway for potential hazards affecting the elevator
 9 operation after an earthquake. Allowing emergency
 10 personnel or the possibility of authorized personnel
 11 to initiate the scan mode lead to equipment suffering
 12 further damage. This would involve extensive repairs
 13 and length in the time it takes to return the elevator
 14 to service. Emergency personnel are not qualified to
 15 perform work inside an elevator controller."

16 Any clarifying questions or comments? And it
 17 sounds like we'll start with Carl.

18 MR. CARY: Yes. Carl Cary, Lerch Bates. I
 19 rise to strongly encourage the TAC committee to vote
 20 against this amendment. As someone who has worked in
 21 a number of buildings with vertical tsunami evacuation
 22 points, we have a number of communities in western
 23 Washington that don't have adequate tsunami evacuation
 24 routes. So, there are many buildings under design
 25 right now that will vertically evacuate those people

1 in the event of a tsunami. If you think about the
 2 process of a tsunami, an earthquake could potentially
 3 trigger this system. The earthquake hoistway scan
 4 allows them to be able to return the elevator to use.
 5 It's obviously not feasible that the elevator, in a
 6 situation where a tsunami is impending and seconds
 7 count, it's obviously not realistic to think that they
 8 can wait for an elevator personnel to come on site and
 9 be able to do the appropriate checks. There is a very
 10 detailed sequence of operation where the car takes off
 11 on itself by itself empty, does a scan of the hoistway
 12 up and down, and allows people to continue to use it
 13 at a reduced speed. If we vote yes on this, we have
 14 essentially removed the ability to have the vertical
 15 evacuation route in Washington State. Thank you.

16 MR. NAIPO: Thank you. Duane.

17 MR. LEOPARD: Well, I read this one earlier
 18 and I've got to say let's not pass this one. I looked
 19 carefully at this when I was on the RAC Committee and
 20 we spent many, many hours to get this through. There
 21 is -- if -- Like in a tsunami or even if an earthquake
 22 happens you don't have enough elevator personnel to go
 23 to all the hospitals, and high rise retirements homes,
 24 or high-rise apartments. You know, a building
 25 engineer can be trained to do these things, to do the

1 hoistway scan and at least, you know, they would have
 2 vertical movement to get in and out and carry on with
 3 their -- with what they've got going on. In a
 4 hospital this is really critical to at least be able
 5 to move people.

6 You know, I was involved in an earthquake in
 7 Portland many, many years ago. There were a lot of
 8 elevators that shut down basically because the ring
 9 and string tripped. This way scanning the hoistway
 10 it's going to go through and it checks the ring and
 11 string to see if it still -- you know, if the counter-
 12 weights were to get displaced, and it's also going to
 13 check your ropes and see if there's any slippage and
 14 things like that. If any of that reoccurs, the
 15 elevator is shut down. So, I think we -- I can't
 16 advocate passing this amendment.

17 MR. NAIPO: Thank you, Duane. Wade.

18 MR. FRIESEN: Wade Friesen, Vertical
 19 Options. I was going to comment not just to what
 20 Duane had to say with this, but from a safety
 21 perspective it's my understanding that this operation
 22 is prohibited. It will not do a hoistway scan and run
 23 if the ring and string is active. So, if we have an
 24 event that was significant enough to displace and
 25 leave the counterweight displaced this operation is

1 not going to occur. So, this is designed, from what I
2 understand, for a minor seismic event where there is
3 no particular substantial damage to the equipment and
4 will allow personnel to -- to get around and use the
5 elevator until elevator personnel can get there and
6 reset it. So, I'm for rejecting this, as well. Thank
7 you.

8 MR. NAIPO: Thank you. Kevin.

9 MR. BRINKMAN: Yeah, Kevin Brinkman. The
10 two previous speakers, you know, highlighted most of
11 what I was going to say because, you know, this was
12 included in the A17 code for the very reason that in
13 an emergency you have so many elevators down it's not
14 possible for mechanics to get to all of them at once,
15 and obviously hospitals and other buildings need to
16 remain in service, if possible, and the safety
17 precautions were put into place to make sure that, you
18 know, if there was an issue with the seismic sensors
19 or something else it would not allow the car to run.
20 I think -- and the only other comment I have is the
21 last statement of the rationale says, "Emergency
22 personnel are not qualified to perform work inside an
23 elevator controller." We're -- we're not asking any
24 emergency personnel to do that. This code requirement
25 doesn't. They're only required to turn on a key

1 switch and -- and run the elevator in scan mode. It's
2 not getting into the controller at all. They're not
3 working on the controller. Thank you.

4 MR. NAIPO: Duane, did you have an
5 additional question? I saw your hand was still
6 raised.

7 MR. LEOPARD: No. I thought I put it down,
8 but I can add to his comment, if I can.

9 MR. NAIPO: All right. Sergey. Oh, wait,
10 wait, I'm sorry. Duane, did you say you wanted to add
11 something to Kevin's comment?

12 MR. LEOPARD: Yeah. This is Duane Leopard.
13 Kevin is right. The key switches are inside the car.
14 So, when you actually activate the hoistway scan and
15 all that, it's done by somebody in the car. They're
16 not in the controller or anything else. And it's
17 typically done by trained personnel of some type.

18 MR. NAIPO: Thank you. Sergey.

19 MR. DOLGIKH: I would just like to
20 contribute a word of caution to the previous speakers
21 because I was in the middle of Nisqually earthquake in
22 the middle of downtown Seattle, and I was the guy who
23 was cabling the Space Center, and I was in the place
24 where the earthquake struck, and we had tons of
25 equipment down and set on safeties on both cars, and

1 the counterweights and things, and then I was the guy
2 who was on the Starbucks Tower in SODO district when
3 OTIS had the crumbled hoistway on the other side of
4 it, and checking escalators in the old Sears Building
5 for integrity and everything else. I understand the
6 concept and the caution behind saying we don't have --
7 in times of emergency we don't have that many people
8 to quickly respond and to assess the damages right
9 away and -- and put those conveyances back in service.
10 But I also want to caution from my personal experience
11 that there are so many variables that could be more
12 problems than not and could create more damages to
13 gear and to people that I think the elevator personnel
14 is essential to be doing the first response and
15 assessment of any kind of post-earthquake/tsunami type
16 of thing. In fact, if there is a tsunami evacuation
17 and there's a basement traction machine how are you
18 going to -- how are you going to quick check it? It's
19 going to flood the basement.

20 So, there are -- there are a different variety
21 of questions that need to be answered before, you
22 know, going across the board and saying, "Well,
23 they're going to let emergency personnel, they've been
24 trained to deal with this." But have they been
25 trained? I mean we -- we have to train people to have

1 a wealth of knowledge that was accumulated by elevator
2 mechanics who were so many years on so many jobs in
3 the hoistway that assesses the damages. I don't know.
4 I'm on the -- on the fence on this one. I'm sorry.

5 MR. NAIPO: All right. Dylan.

6 MR. MONTGOMERY: Dylan Montgomery. So, I
7 am -- I can understand where this one is coming from.
8 I can understand where this one is coming from and
9 what they want, but learning from and going -- being
10 an emergency responder, it's like different property
11 every single time, and if it's -- and the way this
12 reads, at least the way I'm interpreting it, is the
13 reason why they don't want emergency personnel is
14 because it'll cause more damage to the elevator, and
15 at that point like if the elevator -- like if (audio
16 distortion) the elevator will work safely enough, then
17 I'm going to use it. I could care less if it's going
18 (audio distortion), as long as it functions the way
19 it's supposed to function. Now, that's how I
20 interpret it, but I understand where Sergey was coming
21 from where it's like how can it really justify, you
22 know, the damages of it to -- in order to use it
23 safely. So, I'm kind of on the other side of it, but
24 I'm also kind of in line. It's like I'm kind of hit
25 or miss on this one.

1 MR. NAIPO: Jonathan Madison.

2 MR. MADISON: Yeah, Jonathan Madison. The
3 first question, somebody had said that this key switch
4 is inside the elevator, and, so, if this key switch is
5 inside the elevator, the person turning this key,
6 unless I misheard that, would be riding in it when
7 they found out that it didn't work. So, I'm assuming
8 that's a misspoke. But I was also here with the
9 Nisqually quake, and, you know, from Seattle to
10 Bellevue, Tacoma, basically all of the -- all of the
11 majors have protocols in line and everyone heads to
12 those emergency facilities such as the hospitals, and
13 old folks homes, and you name it.

14 What we did find, though, when we started
15 looking at this is we had cars that were still running
16 and some that had earthquake systems where in the
17 middle of a hoistway there were walls hanging into the
18 hoistway that a car was passing and rubbing on, and
19 inevitably if that's brick or any other structural
20 piece we don't know what that's going to do after you
21 have people like the fire fighters and everyone else
22 get in that elevator, travel up the hoistway, and then
23 get hung up in that building and now we've opened
24 another emergency call. So, I think going with this,
25 I see what the idea is -- behind it is to get somebody

1 in there to see it first before we cut the public
2 loose, and even first responders. I mean we're
3 literally taking people we're going to be short on and
4 we're putting them back in harm's way.

5 I'm -- I'm for it, if it's somebody who realizes
6 what the system needs and requires for safe use has
7 had a chance to look at it before we just cut loose a
8 building person.

9 And during the Nisqually quake we had hundreds
10 of people, building maintenance people, you name it,
11 trying to climb into cars to help people out that had
12 no business on our equipment, and then potentially,
13 you know, they were putting their own life at risk
14 with no training or no knowledge of what they were
15 dealing with. That's all I have. Thank you.

16 MR. NAIPO: Thank you, Jon. Dylan Turner.

17 MR. TURNER: Dylan Turner, Greenbusch. I
18 was just going to second what Duane had said. The
19 elevator is not going to operate if either the seismic
20 switch or the displacement switch are still tripped,
21 and this hoistway scan switch doesn't reset safeties;
22 so, if the elevator is already locked out, it's not
23 going to start operating. Also, when an elevator is
24 located in a FEMA flood zone, there are ASCII
25 requirements that require flood switches and various

1 wet rated requirements. So, I think we're kind of
2 missing the point of the hoistway scan itself. I'm
3 just throwing that out there.

4 MR. NAIPO: Thank you, Dylan. Jonathan
5 Quiett.

6 MR. QUIETT: Yeah, Jonathan Quiett. Also I
7 was in the area with the Nisqually quake. From what I
8 understand for the earthquake mode, the way it does
9 the hoistway scan, everything else is running at slow
10 speed. If the ring and string is not currently
11 tripped and the string is currently intact it will
12 ignore the seismic switch after a delay time expires
13 to allow the hoistway scan to take place. After being
14 in the Nisqually quake and the damage that was done,
15 we had many buildings that actually had structural
16 damage around the elevator entrance frames, which now
17 made it so that the doors could not properly open or
18 close. So, we're put in a situation where we're
19 counting on the elevator to be able to go back into
20 service. We are trying to evacuate people from a
21 building. If we have the inability to correctly open
22 a door we have now stuck people in an elevator in an
23 emergency situation to be able to remove them from a
24 building.

25 As far as the elevator personnel to emergency

1 personnel, I personally feel we should keep the
2 emergency person there for the evacuation of people
3 trapped inside of the elevator and not make them
4 responsible for making sure the elevator is safe to
5 evacuate people further from the building using the
6 elevator system.

7 MR. NAIPO: Thank you. Mr. Brinkman.

8 MR. BRINKMAN: Yeah, Kevin Brinkman. There
9 was a question about whether the switch would be
10 located inside the car. The code would not allow
11 that. The switch shall be located outside the
12 hoistway in the inspection or test panel in the
13 controller enclosure, in a machine room, etc.; so, it
14 could not be in the car.

15 MR. NAIPO: Thank you. Mr. Mills.

16 MR. MILLS: Eric Mills, field mechanic. I,
17 too, was in the earthquake back '01. The hoistways
18 themselves were damaged, like Jon Madison said, Jon
19 Quiett. There was structural damage and we had cars
20 that still ran. We had cars with counterweights
21 inside the car. We had all types of issues. And at
22 least having a trained personnel, the elevator man or
23 person, come out and look at it before we turn it over
24 puts eyes on that we know we can -- We notice that
25 stuff right off the bat because we've been in the

1 hoistways. We see that. We have the experience. So,
2 taking this and putting it on a fire fighter who is
3 already overwhelmed just like the elevator maintenance
4 people and repair people, we get overwhelmed, too.

5 I remember when L.A. happened. They had gang
6 boxes with stuff set up all over the machine rooms
7 across L.A. with beds, and water, and food because
8 it's non-stop 24/7. You know, you run, you take a cat
9 nap, and you go back to work. We're considered
10 emergency at that point, but it's state elevator
11 personnel, and I'm -- I am for this.

12 MR. NAIPO: All right. Thank you for that.
13 Duane.

14 MR. LEOPARD: Yeah, I'll back up and say I
15 might be mistaken that the key switch is in the car.
16 Since I've never seen it, I'm not 100% familiar with
17 the code. Thanks for correcting me, gents.

18 MR. NAIPO: All right. Duane and Jon, you
19 both have your hands up. Do you guys still have an
20 additional question or a comment? Okay. So, it
21 sounds like people are applying different parts of
22 this code, and, again, I'm -- I'm just facilitating
23 this. I'm not an elevator mechanic or have any
24 elevator experience, you know, in the field or
25 anything lying that. So, it seems to me that from the

1 changes that this person is submitting, because this
 2 is just during operation of elevators under earthquake
 3 emergency operations, they are stating that this stuff
 4 listed that they tested to should be done by an
 5 elevator personnel. Does any of these codes pertain
 6 to turning the elevator back over to the public? I
 7 don't see that, but I don't know if that is housed
 8 within the rest of this code or if any of these
 9 changes would affect that. But, it just seems to me
 10 that in that -- in that earthquake scenario, or
 11 something that would trip these type of things, should
 12 this work be still okay to be done by emergency
 13 personnel or should this be done by an elevator
 14 personnel? And that's what the change is is that this
 15 person is saying, "Hey, this stuff shouldn't be done
 16 by emergency personnel. The re-setting of the seismic
 17 detection device, the making sure the car is empty,
 18 actuating the hoistway scan key, all of that stuff
 19 shouldn't be done by emergency personnel, but should
 20 be done by the elevator personnel." Again, that's
 21 just a question of clarification just to maybe help
 22 people because it seems like they're -- I heard some
 23 statements about turning this back on for the public
 24 and I didn't feel like that was part of what this
 25 change is. So, with that, I'll step back.

1 MR. NAIPO: Sergey.

2 MR. DOLGIKH: Yes, Paoa. Thank you. This
3 is Sergey Dolgikh, Elevator Inspector L & I. So, I
4 just want to make it very clear, my stand on this as
5 far as what we are calling out here. Riding public is
6 human being, emergency personnel is a human being, an
7 elevator personnel is a human being. We all get hurt
8 the same frickin' way. We just have more marginal
9 safety and training experience that brings us out to
10 the next level of understanding how the systems work
11 and how they are interconnected so that when we get
12 into a situation when those could be in a very bad
13 damaged condition we can assess it much quicker. And
14 once again, like Eric Mills said, we also get
15 overwhelmed, and by we I mean elevator inspectors. We
16 are -- we are doing tremendously stressful work and
17 the same applies to elevator service personnel.

18 So, what I was saying is this: Every life
19 matters, and I think that in this case what we're
20 looking at is we're making it more stringent. Once
21 again, we are making it more rigid in the ways that we
22 protect the safety of people that may not be trained
23 and qualified as much as maybe elevator personnel is,
24 and I think for that matter I would put my yes on this
25 one. Thank you.

1 MR. NAIPO: Mr. Rudder.

2 MR. RUDDER: (Muffled audio)

3 MR. NAIPO: Wait, Scott, hold on. Scott, I
4 think your mic is really muffled, so...

5 MR. RUDDER: (Muffled audio)

6 MR. NAIPO: I just want to make sure that
7 the court reporter can hear you.

8 THE COURT REPORTER: Yeah, I was having a
9 little bit of trouble. It did sound muffled to me.

10 MR. NAIPO: Yeah.

11 MR. RUDDER: (Muffled audio) -- hear that?

12 THE COURT REPORTER: Not really.

13 MR. RUDDER: Don't worry about it then.

14 MR. NAIPO: If it's something that you can
15 possibly toss in the chat and we could -- we'll read
16 from that, there's a couple other people that have
17 comments. If you're willing to do that, Scott, I
18 appreciate it. Kevin.

19 MR. BRINKMAN: Yeah, Kevin Brinkman again.

20 Thank you, Ricky, for putting that in the chat.

21 Correction: There's two switches. One switch is to
22 reset the seismic detection temporarily, and that is
23 outside the hoistway. The switch to activate the scan
24 is actually in the car. It's in 11-- 8.4.10.1.1(e).

25 Thank you.

1 MR. NAIPO: Mr. Quiett.

2 MR. QUIETT: Yeah, I was going to piggyback
3 with that a little bit. The seismic detection switch
4 and looking at the flow chart, the seismic detection
5 switch must be reset. Then the earthquake hoistway
6 scan must be actuated. If it passes that, then it is
7 allowed to -- after EQ, the earthquake mode reset, to
8 return to automatic operation. So, we -- We have to
9 be careful with who we are allowing to have the
10 elevator return back to operation. For some of the --
11 some of the reasons that people have stated, simply
12 letting the elevator run a scan of the hoistway is not
13 a full understanding of the damage that could be done
14 to the system and we could be inherently allowing a
15 system to go back into service and putting the public
16 at a greater amount of harm than by leaving it out of
17 service and having these other egress means out of a
18 structure.

19 MR. NAIPO: All right. Jonathan Madison.

20 MR. MADISON: Yeah, Jonathan Madison.
21 That's exactly where we're going with it. Thank you,
22 Ricky, for clarifying that. The key switch inside the
23 car I see an inherent problem with that right off.
24 But back to the point of we've got damage to entries,
25 if we've got debris in the hoistway, it's not going to

1 show on that initial reset. It's going to show when
2 there's someone in the car doing the scan. So, that
3 may be an argument for another day. But, again,
4 you're not going to have anybody, an emergency
5 personnel, a fire fighter, or EMTs are not going to
6 see the situation that they're about to enter with
7 this car running through a hoistway with the debris in
8 it. So, I -- I think it should be elevator personnel
9 no matter what. But thank you.

10 MR. NAIPO: Thank you. Jan.

11 MS. GOULD: The language emergency
12 personnel, I believe the vast majority of fireman have
13 no idea how use to Phase I and Phase II, let -- let
14 alone know that there's a switch in the machine room
15 that they could run the car with. That's it. And
16 it's fairly new to the code, the key switch is.

17 MR. NAIPO: Thank you, Jan. Oh, Melissa,
18 you had your hand raised?

19 MS. ERIKSEN: This is Melissa. So a few
20 people have referenced what Ricky said. To put it
21 into the record, Ricky put in the chat some code
22 language that just starts with (e) Where earthquake
23 mode slows speed to automatic operation as provided,
24 see 8.4.10.1.3(d) as in delta. The following shall be
25 provided in the elevator car operating panel: One, a

1 group three security spring-loaded key switch labeled
2 "Earthquake Hoistway Scan" with positions marked
3 initiate and off, lettering shall be a minimum five
4 millimeters or a quarter of an inch in height. And,
5 two, a visual indicator labeled or displaying
6 earthquake slow speed.

7 MR. NAIPO: Thank you for that, Melissa.
8 And, with that, is there any additional questions that
9 need to be had before we cast our vote? All-righty.
10 And with that we are going to be casting our vote on
11 proposal 2022.0075 regarding operation of elevators
12 under earthquake emergency operations and the edits we
13 have discussed pretty much relinquishing the emergency
14 personnel from being able to operate the elevator with
15 these amendments and making it just the elevator
16 personnel.

17 For those that are voting for this change of
18 striking emergency personnel and replacing it with
19 elevator, please vote yea by raising your hand now.
20 For those in favor of this change removing emergency
21 personnel and replacing it with elevator personnel,
22 please raise your hand now if you are for that change.
23 Thank you very much for those votes. Thank you very
24 much for those votes. Go ahead and put your hands
25 down.

1 And those who are against it please raise your
2 hand now. You'll be voting nay. It looks like some
3 people are jumping for joy. All right. If you need
4 to vote no or nay please raise your hand now. I'll be
5 waiting for a confirmation from my co-worker. But
6 she's got it. All right, we're good. All right, so
7 go ahead and please lower your hands if you have voted
8 nay.

9 And if anyone needs to abstain from this vote
10 please raise your hand now. If you are voting to
11 abstain from this vote please raise your hand now.

12 All-righty. And, with that, voting has
13 concluded on proposal 2022.0075. Melissa, will you
14 please read the tallies?

15 MS. ERIKSEN: Yes. Thank you. So, there
16 were 6 yeas, 17 nays, and 3 abstentions.

17 MR. NAIPO: All-righty. Um, this is a
18 pretty big one. We've got 15 minutes until lunch.
19 So, I'm going to pose it to you guys. Do you guys
20 want to take a little bit of a break, reset, and then
21 we can come back to hear and tackle the rest of these
22 at that time, or would you guys like to push through,
23 do this one, and then take lunch once we're done? So,
24 those in favor of taking lunch now, go ahead and raise
25 your hand now, if you want to take your lunch now and

1 come back and do 77. Raise your hand if you want to
2 take lunch now for a half hour. Two, three, four,
3 five. All right.

4 And those against it and we're just going to
5 push through until we get this one done and then take
6 lunch after that please raise your hand now.

7 All-righty. It looks like we're going to push
8 through on this one and, then, once we're done with
9 this one, we will then take our lunch, okay.

10 So, we are going over proposal 2022.0077.
11 Patrick, do you -- Oh, all right. We're going over
12 proposal 2022.0077 as follows, Amend 17.1 section 2.7
13 as follows: 2.7.6.3.2, The motor controller shall be
14 located in a, striking machine room space, keeping
15 machine, striking control space or control room, they
16 kept the "or control room", but adding electrical
17 clearance requirements shall comply with NFPA 70, NFPA
18 70E, 29 CFR 1926 or 29 CFR 1910, whichever is
19 applicable (see Part 9). In the event two or more
20 code requirement(s) conflict, the core requirements or
21 requirement providing a higher degree of safety shall
22 be used. And the rest of that verbiage, "A motor
23 controller shall be permitted to be located outside
24 the specified spaces, provided it is enclosed in a
25 locked cabinet. The locked cabinet shall be..." (a)

1 through (f) has all been stricken.

2 The reason for this, "Statement of Problem and
3 Justification. Hazardous equipment should not be in a
4 public place. MRLs already in public spaces conflict
5 with and violate codes and standards the State of
6 Washington must comply with. Stop putting hazards in
7 public spaces. If the hazards exist, protection must
8 be provided through engineering or higher methods. A
9 working space in proximity to a motor controller in or
10 exposed to a public area at any time that presents
11 hazards to trained and untrained personnel. Access
12 and working space have to be provided and maintained
13 about all electrical equipment to permit ready and
14 safe operation and maintenance of such equipment.
15 Additionally, affected persons in a public area have
16 to be protected. In this area several standards have
17 been found to be in conflict that may result in a
18 reduction to life, limb, and the welfare of affected
19 persons."

20 So, the person was available for comment.
21 Unfortunately, when I contacted them they weren't
22 available at this time. So, if there's any questions,
23 unfortunately they won't be able to be answered.

24 "If the hazard exists, protection must be
25 provided through engineering or higher methods."

1 Again, so any questions or clarifications needed
2 from what you guys can see reading this? Mr.
3 Barnhart.

4 MR. BARNHART: Thank you, sir. I'm in
5 opposition to this change. The main thing he's
6 talking about is it's more hazard because it's in a
7 public space, but it's still behind the locked door,
8 just like everything in a machine room is behind a
9 locked door, and the fact that the locked door doesn't
10 say it's a machine room doesn't make it any less safe
11 or any more safe. If the public can get to the
12 machine room door, they can get to the controller
13 door, the same thing applies, they can -- they can
14 violate the lock and get in there and cause a problem.
15 So, this doesn't add any level of safety by what he's
16 trying to do. Thank you.

17 MR. NAIPO: So, I have question. Is a
18 machinery space, machine room, control space, and a
19 control room all locked environments, is that the --
20 is that true? Is that a true statement?

21 UNIDENTIFIED SPEAKER: Yes.

22 MR. NAIPO: Paul?

23 MR. BARNHART: Yeah, that is true.

24 MR. NAIPO: Okay.

25 MR. BARNHART: It goes on (a) through

1 whatever. I mean the whole proposal that's in the --
2 or the -- the sections 2.7 and A17.1 takes care of
3 all that.

4 MR. NAIPO: Okay.

5 MR. BARNHART: All that's -- all that's
6 locked.

7 MR. NAIPO: All right. Thank you. Any
8 other questions or clarifications needed before we
9 cast our vote? And comments? Mr. Brinkman.

10 MR. BRINKMAN: Yeah, there's questions or
11 comments in the rationale about this being, you know,
12 unique or something different, but we've been working
13 on escalators in public spaces for years. Every time
14 I go through the airport there's an escalator that's
15 got barricades set up and people are working around
16 that. Saying this control panel is any different, it
17 has to be in a locked room as opposed to cabinet with
18 a lock, I don't see the difference, you know. And
19 there's a part of the change would be to reference
20 NFPA 70. Well, NFPA 70 requirements are already
21 referenced in A17.1. This -- this would be a
22 duplication. Everything that's in the electrical
23 control system of an elevator has to comply with
24 A17.1, excuse me, with NFPA 70 and ASME A17.5. So, I
25 think there's some duplication here that's not needed.

1 I think we're trying to remove something that's
2 imbedded in the ASME code without justification
3 because it's similar to other applications. Thank
4 you.

5 MS. ERIKSEN: Thank you. Eric, you're next.

6 MR. MILLS: Well, in reference to
7 escalators, I was a stairway manager for many years
8 and I have kicked more kids, more people off my
9 escalators when it's barricaded and surrounded with
10 big, huge in multiple languages "Do Not Enter"
11 lettering than I ever should have. So, in public
12 safety sometimes we have to protect the public from
13 themselves because they think they no better than what
14 the sign says.

15 So, a space is different than a room. A room is
16 an area that's surrounded on all sides, four -- so,
17 four walls, a ceiling, and a floor. A space doesn't
18 mean that. So, taking and putting it out in the open
19 doesn't protect the public. It's all about public
20 safety, and my safety, quite frankly. It's -- You
21 know, I have to watch other people in doing things
22 where they could put me in harm's way. So, being from
23 the field, and, I'm sorry, my name is Eric Mills,
24 field mechanic, I forgot, but that's -- that's the
25 key. It's protecting the public from themselves and

1 protecting us that are working on the equipment. You
2 know, there's -- And kids are the worst because
3 they're interested, they're curious naturally, and if
4 they have access to it they're going to try to get to
5 it. So, I think that I'm in favor of this.

6 MS. ERIKSEN: Thank you. Duane.

7 UNIDENTIFIED SPEAKER: Yeah, I have to kind
8 of agree with this one, too.

9 MS. ERIKSEN: I'm sorry, real quick --

10 MR. LEOPARD: Duane Leopard. I'm sorry, I'm
11 the guilty one. You know, I have a hunch the person
12 whoever wrote this is talking about controllers being
13 in the jams, which I've seen a few of those in my
14 travels across the state, you know, they're up there
15 on the third floor for the mechanic in order to work
16 on them and access them, do whatever he needs to do,
17 he's got to be there basically in the public eye, so
18 here comes the barricade, and I've had people move
19 barricades out of the way for me just to get by to get
20 into the escalators, too. You know, I have to -- I
21 don't know about striking out machine space, though,
22 or control space, but I think that's probably our best
23 direction to go on some of this.

24 MS. ERIKSEN: Thank you.

25 MR. NAIPO: Jan.

1 MS. GOULD: Jan Gould, City of Seattle. We
2 still have language in our Chapter 30 requiring
3 machine room or control rooms and I'm glad of it. It
4 doesn't mean it won't eventually go away, but I want
5 to fight for it as long as possible. We've fought
6 long and hard to get dedicated machine and control
7 rooms, and this is basically for those repair
8 servicemen, service women, that are working on this
9 equipment that they have their electrical working
10 clearances, and I just want to keep dedicated machine
11 and control rooms as long as possible.

12 MR. NAIPO: Thank you. Mr. Quiett.

13 MR. QUIETT: Yeah, with this -- For me, this
14 is more -- Oh, Jonathan Quiett, sorry. This is more
15 for protecting the individuals working on the
16 equipment than it is for anything else. As it sits
17 right now, let's use a school as an example, I go into
18 a machine room as I'm troubleshooting a problem in a
19 school, I have a locked door. Passing period happens.
20 Everything is happening outside of this room. I don't
21 have teachers, students, faculty bothering me while
22 I'm trying to focus and be focused on the work that
23 I'm doing. I'm not putting myself or anybody else in
24 harm's way because I am in a secured environment. By
25 allowing this here, our best protection we're saying

1 to use is use barricades, which we all know can be ran
2 into, bumped into, and now it's the curiosity aspect
3 of it, anybody in the public, "What are you doing?
4 What are you working on? Why is the elevator broke?"
5 It's taking our focus off of our own personal safety,
6 the safety of the equipment that we were working on,
7 and, frankly, the safety of the people around us by
8 having this where it's in a publicly accessible place.

9 MR. NAIPO: Thank you, Jon. Carl.

10 MR. CARY: Yes. I rise, thank you, to state
11 that we should reject this change. Just to speak
12 briefly about the conditions that were talked about,
13 working around the public with barricades in an
14 elevator, or something that was already done in the
15 description that was just provided at a school, the
16 mechanic needs to access the pit of the car top, they
17 would have to pull barricades out, they would have to
18 open the car door, and they would have to deal with
19 that scenario. There are many other jurisdictions
20 that allow control cabinets and control-- jamb mounted
21 controllers successfully without issue. This is going
22 to save owners money by allowing them to dedicate
23 valuable workplace inside the building to something
24 other than a control room and it can be done safely.
25 Thank you.

1 MR. NAIPO: All-righty. And with that, it
 2 doesn't look like anybody else has any other
 3 questions, but once again I'll provide the opportunity
 4 for anybody else who has any clarifying comments or
 5 questions to please provide them now. Sergey.

6 MR. DOLGIKH: You knew that I was going to
 7 raise my hand, right? No, I'm just kidding. So, I'm
 8 looking at this entire -- entire body of code that was
 9 struck out and one thing just kind of struck me, so
 10 this one says provided with cabinet doors or panels
 11 that are not self-closing that are self-locking, and
 12 this goes in direct contradiction with machine room
 13 door requirements that has to be self-closing, self-
 14 latching, or self locking. So, if it's not required
 15 to be self-closing, then how does it pose a safety for
 16 the riding public if it's out in the open public? So,
 17 I'm -- I'm -- Just for that matter I'm going to vote
 18 yes for this. But that -- that's something that
 19 struck me as odd that they wouldn't put the
 20 requirements of it being self-closing. Perhaps it's
 21 just because if it's part of doorjamb or something
 22 like that are --- that are mitigating some
 23 difficulties in dealing with the space that is limited
 24 to maintenance and such for the mechanic or service
 25 provider. So, definitely that kind of -- Yeah, thank

1 you.

2 MR. NAIPO: Dylan.

3 MR. LATHE: Dylan Lathe, L & I. My opinion
4 the reason why it wouldn't be self-closing is because
5 they would be standing there working on it and it
6 would be closing on them the entire time as opposed to
7 being inside of a machine room. Thank you.

8 MR. NAIPO: Mr. Barnhart.

9 MR. BARNHART: Thank you. Paul Barnhart.
10 The comment I was going to ask has already been
11 addressed. It's not self-closing because you are
12 working on the panel and you can't have the door close
13 on you while you're working on the panel. Yes, that's
14 why that's in there.

15 MR. NAIPO: Thank you. Candace.

16 MS. LAU: Candace Lau. Yeah, I was going to
17 respond the same thing, that this is a cabinet that
18 we're talking about and not a machine room or a door.
19 But I also want to comment that what I'm seeing is
20 that, you know, we really need to pay attention to
21 what the mechanics are doing, are saying, and what the
22 people that are actually doing the work are saying
23 because those are the people that are really most
24 affected. It is mostly about their safety and how
25 they work on their equipment with all the stuff going

1 around. Escalators, there was a comment on
2 escalators. There's really no choice on escalators
3 because of where it's located, but there is a choice
4 here. There's a choice here to put these things in a
5 machine room as opposed to in a space with barricades
6 around it, and it's just my comment on that.

7 MR. NAIPO: Thank you. Mr. Quiett.

8 MR. QUIETT: Yeah, Jonathan Quiett. I
9 appreciate what Candace was saying. This is kind of a
10 direct response to what Carl was saying. We
11 absolutely have a choice when we access a pit and when
12 we access the car top. If we have a busy public
13 environment, we can choose at what point we are
14 accessing that pit or car top and the means that we
15 have. If we are actively troubleshooting an elevator
16 and have exposed electrical devices to be able to
17 correctly troubleshoot that piece of equipment, we
18 don't have a choice. We are dealing with whatever the
19 public environment at that time throws at us. So, by
20 saying we don't have -- we can mitigate with
21 barricades, I agree with that to an extent, but I also
22 say we don't have a choice of how we can protect
23 ourselves and the rest of the public while we are
24 doing the work.

25 MR. NAIPO: Thank you. Sergey, I'm sorry, I

1 didn't see that you re-raised your hand.

2 MR. DOLGIKH: Sergey Dolgikh, L & I. So, I
3 just wanted to briefly clarify, I get it why it's not
4 self-closing that the person has to perform the work.
5 My point was that the reason why the machine room door
6 has to be self-closing, self-latching, there is a
7 reason for it, and if we're taking that reason out of
8 this by saying, oh, it doesn't have to be now, but the
9 reason was there for a purpose, the purpose is that it
10 has to be isolated away from the public, away from,
11 like Jonathan was saying, you know, having to make a
12 choice in that snapshot of time. And when you
13 troubleshoot, I've troubleshoot before, it's crazy
14 time. You have a pressure as it is, and now you have
15 a pressure of public constantly moving in and out and
16 around. So, I just wanted to clarify, though, I
17 understand why the self-closing was taken out. That's
18 precisely why I brought up that point. Machine room
19 door shall be self-closing, self-latching, that is
20 there for a reason, and there has to be a machine
21 room. Thank you.

22 MR. NAIPO: All-righty. So, are there any
23 other questions or comments needed to clarify before
24 we're ready to cast a vote? All-righty. So, we will
25 be casting a vote on proposal 2022.0077 regarding the

1 changes of striking machinery space, control space, as
2 well as (a) through (f) on 2.7.6.3.2.

3 If you are for this change we ask that you vote
4 yea now by raising your hand. So, if you are in favor
5 of this change, please raise your hand now. If you
6 are for this change, please raise your hand now.
7 Okay, go ahead and lower your hands. Thank you for
8 your vote.

9 If you are opposed to this change, please raise
10 your hand now. If you are opposed to this change,
11 please raise your hand now. Thank you. Go ahead and
12 lower your hands.

13 And if you would like to abstain from this, that
14 is your vote, please raise your hand now.

15 James, you voted nay, correct? James Cline?

16 MR. CLINE: Yes, I did. Sorry. There it
17 goes.

18 MR. NAIPO: Thanks. All right. So, one for
19 abstain. All right. Go ahead and lower your hands.
20 Thank you for that. Thank you for your vote. And,
21 so, Melissa, will you please read the votes that were
22 cast for proposal 2022.0077.

23 MS. ERIKSEN: Yes. Thank you. There were
24 10 yeas, there were 14 nays, and 1 abstention.

25 MR. NAIPO: All-righty. Thank you.

1 All-righty. With that, that concludes our first part
 2 of the day. You guys are doing a great job. I know
 3 it seems like we're not making headway at all, but
 4 this was the big -- this was going to be a big topic
 5 of discussion is the things that were submitted for
 6 amending or excluding from our WAC, and so I know that
 7 this was going to be a little lengthy of a time.
 8 Granted, I wish we were a little bit further into it
 9 than before, but I'm -- I'm okay with the discussions
 10 that have been going on, the questions. I feel like
 11 people are voting educatedly, not emotionally, I'm
 12 just going to throw yea or nay, whatever. You guys
 13 feel like you're voting with validity behind it. So,
 14 I appreciate that. And, with that, we're going to
 15 take a 30 minute lunch. Melissa is going to throw up
 16 a 30 minute timer; so, when that is done counting
 17 down, hopefully you guys will be, you know, fed,
 18 rested, hydrated, and ready to go the rest of this
 19 day. Thank you guys very much. See you guys in about
 20 30 minutes. Appreciate it.

21 (Lunch recess taken at 12:07 p.m.)

22 MR. NAIPO: So, thank you, everyone, for
 23 coming back promptly. I really appreciate it. We'll
 24 dive back into this work again. I know, hey, we've
 25 only got to 12 so far. That's okay because 675

1 there's a lot of stuff that people were asking to be
2 amended and I knew that this was going to be a lot;
3 so, it's okay. We've still got time. We're good.

4 So, with that, we're going to start with
5 proposal 2022.0079, Amendments to Adopted Standards.
6 They're looking to add, "Amend A17.1 as follows:
7 Adding 3.24.5 Location of Tanks. Hydraulic machines
8 being installed in the line of movement of an elevator
9 car or wherein an affected person is required to work
10 in the line of movement of an elevator car shall be
11 prohibited."

12 In, "April of 2018 an affected person was killed
13 by an engineered hazard which never was compliant with
14 published standards. Due to this fatality, increased
15 local enforcement to prevent further fatalities is
16 warranted. If the hazards exist, protection must be
17 provided through engineering or higher methods.
18 Please understand that the comment is extremely
19 troubling and I author this with great respect to
20 human life and those that are charged with protecting
21 it. Of all my comments, this comment is paramount as
22 based on current practices it is required based on
23 imminent danger to affected persons. Please consider
24 reporting this comment and the associated scenario to
25 your state OSHA office for their awareness also.

1 Despite the language, governing pits and pit equipment
2 as it relates to the remind-- remainder of the
3 hydraulic installation jurisdictions across the United
4 States are allowing installing unsafe and lethal
5 equipment."

6 Any clarifying questions or comments? Mr.
7 Leopard.

8 MR. LEOPARD: I'll keep it short. I like
9 this amendment.

10] MR. NAIPO: Thank you. Anybody else needing
11 clarification? Questions? Mr. Brinkman.

12 MR. BRINKMAN: Yeah, just a couple comments.
13 You know, certainly what happened in April of 2018 was
14 very tragic, but we have elevator mechanics working in
15 pits every day for a variety of reasons and a variety
16 of components of the elevator. Hydraulic tanks are
17 one component that's allowed to be there currently by
18 the A17 code. I'm not sure why that's being singled
19 out because we have to work in pits in order to
20 maintain elevators and maintain their safety. So, I
21 just -- you know, I understand that it's a dangerous
22 location, but if proper protection is taken by
23 controlling the car both electrically and mechanically
24 the car shouldn't come down on anybody, and I -- you
25 know, I think that we need to make sure we keep that

1 in mind because we are going to be in pits regardless
2 of whether we change this proposal or not. Thank you.
3 And that was Kevin Brinkman. I'm not sure I said it
4 this time.

5 UNIDENTIFIED SPEAKER: You're muted. You're
6 talking, but you're muted.

7 MS. ERIKSEN: I don't know who we're talking
8 to. So, Paul, did you have a comment?

9 MR. BARNHART: I'm sorry, you're right, I
10 was muted. Paul. Paul Barnhart with UL. I want to
11 echo Kevin's comments. Any fatality is a tragedy, but
12 I believe that A17 has the requirements in it to
13 provide protection when you're working in the pit.
14 Hydraulics is not the only time you have to be in the
15 pit. And the commenter said that the fatality rate
16 was because of an engineered hazard that was never
17 compliant with published standards. Well, if you're
18 not compliant with the public standards, you
19 definitely are going to put yourself at risk; but, if
20 you're compliant with the published standards, and the
21 rules for access to pits, and protecting yourself when
22 you're in the pits, you're not subject to that hazard.
23 So, I kind of speak in opposition to this. I
24 understand the -- the emotions involved with this,
25 but, like Kevin said, it's not just hydraulic tanks,

1 it would be the same problem. So, the only -- the
2 only way to eliminate the hazard of being in the pit
3 is to say that absolutely nothing can ever be in the
4 pit and I'm not sure we're prepared to go that far.
5 Thank you.

6 MR. NAIPO: Thank you. Mr. Mills.

7 MR. MILLS: I speak for this. Sorry, Eric
8 Mills, field Mechanic. I speak for this. Limiting
9 any time in the pit is a good thing. Most companies
10 are constantly or I should say most employers are
11 constantly updating their safety policies to mitigate
12 hazards in the pit because of the inherent dangers;
13 so, why add something else that we have to do to work
14 on in the pit if everybody knows it's such a bad place
15 to work. So, why add more equipment? Why put the
16 main control system for the hydraulic elevator in the
17 pit? That's a valve. If something happens to that
18 valve when you're under there, there is a chance
19 you're going to die. And I don't know all what
20 happened in 2018, but my understanding was it was a
21 wiring issue that came from the factory, and I might
22 be wrong, but that's what I remember reading. I don't
23 have the paperwork in front of me. So, we're trusting
24 that the manufacturer is going to give us a piece of
25 equipment that's met code compliant and everything.

1 We don't wire everything in the field. So, if
 2 something was mistakenly done, which, unfortunately,
 3 caused the fatality, why -- why would we want to even
 4 take another chance at this. There's enough injuries
 5 and, you know, stuff in the pit area, why add more
 6 equipment there.

7 MR. NAIPO: Thank you. Sergey.

8 MR. DOLGIKH: Sergey Dolgikh, Elevator
 9 Inspector L & I. I want to piggyback off what Eric
 10 Mills was saying. There's -- there's several
 11 considerations, but one of them is if you're posting a
 12 major piece of equipment that controls the hydraulic
 13 elevator in a pit somewhere, right, then you're
 14 limiting the person who's working on it to be in that
 15 spot, and we all know that there is a wreckage space
 16 specifically allocated for the hydraulic pits that are
 17 not necessary all that deep sometimes to -- for the
 18 wreckage space, right? So, if you really need to
 19 troubleshoot something from within the pit and you're
 20 manipulating the elevator, that's another thing,
 21 troubleshooting it. But so with -- for that reason
 22 alone, I would be voting for this. But the other
 23 reason is also, as we know, in the State of Washington
 24 we -- we don't enter pits. So, like Eric said, we're
 25 adding an additional crucial piece of equipment inside

1 the pit where we as an authority of having
 2 jurisdiction cannot enter unless we follow very
 3 specific procedures, and that -- that also puts into
 4 perspective of how long the inspection is going to
 5 take, so on and so forth. So, I'm looking at it from
 6 two different perspectives. One is the service
 7 personnel that services the equipment, and two is the
 8 people, authority having jurisdiction, that has to
 9 inspect the equipment, and for that matter, and since
 10 this is isolated to those people that are actually
 11 permitted to be there under certain circumstances, I'd
 12 say the less we put in the pit, the better it is.
 13 That's my own.

14 MR. NAIPO: Thank you. Is there anybody
 15 else who has any additional clarifying questions or
 16 comments before I move on to voting? Mr. Madison.

17 MR. MADISON: Yeah, Jon Madison. One
 18 question with this because as we keep going back over
 19 safety and everything, you know, and whether or not
 20 the maintenance personnel, be it whatever division
 21 they're from, who's working in here with the reducers
 22 to find refuge if something does go wrong, and we
 23 understand that there's supposed to be mechanical and
 24 electrical safety circumstances that are going to be
 25 set in when you're working on it, what about when this

1 fails when we have passengers in the elevator? So, if
2 something happens to the valve or whether or not it's
3 going to have a pump motor in it and that burns up and
4 locks the car up three feet above it or, you know, a
5 story above it and we have to get to that car that's
6 got trapped passengers in it, do we have any
7 provisions to safeguard them from what happens below
8 and whether it's fumes or an actual fire? And I'm
9 sure that was all engineered. But that's one of the
10 questions I had is adding more things, especially
11 flammable things, into the pit, it just don't seem
12 like a very good idea to the riding public or to the
13 personnel working on it. Thank you.

14 MR. NAIPO: Before we move on, Jon, I just
15 want to make sure, was there -- was that a question
16 that you were posing or was it just something for
17 people to think about and then a statement at the end?

18 MR. MADISON: Mine was more something to
19 think about because I don't want anything in there
20 such as tanks and whatnot. But with the safety and
21 regards to it, what happens when we have a failure? I
22 mean I just want people to think about that idea.

23 MR. NAIPO: Thank you. Mr. Brinkman.

24 MR. BRINKMAN: Yeah, Kevin Brinkman.
25 Just in response to the last comment, you know, we

1 obviously already have hydraulic fluid in the pit
2 because of cylinders that are aligned, etc. Yes,
3 we're introducing more. I -- I concur with that.
4 However, we're also required to have sprinklers in the
5 hoistway in the pit to prevent any fire hazard, and
6 I'm not aware of any hoistway fires resulting from
7 hydraulic fluid. Maybe I'm wrong, maybe there's some
8 out there that I haven't seen, but I'm not aware of
9 any. Thank you.

10 MR. NAIPO: Mr. Larson.

11 MR. LARSON: Thank you. Just in response to
12 some of the comments about the, you know, access to
13 pits, etc., I think some of the rationale can be found
14 in 3.7.18 which says, among other things, that in this
15 configuration the means necessary for tests and
16 inspections can be outward -- outside the (audio
17 disruption) and the means are also permitted to be
18 used by elevator personnel for passenger rescue.
19 I'll -- I'll put the specific language in the chat.
20 This is Russ Larson, by the way. Thank you.

21 MR. NAIPO: Thank you for that, Russ. Jan.

22 MS. GOULD: Jan Gould, City of Seattle.
23 There's an emergency proposal to the Washington State
24 building code to remove sprinklers associated with
25 hydraulic elevators because they don't have the flash

1 point that they used to, not all of them. So, I just
2 wanted to make that comment. You don't always have
3 sprinkler protection.

4 MR. NAIPO: Mr. Quiett.

5 MR. QUIETT: Yes, this is Jonathan Quiett.
6 Something that we have to think about, as well, is you
7 know these systems do have snorkels, and charcoal
8 filters, and everything else. With the -- the
9 hydraulic -- the high degree of hydraulic fluid that's
10 being used even with all these in place, it's also
11 providing an environment that doesn't smell very well
12 for -- for the riding public. There are issues that
13 can arise from a failure of a pump motor shorting and
14 actually catching fire to the tank. Anybody that has
15 worked on hydraulic elevators has had that happen when
16 we have a short in the motor that will catch fire in
17 the tank. You have smoke that comes out of the tank
18 and, you know, without knowing what those fumes
19 actually give off, you know, we can also be inducing
20 other issues into an elevator hoistway that we don't
21 need to.

22 MR. NAIPO: Thank you. Mr. Friesen.

23 MR. FRIESEN: Wade Friesen, Vertical
24 Options. He just spoke to the point that I was going
25 to make, but I wanted to piggyback off that. You

1 know, if you've been around hydraulic elevators long
 2 enough, you've probably seen a couple of tanks smoke
 3 here and there. You know, it used to be from
 4 contactors getting stuff or something like that that
 5 would overheat the oil and cause smoke to roll off of
 6 these things. And I do understand that these units
 7 that are mounted in the pit are ventilated, but we've
 8 seen some pretty extreme situations where I mean smoke
 9 billowing out of machine rooms from these things, and
 10 I think there's a hazard to us fixating to the public
 11 that could be stuck in an elevator where there is a
 12 failure. To add to that, we've seen this on two
 13 modern, very modern, you know, two or three year old
 14 elevators that had software issues that caused this to
 15 happen on modern equipment. So, it's the new, you
 16 know, logic controlled equipment is not immune to this
 17 either. So, that's a consideration to take into
 18 account here. Thank you.

19 MR. NAIPO: Thank you. Paul, I'll get to
 20 you right real quick. I'm just going to read what
 21 Russ Larson put in the chat. 3.7.18 and 2.7.6.4
 22 replaced the wording with the following: Where a
 23 hydraulic machine or an elevator machine motion
 24 controller or motor controller is located in the
 25 hoistway or pit, means necessary for tests that

1 require movement of the car shall be provided and
2 arranged so that they can be operated from outside the
3 hoistway and shall conform to 2.7.6.4.1 and 2.7.6.4.2.
4 These means are also permitted to be used by elevator
5 personnel for passenger rescue.

6 That was just to piggyback of off Russ's comment
7 prior. And so Mr. Barnhart.

8 MR. BARNHART: Thank you. Paul Barnhart
9 from UL. The questions I have, a lot of this
10 discussion has revolved around AOE tanks, and
11 certainly 3.24.5 starts out by saying location of
12 tanks, but then the clause that's written here says
13 hydraulic machines being installed. So, to me that
14 would be any part of the hydraulics that lifts the
15 elevator can't be installed under the elevator. So,
16 how do you build a hydraulic lift? You know, if -- if
17 the proposal is to keep the tanks out of the pit,
18 okay, write it that way, but that's not how it's
19 written. So, I'm just a little confused by the way
20 it's written. Thank you.

21 MR. NAIPO: Thank you. Candace.

22 MS. LAU: Candace Lau. I kind of missed
23 that point, but there's a WAC code, right, currently
24 that has some -- some parameters surrounding this; so,
25 I can't remember if this was going to be changed later

1 on, but would this -- would this be a moot point if
 2 it's already covered in the WAC, is what I'm saying.
 3 WAC 02552 is the one where it has some limitations and
 4 some parameters around surrounding having motors and
 5 stuff in the pit. So, I'm just wondering if this
 6 amendment would be a moot point if we've already
 7 addressed it in the WAC 02552. That's just my
 8 comment.

9 MR. NAIPO: What I can do real quick is I
 10 will bring up that WAC in just a second, 02552,
 11 location of equipment in a hoistway. So, let me do
 12 this. So, elevator equipment shall be permitted to be
 13 located within the hoistway subject to the
 14 requirements in A17.1 and the following: Where an
 15 elevator cannot be prevented from movement
 16 electrically or mechanically prior to entering the pit
 17 area, motor controllers, motion controllers, drives,
 18 hydraulic control valves, hydraulic reservoirs (tank,)
 19 hydraulic pump motors, and driving machines shall not
 20 be located in the pit. Where a means is used to
 21 secure the elevator electronically [sic] and
 22 mechanically prior to entering the pit, the means
 23 shall be designed such that an activation can be
 24 performed without full bodily entry into the pit.

25 So, is that verbiage, again because I'm just

1 facilitating, is that verbiage the same as what's
2 being proposed by this WAC change? Sergey?

3 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
4 Inspector L & I. I think those are two different
5 items just by the 02552 basically seems like it
6 mitigates removal of electrical and mechanical hazards
7 prior to entering the pit, and basically stating that,
8 hey, if you can't provide those, then any of those
9 mechanisms shall not be in the pit, which kind of
10 paraphrases a little bit of the code, but we're
11 looking at this, I mean at least I look at this as an
12 intent of removing mechanical and electrical hazard
13 out of circulation, basically, before -- before a pit
14 is being entered for whatever purpose.

15 When I'm looking at the requirement that we're
16 looking at here and it speaks of actual tanks, I just
17 wanted to make a comment here on the previous
18 suggestion. Well, the hydraulic machines, obviously
19 it'd be a submersible, right, because if this is a
20 hydraulic -- if the submersible motor sits in a tank
21 we're done. If it's -- if it's an external machine,
22 it could be probably out and pumping. But, once
23 again, this is more specific to me. This is more
24 specific to actually location of a flammable,
25 hazardous, fuming item that creates hazards,

1 additional hazards in the pit along the side with
2 troubleshooting and servicing the equipment.

3 The WAC that Candace mentioned here, the way I
4 read it at least, is -- is, hey, before we do this, we
5 need to mitigate electrical mechanical hazards and, if
6 we can't, then we need to remove those pieces of
7 equipment outside the pit so they can be servicing.
8 So, to me, it's apples and oranges at this point.
9 Thank you.

10 MR. NAIPO: Mr. Quiett.

11 MR. QUIETT: Yeah, Jonathan Quiett. Just
12 real quick. Somebody said something earlier about a
13 hydraulic machine and their issue with it. It's
14 actually -- It's spelled out in the A17.1 the
15 definition of hydraulic machine. It's a unit
16 consisting of a pump, motor valves, and associated
17 internal piping that converts electrical energy and
18 supplies it as liquid under pressure. So, that's a
19 hydraulic power unit. That's what we're talking about
20 with hydraulic machines. So, let's not be confusing
21 piping in the pit, because we have to have the piping
22 in the pit, with turning this into wanting to put the
23 hydraulic machine in the pit. They're two completely
24 different things. Thank you.

25 MR. NAIPO: So, with that, are there any

1 additional clarifying statements or questions that
2 need to be had before we cast a vote on this? All
3 right. So, we'll be casting a vote on proposal
4 2022.0079 that amends 17.1 3.24.5, Location of Tanks.
5 Hydraulic machines being installed in the line of
6 movement of an elevator car or wherein an affected
7 person is required to work in the line of movement of
8 an elevator car shall be prohibited.

9 It strictly prohibits it. So, it removes it
10 from the WAC. It's saying electronic or electrically
11 or mechanically, it just says it can't be done. No
12 matter what, you cannot do this.

13 So, if you are for that change -- Oh, I'm sorry,
14 Dylan. I missed that while I was reading. I
15 apologize.

16 MR. TURNER: No problem. Dylan Turner,
17 Greenbusch. You kind of just answered what I was
18 going to bring up. But I was just going to say if we
19 vote in favor of this, then that WAC section needs to
20 be removed because you can't vote yes to this and then
21 leave the part that allows the hydraulic equipment if
22 it's electrically and mechanically locked out.
23 They're opposing requirements. Thank you for that.

24 MR. NAIPO: So, if you are voting yea for
25 this proposal 2022.0079, please raise your hand. Or,

1 Candace, I'm sorry, did you have a question or
2 statement?

3 MS. LAU: Yeah. Candace Lau. But, see,
4 that's what I'm saying is we're only voting this.
5 We're not voting to get rid of that WAC. And -- and
6 the other thing is, I kind of see what Sergey was
7 saying. It's two separate things and I tend to agree
8 now. So, even if you can have those provisions, what
9 I'm understanding, this is how I'm understanding it,
10 even if that WAC is met and you have those provisions
11 to prevent it from movement prior to entering the pit,
12 you can still have this in place, that it's -- that --
13 This is still an additional requirement. So, even if
14 you have those things in place, you may not use it,
15 but you have it in place, and this will say you can't
16 have it in line of sight either. It's an addition to
17 that WAC code. So, it's not like removing the WAC
18 code. I think that's what you were saying, Dylan.
19 I'm not positive. But I think it's adding this and
20 keeping the other one.

21 MR. NAIPO: Dylan.

22 MR. TURNER: Dylan Turner, Greenbusch. I
23 mean the way I read the WAC as it is now, it's
24 providing a limitation of when you can put the
25 hydraulic equipment in the pit. So, if this is saying

1 you cannot put the equipment in the pit, then there's
 2 no point in having limitations of when it can be in
 3 there. It just can't be in there. And for the
 4 record, I don't think the equipment should be in the
 5 pit, period. But my point is I don't think we can
 6 have one portion of the WAC that says you shall not
 7 put equipment in the pit and then another portion that
 8 says under these conditions you can have equipment in
 9 the pit.

10 MR. NAIPO: And you are -- you are
 11 completely correct, and that is -- that was
 12 unfortunately additional work that we as the Program
 13 have to do and that's why I appreciate when you guys
 14 who work within our WAC and you guys are reading
 15 things because, again, I'm just facilitating this. I
 16 don't know where to look. I don't know where to go to
 17 see if there's something that's contradictory. I know
 18 that's what our technical specialists are here for and
 19 they're here in a different capacity than trying to
 20 discern this stuff, but she brought it up that, "Hey,
 21 this is -- this is addressed here. Does this say the
 22 same thing?" So, whether or not we have to amend or
 23 do anything to 2552, that still has to be determined.

24 What we're voting for now is strictly on this
 25 proposal right here. If there are additions that need

1 to be made, additional changes that need to be made
 2 within the WAC, that's what we will cover. It's our
 3 job as the Program to make sure that anything we put
 4 forth into the WAC doesn't contradict itself somewhere
 5 else. Just like when we adopt a code, we need to make
 6 sure that, hey, the adopted code that we have
 7 doesn't -- you know, isn't contradictory to something
 8 that we have already adopted in our WAC, WAC rule.
 9 So, thank you for that. But right now we're just
 10 voting on this. I've got a couple questions. It
 11 looks like Sergey will go first and then Candace.

12 MR. DOLGIKH: Sergey Dolgikh, elevator
 13 section L & I. So, just to answer Dylan's -- Well,
 14 not to answer it, but to comment on it, when you read
 15 the 2552 WAC, it's a provisional WAC. It says
 16 "where". It's waiting on a provision, where an
 17 elevator cannot be prevented from moving electrically
 18 and mechanically, is then you need to get it out of
 19 the hoistway. "Where a means is used to secure the
 20 elevator electrically and mechanically prior to
 21 entering the pit, the means shall be designed in such
 22 a way...", it's more like a variance sort of in a way,
 23 I'm throwing that -- that terminology there, whereas
 24 when you're speaking about -- when you're speaking
 25 about the subject of what we're talking about, it

1 actually is very exclusive to the letter that says it
 2 shall not be there, period. And, so, this particular
 3 item actually narrows it down, and, as we spoke
 4 before, the code is only moving upward in safety, not
 5 the downward. You don't diminishing safety, you're
 6 actually improving safety by certain things. And I
 7 don't believe that adding an additional piece of
 8 equipment, and I'm not going to beat this horse to
 9 death, but it's already dead, but, so, anyway, so that
 10 was kind of why I was trying to clear my standpoint on
 11 that one. But thank you.

12 MR. NAIPO: Candace.

13 MS. LAU: Candace Lau. Yeah, I don't want
 14 to beat this to death either, but I just wanted to
 15 make the point that you can have -- What this
 16 amendment is saying is that it does not want the
 17 hydraulic machine to be installed in the line of
 18 movement. They're not saying you can't put it in the
 19 pit. They're just saying you can't put it in the pit
 20 in the line of movement of the elevator car or where a
 21 person can work. Let's say you put it in the back of
 22 the hoistway where it's not in the line of movement in
 23 the car, it's beyond that point, I'm just making this
 24 up, beyond that point, then this amendment is saying,
 25 hey, if it's beyond that point you can't, whereas the

1 WAC is saying if you don't have those things to
2 prevent it from movement you can't even install it in
3 the pit. So, they're two very separate and different
4 things. Now that Sergey pointed it out to me, I can
5 see that they are two very separate and different
6 things. That's just a comment.

7 MR. NAIPO: All right. So, any other
8 questions or comments before we cast our vote on this?
9 I want to make sure I put this out there is should
10 this be like the other thing that we did before where,
11 hey, we voted, you know, this really doesn't need to
12 be here because of another WAC that already addresses
13 it?

14 If there are hands that feel like, hey, the WAC
15 that's in place, 2552, addresses what this is already
16 doing or the intent of this, can you please raise your
17 hand now? If you feel like the WAC 2552 addresses
18 this proposal 79, please raise your hand now.

19 All right. Then this will be something that
20 we -- then I'm hearing that the consensus is that 2552
21 doesn't have anything to do with this. So, that is
22 what we're going to be voting on what is what this
23 says and whether this needs to be put in the amendment
24 to our adopted standard 675.

25 So, if you are for this change, please raise

1 your hand and vote yea now. If you are for this
2 change, please raise your hand now. All right. Thank
3 you. Go ahead and lower your hands. Thank you for
4 those votes.

5 Those who are in opposition of this change,
6 please raise your hand and vote nay now. If you're in
7 opposition of this change, please raise your hand and
8 vote nay now. All-righty. Thank you for that.
9 Please lower your hands.

10 If you are abstaining from this vote, please
11 raise your hand now. If you are abstaining from this
12 vote, please raise your hand now. All-righty. Thank
13 you.

14 Melissa, will you please read the tallies for
15 proposal 2022.0079.

16 MS. ERIKSEN: Sure. There were 16 yeas, 7
17 nays, and 2 abstentions.

18 MR. NAIPO: All right. Before we move on
19 just so that everyone understands and knows, too, that
20 as I'm listening to you guys and I hear points of
21 reference, or comments, or something like that that I
22 feel needs to be discussed further, especially if this
23 passes, that's what I'm sort of making over here. So,
24 I feel like 2552 does need to be just codified
25 against this just to make sure that, hey, we really

1 are -- these are two totally separate things, and
2 we'll go from there. Yes, Mr. Quiett.

3 MR. QUIETT: Jonathan Quiett. I think 2552
4 can also be relevant, though, for traction equipment.
5 We're in the hoistway. We have to access it and work
6 on it. When you have -- Traction machines are in the
7 hoistway, it's part of the structure that you're
8 working on, and you have to do work on those types of
9 equipment, as well. So, we can't -- we can't get
10 pigeon-holed thinking about hydraulics because we're
11 talking about hydraulics because 2552 can also be for
12 other pieces of equipment, as well. Thank you.

13 MR. NAIPO: All-righty. And, with that, we
14 are moving on to amendment 2022.0080, Amend 17.1 as
15 follows: Testing of conveyances covered by 17.1,
16 1.1.1 shall utilize rated load including, but not
17 limited to...

18 Okay, we are going to skip this one because this
19 was something submitted by someone regarding not
20 allowing alternative testing, which we have already,
21 or, yeah, to not allow alternative testing, which we
22 have already voted for that we are going to keep the
23 current paren ten of 675 saying that the State does
24 not allow alternative testing at this time. So, if
25 everyone is okay with that, we're going to move past

1 this one.

2 Going on to 2022.0081. Okay, there we go.

3 1.2.1 Purpose. The purpose of this code is to provide
4 for the safety of life and limb, and to promote the
5 public welfare. Compliance with this code shall be
6 achieved by conforming with the requirements in ASME
7 A17.1, and striking conformance with some of the
8 requirements in ASME A17.1, and for systems,
9 subsystems, components or functions of that that do
10 not conform with requirements in ASME A17.7.

11 (c) Conformance with the requirements in A17.7.

12 The 17 -- A17.7 safety standard does not
13 establish equivalent safety requirements as compared
14 to prescriptive standards.

15 Any questions or clarifying statements? Mr.
16 Barnhart.

17 MR. BARNHART: I take issue with this
18 proposal. The rationale that states A17.7 does not
19 establish equivalent safety requirements is just flat
20 out false. When properly applied by -- at AECO, an
21 accredited elevator company, their certification
22 organization or whatever that means, A17.7 does
23 establish equivalent safety and in many cases it
24 establishes a higher level of safety because a
25 complete hazard analysis is conducted and those

1 hazards have to be addressed. As an AECO member, we
 2 have seen cases where the prescriptive code didn't go
 3 far enough in actually doing the hazard analysis, and
 4 mitigating those hazards actually resulted in a safer
 5 application rather than a less safe. So, the
 6 rationale for this change is just flat wrong. Sorry.
 7 Thank you.

8 MR. NAIPO: Mr. Brinkman.

9 MR. BRINKMAN: Yeah, Kevin Brinkman. I
 10 certainly agree with what Mr. Barnhart said. You
 11 know, A17.7 has been around for about 15 years now
 12 and, you know, its been used in a lot of cases to
 13 bring new technologies to the marketplace and bring
 14 it there safely. The way to do that without A17.7 is
 15 through a variance process and then you're relying on
 16 the people at the State Depart-- the State Elevator
 17 Division to make a decision on whether or not the
 18 alternate technology should be allowed. In the case
 19 of A17.7 you're allowing a third party, an independent
 20 third party, to make that -- to make an evaluation,
 21 determine the safety, and then in the end the local
 22 authority still has the option to accept or deny that
 23 request for the A17.7 conformance. It's still left up
 24 to the jurisdiction. So, by leaving A17.7 in there,
 25 you get the best of both worlds. You get the

1 independent third party to do the testing work for
2 you, no cost to the Department, and then you can make
3 a decision on that based on the data that's provided.

4 MR. NAIPO: All right. Thank you. Carl.
5 Carl.

6 MR. CARY: Yeah, Carl Cary, Lerch Bates. A
7 point of clarification. The language that they're
8 looking to strike doesn't align with the way WAC 00675
9 reads. They're striking language that says
10 conformance with some of the requirements in ASME A17.
11 That's not what the WAC says. The WAC says
12 conformance with a combination of requirements in ASME
13 17.1 and 17.7 with the following, and then there is no
14 (c).

15 MR. NAIPO: Oh, no, no, no. So, he is --
16 I'm sorry. So, what they are proposing a change to is
17 where verbiage 1.2.1, which is I believe in ASME
18 A17.1, I'm assuming, I don't have my book in front of
19 me, I apologize, but I believe the paren (a) (b) and
20 (c) that they're referencing that they need changed
21 from the ASME code. And if anyone can answer that
22 question more clearly for Carl than me, please raise
23 your hand. If not, I'll move on to Sergey. Thank
24 you.

25 UNIDENTIFIED SPEAKER: Yeah, that's correct.

1 MR. NAIPO: All right. Thank you.

2 UNIDENTIFIED SPEAKER: Ditto.

3 MR. DOLGIKH: Is it my turn now?

4 MR. NAIPO: Yes.

5 MR. DOLGIKH: Okay. Thank you. Sergey
6 Dolgikh, L & I. I have only one question here to ask
7 and Paoa kind of brought it up in review, we're not
8 looking about -- we're looking about 1.2.1, the
9 purpose of, as in adjusting the language from 17.1,
10 but that's where I'm having a question to ask. 17.1
11 kind of refers us nonchalantly into 17.7, and 17.7, to
12 my knowledge, has never been adopted in the State of
13 Washington as a -- as a valid code. So, does it mean
14 that if we are adopting 17.1 we're kind of making a
15 blanketed statement about 17.7 and we don't even know
16 what it -- what it basically states inside 17.7. I
17 mean it's just kind of like I'm trying to figure out
18 if every time we say something is good for us as a
19 reference to this, or this, or that, we have to have
20 somehow adopted it because, like 17.2, we adopted it
21 for use, right? So, but here what I'm seeing is this
22 language is referring us somewhere else where its
23 never been adopted. So, that's just a question. But
24 thank you for listening.

25 MR. NAIPO: So, to clarify his statement or

1 to clarify or answer your question, just because a
 2 reference standard that we have adopted refers us to
 3 another code that we may not have adopted doesn't mean
 4 we adopt that code. It just means that it references
 5 and points us to that direction because somewhere in
 6 that code there is something that we have to
 7 reference. We don't have to reference the whole code.
 8 We don't have to -- Because we reference parts of NFPA
 9 70 we don't adopt the whole NFPA 70 book. We're
 10 adopting it, parts of it, via the code that we have
 11 adopted and the references, and that points us to
 12 those other books.

13 MR. DOLGIKH: I get it. I agree with you.
 14 But then we need to bring in view what portions of
 15 17.7 we're referring to in this particular statement
 16 and if we don't have those references we don't know
 17 what the heck we're looking at. It just says
 18 blanketed right there. It says conformance with the
 19 requirements of 17.7. I don't know what it is. So,
 20 if we are specific to what we want to bring in view by
 21 telling somebody, hey, in order for this we're going
 22 to conform or we're going to strike it out, we're
 23 talking about 17.1. We're not talking about 17.7.
 24 But then we're striking 17.7 without knowing what that
 25 17.7 brings in view. That's all I'm asking. It's

1 confusing.

2 MR. NAIPO: Jan.

3 MS. GOULD: Just a point of clarification.

4 Part 9 is all those codes that ASME references, and
5 it's by reference. You don't directly adopt them, but
6 they're by reference. Part 9.

7 MR. NAIPO: Thank you. Duane.

8 MR. LEOPARD: I just want to clarify, so I
9 mean does everybody know what A17.7 is, understand
10 what it is? I know we don't refer to it very much.

11 MR. NAIPO: Please.

12 UNIDENTIFIED SPEAKER: A17.7 it says the
13 performance standards has been developed and built,
14 you know, for elevators. Like was stated earlier,
15 it's -- safety standards probably covers a little bit
16 more than what A17.1 does, just for note.

17 MR. NAIPO: All right. Thank you. Mr.
18 Larson.

19 MR. LARSON: Thank you. Russ Larson. Yeah,
20 I think that that was the kind of the point I wanted
21 to make is that A17.7 is the AECO process, right. It
22 is the process of third party certifying bodies
23 looking at global essential safety requirements and
24 making, you know, a -- a report. So, adopting 17.7 or
25 allowing 17.7 simply allows that process to happen.

1 The AHJ still has the authority to accept or reject
2 any specific AECO certificate. So, to Kevin's point
3 earlier, I don't think there's any harm in allowing
4 17.7 to go forward. The AHJ still has the ability to
5 evaluate every AECO certificate, every individual
6 instance of this, on its own merits. Thank you.

7 MR. NAIPO: Jan.

8 MS. GOULD: Jan Gould. Yes, A17.1, Duane,
9 is a prescriptive code and A17.7 is maybe they can't
10 get that prescriptive, but the engineering firm
11 creates an AECO and the jurisdictions have the right
12 to accept it or not.

13 MR. NAIPO: Thank you. Russ, did you have
14 another question? Did you not have a chance to put
15 your hand down? Duane, the same thing for you. Have
16 you guys had your questions answered? Okay. Thank
17 you. Candace.

18 MS. LAU: Candace Lau. Right now in the WAC
19 amendment already to -- it already says that the
20 Department has the final authority regarding
21 acceptance of any item in A17.7, blah, blah, blah.
22 The Department may remove approval if a design has
23 changed or not or unforeseen or undisclosed
24 information is obtained. So, it's kind of already
25 covered in our WAC codes right now under the

1 amendments that we have the final authority. So, I
2 don't see why we need to strike it really. Just a
3 comment.

4 MR. NAIPO: Sure. What I'm going to do is
5 I'm going to bring up -- I'll show that to you guys.
6 We're going to share -- Can everyone see that?

7 UNIDENTIFIED SPEAKER: Yes.

8 MR. NAIPO: Yes, okay. So, this is the
9 portion that -- And it was brought up in the chat, as
10 well, from Ricky Henderson, feeling that paren two of
11 675 sort of addresses what this is already doing.
12 So, with that, if you can, quickly review this and
13 then I'll take a minute or so just to review paren two
14 all the way down to three, and then what I'll do is
15 I'll go back to the submittal and then we'll decide on
16 whether, hey, this is -- this is roughly saying the
17 same thing, which I think I'm leaning towards, like I
18 agree with Candace and what Ricky sort of put forth,
19 but you guys are the voting members, so...

20 Does anyone need any extra time? All right.
21 Does anyone need additional time? If you could just
22 raise your hand for me real quick. If not, twice,
23 going three times. All right. So, with that
24 information, does that sort of say the same thing as
25 675(2)? Yes, Mr. Barnhart?

1 MR. BARNHART: Yeah, Paul Barnhart from UL.
2 My understanding from what I've seen is the proposal
3 is to amend 675 to eliminate any possibility of using
4 A17.7. I'm not sure it's -- it's reflected very well
5 in the spreadsheet, but what we just saw was already a
6 WAC, right, and this is trying to adjust that and
7 basically saying the only way you can do this now is
8 to comply with A17.1, period, and if that's the case
9 I'm voting against this because 17.7 is a legitimate
10 approach. Thank you.

11 MR. NAIPO: All right. So, does anyone have
12 any additional questions, or clarifications, or
13 statements? All right. With that, we'll be casting a
14 vote on proposal 2022.0081, and, just pretty much like
15 Mr. Barnhart said, striking the ability from 1.2.1 of
16 the ASME code and any reference to ASME A17.7,
17 striking all of that from there.

18 If you are for that, what I ask that you do is
19 please raise your hand now. You're voting yea. If
20 you are for that change of striking 17.7 from this
21 part of the ASME A17.1 code, please raise your hand
22 now. If you are -- Okay. Thank you. No one has
23 voted for that. All right.

24 If you are against this, please raise your hand
25 for nay. If you are against this change, please raise

1 your hand now voting nay. Are you good? All right.
2 So, everyone that has voted nay, please put your hand
3 down.

4 And now at this time if you are abstaining from
5 this vote or voting to abstain, please raise your hand
6 now. If you are voting to abstain from this vote,
7 please raise your hand now.

8 All-right. And, with that, Melissa, will you
9 read the tallies for the vote for proposal 2022.0081.

10 MS. ERIKSEN: Yes. Thank you. There were 0
11 yeas, 25 nays, and 0 abstentions.

12 MR. NAIPO: All right. Thank you.

13 MR. BARNHART: That was a lot of discussion
14 for a unanimous vote.

15 MR. NAIPO: It happens at times that way
16 sometimes. All right. Moving on to proposal
17 2022.0082, Amendments to Adopted Standards. Section
18 2.12 Hoistway door locking devices and electronic
19 [sic] contacts, and hoistway access switches in
20 requirements 2.12.7.2.1. They are asking to strike
21 (c), which is on the sight guard, and 2.12.7.2.2 where
22 the switch is located on the sight guard, the sight
23 guard shall accommodate and support the load of the
24 switch and its wiring.

25 As the distance between -- The rationale is:

1 "As the distance between a human body and the hazard
 2 decreases, the risk increases. This inverse
 3 relationship is a foundation of safety and is
 4 compounded by this requirement wherein the distance
 5 from the human body is to elevator equipment of
 6 substantive size and mass. If the hazards exist,
 7 protection must be provided through engineering or
 8 higher methods. If the 2.12.7.2.1(c) requirement is
 9 deleted, then this has no further...", "...concerns of
 10 engineering an electrical component onto a hoistway
 11 door assembly that is, for the most part,
 12 electronically [sic] isolated may result in the
 13 assembly becoming energized, posing a hazard to the
 14 riding public."

15 Any clarifying questions or comments? So, if
 16 there are none -- Mr. Leopard.

17 MR. LEOPARD: I'm sorry, I was a little slow
 18 on the hand. Well, I kind of like this thing. We
 19 don't need these switches in the sight guards. I've
 20 seen those before. They're -- They just -- Nobody
 21 seems to make them trustworthy and loyal, and they
 22 fall apart, and I've seen sight guards broken off
 23 because a wire got tangled up, and a whole bunch of
 24 other stuff.

25 MR. NAIPO: All right. Thank you. Mr.

1 Quiettt.

2 MR. QUIETT: Yeah, Jonathan Quiettt. I'm for
3 this, as well. We don't need to have an added
4 component that has moving wiring on a door when we're
5 using it to safely access the tops or anything
6 elevator also causing issues of NEC now requiring this
7 (audio indiscernible) more likely than not because
8 it'll be a lower voltage, so we're not going to be
9 having any way to dissipate any static charge
10 correctly or anything like that when we go to use the
11 equipment.

12 MR. NAIPO: So, I'll ask again, if there
13 aren't any additional questions or clarifications --
14 Oh, Mr. Brinkman.

15 MR. BRINKMAN: Yeah, I'm going to speak
16 against this. The only -- You know, I think it was
17 thoroughly vetted through the A17 code committee when
18 they looked at this, you know, for quite thoroughly,
19 and there was concern about electrifying the panel. I
20 mean these switches, just like anything else, has to
21 meet the same requirements for safety within the A17.5
22 if the -- you know, to avoid electrical shock hazards,
23 etc. So, I don't see where you're electrocuting the
24 panel. They've been done now for several years this
25 way and I am not aware of any issues with them. So,

1 I'm going to say I'm voting against this. Thank you.
2 And that was Kevin Brinkman.

3 MR. NAIPO: Candace.

4 MS. LAU: Candace Lau. I just want to say
5 that maybe that's true what Kevin just said, but
6 there's also a lot of alterations that are done this
7 way and we don't even know if they're engineered.
8 They're just slapping it on. And I've seen pictures
9 of -- I haven't been out there recently; so, I haven't
10 seen them in person, but I have seen pictures of how
11 they are being installed, and it just -- it -- it
12 doesn't even seem like there's engineering involved in
13 some of these alterations. That's just my comment.

14 MR. NAIPO: Mr. Brinkman, did you have
15 another question or statement to follow up?
16 All-righty. If there's -- Oh, Mr. Friesen.

17 MR. FRIESEN: Wade Friesen, Vertical
18 Options. You know, I agree with the point that was
19 made earlier. This is likely low voltage stuff that
20 may or may not electrify the panel, but I think the --
21 the bigger hazard that exists with this is that the
22 operator is put closer to the moving car when
23 they're -- when they're using this switch. Even the
24 jamb is fairly close. But having this thing in the
25 sight guard you are very close to the moving car,

1 which increases the probability for getting hurt. So,
2 I don't think this is a good plan to keep these
3 things. Thank you.

4 MR. NAIPO: Thank you. Any additional
5 comments or questions, clarifications before we move
6 on to voting? All-righty.

7 With that, we'll be voting on proposal
8 2022.0082, removing (c) from 2.12.7.2.1 regarding "on
9 the sight guard", and requirement 2.12.7.2.2 "Where
10 the switch is located on the sight guard, the sight
11 guard shall accommodate and support the load of the
12 switch and its wiring."

13 All those in favor for this change, please raise
14 your hand now and vote yea. If you are for this
15 change, please raise your hand now and vote yea.
16 All right. Thank you. For those who voted yea, go
17 ahead and lower your hands.

18 Those who would like to cast a vote of nay
19 regarding this change, please raise your hands now.
20 If you are in opposition and want to vote nay for this
21 change, please raise your hand now. All right.
22 Please lower your hands for those who voted nay.

23 And if there's anyone who needs to abstain from
24 this vote or vote to abstain, please raise your hand
25 now.

1 If you have already voted nay, please make sure
2 you lower your hand. Paul, are you voting to abstain
3 from this, too?

4 MR. BARNHART: I'm abstaining, yes.

5 MR. NAIPO: Okay.

6 MS. ERIKSEN: Real quick. I'm sorry, this
7 is Melissa. I don't know if people who voted for this
8 put their hand down when they voted -- when the votes
9 were for no, as well, because we have a lot more votes
10 than we have had for the entire thing. Could we
11 please re-do this?

12 MS. GOULD: My hand was a mistake. Jan
13 Gould. I apologize.

14 MR. NAIPO: Okay.

15 MS. ERIKSEN: Your hand is never a mistake,
16 Jan.

17 MR. NAIPO: All right. So, for everyone who
18 is voting yea for this change, please raise your hand
19 now to be counted. Again, these are for the votes for
20 this change. Please raise your hands now so we can
21 recount it.

22 MS. ERIKSEN: Thank you.

23 MR. NAIPO: We're good? All right. So,
24 those who voted yea, please go ahead and lower your
25 hands. All right.

1 And if you are voting nay, please raise your
2 hand now. If you are voting nay, so you're in
3 opposition of this, please raise your hand now. Okay.

4 MS. ERIKSEN: Russ. Russ, is yours a no?

5 MR. LARSON: I'm a nay.

6 MS. ERIKSEN: Okay. Cool. Thank you.

7 MR. NAIPO: Thank you. All right. So,
8 everyone who has voted nay, please lower your hand.

9 And if there's anyone who is abstaining, please
10 raise your hand now. If you're abstaining, please
11 raise your hand now. All right. Thank you.

12 Melissa, will you please read the tally for a
13 vote of proposal 2022.0082.

14 MS. ERIKSEN: Thank you. There were 20
15 yesses, 3 nos, and 1 abstention.

16 MR. NAIPO: All right. Thank you. Okay,
17 with that, we're going to take a quick five minute
18 break and then we'll -- Oh, Patrick, did you have
19 something? Oh, no. All right. He bounced off. All
20 right. So, go ahead and start that five minute timer.
21 See you guys back in five minutes.

22 (Recess taken)

23 MR. NAIPO: All-righty. Welcome back,
24 everyone. So, what I'm going to do is I'm just going
25 to sort of share where we're at right now. We have

1 gone through and only got to 16. Actually, to 16?
2 Actually, 15. We've only got to 15 proposals so far
3 and the majority of all of them have been in 675.
4 With that, I am going to make the executive decision
5 today to ask to have guys do a little bit of homework,
6 okay, and for those who may already have, great and
7 thank you, but this is what I'm asking, so there are
8 another -- so, if we're at -- if we're at 17 and
9 there's still another 27, I believe -- no, there's
10 another 26 regarding 675, what I would ask is that
11 tonight, if you can, early tomorrow, get as much
12 information or as close to your vote as you can, and
13 what I propose is tomorrow, I know I've allowed people
14 to make comments and it has spurred on our
15 conversations and made them a little bit longer, and I
16 don't want to -- I don't want to diminish the validity
17 of it, but we only have so much time, and I
18 understand -- I want to give the people an opportunity
19 who are on the fence or who don't understand what this
20 change is really going to do, I want to give them the
21 opportunity to get educated. There are many of you
22 already who have been speaking multiple times who are
23 very educated on this change and the like. What I
24 would like to propose is that, hey, we hold back those
25 comments from people who know about this change and

1 give the people who need clarification on what this
2 change really means to have that afforded to them.
3 With that, I would ask that you guys think about that
4 a little bit and tonight, early tomorrow, whatever, if
5 you can at your leisure and try to come back with your
6 initial vote, and if you're on the fence, have a
7 question or questions that would help you get to
8 either a yea or nay.

9 What I'm proposing now is that we're going to
10 skip the rest of these 675s and we're going to jump
11 straight to 700 because I feel a lot of these other
12 changes we'll be able to get through a little bit
13 quicker because a lot of these have to do with very
14 code intense conversations that are going on and I
15 feel it's just going to draw out the day and we've
16 spent a lot of time already on those type of those
17 things and I want to get a little bit of a wind to
18 make us feel like, hey, we've chipped away at more
19 than just 15 so far. So, I just want to propose that
20 to you guys and see what you guys thought.

21 Bob, you have your hand up?

22 UNIDENTIFIED SPEAKER: Yeah. Sorry, Paul.
23 Yeah, you know, there are a lot of us that don't work
24 in and around elevators and all of the conversation
25 really helps a guy like me understand some of the

1 intricacies on both sides of these issues and without
2 that conversation for me to read through this again,
3 which I've already done once, and read through it
4 again on my own and think I'm going to make decisions
5 that are going to be well thought out is, in my
6 opinion, probably not a very good idea. I hate to say
7 it, and I was just telling somebody on the last break
8 that these kinds of meetings kill me, but I don't know
9 any other way around it, you know. I don't know how
10 you do this. I think -- I think we have to have this
11 process.

12 MR. NAIPO: All right. I appreciate that.

13 THE COURT REPORTER: And this is the court
14 reporter and who was just speaking?

15 MR. OURY: I'm sorry, my name was Bob Oury,
16 I should have told you, O-u-r-y.

17 THE COURT REPORTER: Thank you.

18 MR. NAIPO: Melissa, you have your hand up?

19 MS. ERIKSEN: So, this is Melissa. I
20 appreciate what Bob said and I know that you really
21 just hang in there with us in these meetings and I
22 appreciate you for that because sometimes I'm right
23 there with you. With that being said, to maybe bridge
24 what you need, and others who did not speak up and say
25 the same thing you did, and what Paoa was saying,

1 where the conversation is helpful to you and if you
 2 have something to say in the conversation that was not
 3 said previously then offer that conversation. We've
 4 had several instances on almost every proposal we've
 5 gone through where somebody just spoke up to say, yep,
 6 I agree with what they said. I'm really glad. I'm
 7 really glad that there is agreement in what's being
 8 said. Unless there is something further to add, then
 9 maybe hold off on that and that would be a good way to
 10 bridge what Paoa was saying, and what you and others
 11 need.

12 MR. NAIPO: So, I will leave it up to you
 13 guys right now. If we do continue with 675, and you
 14 know where we're at, what number were we on,
 15 continuing on with 17 and going on down, we might sort
 16 of, alluding to what, you know, Melissa was saying, is
 17 that, you know, if you're for it, that's great, but,
 18 again, the intent of these conversations is to help
 19 those who don't understand really what the
 20 ramification is to your specific stakeholder group and
 21 you're going to be able to garner those questions so
 22 that you're making an educated decision as much as
 23 possible.

24 If you guys feel like we can -- Again, I don't
 25 want to diminish it, but, again, it's the time frame

1 that we have to get all of this work done. If you can
 2 just make an educated thing like, "Hey, is this going
 3 to help someone else or am I putting forth something
 4 to put forth why this is a good thing for me?", I'm
 5 not saying that that's not needed, but it may -- you
 6 know, it may be a little more than we need at the
 7 time. So, Mr. Mills, go ahead.

8 MR. MILLS: Why don't we put a cap on,
 9 you've got 30 seconds to speak out for it or against
 10 it, and you get to speak once for each one, and just
 11 be done, and that makes it quick, easy. We don't have
 12 to beat a dead horse, we don't have to keep
 13 reiterating, going back and forth between us, you get
 14 one chance, 30 seconds, and move on.

15 MR. NAIPO: We can try that, definitely.
 16 All right. So, it sounds like some -- from what
 17 people are sort of alluding to, and just I can see
 18 some of the faces on there, we're just going to hammer
 19 through the 675. Okay, we're just going to keep
 20 going, and what I would ask is that you, again, hey,
 21 we're going to try to cut down your responses just a
 22 little bit so we can try to get through these a little
 23 bit quicker, but at the same time I know I tend to be
 24 long-winded at things because I really want someone to
 25 understand where I'm coming from, and the how, and the

1 why. That's why I'm not doing this. That's why I'm
2 not in your shoes.

3 So, starting with that, we will start off with
4 this next 675, which is proposal 2022.0083, Amendments
5 to Adopted Standards. We're striking all of
6 8.7.2.14.5.2 (a) through (i). "This requirement
7 introduces a hazard by modifying an engineering
8 control that may result in reduced vertical clearances
9 that will result in an OSHA defined focus four
10 fatality of struck by or caught between.
11 Additionally, it will result in an OSHA defined focus
12 four fatality of a fall. An employer in the United
13 States to include its territories would be legally in
14 violation of imminent danger violations of 29 CFR
15 1910, Subpart D and I, and 29 CFR 1926 Subpart M. In
16 essence, a building owner would have purchased an
17 elevator no one could safely and legally access the
18 car top of. If the hazard exists, protection must be
19 provided through engineering or higher methods."

20 Is there any clarifying questions that are had
21 by those who don't understand this change? Okay, Mr.
22 Brinkman.

23 MR. BRINKMAN: Kevin Brinkman. And this
24 time I do have a question instead of a comment. I'm
25 not sure how illuminating this makes it safer. This

1 would allow using a stowable design for a car top
2 railing in cases where an existing conditions of a
3 building prevent a full size one from being on there
4 all the time because it would strike the overhead.
5 So, how does illuminating an alternate design that
6 would be -- be able to be deployed while the mechanic
7 is working on top of the car improve safety? Thank
8 you. Kevin Brinkman.

9 MR. NAIPO: Any other clarifying questions
10 needed before we cast a vote? Lyall.

11 MR. WOHLISCHLAGER: Maybe Kevin can -- This
12 is Lyall Wohlschlager. Maybe Kevin can comment on
13 this, but I've got to believe that at the ASME code
14 committee meetings they address these OSHA related
15 standards, as well, when they're making their
16 decisions. Is that not a true statement, Kevin?

17 MR. NAIPO: Mr. Brinkman, yes.

18 MR. BRINKMAN: Kevin Brinkman. I am sure
19 it's considered in the discussions. We don't directly
20 reference OSHA because A17.1 is a design standard, but
21 I'm sure in the discussions about items such as this
22 it does come up.

23 MR. NAIPO: Any additional questions before
24 we cast our vote? With that we will be casting a vote
25 on -- Oh, Mr. Quiett.

1 MR. QUIETT: Jonathan Quiett. There is
 2 already provisions within the WAC for car top
 3 railings, and definition of heights that it can be put
 4 at, and how it can be installed. We're having two
 5 separate things now. You can either follow these
 6 WACs existing with installing a permanent handrail
 7 that might not be to the height and use the provisions
 8 that are in there, or we're saying with this, if we do
 9 not strike this, then -- or it'll be or a collapsible
 10 handrail, and I think just for this ease we need to
 11 stay with one system or the other, not be confusing
 12 the two.

13 MR. NAIPO: So, Mr. Quiett has brought forth
 14 that, hey, this is already a WAC standard, yes, they
 15 don't -- we don't allow collapsibles, is what I'm
 16 understanding in the WAC that that's presented, but
 17 it's an alternate design with a restricted height and
 18 stuff for hazards. Candace.

19 MS. LAU: Oh, I just wanted to -- a point of
 20 clarity. This is in the 8.7 and so this is for
 21 alterations, right? So, it's not like a -- Just for
 22 those that maybe did not, you know understand, this
 23 exact code is for alterations. So, you have existing
 24 conditions and you got to make something work. That's
 25 just a comment.

1 MR. NAIPO: Thank you. The question then
2 is: Does the WAC code that Jonathan referenced is
3 that for new installs, or is that for new installs and
4 alterations, or just alterations, the car top railing?

5 MS. LAU: This is Candace Lau. Yeah, so --
6 so, he's correct. We do have a retroactive code in
7 the WAC that addresses this, but not under
8 alterations, so it was just like an existing code that
9 is required for all existing installations, 23.1.1.7,
10 I believe.

11 MR. NAIPO: So, asking, do you -- is your
12 educated opinion regarding the WAC and this one one
13 and the same or are we talking about two totally
14 separate instances where this may be applied
15 differently than what's in our WAC?

16 MS. LAU: This is Candace again. Like I
17 said, the WAC code is a retroactive code. It's for
18 all existing. Just any elevator out there currently
19 it is -- has to go with that 23.1.1.7, but the 8.7 is
20 when you do an alteration it's saying -- because it's
21 under 8.7, if you're adding car top handrails it's
22 telling you -- they -- they're in conjunction with
23 each other, I guess. And Jon is correct, they could
24 contradict each other, as well. I don't think they
25 contra-- Well, yeah, I haven't looked at it that

1 closely. To be honest, I haven't compared them, but
2 there may be some conflicts there. This is -- I think
3 this is just allowing for that, this other system.
4 Does that answer your question?

5 MR. NAIPO: So, I guess the question I'm
6 answering, is this one of those things where, hey,
7 it's sort of already addressed, and I'm asking you as
8 the stakeholders, "We, the stakeholders, feel like,
9 hey, the requirement that's in the WAC is okay. We
10 don't need to strike this because of this. We already
11 have this in place." And if you would like to, I can
12 bring up that WAC so that you guys can see it in
13 conjunction with this. If anyone wants to see that
14 WAC, please just raise your hand and I'll get that up
15 here as soon as I can. If not, I will ask first, do
16 you feel like this is the same as that or we're fine
17 with what the WAC currently says regarding car top
18 handrails?

19 So, those in favor of what the WAC currently
20 says for car top handrails, will you please raise your
21 hand.

22 MS. GOULD: What? Are we voting on the
23 amendment? Jan Gould. Are you --

24 MR. NAIPO: What I'm asking is if people
25 believe that the 23 here, let me just bring it up.

1 MS. GOULD: No, I know what it --

2 MR. NAIPO: Yeah. No, what I'm saying, what
3 I'm asking is: Is this one of those things to where,
4 hey, we are already have a WAC that sort of addresses
5 that, so do we really need to cast a vote on it, or
6 I'm sort of asking people's opinions about this. Yes,
7 Candace.

8 MS. LAU: Well, they are different in that,
9 one, the amendment that is being proposed right now is
10 saying that they want to amend 8.7, which means if you
11 want to do an alteration on a car top handrail they
12 want to get rid of all of this, which is not -- Like I
13 said, I haven't really gone line item by line item to
14 figure out what the -- what all the -- all the things
15 are. They -- We -- What I'm saying, I guess, is we
16 can't just say we're going to get rid of 23.1.1.7 if
17 we go to this. So, there are two separate things.
18 They're two separate things. It's not like we vote
19 for this or we vote for that. I don't know how else
20 to explain that, I guess. But they could contradict
21 each other is what I'm saying. But I haven't really
22 looked at the two to see where they would contradict.

23 MR. NAIPO: All right. Jan.

24 MS. GOULD: Jan Gould. To give you some
25 past history, when there was a large Part D in the WAC

1 rule, the State Inspectors all of a sudden saw the pit
 2 stops, which had to be a certain height, so they wrote
 3 it up on thousands of elevators in the state of
 4 Washington. So, you would need to clarify this, but
 5 Part D is retroactive, and an alteration is an
 6 alteration. So, to me, if you strike this
 7 requirement, then the WAC rule would prevail, and I --
 8 I liked that you have an option for a low overhead to
 9 have a handrail and have it in ASME's language for
 10 alterations.

11 MR. NAIPO: Thank you. Duane.

12 MR. LEOPARD: I just took a quick look at
 13 the WAC to 23.1.1.7. It looks like it makes
 14 provisions for a, what did you say, a non-collapsible
 15 handrail. This allows for provisions for a
 16 collapsible handrail. And, you know, if you try to
 17 make a handrail at 24 inches, it's more of a tripping
 18 hazard for a mechanic, but if you get one that's safer
 19 that's on the car top, it stands up, collapses, stands
 20 up with a safety switch, that's more safety for
 21 mechanics. I agree with -- I don't agree with the
 22 strike-out.

23 MR. NAIPO: All right. So, what I suggest
 24 is we take a vote on this, and, again, regarding
 25 knowing that, hey, when it comes to an alteration,

1 this person is proposing that they remove the
2 requirements that are stated here for the railing and
3 the possibilities of a different type of railing; so,
4 that's what you're going to be voting on is, again, in
5 the sense of an alteration being done this is what the
6 code says and they are wanting to strike that
7 regarding this car top handrail.

8 So, we're going to cast a vote on 2022.0083
9 regarding what I just spoke of just here briefly. So,
10 if you are for striking regarding an alteration and
11 striking all of this verbiage regarding a car top
12 railing, please vote yea now by raising your hand.
13 If you are for this change of striking those
14 requirements, please raise your hand now. All right.

15 If you are against this, please vote nay now by
16 raising your hand. All right.

17 Please lower your hands if you voted yea
18 already. I thought that was nay.

19 Those who are in opposition or who are for this
20 change -- No. No, no, no, no. Good lord.

21 Those who are voting nay --

22 MR. DOLGIKH: Yes. Thank you.

23 MR. NAIPO: Those who are voting nay, please
24 raise your hand now.

25 MS. ERIKSEN: This is Melissa. That was.

1 So, we're at abstentions.

2 MR. NAIPO: Oh. I need a longer break,
3 apparently. Those for abstaining, please vote now.
4 Those who are abstaining, please raise your hand by
5 voting now.

6 All-righty. Melissa, will you please read the
7 tally total for proposal 2022.0083.

8 MS. ERIKSEN: Yes. Thank you. So, there
9 were 0 yeas, there were 25 nays, and there were 0
10 abstentions.

11 MR. NAIPO: So, going on to 84, proposal
12 2022.0084, Amendment to 17.1 section 6.1 as follows,
13 and it's regarding 6.1.6.3.6 Escalator Skirt
14 Obstruction Device. 6 point -- Okay, I'll have to
15 read the whole thing. "Means shall be provided to
16 cause initiation of dynamic braking (6.1.5.3.4) or the
17 electric power to be removed from the escalator
18 driving-machine motor and brake if an object becomes
19 caught between the step and the skirt as the step
20 approaches the upper or lower combplate. The device
21 shall be located at a point at which the step assumes
22 a flat step position (see 6.1.3.6.5). The escalator
23 shall stop before that object reaches the combplate
24 with any load up to a full brake rated load with the
25 escalator running [see 6.1.3.9.3(a)(2) and

1 6.1.3.9.3(b)(2)]. The device shall be the manual
2 reset type."

3 What they are asking is to strike, "or it shall
4 be permitted to automatically reset not more than one
5 time within 24 hours of operation and therefore
6 require a manual reset before the next re-start.
7 Interruption of power during operation should not
8 cause the device to lose the status of the timer nor
9 the count of events."

10 Justification: "Permitting an escalator skirt
11 obstruction device to automatically reset one time
12 within 24 hours of operation lowers the minimum safety
13 standard. The ability for an electromechanical
14 machine to effectively rule out a hazardous condition
15 being present as opposed to elevator personnel ruling
16 out the presence of a hazard has not been proven to
17 insure safety to the riding public. If the hazards
18 exist, protection must be provided through engineering
19 or higher methods that are effective. Automatic
20 reset without elevator personnel investigating is
21 unacceptable."

22 Any questions of clarifications to help garner a
23 vote of yea, nay, or abstain? Any questions? Wade.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. So, I have seen a lot of skirt switches that

1 have been adjusted so far out because of nuisance
 2 tripping that they have set the switch to the point it
 3 requires an excessive amount of force or it can't be
 4 tripped at all. So, while I'm not an advocate of
 5 removing a safety standard by any means, what I could
 6 see this doing is allowing more of these switches to
 7 be adjusted properly and shut the elevator down. Not
 8 knowing much about this particular automatic reset
 9 device, I'm assuming that the unit would not reset if
 10 the switch was actively depressed, but, you know, I
 11 just -- Just an understanding that these things are
 12 commonly bypassed or rigged in such a way that they
 13 won't trip because of nuisance situations. Automatic
 14 reset may provide an extra option which would actually
 15 increase safety because the switches would be used.
 16 Thanks.

17 MR. NAIPO: Mr. Mills.

18 MR. MILLS: As an escalator guy, there's a
 19 reason why its been in the code forever, manual reset,
 20 and so we get out there and we look at it. Auto
 21 resets, even if it is once every 24 hours, I just -- I
 22 don't agree with it. We go out there and look at it,
 23 and there is a lot of nuisance, without a doubt.
 24 Unfortunately, that's lack of educating the public on
 25 how to properly ride an escalator. And anybody that

1 adjusts a skirt switch out of code should lose their
2 license because now they've taken code compliance out
3 of it. We never -- I've never adjusted one out of
4 code. It's not right, just to make your life easier,
5 no. We have a commitment to the public to not do
6 stuff like that.

7 MR. NAIPO: Thank you. Any other questions
8 for clarification needed, anyone? Carl.

9 MR. CARY: Sorry. Carl Cary, Lerch Bates.
10 The striking part, I -- the 6.1.3.9.3 I don't think is
11 the correct reference. Thank you.

12 MR. NAIPO: No. It's regarding 6.1.6.3.6.
13 Further down -- I think he's stating further down,
14 that verbiage, the last sentence or so is what he's --
15 or the last sentence or two is what he's wanting
16 amended.

17 UNIDENTIFIED SPEAKER: Got it. Thank you.

18 MR. NAIPO: Kevin.

19 MR. BRINKMAN: Just for maybe to help some
20 of the folks out who are looking at this, I pulled up
21 the rationale from this change when it was originally
22 done and I believe the self-resetting was added at a
23 similar time as the manual resets. The concern was
24 that, you know, sometimes is that typically what the
25 experience said was was that the -- if there's a

1 problem with the switch or an issue with the
 2 adjustment that they're usually going to have multiple
 3 shutdowns in a short time; so, therefore, one reset
 4 per hour, per 24 hours was felt to be probably just
 5 something that was a nuisance trip and they felt --
 6 thought it could be reset safely. And the other
 7 concern was that if it's -- you know, keep -- it
 8 houses the manual reset that the escalator may be down
 9 for long periods of time while you have a mechanic
 10 come back out and reset it. So, they thought with the
 11 one reset it would allow for it to take into account
 12 the nuisance trips. So, that really applies to this
 13 one, as well as there's a couple more changes that are
 14 very similar to this. That rationale would apply to
 15 all those. Thank you.

16 MR. NAIPO: Thank you. Mr. Leopard.

17 MR. LEOPARD: I think we need to
 18 double-check something because proposal -- oh, I'm
 19 sorry, Duane Leopard, city of Spokane -- 0084 that
 20 refers to escalator skirt obstruction device. Then
 21 we're talking about as the step approaches the upper
 22 and lower combplate within the text. That's what I
 23 was looking at. But the next one, 0085, step upthrust
 24 device and such.... Just looking at it, I'm not sure
 25 that that's proper, but I'm looking at A17.1. I like

1 the strike-out. Thank you.

2 MR. NAIPO: Mr. Madison.

3 MR. MADISON: Yeah, following -- Sorry, Jon
4 Madison. Following with what everyone has been
5 talking about, this upthrust switch, as I see, it when
6 these -- when these go off you've usually got a
7 missing wheel or something. When we're talking about
8 the skirt, there was something about that. Anyway,
9 the point being, if there's any damage to it and they
10 re-- they just restart the unit, I mean are we going
11 to say that the security guy, or the maintenance guy,
12 or the escalator cleaning crew has enough experience
13 just to fire a unit back off, let the people jump back
14 on it, and then we'll find out if it's got a broken
15 cast step or a missing wheel once we have the public
16 back on it? That's just my concern because anything
17 that is a manual reset and we start adding automatic
18 reset switches in there, you know, whether there's a
19 24 hour time frame or not, just seems like a pretty --
20 a pretty poor idea as far as the safety of the public.
21 Thank you.

22 MR. NAIPO: Duane, did you have another
23 question? No. Oh, okay. Your hand is still up,
24 Duane, that's all I am saying. Mr. Friesen.

25 MR. FRIESEN: Wade Friesen, Vertical

1 Options. I just wanted to clarify that we are talking
 2 about the skirt obstruction device here and not the
 3 upthrust, that's in the next section that we're
 4 discussing here. But, you know, again, having not
 5 seen one of these with an automatic reset device, I
 6 have to believe that this thing is shutting the unit
 7 down if it's tripped, and it has to be manually
 8 started by some sort of personnel in the building.
 9 Somebody is going to look at this thing. It's not --
 10 it's not like it's going to reset itself and restart
 11 itself. So, you know, just to play devil's advocate,
 12 I could see how this would be beneficial to reduce
 13 nuisance shutdowns. Thanks.

14 MR. NAIPO: If I could, before I move on
 15 to -- or, actually, Mr. Quiett, if you feel like you
 16 can answer that question, as well, that would be
 17 great, of Wade's, or if you were going to make a
 18 comment and then see if someone else might be able to
 19 answer Wade's question.

20 MR. QUIETT: Jonathan Quiett. Yeah, I was
 21 actually going to make a comment, but the -- If you
 22 have a skirt device that goes off, if there is
 23 actually something between the step and the skirt, by
 24 the time the unit stops whatever happens to be in
 25 there is going to be fairly close to the turnaround of

1 the escalator at that point and it may not necessarily
 2 keep the skirt switch trip. So, if you have untrained
 3 personnel that are now having the ability to go
 4 restart the unit you could be causing further more
 5 significant damage to the unit if whatever happens to
 6 be in there impacts the combplate, impacts and gets
 7 into the turnaround, you know, does damage within the
 8 unit itself. So, I'm -- I'm in firm agreement this
 9 needs to be struck. It needs to be inspected before
 10 the unit is turned back on.

11 MR. NAIPO: Candace.

12 MS. LAU: Candace Lau. I just want to kind
 13 of sort -- I don't know if that's what Wade is asking,
 14 but when we say -- when the code asks for manual reset
 15 it's not asking for somebody to just walk over to the
 16 key switch and turn the key switch to turn it back on.
 17 That's not considered manual reset. Manual reset for
 18 escalators you actually have to have an elevator
 19 person come and reset it. So, if I can just re-do the
 20 definition of manual reset for escalator moving walks,
 21 it says a means not accessible to the general public
 22 or authorized personnel requiring on-site intervention
 23 by elevator personnel prior to restarting the
 24 escalator moving walks. So, that's very, very
 25 different than just restarting the escalator. That's

1 not a manual reset. Just -- Just wanted to clarify
2 that.

3 MR. NAIPO: So, I still think -- I -- I
4 don't know if Wade's question has been answered
5 regarding the functionality of the automatic reset.
6 Mr. Mills, do you know anything about that as far as
7 the automatic reset and how the functionality of that
8 actually works? Is it something where within 24 hours
9 the system is going to shut off on the conveyance and
10 come back on by itself or do you have any comments
11 towards --

12 MR. MILLS: Because we don't have those yet
13 in this state, I haven't seen one. We did --
14 Schindler used to make one that had a reset button,
15 and just (audio indiscernible) references the crews
16 there at the movie theaters in downtown Seattle would
17 lift up, push the reset button, and walk away, and
18 what happened was the handrail was destroyed. They
19 went in there on overtime and had to pull all these
20 pieces out because the handrail was being eat up and
21 it was re-- it was tripping the handrail speed sensor,
22 and because of their lack of knowledge, they knew how
23 to push a reset button, but it was destroyed, and the
24 whole thing was illegal. They should have never
25 touched the escalator, but they knew enough to get

1 themselves in trouble and destroy the equipment.

2 MR. NAIPO: So, with this change, again this
3 change it sounds like all they're doing is they're
4 wanting to remove the possibility of an automatic
5 reset, the type that resets itself within 24 hours.
6 Mr. Oury.

7 MR. OURY: Hold on. Here we go. Sorry
8 about that. Bob Oury. So, is it my understanding
9 that this strike in red is currently in the code, but
10 there have none been installed in the state of
11 Washington currently yet? So, this was put into the
12 code and now they want to strike it before any units
13 actually get installed in the state of Washington, is
14 that what I understand?

15 MR. NAIPO: So, it sounds like --- So,
16 Gerald put in the chat that this verbiage for the next
17 three proposals is the same in both WAC, or, excuse
18 me, WAC, ASME A17.1 2016 and 2019 that we're looking
19 at. So, yes, it is something that is currently in the
20 code. It just sounds like none of the mechanics that
21 are represented have had to deal with these type of
22 conveyances. So, it mainly is just are we -- Oh,
23 doo-doo-doo-doo-doo, sorry. Duane.

24 MR. LEOPARD: (Garbled audio)

25 MR. NAIPO: I'm sorry, Duane, what was that?

1 MR. LEOPARD: Go ahead and finish what you
2 were saying.

3 MR. NAIPO: Oh, no, no. It just -- I lost
4 my train of thought right when I saw your name. I'm
5 sorry. I saw it pop up and I'm like, wait, oh, okay,
6 got to get to that; so, I'm sorry.

7 MR. LEOPARD: Duane Leopard, city of
8 Spokane. You know, I said earlier I didn't like the
9 strike-out, but this -- I read it wrong. For skirt
10 obstruction devices, the way it's set up, if the
11 switch is broke, it stays broke, and it's not going to
12 restart. But there are probably one of those -- the
13 top false alarms, false stops, and if you maintain if
14 the -- if the switch remains broken, then it's not
15 going to restart. So, I'm going to switch and I'm
16 going to vote in favor of this, against this
17 strike-out on this unit.

18 MR. NAIPO: Mr. Brinkman.

19 MR. BRINKMAN: Yeah, Kevin Brinkman.
20 I believe this was put into the A17 code in either
21 2010 or 2013. Its been part of it for a while. And I
22 think the key is, you know, there's been talk about
23 the guy at the movie theater going back and resetting
24 this button, stuff like that. This is an automatic
25 reset, not a manual that anybody in the general public

1 can touch. So, it's something where the system, if
2 everything comes back, it has a nuisance trip, it goes
3 to all clear, and it can -- it can reset one time
4 within 24 hours, but, as somebody mentioned, if
5 there's a broken switch or something else it's going
6 to activate immediately again, and then you're going
7 to have to go in and do the inspection and a full
8 manual reset. So, it's only allowing one time. In
9 this case it was a nuisance. If it happens more than
10 once, that's an indication there's something wrong and
11 it should be corrected. Thank you.

12 MR. NAIPO: Thank you. Melissa, did you
13 have your hand raised?

14 MS. ERIKSEN: Yes. This is Melissa. So, I
15 believe Bob is the one, Bob Oury is the one who said,
16 you know, if somebody previously said that there
17 aren't any in Washington state, but this is being
18 struck out, if it's being struck out of the code, the
19 code book is for more than just our state. So, if
20 it's being struck out, it's maybe because we don't
21 have anything here, if that's the case.

22 MR. NAIPO: So, any additional comments or
23 questions needed to help anybody clarify their vote,
24 please raise your hand. All right. So, what I'd like
25 to do is since this terminology is being struck from

1 the next two... Now, granted, this one is just for
 2 escalator skirt obstruction device. They are asking
 3 to remove the automatic reset once within 24 hours,
 4 that's what they're asking about. That's what you're
 5 voting on in this one. The next one we will cover is
 6 the same change, but for a different function of the
 7 escalator. So, I just wanted to -- Hopefully, the
 8 next we'll be able to get through real quickly.

9 So, this is regarding we're going to cast a vote
 10 on proposal 2022.0084 regarding removing the automatic
 11 reset switch within one time within 24 hours of an
 12 escalator skirt obstruction device. For everyone
 13 that is for that change of omitting the automatic
 14 reset, please vote yea now. If you are for that
 15 change to remove the automatic reset function of the
 16 escalator on the escalator skirt obstruction device,
 17 please vote yeah now. All-righty. If everyone has
 18 cast their vote for yeah... Melissa, are you good?
 19 All right. Yes, please put down your hands. Thank
 20 you.

21 For those who want to vote nay for this change
 22 as you want to keep that verbiage within the code,
 23 please vote nay now. All right. Thank you. You
 24 can put your hands down. And if there's anyone left
 25 who needs to -- Is someone saying something? All

1 right. If there's anybody who would like to abstain,
2 please raise your hand now. Thank you.

3 Melissa, will you please read the results of the
4 vote for 2022.0084.

5 MS. ERIKSEN: Thank you. We had 9 yeas, 13
6 nays, and 4 abstentions.

7 MR. NAIPO: Thank you for that. And with
8 that same verbiage and knowledge, if there are any --
9 if there is any information that is different
10 regarding the step upthrust device and the fact that
11 they are wanting to remove the one -- the automatic
12 reset one time within a 24 hour operation that then
13 requires a manual reset, if there is any additional
14 comments or anything that needs to be had on this,
15 please raise your hand now. Eric.

16 MR. MILLS: Just a point of information for
17 everyone. The upthrust is inside the unit. It's
18 typically an internal problem. It's -- The skirt
19 switch is visible. Normally you can see the area
20 where it could be impacted. This is actually an
21 internal device that checks your steps as they go
22 through the area; so, you can't visually see it
23 without opening the unit up. This should be a yea.

24 MR. NAIPO: Thank you. Mr. Friesen.

25 MR. FRIESEN: Wade Friesen, Vertical

1 Options. Just to piggyback off of what Eric said, a
2 step upthrust device, I've never heard of one of these
3 being tripped as a nuisance situation. If this device
4 is tripped there's a serious issue. And I also do not
5 agree that this should be an automatic reset means. I
6 think this should be struck. Thank you.

7 MR. NAIPO: Mr. Quiett.

8 MR. QUIETT: Jonathan Quiett. This is for
9 everybody that doesn't know where this is. So, this
10 switch is located at the bottom of the escalator. So,
11 if the escalator moving in a down direction has a step
12 that's coming in too high, it stops the unit before
13 that step is too high, gets to the bottom of the unit
14 and cause -- can cause major damage to the unit, and I
15 think it's irresponsible to let it be automatically
16 reset, and then restart the unit and further -- cause
17 further damage or damage to begin with.

18 MR. NAIPO: Any additional questions for
19 clarification or statements? Yes, Candace.

20 MS. LAU: Candace Lau. Yeah, I want to add
21 to what he just said. It's not even just about the
22 equipment; it's about stacking up the steps and really
23 causing injuries, and it's just a really important
24 issue here.

25 MR. NAIPO: All right. Thank you. I'll

1 give one more opportunity for anybody else who needs
2 any additional questions answered or comments. All-
3 righty. And with that, we'll be casting a vote on
4 proposal 2022.0085 regarding the step upthrust device
5 and removing the automatic reset of not more than one
6 time within 24 hours of operation and therefore
7 requiring manual reset verbiage from the code.

8 If you are for that change, please vote yeah
9 now. If you are for that change, please vote yea now.
10 All right. Please put your hands down. Thank you
11 very much for voting. I'm waiting until everybody
12 removes their hand.

13 All right. If you are not for this change of
14 removing the automatic reset, please vote nay now. If
15 you are not for that change, please vote nay now. All
16 right. Please go ahead and lower your hands. Thank
17 you very much.

18 And if there is anyone who needs to abstain, if
19 you are voting to abstain from this vote, please raise
20 your hand now. If you are voting to abstain from
21 this, please raise your hand now. All-righty. Thank
22 you very much.

23 Melissa, will you read the vote tallies for
24 proposal 2022.0085.

25 MS. ERIKSEN: Yes. Thank you. There were

1 19 yeas, 5 nays, and 2 abstentions.

2 MR. NAIPO: All right. Thank you. So,
3 again, with that same verbiage going to apply to the
4 handrail entry device about removing an automatic
5 reset within 24 hours, at least allowing one, and
6 therefore requiring a manual reset after that, again
7 the conversation of the last two, if there is anything
8 that you feel is different regarding the handrail
9 entry device, please make those statements or pose
10 your questions now so we can get clear clarification.
11 Thank you. Anybody? All right. Mr. Mills, man of
12 the hour.

13 MR. MILLS: Eric Mills. The thing with the
14 handrail entry device is whatever has set it off now
15 has to travel the length of the unit to the other one
16 before it'll reset it. So, whatever the damage is,
17 whether it's a broken handrail, a finger, whatever, it
18 now travels the entire length of the unit whether it's
19 underneath or on top and get to the other one. So,
20 depending on the length of the unit, it could be
21 whatever it is that's causing the obstruction could be
22 100, 600 feet long, whatever, before it hits it again.
23 So, you have that whole distance because the escalator
24 doesn't stop like instantaneous. It drifts. There's
25 a small drift to them. So, it's going to be past that

1 point of impact. So, it's going to, then, travel the
2 distance, depending on the direction of the unit and
3 what handrailing that was tripped. So, I vote yea on
4 it also.

5 MR. NAIPO: Any other questions or comments
6 to clarify your vote?

7 MR. WOHLSCHLAGER: Does anybody have any
8 examples of nuisance trips with these handrails?

9 MR. NAIPO: Thank you. Duane, I saw you
10 physically raise your hand. There you go. Mr.
11 Leopard.

12 MR. LEOPARD: Thank you. Escalator guy,
13 yeah, I've seen it lots of times, a stupid piece of
14 bubble gum won't go through those things, trip them
15 once. There's a whole bunch of things that trips
16 these and they become nuisances.

17 MR. NAIPO: Any other questions or
18 clarifications needed? Wade.

19 MR. FRIESEN: Wade Friesen, Vertical
20 Options. I haven't seen as many nuisance trips with
21 these. I did see a misadjusted handrail one time
22 where the customer got something stuck in a step and
23 then reversed the device and had it tripped. But I
24 think with the handrail entry device where it's
25 possible that you can get somebody's hand sucked into

1 this thing, this is one of those types of devices that
2 really needs to have a mechanic's eyes on it to make
3 sure that there is nothing that's -- that's seriously
4 wrong before this unit is fired back up again. I'm --
5 I'm -- I'm not for making that thing automatic reset
6 on this one. Thanks.

7 MR. NAIPO: Thank you. So, last time,
8 anybody has got any questions or clarifications to
9 help educate anyone? All-righty. And, with that,
10 we'll be casting a vote on proposal 2022.0086
11 regarding removing the not more than one time or
12 automatically reset not more than one time within the
13 24 hour operation, and, therefore, would need a manual
14 reset regarding the handrail entry device on an
15 escalator.

16 Those who are for that to be omitted from the
17 code, so, therefore, we will not allow those, please
18 vote yeah now. Please vote yea for not allowing in
19 this state the automatic reset within 24 hours. All
20 right. Go ahead and lower your hands. Thank you very
21 much for your votes. Eric and Dylan, yeah. Go ahead
22 and lower hands if you've voted yea already. All
23 right. Thank you.

24 And those who are in opposition of this, so they
25 are for that 24 hour -- they are for the automatic

1 reset within 24 hours of operation and, therefore, a
2 manual reset if it's done more than once, please vote
3 nay for this change. Please vote nay for this change
4 if you are for those types of operations. All right.
5 Thank you. Go ahead and lower your hands.

6 And, finally, those who wish to abstain please
7 raise your hands now. Thank you.

8 Melissa, will you please read the vote tally
9 for 2022.0086.

10 MS. ERIKSEN: Absolutely. There were 18
11 yeas, 6 nays, and 2 abstentions.

12 MR. NAIPO: All-righty. Thank you. So, on
13 to proposal 2022.0087, Amend 17.1 section 6.1 as
14 follows: 6.1.6.4 Handrail Speed Monitoring Device. A
15 handrail speed monitoring device shall be provided
16 that will cause the activation of the alarm required
17 by 6.1.6.3.1(b) without any intentional delay,
18 whenever the speed of either handrail device -- or,
19 excuse me, speed of either handrail deviates from the
20 step speed by 15% or more. The device shall also
21 cause initiation of dynamic braking (6.1.5.3.4) or
22 electric power be removed from the driving-machine
23 motor and brake when the speed deviation of 15% or
24 more is continuous within a two second to six second
25 range. The device shall be the manual reset type.

1 And it is striking, "or shall be permitted to
2 automatically reset not more than one time within a 24
3 hour operation and thereafter require a manual reset
4 before the next restart. Interruption of power during
5 operation should not cause the device to lose the
6 status of the timer nor the count of events.

7 "Permitting an escalator handrail speed
8 monitoring device to automatically reset one time
9 within 24 hours of operation lowers the minimum safety
10 standard. The ability for an electromechanical
11 machine to effectively rule out a hazardous condition
12 being present as opposed to elevator personnel ruling
13 out the presence of a hazard has not been proven to
14 ensure safety to the riding public. If the hazard
15 exists, protection must be provided through
16 engineering or higher methods that are effective.
17 Automatic reset without elevator personnel
18 investigating is unacceptable."

19 So, again, this is just something else with the
20 same exact type of verbiage, but this is regarding the
21 handrail speed monitoring device. Any comments or
22 points of reference to help people make an educated
23 vote on this regarding removing the code reference of
24 permitting an automatic reset one time per 24 hours on
25 a handrail speed monitoring device? Mr. Friesen.

1 MR. FRIESEN: Wade Friesen, Vertical
2 Options. I kind of feel like this is a lot along the
3 lines of the -- of the skirt switch. You know, if
4 there's a real issue and this isn't some kid playing
5 on the thing or grabbing the handrail and slowing it
6 down or a nuisance type of situation, it's going to
7 happen twice right away and the unit is going to be
8 shut down. So, I think that it's appropriate to
9 retain this language. Thanks.

10 MR. NAIPO: Thank you. Mr. Barnhart.

11 MR. BARNHART: Just to clarify, what's in
12 blue is existing text?

13 MR. NAIPO: Yes, and --

14 UNIDENTIFIED SPEAKER: If it's color red
15 it's underlined.

16 MR. NAIPO: Yeah. I apologize about that.
17 Any additional questions or -- Oh, Mr. Leopard, I'm
18 sorry, I was busy doing that and I didn't see you.

19 MR. LEOPARD: Duane Leopard, city of
20 Spokane. Hey, I did it this time. I agree with Wade.

21 MR. NAIPO: All right. Any other questions
22 or clarifications needed before we cast a vote on this
23 one? Duane, you've still got your hand up, just so
24 you know. All-right.

25 So, we'll be casting our vote on 2022.0087

1 regarding the handrail speed monitoring device and not
2 allowing automatic resets here in the state of
3 Washington. Sort of the same verbiage that we've
4 covered in the last three. So, again, you're voting
5 on the handrail speed monitoring device.

6 If you are for that change of not allowing these
7 type of automatic resets to be had in the state of
8 Washington please vote yea now. Please vote yea now
9 if you are for the change of on the handrail speed
10 monitoring device not allowing the automatic reset.
11 All-righty. Patrick -- Add one to whatever you had.
12 Patrick added it right when you looked away after you
13 shook your head.

14 MS. ERIKSEN: So, there were seven.

15 MR. NAIPO: All right. We'll do that one
16 more time, then. Can everybody please vote yea again.
17 I apologize.

18 MS. ERIKSEN: Okay. Thank you.

19 MR. NAIPO: All right. Seven, okay. All
20 right. Thank you. Go ahead and lower your hands.

21 And those who are in opposition of this change
22 go ahead and please raise your hand now and you are
23 voting nay that you are in opposition of this change.
24 All right. Thank you very much. Please lower your
25 hands.

1 And if you are voting to abstain from this --
2 Please everyone who voted nay please lower your hands
3 so that we can count the abstaining votes. Carl, are
4 you abstaining? All right. So, those who are
5 abstaining from the vote please raise your hand now.
6 All righty. Thank you very much.

7 Melissa, will you please read the vote tally for
8 proposal 2022.0087.

9 MS. ERIKSEN: Yes. Thank you. There were
10 7 yeas, 16 nays, and 3 abstentions.

11 MR. NAIPO: Thank you. All-righty. Moving
12 now to the next one, proposal 2022.0088. Amend 17.1
13 add 6.2.3.x, I'm not quite sure what that means, Uses
14 Not Permitted. Equipment used for moving and handling
15 material designed and/or used that manually connects,
16 couples, attaches, or mates to the treadway of a
17 moving walk with the use of fasteners or by friction
18 is prohibited.

19 "In accordance with the scope of ASME A17.1,
20 Part 6, this proposal is intended to proactively
21 provide detailed enforceable language prohibiting a
22 moving walk from being utilized for anything but the
23 transportation of passengers. This issue is being
24 reported in multiple areas of the United States and
25 appears to be creating hazards. This proactive

1 approach is requested to attempt to protect life and
2 limb through the mitigation and or elimination of the
3 hazards associated with pinches, falls, lacerations,
4 as well as to limit or eliminate damage to equipment
5 which would promote the public welfare."

6 So, this is regarding escalators. Mr.
7 Montgomery.

8 MR. MONTGOMERY: Oh, sorry, I forgot to put
9 my hand down.

10 MR. NAIPO: No worries, no worries. Does
11 anybody have any questions of clarification to help
12 them come to a vote, any statements of understanding?
13 All right. Mr. Mills.

14 MR. MILLS: Eric Mills, field mechanic.
15 Basically what this is is taking -- eliminating the
16 moving walk as being a material mover. They have
17 certain areas, especially huge amusement parks use it
18 to move produce, freight back and forth throughout
19 buildings, and this is just whatever it says that they
20 added and reworded preventive to stop it from
21 happening in this state, that's what it's written up
22 as.

23 MR. NAIPO: Thank you. Any other questions,
24 need an answer for clarifications from tech members?
25 Mr. Wilson.

1 MR. WILSON: I was just looking at the scope
2 of escalators in Part 6 and in the scope it says Part
3 6 applies to escalator and moving walks used to
4 transport passengers. Thank you.

5 MR. NAIPO: Thank you. Mr. Larson.

6 MR. LARSON: Yes. Thank you. This is Russ
7 Larson. I've seen some examples of this recently
8 specifically with moving walks. Moving walks by the
9 code are allowed to be as steep as 12 degrees, which
10 is an unusually steep configuration. In those cases,
11 shopping carts, carts, you know, can have runaway
12 conditions and there's been some bad accidents with
13 respect to that. So, I -- I agree with the consent
14 here that this is a dangerous situation and we should
15 vote to adopt this. Thank you.

16 MR. NAIPO: Thank you. Mike, did you have
17 an additional question? Your hand is still up. I'll
18 give one more opportunity for any questions of
19 clarification or comments before we move to vote. Mr.
20 Quiett.

21 MR. QUIETT: Jonathan Quiett. The only
22 thing that I would be concerned with is the actual
23 wording of it because if we -- The way I'm
24 understanding it, if we leave it like this then it's
25 going to preclude people from having luggage with them

1 on a moving walk in an airport, for an example,
2 because it's not just moving passengers at that point.

3 MR. NAIPO: So, I just put in there a note
4 of reference for us to make sure that we come back and
5 talk about that or at last review it, if we are able
6 to do it in this TAC. If this does pass, then we want
7 to make sure that, hey, what about luggage on a moving
8 walk as in an elevator luggage is used, make sure
9 verbiage doesn't preclude from those type of things
10 being used. So, with that, is there -- Oh, Mr.
11 Brinkman.

12 MR. BRINKMAN: Yeah, Kevin Brinkman. I
13 would agree with that last concern except that it says
14 connects, couples, attaches, or mates. I don't think
15 that would impact luggage, but I may be wrong. So,
16 it's probably worth looking at again, but I'm -- I'm
17 not sure that's the issue, with the way I read it, at
18 least.

19 MR. NAIPO: All right. Thank you. All
20 righty. So, with that, we'll be casting our votes for
21 proposal 2022.0088, Uses Not Permitted. For
22 escalators and moving walks, "Equipment used for
23 moving and handling material designed and/or used that
24 mechanically connects, couples, attaches, or mates to
25 the treadway of a moving walk with the use of

1 fasteners or by friction is prohibited."

2 If you are for that change, I ask that you
3 please vote yea by raising your hand now. Please vote
4 yea if you are for this change. Please raise your
5 hand now. All right. Please go ahead and lower your
6 hands. Thank you for your votes.

7 All right. So, anybody -- Eric, do you want to
8 lower -- Thank you. Anybody in opposition of this
9 change please vote nay by raising your hand now.
10 Please vote nay if you are in opposition of this
11 change. Please raise your hand now. Thank you. Go
12 ahead and lower your hands.

13 And, then, anyone who would like to abstain,
14 please raise your hand now. If you're abstaining,
15 please raise your hand now. Thank you.

16 All right. Thank you. Melissa, will you please
17 read the vote tally for proposal 2022.0088.

18 MS. ERIKSEN: Yes. Thank you. We had 23
19 yeas, 1 nay, and 2 abstentions.

20 MR. NAIPO: All right. Moving on to
21 amend -- It looks like something else regarding an
22 escalator. This is regarding handheld -- Wait, is
23 this the same thing?

24 UNIDENTIFIED SPEAKER: Yeah, I thought we
25 just did this one.

1 UNIDENTIFIED SPEAKER: This is on moving
2 walks.

3 UNIDENTIFIED SPEAKER: Yes, yes.

4 MR. NAIPO: What's that? I'm sorry, Eric,
5 what was that? You're muted. I can't hear you if
6 you're talking.

7 UNIDENTIFIED SPEAKER: He's saying it's for
8 moving walks.

9 MR. NAIPO: It's for moving walks, all
10 right. Thank you.

11 UNIDENTIFIED SPEAKER: It's for moving
12 walks, but we've already gone over this with
13 escalators. Why don't we, if it's all right with
14 everybody for time, just adopt what we did with
15 escalators. I think handrail inlet was a yea and the
16 handrail speed sensor was a nay. I'm down with that.
17 I hate to lose, but we've already gone through it and
18 beat it, so why don't we just move on, if people are
19 down with that.

20 MR. NAIPO: Okay. So, what is being proposed
21 is -- So, these -- these amendments that we are about
22 ready to go through are regarding moving walks, but we
23 just voted on the same things for escalators. What
24 Eric is proposing is that we take those votes that
25 were used for escalators and is everyone okay with

1 using those same votes for moving walks? If you are
2 okay with that, applying the vote that you had before
3 and the results from the votes for the escalators and
4 moving them to moving walks, if you're okay with that,
5 please raise your hand now by raising your hand and
6 saying, yes, we're okay with applying those changes.
7 Please vote now. All right. Then we will do that.
8 Yes?

9 MS. ERIKSEN: Which amendment numbers, which
10 proposal numbers am I grabbing from?

11 MR. NAIPO: Okay. So, the results for
12 2022.0089 are the results from 2022.0086.

13 MS. ERIKSEN: Thank you.

14 MR. NAIPO: And what I'm going to do is once
15 we transition all of these votes I'll have you read
16 them to the court reporter so she has those for these
17 ones, as well. Okay, number 90 is speed monitoring.

18 MS. ERIKSEN: Is that is 0087?

19 MR. NAIPO: Yeah, 0087, yes.

20 MS. ERIKSEN: Cool. Thank you.

21 MR. NAIPO: And, yep, okay. All right, so
22 for 20-- or proposal 20222 -- Actually, no. I want
23 you to read the voting for those other two. Can you,
24 please, Melissa, provide the voting results for
25 2022.0089 because we are transitioning the votes from

1 the previous one to this one, as well.

2 MS. ERIKSEN: Absolutely. So, the votes
3 come out as 18 yeas, 6 nays, and 2 abstentions for the
4 proposal ending in 89. The proposal ending in 90
5 comes out 7 yeas, 16 nays and, 3 abstentions.

6 MR. NAIPO: Thank you. So, moving on to
7 2022.0092...

8 MS. ERIKSEN: We have three hands up.

9 MR. NAIPO: Oh, I'm sorry. Candace. Oh,
10 Bob. Oh, he had his hand up, too.

11 MR. OURY: Sorry about that.

12 MR. NAIPO: Go ahead. You're fine. Mr.
13 Shafer. That was probably their votes or voting hand
14 that's still up. Patrick. I'll take no response as
15 a -- Oh, did you mean to put your hand down? Okay.
16 All right. Cool. Thank you. All right.

17 So, on to amend 17.1, um, um, um, um, section
18 2.2, Means to unlock the access door from inside the
19 pit shall be provided. "This means shall be located",
20 and they're looking at amending measurements in (c)
21 with the door in a closed position, in a plane not
22 more than lowering from 1,000 millimeters to 635
23 millimeters, which is going from 39 inches to 25
24 inches, horizontally from a rung, cleat, or step of
25 the pit ladder.

1 So, this is, "When no pit ladder is provided,
2 not more than 1,825 millimeter (72 inches) vertically
3 above the pit floor, or when a ladder is provided not
4 more than 72 inches vertically above a rung, cleat, or
5 step. The minimum distance from the top rung, cleat,
6 or step on the top of the pit ladder or handlehold
7 shall not be less than 1,200 millimeters (48 inches).
8 (See 2.2.4.2.1 and non--

9 THE COURT REPORTER: I'm sorry, this is the
10 court reporter. Can you slow down just a little bit.
11 Can you repeat that last number? You said 2--

12 MR. NAIPO: Got it. (See 2.2.4.2.1 and
13 non-mandatory appendix J, figure J-1), and (c) With
14 the door in the closed position, in a plane not more
15 than 25 inches horizontally from a rung, cleat, or
16 step of the pit ladder.

17 39 inches is approximately 14 inches longer than
18 the average arm making the assembly to unlock the
19 doors is out of reach creating a hazard. This doesn't
20 completely eliminate the hazard or solve the problem
21 as there's still an angular distance that results in a
22 reach angle -- a reach range at an angle which is
23 still greater than 25, 25 inches, making it not a safe
24 reach.

25 Any questions of clarification needed? Mr.

1 Mills.

2 MR. MILLS: Eric Mills. So, what this is
3 saying is making it so you have access to open the
4 door from the pit from the ladder because right now if
5 it's a center opening door you sometimes have to reach
6 over three feet to grab it. I'm six foot four. I
7 sometimes have to seriously stretch to make that grab,
8 and this is just making it so it's easier for us to
9 egress the pit, enter and egress the pit easier.

10 MR. NAIPO: All right. Thank you. Mr.
11 Quiett.

12 MR. QUIETT: Jonathan Quiett. Yeah, this
13 also provides better protection for the public, as
14 well, because the common practice now is to set
15 barricades up and keep the doors open to some extent
16 so you can safely egress out of the pit in that
17 situation. And like Eric Mills was saying, if you
18 have a wide door opening and you're on a pit ladder
19 it's a very long reach in order to do that. So, this
20 is just an added safety, not just the people in the
21 pit, but the public, as well.

22 MR. NAIPO: Thank you. Any other questions
23 of clarification or anyone? Wade.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. One -- one clarification, part of the reason

1 we leave the door open when we're doing pit work is to
 2 have a secondary safety mechanism with the door lock
 3 open. But aside from that, I want to make sure that I
 4 understand this correctly: Are we suggesting here
 5 that some sort of cable device or something be added
 6 to the back side of the door so that it could be
 7 actuated from closer to the pit ladder, or what do
 8 you -- what means to mitigate this are being
 9 suggested? I'm not seeing any sort of device to be
 10 able to unlock the door. If anybody had any detail,
 11 it would be appreciated. Thank you.

12 MR. NAIPO: Mr. Quiett.

13 MR. QUIETT: Yeah, Jonathan Quiett. There
 14 are some of the manufacturers that because their doors
 15 unlock at the very top they've been installing these
 16 for years to be able to get access to the pit either
 17 with a cable system or a linkage system to bring that
 18 point down closer to bottom of the door. This just
 19 kind of takes it one step further with also having a
 20 horizontal requirement so you can access it safely
 21 from the pit ladder.

22 MR. NAIPO: So, is it safe to say that this
 23 change is -- Is this regarding the ladder itself or no
 24 matter what the ladder is that they make sure that
 25 when that door is in the closed position the amount of

1 reach that you have to get to the door to open it, in
2 whatever fashion it is, is only this far instead of
3 this other distance that's in the code; is that
4 correct? Is that the right assumption, I guess, I
5 have for this? Mr. Mills.

6 MR. MILLS: I have the same assumption.
7 It's just to make unlocking the door easier.

8 MR. NAIPO: Okay. So, it's not saying that
9 they have to do this. It's just that no matter how
10 you do it, you've just got to close this reaching
11 distance for the working mechanic. Okay.

12 MR. MILLS: Yes.

13 MR. NAIPO: Or whomever. All right. Thank
14 you. All right. Any other questions or
15 clarifications needed before we cast a vote on this
16 one? All right. Mr. Friesen, did you have an
17 additional question?

18 MR. FRIESEN: Wade Friesen, Vertical
19 Options. The only concern I see with this is how is
20 this being measured? Is it being measured strictly on
21 a -- in a horizontal plane across the door? Is it
22 being measured at an angle to the pit ladder? How is
23 it being measured? I'm just concerned about
24 enforcement of this and how -- how this measurement is
25 being taken. Thanks.

1 MR. NAIPO: Thank you. Carl.

2 MR. CARY: Yeah. He kind of took my
3 question because the intent of the 39 inches is
4 measured from the outside edge of horizontal from the
5 pit ladder. So, I guess I just wanted to be clear on
6 what we're voting on here. Is that 25 inches from the
7 outside edge of the pit ladder?

8 MR. NAIPO: Mr. Quiett.

9 MR. QUIETT: Jonathan Quiett. In the non-
10 mandatory Appendix J it does give a diagram that shows
11 the horizontal measurement from the closest point of
12 the pit ladder to the unlocking device and vertically
13 from the top most rung of the pit ladder. So,
14 that's -- that's the two dimensions it gives you. I
15 hope that answers everybody's question.

16 MR. NAIPO: Thank you. With that, we'll be
17 taking -- Or, Carl, did you have an additional
18 question? I'm sorry. Oh, no. Okay. All right.

19 So, with that, we'll be taking our votes for
20 proposal 2022.0092, Amending the distance with the
21 door in the closed position, in a plane not more than
22 three -- 635 millimeters (25 inches) horizontally from
23 a rung, cleat, or step of the pit ladder, so closing
24 that distance if someone has to reach to open the
25 doors.

1 If you are for that change, please raise your
2 hand now. Oh, Melissa, I'm sorry.

3 MS. ERIKSEN: Both Ricky and Gerald raced
4 each other to put a picture in the chat if anybody
5 still has questions. Ricky won. So, if that clears
6 up any questions, then go ahead and call for the vote.

7 MR. NAIPO: All right. Thank you. Again,
8 so -- Oh, James, I'm just asking real quick were
9 you -- is that you're casting your vote, is that what
10 you guys were doing, if you are --

11 UNIDENTIFIED SPEAKER: Yeah.

12 MR. NAIPO: -- for that change? Okay. All
13 right. So, if we are for that change, please go ahead
14 and raise your hand now, if you're casting a yea for
15 this change of minimizing that distance between the
16 rung and the hoistway door entry, yeah. All right.
17 Thank you. And those -- Thank you for voting yea. Go
18 ahead and put your hands down.

19 Those in opposition of this change to keep the
20 measurement requirement still at 1,000 millimeters
21 and 39 inches, please vote nay now. If you are in
22 opposition of this change, please vote nay now. All
23 right. Thank you very much for your vote. Lower your
24 hands.

25 And if there is anyone who needs to abstain from

1 this vote, please raise your hand now. If you wish to
2 abstain, please raise your hand now. Thank you.

3 Melissa, will you please read the vote tally for
4 2022.0092.

5 MS. ERIKSEN: Yes. Thank you. We had 19
6 yeas, 4 nays, and 3 abstentions.

7 MR. NAIPO: All-righty. Thank you very
8 much. All-righty. And with that we're going to take
9 our last five minute break, unless all hell breaks
10 loose between the next hour and a half, two hours that
11 we're together and we have to take an additional one,
12 but this will be the last one, last five minute break.
13 Thank you guys very much for everything you guys are
14 doing. See you guys back here in five minutes.

15 (Recess taken)

16 MR. NAIPO: So, I just want to, again,
17 thank you guys for all your guys's work you guys are
18 doing. Thank you for the conversations you guys are
19 having. Thank you for some of the adjustments you
20 guys have made since lunch. We've been able to get
21 through nine. Now, granted, we had some duplicates in
22 there, but, hey, we're not trying to minimize it.
23 We've gotten some work done; so, I really want to tell
24 you how much I appreciate that. I have a little less
25 anxiety than I did at lunch; so, thank you. But let's

1 just keep pressing on and keeping doing this good work
2 and hopefully get done so we can get out of here.

3 All right. Going on to proposal 2022.0093.

4 Okay. Amend 17.1 section 2.7 as follows: "2.7.5.1
5 Working Areas in the Car or on the Car Top. The
6 requirements of 2.7.5.1.1 through 2.7.5.1.4 shall be
7 compiled [sic] with" adding, "on all electric
8 machine-room-less installations", and striking, "if
9 maintenance or inspection of the elevator driving
10 machine brake, emergency brake, elevator machine
11 controller, or motor controller are to be carried out
12 from inside the car or from the car top." 2.7.5.1.1
13 striking, "If maintenance or inspection of the
14 elevator driving machine brake, or emergency brake, or
15 of elevator motion controls or motor controls from
16 inside the car or from the car top could result in
17 unexpected vertical movement, a, and amending it to
18 now read, "The means to prevent movement shall be
19 provided to support the elevator equipment
20 symmetrically with respect to the center of gravity of
21 the load."

22 Rationale: "The hazard of unexpected movement
23 of machinery in this scenario always exists for MRLs.
24 The moving of a majority of equipment normally found
25 in legacy installation's machine rooms to the hoistway

1 warrant this change. Permissive and subjective
 2 language should be revised to mitigate/eliminate the
 3 potential for, but not limited to OSHA Focus Four
 4 hazards of struck by, caught between, falls, and
 5 electrocution due to unexpected vertical movement. If
 6 the hazard exists, protection must be provided
 7 through engineering or higher methods. Currently
 8 manufacturers provide equipment that is not confirmed
 9 as supporting the load (symmetric or asymmetric) with
 10 respect to center of gravity in accordance with
 11 rigging best practices. There are several MRL
 12 configurations currently being installed that either
 13 experience or have been classified with traction loss
 14 risks."

15 Clarifying questions? Any clarifying
 16 statements? Carl.

17 MR. CARY: Yeah, I'd like to speak against
 18 this amendment. There are -- Striking of this section
 19 isn't going to change the reality that there's
 20 thousands of MRLs installed in the state that are
 21 going to require maintenance from the car top. The
 22 code requires that there's a mechanical means to lock
 23 the elevator car top elevator out while they're
 24 working via the car top. So, striking this language
 25 could essentially leave us with no language on how to

1 safely do that. That's all. Oh, Carl Cary, Lerch
2 Bates. I forgot to say that.

3 MR. NAIPO: Thank you. Mr. Brinkman.

4 MR. BRINKMAN: Kevin Brinkman. Yeah, I'm --
5 I'm opposed to this change, as well. This will
6 basically require lock and block in all scenarios.
7 The code language was written to say, you know, if
8 you're doing an adjustment on the emergency brake, or
9 the brake, or something else where unattended car
10 movement could happen, yes, we want this protection.
11 It's very important. But if I'm on the car for other
12 reasons, it's no different than working on an elevator
13 with an overhead traction machine if I'm looking at,
14 you know, working on the door operator or something
15 else, and so why would the lock and block apply only
16 to machine-room-less elevators in those cases, but not
17 an overhead machine room elevator? That's what this
18 would imply if we did this change. So, I don't think
19 it's really justified. You know, it's certainly
20 necessary when you're doing an inspection or testing
21 it could make the elevator move, and that's what --
22 why it's there the way it's written today, and I think
23 we should leave it the way it is in the A17 code.
24 Thank you.

25 MR. NAIPO: Thank you. Any other questions

1 for clarification at all? Mr. Mills.

2 MR. MILLS: Eric Mills, field mechanic. I
3 believe the intent of this is how I read it is
4 typically when we hoist a car we hoist from both
5 rails. With this it's saying that it's supported one
6 way or the other. I don't know, some MRLs I've seen
7 only have one pin on one side that locks it in place.
8 I believe they're asking for two pins so that it would
9 be -- or a way to lock it in place symmetrically so
10 it's not -- what's the -- respect the center of
11 gravity. So, with two locking points you're held up
12 in two different sides of the car is what I'm guessing
13 it is. And, also, when you're working on an MRL you
14 have the machine, the brake, everything right there.
15 When you're working on a traditional machine room
16 elevator you don't have access to that stuff. What
17 you have access to is the deflector shiv, which is a
18 mechanical piece of equipment that has no safety
19 devices, has no electrical devices. You might be able
20 to access a switch, but you're not going to access the
21 machine, the brake, the governor, typically. So,
22 that's the difference between the two.

23 MR. NAIPO: Thank you. Mr. Quiett.

24 MR. QUIETT: Jonathan Quiett. Some of the
25 issues that we've ran into with MRL installations is

1 there are certain designs where you actually have to
 2 drop the machine to replace the brake components and
 3 things of that nature where the overhead structure is
 4 designed to be the self-supporting structure where the
 5 elevator is supported from. We have to disassemble
 6 that structure. There has to be other means in place
 7 as a backup system since you can't use your primary
 8 hoisting system. There are some newer installations
 9 out there that are solely dependent upon a beam
 10 installed in the overhead by a contractor that doesn't
 11 go through a verification process to see if it's even
 12 rated to hoist the required load off of. So, we do
 13 need other means to be able safely work on our
 14 elevators. When we have an elevator and machine room,
 15 if we're doing work on the brake or the driving
 16 machine, we're not exposed to the hazard of being on
 17 the car top. So, if the elevator actually happens to
 18 move while we are working on that in the machine room,
 19 we are not in direct hazard with that. Thank you.

20 MR. NAIPO: Thank you. Mr. Madison.

21 MR. MADISON: Yeah, Jon Madison. Jon Quiett
 22 touched on that. When we're -- When we work on the
 23 brakes in a conventional elevator, not an MRL, the car
 24 would be landed so all the stored energy would be out
 25 of the system. When you're working on an MRL from the

1 car top and the motor is next to you we want means to
2 prevent the car from actually coming up and crushing
3 the person working on it. The locking pins provide
4 that means. Having the car strapped off to the
5 overhead structure does not prevent the car from
6 coming up into that structure, and most of the times
7 when we're doing this maintenance we do not have the
8 car fully loaded with weights to make it go the other
9 direction. It would be the unbalanced load would want
10 to move the car up into the overhead. So, thank you.

11 MR. NAIPO: Thank you. Mr. Larson.

12 MR. LARSON: Yes, thank you. This is Russ
13 Larson. I just want to point out to the team that
14 this requirement specifically addresses maintenance
15 and inspections. It does not address repairs, or
16 machine rebuilds, or change-outs, in which case, of
17 course, you would need alternate means or some means
18 to hoist or rig the car. So, from that perspective,
19 the hazards in a machine-room-less application are, to
20 Mr. Brinkman's point, no different than the hazards in
21 a machine room version application here. Thank you.

22 MR. NAIPO: All right. So, I'll give a
23 final opportunity for people to ask any clarifying
24 questions that they may need before we cast our vote.
25 This is for clarifying questions. All right.

1 With that, we will move to casting a vote on
2 proposal 2022.0093 on all MRLs moving to implement a
3 provided support to support the elevator equipment
4 symmetrically with respect to the center of gravity of
5 the load.

6 If you are for this change, I ask that you
7 please raise your hand now and vote yea. If you are
8 for this change, please raise your hand and vote yea
9 for this. All right. Thank you for those who have
10 voted. Please lower your hands.

11 If you are opposed to this change I ask that you
12 please raise your hand now and vote nay. If you are
13 opposed to this change, please raise your hand and
14 vote nay. Good? All right. Please lower your hands.
15 Thank you for your votes.

16 For those who wish to vote to abstain, I'd ask
17 that you please raise your hand now. If you voted
18 nay, please lower your hands. Thank you. If you are
19 voting to abstain, please raise your hand now.
20 All-righty. Thank you everyone.

21 If you could, Melissa, please read the results
22 and vote tally for proposal 2022.0093.

23 MS. ERIKSEN: Of course, of course. There
24 were 6 yeas, 16 nays, and 4 abstentions.

25 MR. NAIPO: All-righty. Thank you. Okay,

1 moving on to proposal 2022.0094, Amendment of section
2 2.7 as follows: 2.7.6.3.2, The motor controller shall
3 be located in a machine room or control room removing
4 machinery space and control space, and -- Wait a
5 second, it sounds like something we already addressed
6 on another one.

7 MR. DOLGIKH: It looks like a duplicate.

8 MR. NAIPO: Is it a duplicate or is the same
9 type of change, but a different piece of equipment is
10 what I'm wondering.

11 MR. LEOPARD: This is Duane. I can answer
12 that.

13 MR. NAIPO: Yes, sir.

14 MR. LEOPARD: It's a duplicate from LULAs.
15 This is -- It looks like it's applying to electric
16 elevators.

17 MR. NAIPO: All-righty. So, this is the
18 same change that we had before, it's again regarding
19 electrical or electric elevators, is that what you
20 were saying?

21 MR. LEOPARD: Yes.

22 MR. NAIPO: Okay. Jan, I see you have your
23 hand up.

24 MS. GOULD: Yes. I was just going to
25 suggest in the interest of time -- Jan Gould, sorry --

1 that you just use the last four numbers and we all
2 know we're in 2022. That would help you out also.

3 MR. NAIPO: All right. Thank you. Mr.
4 Brinkman.

5 MR. BRINKMAN: Yeah, Kevin Brinkman. This
6 is the same as 0077. It's the same section and
7 everything else. So, it must be either two different
8 people put it in or it was a duplicate by accident,
9 and that one has been voted on already.

10 MR. NAIPO: Okay. So, I'm going to bypass
11 this one. I'm going to do some double-checking just
12 to make sure, and I'm going to compare the submittals
13 for these two submissions and then I'll report back on
14 that tomorrow, if that's okay with everyone, and we'll
15 just move on.

16 So, moving on to 2022.0095, Amendment to Adopted
17 Standards. Amend A17.1, section 6.1 as follows:
18 Remote machine room. Permanent electric lighting, and
19 it looks like they're wanting to adjust the foot
20 candles from -- I do not know what lx stands for --
21 lumens maybe. Someone want to --

22 UNIDENTIFIED SPEAKER: Locks.

23 MR. NAIPO: I don't understand what that
24 means, but thank you for that. I do know foot
25 candles. So, changing it from 100 lx to 10 foot or 10

1 foot candles to 200 locks, I think is what you guys
2 said, 19 foot candles at the floor level, as well as
3 on 6.1.7.2, truss interior. "The illumination shall
4 not be less than 200 locks, 19 foot candles at floor
5 level. The light and lighting control switch shall be
6 provided under the access plates (see 6.1.7.3) at the
7 top and bottom landings, and in any machine areas
8 located in the incline. The lighting control switch
9 shall be located within easy reach of the access of
10 such spaces and so located that it can be operated
11 without passing over or reaching over any part of the
12 machinery."

13 "Section 6.1 does not provide adequate minimum
14 requirements for lighting in these hazardous spaces."

15 Any clarifying questions needed from the TAC?
16 Mr. Leopard.

17 MR. LEOPARD: This is Duane, city of
18 Spokane. Don't we already have a WAC code that
19 specifies this? Does anybody know right off?

20 MS. GOULD: Not for an escalator.

21 MS. LAU: Yeah, this is Candace. This is
22 for escalators, not for elevators.

23 MR. NAIPO: Thank you, Candace. Did you
24 have an additional statement or question? Oh, okay.
25 All right. Any other questions? So, this is, as we

1 found out, regarding escalators and a specific type of
2 lighting. Any other questions or clarifications
3 needed? All-righty. We'll move on to vote.

4 Voting on 0095, adjusting the foot candles in
5 reference to escalators and a certain requirement, if
6 you are for this change of increasing that lighting
7 requirement, please make sure to vote yea and raise
8 your hand now. If you are for that change, please
9 raise your hand and vote yea now for increasing the
10 lighting requirement. All right. Thank you. Go
11 ahead and lower your hands. Thank you for your votes.

12 If you are not for this change, please vote nay.
13 If you are not for this change, please vote nay.
14 Thank you. And lower your hands. Thank you for your
15 vote.

16 And for those who would need to abstain, please
17 raise your hand now and vote. If you wish to abstain,
18 please raise your hand now. Thank you.

19 All-righty. Melissa, will you please read the
20 results of voting for 0095.

21 MS. ERIKSEN: Yes. Thank you. It is 21
22 yeas, 1 nay, and 4 abstentions.

23 MR. NAIPO: Thank you. Jan, did you have a
24 question? Oh, all right.

25 So, moving on to 0096, "Amendments to adopted

1 standards. Amend 17.1 section 8.6. 8.6.1.2.1, "A
 2 written Maintenance Control Program (MCP) shall be in
 3 place to maintain the equipment in compliance with
 4 requirements of 8.6." And we'll just jump down to (a)
 5 "A Maintenance Control Program for each unit (see
 6 8.6.1.1.1) shall be provided by the person(s) and/or
 7 firm maintaining equipment, and shall be on site",
 8 striking out viewable, "within the physical building
 9 or structure the conveyance is permanently installed,
 10 viewable by elevator personnel at all times", and
 11 striking, "from time of acceptance inspection and test
 12 or from the time of equipment installation or
 13 alteration (see 8.10.1.5)", as well as adding, "Once
 14 on site within the physical building or structure the
 15 conveyance is permanently installed, the Maintenance
 16 Control Program and any associated documentation shall
 17 be provided and remain in place for perpetuity until
 18 the equipment is decommissioned and no longer a
 19 conveyance subject to the enforced codes and
 20 standards."

21 "Elevator personnel and building owners suffer
 22 from persons making MCPs and records hard to see.
 23 Compliance cannot be accomplished or verified. There
 24 is no legal provision that easily ensures a private
 25 entity..." -- "that ensures a private entity provides

1 freedom of information, thus the above proposal should
 2 make it clear that the necessary documentation is
 3 required to be there where the affected people are and
 4 needing to see it. The proposed also solves the
 5 problem wherein a company is the maintenance provider
 6 and then after not being that entity takes the
 7 required safety documents off the job site, making it
 8 unsafe for any future company to ensure compliance.
 9 The code and your jurisdiction's enforcement should
 10 not favor a company's so-called secrets at the expense
 11 of safety."

12 So, any clarifying questions from the TAC
 13 regarding this change on where and how the MCP is on
 14 site? Sergey.

15 MR. DOLGIKH: I've been wanting -- This is
 16 Sergey Dolgikh, Elevator Inspector L & I. I've been
 17 wanting to pose this question for a long time and
 18 there has been a confusion it seems like, I don't
 19 know, from the people I spoke to, who does the MCP
 20 belong to? Who is -- Who is the owner of MCPs, is it
 21 the elevator contractor or is it the owner? And a lot
 22 of times I have conflicting answers to that question.
 23 In my view, the MCP belongs with the conveyance and
 24 record of the service that was done to the conveyance,
 25 and since we were debating on, excuse me, we were

1 debating on on-site documentation and such, who does
 2 it go to and whether they should be left to the owners
 3 or not. I think this is an essential part of decision
 4 making or not decision making, but clarifying is MCP
 5 part of elevator provider or is MCP part of the owner,
 6 and in my view it is part of the owner. Therefore,
 7 it shall be on site. It has no bearing on which
 8 elevator company does what. When the elevator company
 9 drops off the service they should be leaving the MCP
 10 behind to the owner as part of their documentation.

11 There was a lot of arguments in the past about
 12 the proprietary steps that are being taken in the
 13 servicing of the equipment and it's a big secret, but,
 14 you know, and there have been examples of that in the
 15 industry where specific proprietary tool doesn't allow
 16 the next mechanic from different provider to
 17 efficiently align, and adjust, and do the testing of
 18 that particular equipment.

19 So, I guess -- I guess it's not random on my
 20 part. I'm just trying to gain some clarity as to who
 21 does MCP belong to and from that we will derive
 22 whether this is appropriate or not. Thank you.

23 MR. NAIPO: Mr. Larson.

24 MR. LARSON: Thank you. This is Russ
 25 Larson. Great questions and this is a widely

1 misunderstood topic in our -- in our industry. So, a
 2 couple things just to help everybody understand it and
 3 paint the picture, there's three ideas here, three
 4 entities, three code required pieces of documentation
 5 which people get mixed up a lot. The MCP is the
 6 Maintenance Control Program, which is what the
 7 maintenance company is going to do and at what
 8 frequency. It's the plan. The second aspect that's
 9 often confused is records. Records is the service
 10 company's report card and it demonstrates compliance
 11 to the MCP. So, the MCP is different than records,
 12 and records are different than the MCP. The third
 13 category is on-site documentation, which is things
 14 like wiring diagrams, and oil logs, and fire fighter
 15 service logs, and unique procedures, and check-out
 16 procedures, all those sorts of things, and those are
 17 three different entities with three different
 18 requirements.

19 The MCP is the -- is the responsibility of the
 20 maintenance company. That's very clear in the code.
 21 But this proposal, this language is specifically
 22 talking about records, right? It's not talking about
 23 MCPs. It's not talking about on-site documentation.

24 A couple thoughts about records, but, first of
 25 all, I can't say all, but I've got to say most service

1 companies' electronic records are fundamentally the
 2 basis of what they do. I -- I'm not sure I can say
 3 all because there may be a service company out there
 4 that has paper records, but mechanics are primarily
 5 scheduled electronically and they're tracked
 6 electronically; so, electronic records are the
 7 fundamental basis of what maintenance companies do.

8 The code requires us -- requires service
 9 companies to provide records for maintenance, for
 10 category tests, for repairs, and for call backs, but a
 11 couple challenges with paper copies is we've all been
 12 in situations like this is potentially they get
 13 damaged, they get soaked with oil, they get ripped,
 14 and if and when that happened reproducing those to
 15 comply with the requirements becomes a challenge. So,
 16 the fact that electronic records are the fundamental
 17 basis of most service companies' records and they can
 18 easily be reproduced if they're damaged, oil soaked,
 19 ripped, it makes them, I think, an advantage.

20 You know, another thing that comes up from no
 21 fault of anyone's is, you know, imagine a situation
 22 where a service mechanic is responding to an overt
 23 call back, and it may be no fault of his or her own,
 24 and is more interested in getting home or getting to
 25 the next call back, then potentially finding where the

1 records of this particular job site which he or she
 2 may not be familiar with are located, you can imagine
 3 situations like that where -- for, again, for no fault
 4 of anyone's own, the records of what's happening on a
 5 unit they tend to drift away from what's actually
 6 happening.

7 So, I think for those reasons the code writers
 8 have put this language about records in the code,
 9 which requires them to be viewable on-site, and for
 10 those reasons I think that is a valid requirement.
 11 So, I -- I -- I don't support this change. Thank you.

12 MR. NAIPO: All right. Duane.

13 MR. LEOPARD: Duane Leopard, city of
 14 Spokane. Oh, I like what the previous speaker had to
 15 say about the definition of records and everything,
 16 but I think in this case we were looking at the MCPs,
 17 the Maintenance Control Program itself. It's
 18 referring to the instructions on how things will be
 19 done. I have to support this because I've been
 20 witnessing exams off and on and I find that mechanics,
 21 when I ask them where their MCP is, they hand me the
 22 records. I ask them for their procedures to do the
 23 test and they can't find it either electronically or I
 24 even followed one guy to his van and he had to throw
 25 all of his pieces, parts, and all that all over the

1 place until he finally found the binder out of his van
2 and I can tell that it's not referred to very much.
3 So, you know, and I've been fighting to get this -- to
4 have these instructions on site, and, you know,
5 electronically available or viewable just does not
6 work. There's about 300 different means to view in
7 the actual MCPs. So, I really like this change.

8 MR. NAIPO: Thank you, Duane. Mr. Hawks.

9 MR. HAWKS: Yes. I'm Thomas Hawks with
10 Northwest Grain Growers, and I don't think we need to,
11 in our case at least, keep the mechanic's book, I call
12 it, with the procedures, and our maintenance
13 schedules, and so forth on-site. We tend to have mice
14 in the elevator eat paperwork. But the other things
15 about it are we may have 30, 40 conveyances, and so we
16 have them strung out all over the place in different
17 warehouses and different counties. To have a
18 mechanic's book at each site with those records, it's
19 a living document, if some little thing changes and we
20 have to make a change in that book a little bit we'd
21 have to run around to all those different sites and
22 keep upgrading all those books continuously. So, the
23 mechanics they work as a team at least and they travel
24 from place to place when they do things to these
25 conveyances and they generally go around with the

1 inspectors when they come out, so they have it with
2 them and it's right there with them, so I don't see
3 why they'd have to have one at every site to try and
4 maintain. Thank you.

5 MR. NAIPO: Thank you. Jan.

6 MS. GOULD: Jan Gould. The city of Seattle
7 amends this where we require all three pieces to be on
8 site because I've asked the big four a few times how
9 many of us and how soon can I get access to your
10 records if you're keeping them electronically, and
11 never got a clear answer. And if you're inspecting an
12 elevator today you want to write that correction
13 letter today and if it's a month out it does no good.
14 So, I support all on-site records. And in the state
15 of Washington record retention is a minimum of five
16 years and ASME even speaks for maintenance records
17 shall be retained for five years.

18 MR. NAIPO: Thank you. Wade.

19 MR. FRIESEN: Wade Friesen, Vertical
20 Options. As a company policy we do both. We keep
21 electronic records and we keep physical records on
22 site; so, I -- I really don't see the issue with that.
23 It saves -- It saves our mechanics, you know, to the
24 point that somebody mentioned of sending a different
25 mechanic to a job they're not familiar with and it

1 saves them the time of trying to figure out what the
 2 last guy did if the records are on site. But I'm --
 3 I'm -- I'm not really sure why we're striking out
 4 this, "from time of acceptance inspection" or from the
 5 time the equipment was installed or altered. You
 6 know, if we're taking a piece of equipment and doing a
 7 mod on them, modernization on it, I don't see why the
 8 record from the time prior to that should be retained.
 9 It would be confusing, if anything, because most of
 10 the time, if we're talking a substantial alteration,
 11 the equipment is substantially altered and it is no
 12 longer applicable. But that's it. Thanks.

13 MR. NAIPO: Thank you. Mr. Cleary.

14 MR. CLEARY: I know I'm not supposed to say
 15 a whole lot, but I just want to make it very clear the
 16 grain industry is quite unique. They've got grain
 17 silos in the middle of no where that are stand-alone
 18 facilities, I think there's 440 of them, and so it's
 19 really difficult for them to have them in separate
 20 locations because a lot don't even have offices. So,
 21 the grain industry is quite unique when it comes to
 22 the MCPs, and they're a specialty because they're
 23 under the 270 statute, the exemption from licensure,
 24 which makes it, you know, they're not -- they're not
 25 elevator companies. They're working under a different

1 statute. So, to require them to keep everything at
2 each one of those locations it's just really difficult
3 because they're just not the same as a regular
4 facility. So, I just wanted to state that to help Tom
5 a little bit.

6 MR. NAIPO: Thank you. Candace.

7 MS. LAU: Candace Lau. Yeah, I -- I agree
8 that we should have on-site documentation, but I'm a
9 little bit confused because in 8.6.1.2.2 it spells out
10 exactly what needs to be on-site. So, when you're
11 talking about the test and all that stuff,
12 maintenance, all that stuff has to be on site already.
13 So, this portion of it is just talking in general
14 about the Maintenance Control Program, but if you go
15 to 8.6.1.2.2 it talks about on-site documentation and
16 there's certain things that have to be there such as
17 testing. I just want to make it clear to everybody
18 that is another section on this for -- for what is
19 required to be on site.

20 MR. NAIPO: All right. Thank you. Thank
21 you, Candace. So, with Candace's clarification, she
22 just wanted to make sure that everyone understands
23 this change is just regarding the Maintenance Control
24 Program. Further down in the code it talks about a
25 lot of other things that people have alluded to, the

1 maintenance, or the maintenance records, the
2 maintenance logs, test logs, test sheets, and all that
3 type of stuff, but this is mainly regarding the
4 Maintenance Control Program whether it needs to be
5 physically on site or keeping it just as viewable on
6 site, how ever that may be acquired.

7 So, what I'd like to do is pose that we cast our
8 votes on -- What number is this? What are we on? We
9 are on 0096. If you are for this change of, again,
10 just the Maintenance Control Program being physically
11 on site at a building or structure, if you are for
12 that change, please vote yea now. If you are for that
13 change of the MCP being physically on site, please
14 vote yea now. Are we good? Okay. Go ahead and lower
15 your hands. Thank you for your votes.

16 Those in opposition of this -- Please, if you've
17 voted yea, please make sure to lower your hands. If
18 you are in opposition of this change regarding the
19 Maintenance Control Program, please raise your hands
20 now and vote nay. If you are in opposition of this
21 change, please vote nay now.

22 MS. ERIKSEN: Sorry. This is Melissa. Jon,
23 did you vote yes? Thank you.

24 MR. NAIPO: All-righty. Thank you for those
25 who have voted. Please go ahead and lower your hands.

1 And if you need to vote to abstain, please raise your
2 hand now. If you are abstaining, please raise your
3 hand now. Thank you.

4 So, Melissa, will you please read the tally for
5 proposal 0096.

6 MS. ERIKSEN: Yes. There were 16 yeas, 8
7 nays, and 2 abstentions.

8 MR. NAIPO: Thank you. All right. Moving
9 on to 97, Amend A17.1 Section 3.1.5 as follows:
10 3.19.5 Piping Buried in the Ground. They want to
11 strike all of that. And that, "Piping buried in the
12 ground shall be prohibited."

13 "Piping in the ground has been problematic since
14 the code's inception. Electrolysis, Dig Safe issues,
15 and a myriad of environmental factors should prohibit
16 this practice. New installations should be afforded
17 engineering that ensures the components and assemblies
18 are installed in more protected locations suitable for
19 maintenance, inspection, and testing." And this is
20 regarding, "Piping buried in the ground shall be
21 prohibited."

22 Any questions for clarification needed? Any
23 questions for clarification needed?. John.

24 MR. CARINI: Yes. John Carini, Sound
25 Transit. Will this limit the use of in-ground

1 hydraulic elevators or the installation of new in-
2 ground hydraulic elevators?

3 MR. NAIPO: Gerald. No? I hope you're
4 shaking your head.

5 MR. BROWN: This is specifically -- This is
6 specifically geared for piping. That's the way I read
7 it. It's not so much for in-ground cylinders. It is
8 just the piping. Typically they were using like gas
9 line piping that had the tar and the yellow coating on
10 it or they were using some other type of similarly
11 protected material or they were piping pipe in a pipe
12 instead of having it directly touching the soil.
13 There's a lot of alternatives to in-ground piping now,
14 so...

15 MR. NAIPO: All right. Thank you. Carl.

16 MR. CARY: Yeah, I would like to speak
17 against this amendment. There are certainly some
18 situations out there where running overhead piping is
19 not feasible or realistic. I've got a Sound Transit
20 project that I worked on where the machine room was on
21 the opposite side of the bus terminal and there was no
22 way to physically run overhead piping from point A to
23 point B. I would ask that we leave this to owners.
24 There's clear code requirement on the piping that's
25 buried, what it has to have to ensure that there is no

1 intrusion or exposure of hydraulic fluid to the
2 environment. And that's all I've got.

3 MR. NAIPO: All right. Thank you. So, with
4 that, any additional questions for clarification
5 needed? All-righty. With that, I move to vote on
6 proposal 0097 and prohibiting the burial of piping in
7 the ground.

8 If you are for that change, please raise your
9 hand and vote yea. If you are for that change of
10 prohibiting piping to be buried in the ground, please
11 raise your hand now and vote yea. At this time please
12 vote yea if you are for that change. All right.
13 Thank you.

14 If you are against this change, please raise
15 your hand now and vote nay. If you are against this
16 change, please raise your hand and vote nay. All
17 right. Thank you. Please lower your hands. For all
18 of those that voted nay, thank you.

19 If you are abstaining from this vote... If you
20 voted nay, please lower your hands. If you are
21 abstaining from this vote, please raise your hands
22 now. If you are abstaining from this vote, please
23 raise your hand now.

24 Sorry, Candace, did you vote nay already? Oh,
25 you did? All right. Thank you.

1 Melissa, did you get a good tally? All right.
2 So, go ahead please provide the tally for proposal
3 0097.

4 MS. ERIKSEN: Thank you. There were 0 yeas,
5 there were 24 nays, and 1 abstention.

6 MR. NAIPO: All-righty. Thank you.
7 All-righty. Amendment to 8.6 regarding 8.6.4.19.11.
8 This is proposal 106. I apologize, I jumped a little
9 ahead of myself. Proposal 0106, Amending section 8.6,
10 "Ascending car overspeed protection and unattended car
11 movement devices and emergency brake. Where it says
12 regarding (b) and Tests, "Ascending car overspeed
13 protection shall be subjected to tests with no load in
14 the car at the..." removing, "slowest operating
15 (inspection) speed", and adding "at which ascending
16 car overspeed is required to operate in up direction."

17 Justification: "The requirement is in conflict
18 where it requires to demonstrate compliance, but then
19 indicates to perform a test that would not do so.
20 Understanding this is a Category 1 test at no load,
21 the safe conclusion is to demonstrate no load up for
22 ascending car overspeed protection, and no load up and
23 down for unintended car movement protection. Doing so
24 demonstrated functionality and also represents what
25 may happen in a real world scenario."

1 So, this is regarding ascending car overspeed
2 protection and unattended car movement devices and
3 emergency brake, and the tests associated with it, and
4 how you do that test.

5 Any clarifying questions? Clarifying comments?
6 I ask again, any clarifying questions needed or
7 comments to be had? All right. Oh, Mr. Brinkman.

8 MR. BRINKMAN: Yeah. I looked at the
9 rationale on this one, as well, from the changes made,
10 and the ASME committee basically said that they -- you
11 know, they do test at full speed, testing at full
12 speed is required at acceptance in Cat. 5. This is
13 for the -- I believe the annual. And just saying that
14 testing at the slower speed will let them know, let
15 the person doing the test know if it's failing to
16 engage, and they can adjust it and avoid damage to the
17 equipment. So, that was the rationale for doing it
18 initially this way and I think we should stick to the
19 ASME requirement.

20 MR. NAIPO: Okay. Thank you. Mr. Madison.

21 MR. MADISON: Jon Madison. In testing this
22 over the last 8 or 10 years, we have multiple
23 manufacturers that, through either a prong change, or
24 loss of memory, or a board change, their systems
25 detect it, but then the system is initiated by a

1 governor overspeed switch. So, to actually unplug a
 2 socket on a board, because that is their test, and it
 3 shows that you get a fault, when you actually test the
 4 system you can find out if the brakes are bad or
 5 otherwise, and this goes into our non-destructive
 6 testing. In an ascending car, the car doesn't crash
 7 into anything, it sets the brake, and if done properly
 8 it does it in the middle of a hoistway. The only
 9 thing that suffers from it, it would be rope grippers.
 10 But you will find that in a full speed test you'll
 11 find problems. On the low speed test you're not
 12 confirming that the car even arrested speed. So,
 13 there's a little more to it than just a slow speed
 14 test. That's all. Thank you.

15 MR. NAIPO: Thank you. Mr. Quiett.

16 MR. QUIETT: Jonathan Quiett. With this
 17 testing there's an example that I can give you. One
 18 of the manufacturer's procedures for doing Category 1
 19 ascending overspeed test does require you to overspeed
 20 the elevator in the up direction. We have had one of
 21 them that has failed that test. Now, the brake
 22 function, as it is designed to, it did not retard the
 23 motion of the elevator. There's very short rides and
 24 did significant damage to the elevator. We want to
 25 find that when it's in a controlled environment

1 without people in the elevator. So, by doing the
 2 testing at the condition of what this is, which would
 3 be an overspeed condition or whatever the device is at
 4 that activates the ascending overspeed device, by
 5 doing the test in a controlled manner we can figure
 6 out where the problem is, and this instance ended up
 7 being the emergency brake did not have the stopping
 8 force to be able to slow the elevator down to a
 9 correct speed before it got to the overhead of the
 10 building. That was the limit of what it was.

11 MR. NAIPO: So, just for clarification, Mr.
 12 Madison and Mr. Quiett, do you feel like -- I'm
 13 assuming that you're -- you're in favor of this
 14 because this would help alleviate some of the things
 15 that you guys are talking about; is that correct? All
 16 right. Thank you. Mr. Quiett.

17 MR. QUIETT: This is Jon Quiett. I was just
 18 trying to raise my hand to follow up. But, yeah, no,
 19 that's -- that's exactly what I was saying. We
 20 found -- we found a failure condition when -- in a
 21 controlled environment.

22 MR. NAIPO: All right. Thank you. And,
 23 again, that was just for my -- I apologize. It was
 24 more for my understanding. I just wanted to make sure
 25 what I was hearing was correct and assumed; so, thank

1 you. Any additional questions that need to be had so
2 they can clarify anything? Any misunderstandings
3 regarding this? Okay. Well, then I move that we vote
4 to this.

5 We're going to pass a vote now on proposal 106
6 regarding the tests on ascending car overspeed
7 protection, and unattended car movement devices, and
8 emergency brake.

9 If you are for this change, I'd ask that you
10 please raise your hand now and vote yea. If you are
11 for this change, I'd ask that you please raise your
12 hand and vote yea for this change. All-righty. Thank
13 you for those who voted. Please go ahead and lower
14 your hands. Thank you for that.

15 So now those who are in opposition of this
16 change I ask that you please raise your hands and vote
17 nay. If you are in opposition of this change, I ask
18 that you please raise your hand and vote nay. Thank
19 you. All-righty. Thank you for those who voted. You
20 can lower your hands.

21 And those who vote to abstain -- If you voted
22 nay, please lower your hands. And those who would
23 vote to abstain please raise your hand now. If you
24 vote to abstain, please raise your hand now.

25 All right. Thank you for everyone who voted.

1 Melissa, will you please read the vote tally for 106.

2 MS. ERIKSEN: Sure. It's a tie. We had 13
3 yeses and 13 nos, and no abstentions.

4 MR. NAIPO: All-righty. Cool. So, for
5 those who don't know, in the event that that happens I
6 guess because time permitting this will just be pushed
7 on to the ESAC. So, again, I want you guys to
8 understand, too, that for everything that passes here
9 there's still two more things that it needs to go
10 through, okay. So, everything that you guys submit
11 that, hey, we are for this change we're going to put
12 forth, that's going to go to the ESAC Committee. The
13 ESAC Committee will then -- all of the members will
14 then review all of these that have been put forth and
15 they will decide whether, hey, this, then, needs to be
16 pushed on to the Program. At that time the Program,
17 i.e Gerald, will then review those and then make final
18 determinations on those. I think it's pretty fair to
19 say, though, since he's in attendance here and he's
20 hearing all the conversations we're having, where
21 things are going, where people are coming from, as
22 well as he will be part of the ESAC, as well, he will
23 have a very good understanding of why you as
24 stakeholders were putting this forward; so, I don't
25 expect anything that gets through the TAC and the ESAC

1 to possibly be shot down by Gerald, and, if it is, we
 2 will make sure that everyone knows exactly why we
 3 decided to remove that from this WAC rule change. So,
 4 you guys will get an explanation if, again, there is
 5 anything that doesn't go through with this rule
 6 making.

7 So, moving on to the next one since this was a
 8 tie, we're going on to proposal 0039 regarding
 9 Amendment to 8.7.1.1, which is regarding alterations,
 10 applicability of alteration requirements. When any
 11 alteration is performed, regardless of any other
 12 requirements of section 8.7, the installation, as a
 13 minimum, shall conform to the following applicable
 14 code requirements. It goes to, "(c) ASME A17.3 if
 15 adopted by the authority having jurisdiction", and
 16 they're asking to add, "for major alterations only,
 17 major alterations are considered to be, but not
 18 limited to, controller changes, changes in drive
 19 machines, or hydraulic pumps."

20 The rationale is, "An alteration may include a
 21 change in a door reopening device, but, as written,
 22 this would trigger a full application of 17.3 and
 23 considerably place the cost of the door
 24 opening..." -- "...reopening device out of reach.
 25 Therefore, by limiting the application of A17.3 to

1 only major modernizations, smaller alterations can
2 still be performed without dealing with A17.3 in its
3 entirety."

4 All-righty. Any questions for clarification
5 needed? Mr. Friesen.

6 MR. FRIESEN: Wade Friesen, Vertical
7 Options. I like this, and I think this is a -- this
8 is a great idea, but I am very concerned that we do
9 not have definitions of what is considered to be a
10 major or modern modernization. I think that language
11 needs to added as to exactly what is considered to be
12 a major mod. So, for example, it could be added in
13 here that we're doing controller change or something
14 of that nature that initiates this because right now I
15 think it's a little too vague. Thank you.

16 MR. NAIPO: So, I've just added a note here,
17 reference if needed -- Oh, wait, no, no, no, no.
18 Language added to maybe define major alteration if
19 this passes. Any other -- Oh, Mr. Barnhart.

20 MR. BARNHART: Yeah, I have to agree with
21 the previous comment. The way it's written right now
22 I could change an ESD and that wouldn't -- that
23 wouldn't be a problem. I could do that without any --
24 any consideration. So, I think it needs a lot more
25 definition as to what a major alteration is and look

1 at it a little closer. Thank you.

2 MR. NAIPO: Mr. Larson.

3 MR. LARSON: Yes. This is Russ Larson. I
4 agree with the previous two comments, the lack of
5 definition of a major alteration makes this difficult
6 to enforce and difficult to really put any teeth in,
7 but there's more elegant ways in terms of how to adopt
8 17.3 to account for these. So, I disagree with this
9 proposal. Thank you.

10 MR. NAIPO: Thank you. Candace.

11 MS. LAU: Candace Lau. Yeah, I -- Although
12 I don't disagree that it needs some more definitions
13 for when, but currently as the A17.1 is written it
14 tells you right now if you're going to take out an
15 alteration for anything, including door edges, you're
16 going to have to come up with A.17.3. That's what
17 it's saying now. So, this -- this is -- this is kind
18 of modifying it a little bit to say, "Hey, if it's a
19 door defect or edge, we're not going to make you come
20 up to A17.3 the day you do the alteration on that
21 detector edge." That's what it's saying. It's not
22 saying -- It's not adding to the requirement. What
23 it's doing is it's modifying the requirement because
24 today, if we read this literally, we would have to --
25 when you take out an alteration for a detector edge

1 you're going to have to have the whole thing come up
 2 to the A17.3 standard before we can pass that
 3 alteration. That's what's going on today, okay. So,
 4 I just want to make sure that everybody understands
 5 that this is to try to eliminate these small
 6 alteration permits that you take out because
 7 currently the way it's written you would have to
 8 comply with A17.3 in order for that alteration to
 9 pass.

10 MR. NAIPO: Thank you. Sergey.

11 MR. DOLGIKH: Yeah, Sergey Dolgikh, L & I
 12 Elevator Inspector. I would like to make a
 13 suggestion. So, why not focus on -- Because in the
 14 WAC we have definitions and definitions are right
 15 around chapter 650, somewhere in that neighborhood.
 16 We have definitions for what things mean, okay. Why
 17 not address the definition of the alteration or of --
 18 just bring the new language in, let's call it mod,
 19 modernization, major modernization, and from that
 20 definition we can trickle down an actual verbiage as
 21 to how that definition should be reading, whether
 22 it's -- whether it requires this portion of the A17.1
 23 or we could -- we could expand it into treating it
 24 more as a new installation of sort. Just a
 25 suggestion, I'm throwing it out there, adjust

1 definition versus adjusting the verbiage. Thank you.

2 MR. NAIPO: Jan.

3 MS. GOULD: Yes. It seems quite unfair, and
4 the State adopted the A17.3 in either October or
5 September 1st of 2018, but is not enforcing it. So,
6 making only alterations comply and not all retroactive
7 makes no sense to me. I think it would discourage
8 alterations until the State enforced A17.3 for all.

9 THE COURT REPORTER: And this is the court
10 reporter. Who was that that was just speaking?

11 MS. GOULD: Oh, so sorry, Jan Gould.

12 THE COURT REPORTER: Thank you.

13 MR. NAIPO: Candace.

14 MS. LAU: Yeah, Candace Lau. I'm not sure
15 what you're getting at on what you said previously,
16 Jan, but the part that's written in black right now
17 it's in the code already, right? So, basically
18 what -- what the code is saying today is that any time
19 you take out an alteration for anything you're going
20 to have to comply with A17.3. That's not a WAC
21 standard. That's what the -- That's what the A17.1 is
22 saying, okay. The blue part that's written on there
23 is the part that is the revision that the -- the --
24 that we're not going to require for you to come up to
25 A17.3 when you take out an alteration for a phone,

1 let's say, okay. That's what the blue part is saying,
2 right? Currently the A17.1 code is saying if you take
3 out an alteration you have to comply with A17.3. I
4 just want to make that clear. I don't know if we're
5 understanding what we're looking at here. That's
6 what -- That's what A17.1 is saying right now. We're
7 not enforcing it as the Department. We have not been
8 enforcing that. But that's what A17.1 is saying.

9 MR. NAIPO: Jan.

10 MS. GOULD: Yes. I understand that. What
11 I'm saying is that its been adopted three years and
12 not enforced, and it's only affected because you adopt
13 A17.3, but not enforcing it. So, to just trigger
14 alterations only to comply, to me, would discourage
15 buildings from taking out major alterations,
16 controllers and such.

17 MR. NAIPO: All-righty. Candace.

18 MS. LAU: Candace. I think we're saying the
19 same thing, but I don't know if we're all
20 understanding what we're saying. I don't agree that
21 we need to -- We did adopt A17.3 and we -- you're
22 right, you're correct, we have not been enforcing it
23 as a -- as a department. I'm just telling you that
24 A17.1 is re-- Because the State has adopted the
25 A.17.3, A17.1 is saying if you do any alterations you

1 have to -- you have to now enforce the A17.3. It's
2 saying that today. I just want to make that clear.
3 The Department has not been enforcing this, but that's
4 what the code is saying.

5 MR. NAIPO: All right. Thank you. Mr.
6 Brinkman.

7 MR. BRINKMAN: Yeah, Kevin Brinkman here.
8 You know, I'm just really trying to understand this
9 myself because I understood that the current WAC 00675
10 already requires compliance with A17.3 and it's not
11 tied to an alteration to trigger it. So, I'm not sure
12 how this change is going to help because it's already
13 required to -- you're already required to comply today
14 with or without an alteration, at least that's the way
15 I'm reading it, and maybe I'm -- if I'm wrong, please
16 let me know. Thank you.

17 MR. NAIPO: Candace.

18 MS. LAU: Okay. So, if we read this today
19 and without the revision what it's saying in 8.7.1.1
20 is when any alteration is performed. This is how
21 A17.1 is written, when any alteration is performed,
22 meaning if you take out a safety edge, you put in a
23 detector edge, okay, it's saying, "When any alteration
24 is performed, regardless of any other requirements of
25 8.7, the installation, at a minimum, shall conform to

1 the following applicable code requirements, and (a)
 2 the code at the time of installation; (b) the code
 3 requirements for the alteration at the time of
 4 alteration; and (c) A17.3 if adopted by the authority
 5 having jurisdiction." The Department, our department,
 6 has adopted the A17.3. So, what this code is saying,
 7 without any changes right now, is that when you take
 8 out an alteration permit to change a safety edge to a
 9 photo eye, I mean to a detector edge, this code is
 10 saying -- without any revisions, this code is saying
 11 you now have to come up with A17.3. We're not saying
 12 that. That's what A17.1 is saying. That's how I read
 13 it. And, so, therefore, any alteration permit that's
 14 taken out for a phone or a detector edge we can't pass
 15 that inspection, that alteration permit, unless all
 16 A17.3 is met. That's what A17.1 is saying. And we
 17 haven't been enforcing it, I'm just telling you we
 18 haven't been enforcing it, and that's why that person
 19 is trying -- that's what they're trying to do with
 20 that addition to the blue part of the revision.

21 MR. NAIPO: Thank you. Russ.

22 MR. LARSON: Thank you. This is Russ
 23 Larson. I think part of the confusion may be the
 24 difference between an alteration as defined in 17.1,
 25 which I've just put in the chat, and the requirements

1 for an alteration permit in the state of Washington,
2 which sounds like they may be for repairs or
3 replacements. So, I think we need to go back to the
4 definition of an alteration in 17.1 to help us
5 understand this a little better. Thank you.

6 MR. NAIPO: Thank you. Mr. Quiett, I
7 believe, yeah.

8 MR. QUIETT: Jonathan Quiett. Yeah, this is
9 kind of more of a clarification with -- within the new
10 WAC, what is it, the 23,000 or whatever the A17.3
11 definition for time frames, have the inspectors been
12 writing that up now on their annual inspection? I
13 haven't seen it, but that doesn't mean it's not
14 happening. I just need some clarification to kind of
15 make a decision on the rest of this.

16 MR. NAIPO: So, to answer your question,
17 unfortunately no. At the time that those compliance
18 time frames were put in it wasn't actually vetted with
19 the actual program that we had in place at the time to
20 see whether that was actually a possibility. I'm the
21 one who actually had to put forth that documentation
22 and work with our developers to actually see if it was
23 possible. It is something now that we can do. And it
24 just came into production here last week; so, we just
25 now have the ability to provide these time frames

1 without giving a customer their 90 day penalties that
2 I'm sure some of you guys have heard about, if they
3 don't fix their A.2 items in 90 days by the due date
4 they can get a penalty, and then 180 days later blah,
5 blah, blah, so on and so forth. So, the reason why we
6 haven't been is because the system wasn't able to do
7 that. It is now and so now we're moving forward with
8 how are we going to do this, but I don't have a time
9 frame on when that's going to be done. I just know
10 that that's why it wasn't done before. The system
11 wasn't able to do it, so...

12 MR. QUIETT: Okay, so I would like to throw
13 in there, I think with that being said, then we need
14 to have some means for owners and contractors to know
15 the specific alterations that would trigger the A17.3
16 requirements because the first time they're seeing it
17 is going to be when we're doing an alteration. It
18 kind of puts everybody in a bad spot at that point and
19 it's not something that -- that's being -- that's
20 being written up, and, you know, they can look it up,
21 see the time frames and everything else. So,
22 that's -- Well, I agree with what Candace is saying
23 that there's no provision in there right now and any
24 alteration would trigger it. There -- We need to have
25 some middle ground.

1 MR. NAIPO: Any other questions before we
 2 get read to cast a vote on this? Any other questions
 3 needed for clarification? All right. So, we are
 4 going to move forward with casting our vote on
 5 proposal 0039 regarding bolstering the time that A17.3
 6 at the time of alteration is added, stating that, "for
 7 major alterations only", and there's been some
 8 discussions about, hey, we need to define what a major
 9 alteration is. I put that off in column E, as well,
 10 as something that, hey, this is something -- if it
 11 passes, this is something we need to do, as well. We
 12 need to define what this really looks like, whether
 13 it's the -- we're going to define exactly what that
 14 work is or just putting in a definition in 700 for
 15 major alterations. That's only if it passes. So, for
 16 those who are, hey, we need to do more work, I have
 17 that started over here already.

18 So, with that, if you are for this change of
 19 making it so that major alterations are the main
 20 trigger for 17.3 requirements for conveyances, if you
 21 are for that change, please raise your hand and vote
 22 yea. If you are for that change of major alterations
 23 being the key trigger for a conveyance to be compliant
 24 with 17.3 standards, please cast your vote for yea
 25 now. Thank you for those who have voted, cast your

1 vote. Please remove your -- lower hands, unclick your
2 hands, whatever you want to call it.

3 And those who are in opposition of this change
4 to keep the standard of at any time of alteration a
5 conveyance needs to be compliant with 17.3 as the code
6 is written now, please vote nay. So, if you are in
7 opposition of this change, please vote nay now. Thank
8 you. Please lower your hands.

9 And if there is any votes to abstain, I please
10 ask that you raise your hand now. If you vote to
11 abstain, please raise your hand now. Thank you.

12 Melissa, will you please read the vote tally for
13 proposal 0039.

14 MS. ERIKSEN: Yes. There were 19 yeas, 3
15 nays, and 2 abstentions.

16 MR. NAIPO: All-righty. Thank you. All
17 right. Oh, boy, this is -- All-righty. I'm sorry,
18 I'm just making sure that I didn't -- that when I
19 sorted this it sorted correctly. Okay.

20 This is regarding proposal change 0021. I'm
21 just making sure this isn't part of this already.
22 Append -- Okay, it is this one. So, he is -- or they
23 are asking to amend or append -- Wait, no. Yes, amend
24 (8) that we currently have in our 675. So, he is
25 looking to amend currently what WAC 296.96.00675(8)

1 says, okay. Currently it says, "Append ASME
 2 A17.1-2016/B44-16 8.6.4.19.6 as follows: At least
 3 once every year the fire alarm initiating devices
 4 associated with elevator recall and shunt trip
 5 initiating devices shall be tested to ensure they are
 6 still properly interfaced with the elevator
 7 controller" or, "elevator control", adding
 8 "Deficiencies shall be corrected. A record of
 9 findings shall be available to elevator personnel and
 10 the authority having jurisdiction", in between the
 11 last sentence of, "This test applies to electric and
 12 hydraulic elevators." And they wish to add another
 13 piece because nine is already taken, "Append ASME
 14 A17.1-2016/B44-16 8.6.1.4.1(c) as follows: (5) A
 15 record of findings for fire alarm initiating device
 16 testing required by WAC 296-96-00675(8)", which is
 17 what this is.

18 "Currently there is no requirement for the fire
 19 alarm initiating device test findings to be recorded
 20 and available to the elevator personnel and AHJ.
 21 The added language provides clarity that the findings
 22 are to be recorded and are to be available to the
 23 elevator and AHJ personnel, and where the written
 24 records are located."

25 Any questions or clarification needed? Sergey.

1 MR. DOLGIKH: Sergey Dolgikh, Elevator
2 Inspector L& I. There is inaccuracy in this
3 definition here because if we're appending 8.6.4.19
4 that refers only to traction elevators. When you say
5 at the end of the sentence and paragraph, "This test
6 applies to electric and hydraulic elevators", there's
7 a different ASME code that governs hydraulic elevator
8 testing, which would be 8.6.5.14. So, we need to make
9 it very clear if we're including hydraulic elevators
10 we need to put a proper designation of the code that
11 we're appending, and, so, that's kind of where I see a
12 problem. Thank you.

13 MR. NAIPO: Jan.

14 MS. GOULD: Jan Gould. Just so you know, in
15 the NFPA 72 all those records are retained and they're
16 at the fire panel available.

17 MR. NAIPO: Any other clarifications or
18 questions? Mr. Friesen.

19 MR. FRIESEN: Wade Friesen, Vertical
20 Options. So, I'm curious as I need a little
21 clarification, how does this differ from having the
22 fire personnel signing the fire fighter's log in the
23 MCP? Is there additional information here that's
24 being required? Thank you.

25 MR. NAIPO: Anyone interested -- Oh,

1 Candace, yes.

2 MS. LAU: I'll try to answer this. Candace
3 Lau. Currently there's no requirement to even log it.
4 There's a requirement, if you read this what's written
5 today, you have to test it. So, basically, if you
6 read it, what's in the code today, it says at least
7 once a year the fire alarm initiating devices
8 associated with elevator recall and shunt trip
9 initiating devices shall be tested. That's all it
10 says. It doesn't say you have to log it, okay. So, I
11 think this is written to say, hey, you've got to it,
12 and, then, if you find something wrong you've got to
13 put it down. I think that's what this is saying
14 because nowhere else does it tell you that you need to
15 log anything because this is strictly a state mandate
16 that these -- or nowhere in the A17.1 does it tell you
17 that you have to log smoke detector testing and shunt
18 trip testing. So, when -- when it was written into
19 the code that you have to at least once a year test
20 the smoke detector, once a year do the shunt trip,
21 there's just no code that says, oh, and you have to
22 log it. I think that that's what this is about, okay.

23 MR. NAIPO: All right. Thank you. Thank
24 you, Candace. Mr. Quiett.

25 MR. QUIETT: Jonathan Quiett. Another part

1 of it that is I -- I see it regularly, but where the
2 fire alarm system is not working properly. So, where
3 the line in here says deficiencies shall be corrected,
4 simply testing it and marking it off doesn't mean that
5 the system is functioning properly. There's
6 definitely something that -- that needs to be done to
7 kind of bridge that gap. I know the company that I
8 work for when we were using our own fire service logs
9 they had more details as for what device was supposed
10 to do what function and you had a better idea. Now,
11 with what's required, they don't know. It's like,
12 yep, the elevator recalled or the smoke detector went
13 off. They don't care if the elevator recalled or not.
14 We've run into a lot of situations lately where we've
15 had to deal with having fire alarm companies come back
16 in and re-program their systems, or fix the quality
17 device, or whatever the case may be all because this
18 stuff is not being, number one, tested properly, and,
19 number two, documented so we have access to it.

20 MR. NAIPO: Thank you. Mr. Larson.

21 MR. LARSON: Thank you. This is Russ
22 Larson. In answer to the previous gentleman's
23 question, there is a code requirement for monthly fire
24 fighter service testing. It's -- The code reference
25 is 8.6.11.1. That's generally a building

1 responsibility and that does not require a fire alarm
2 initiating device activation. That's only a test
3 of -- of Phase I recall and then a one floor run on
4 Phase 2. Thank you.

5 MR. NAIPO: Thank you. Candace.

6 MS. LAU: Candace Lau. Yeah, exactly, Russ.
7 There is an A17.1 requirement to log the key switch
8 test. Again, there is no A17.1 requirement to log any
9 fire alarm initiating device test and none for the
10 shunt trip test. It's strictly in our WAC that we
11 wrote in there that we want it tested. But, again, if
12 somebody says, "Hey, I don't need to log it. I tested
13 it, but I didn't log it. You can't write me up for
14 logging it because there's no code that says I have to
15 log anything."... So, this is just to finish the
16 thought process, I guess, from the last WAC where we
17 adopted this code that it needs to be tested, but
18 there's nothing in any of the codes that require you
19 to log it. This is just to finish the thought of
20 testing and logging. I think that that's what this is
21 about.

22 MR. NAIPO: Thank you. Sergey.

23 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
24 Inspector L & I. There is a lot of times -- there are
25 times when I do my own inspections and I do check

1 obviously the records of those tests being done, and
2 there are times when I get those things that are
3 pretty much marked down as tested and passed similar
4 to the five year safety test, for instance, and then
5 all I'm getting is an elevator service provider
6 calling me and telling me an instance of it actually
7 happened, in actuality it happened just recently,
8 calling me and telling me, "Hey, I was called here to
9 run a car to -- to do this thing, and my -- my
10 (garbled audio) wasn't even connected in a controller.
11 It wasn't even wired in on the terminal strip." And
12 what I'm asking myself at that point is how the heck
13 all these years the things were tested and they passed
14 the test by a smoke alarm company or the electrician
15 with the shunt trip type things and all that. But
16 we're talking about specifically smokes and fire alarm
17 initiating devices at this point, and so my question
18 is how the heck those things were tested and all
19 passed and then the mechanic comes back and says,
20 "Well, it hasn't been connected inside the
21 controller", okay. So, I think it's imperative
22 that -- And those key switch tests they don't
23 necessarily reflect that. It is imperative that we
24 have those records because it's a life safety. I've
25 had instances before when I would do a duplex elevator

1 recall the Phase I and one elevator comes down and
2 opens the doors and the other one keeps the doors
3 shut, and that indicates to me that somebody is going
4 to get burned in there. So, bottom line is it's a
5 life safety, in my opinion. Those records should be
6 available to us, and those records should be -- and
7 the tests should be performed in conjunction with
8 functionality of the elevator, elevator controls.
9 Thank you.

10 MR. NAIPO: All right. Carl, I will call on
11 you real quick. I just wanted to read Paul Barnhart's
12 comment he put in the chat. The phrase, "to ensure
13 they are still properly interfaced with the elevator
14 control" implicitly requires deficiencies to be
15 corrected. I agree with the logging part, though.
16 Thank you very much for that, Mr. Barnhart.

17 Carl, you had your hand raised.

18 MR. CARY: Yeah. Carl Cary, Lerch Bates. I
19 took my hand down because I didn't want to repeat the
20 point, but I was just going to, for a point of
21 clarification to Sergey's earlier point about language
22 saying this test applies to electric and hydraulic
23 elevators, that's already existing language in the
24 WAC.

25 MR. NAIPO: Okay. Thank you. All-right.

1 Any additional questions needed to clarify?
2 All-righty. With that, we will move on to voting on
3 this change, and the gist of the change for proposal
4 0021 is just to add that the record of findings for
5 fire alarm initiating devices are kept and -- or
6 they're just kept, that they're there, for not that
7 it's done in the log, but that was the result of it,
8 as well.

9 So, if you are for that change and adding these
10 requirements to those to make sure that we have those
11 logs, I ask that you vote yea now. If you are for
12 that change, I ask that you vote yea. If you are for
13 that change in the fire alarm initiating device
14 testing to be on site and required. All-righty.
15 Thank you for those who have cast your vote. I ask
16 that you please lower your hands. Thank you again for
17 your vote.

18 If you are opposed -- If you voted yea, please
19 make sure you lower your hands. If you are opposed to
20 this change, I ask that you please vote nay and raise
21 your hand now. If you are opposed to this change,
22 please raise your hand now. All right. Thank you.

23 And for those that vote to abstain, please raise
24 your hands now. If you vote to abstain, please raise
25 your hand now. All right. Thank you.

1 Melissa, will you please read the results of
2 voting for proposal 21.

3 MS. ERIKSEN: Yes. There were 22 yeas, 2
4 nays, and 0 abstentions.

5 MR. NAIPO: Thank you. All right. Okay,
6 this is a big one. I'm going to skip this one because
7 we only have 28 minutes left and I feel like this is
8 going to take 28 minutes for me to read all this
9 stuff. So, we're going to skip this one. We'll see
10 how you guys feel tomorrow morning and whether you
11 guys want to start with this big one or maybe chip
12 away at some easier ones and then come back to this,
13 but I'm skipping this one. I'm skipping this one for
14 now; so, we're going to the next one, not that one.
15 It's continued like three times, four actually. There
16 we go. So, we are going to go to -- Oh, do I want to
17 do that one? No, we're not going to do that one.
18 We're going to do this one. We're going to skip those
19 other ones. We're going to move forward to 0041. We
20 will come back to those tomorrow morning.

21 So, we are going to skip to proposal 0041. He
22 is or they are one -- I'm saying he because that is
23 the majority of the people who submitted, they were
24 male. I'm sorry because I know there are some women
25 who submitted stuff and I apologize. They submitted

1 this. We already have WAC 296-96-0675(5). So, they
 2 are keep-- wanting to add or keep that and add at the
 3 very bottom "(a) Regarding escalator cleaning shall be
 4 performed at least once annually. It can be performed
 5 concurrently with the required Cat 1 testing (ASME
 6 A17.1 8.6.8.13 Cleaning)".

7 Rationale: "ASME A17.1 8.6.8.13 Cleaning. The
 8 interiors of escalators and their components shall be
 9 cleaned to prevent an accumulation of oil, grease,
 10 lint, dirt, and refuse. The frequency of the cleaning
 11 will depend on service and conditions, but an
 12 examination to determine if cleaning is necessary
 13 shall be required at least once a year." The last
 14 sentence leaves the cleaning of the escalator to
 15 arbitrary assessment rather than objective necessity.
 16 Escalator equipment is high risk due to its
 17 configuration, function, and design. It is a
 18 continuously operating machinery that gets a heavy use
 19 by riding public in malls, airports, and other high
 20 traffic areas. It is crucial that the necessary
 21 cleaning and maintenance be mandated by this code."

22 What they are doing again with this one is, just
 23 to the gist, is to, "Escalator cleaning shall be
 24 performed at least once annually", and suggesting that
 25 it be performed in line with our Cat 1 testing.

1 Sergey, you jumped in raising your hand. Am I
2 surprised, no.

3 MR. DOLGIKH: Oh, no, you're not. This is
4 Sergey Dolgikh, Elevator Instructor. Guess what, I'm
5 going to own this one because I'm the one who put it
6 in, all right, and I've done some escalator
7 clean-downs and they are just total you know what, but
8 it's a mess, but they are very important, and
9 extremely important, and they are very dangerous, too,
10 if you don't do it properly to clean down the
11 escalator because I was the guy who was crawling in
12 between the axles, and you can believe my size, I fit
13 in some places that nobody would want to be, so...
14 But what I'm trying to say is this: Cat 1 is that's
15 when you're testing a whole bunch of stuff on the
16 escalator, okay, I've done those, too, and that's the
17 good time for the clean-down to be addressed because
18 that's when the -- Escalators is the number one pretty
19 much of people damaging equipment and such like that.
20 I'm not even going to mention about pets and animals
21 that are being dragged on escalators in airports and
22 things like that. That is a very bad juju. But what
23 I'm saying is during the clean-downs, especially the
24 external escalators, there's a lot of maintenance
25 issues that can be caught and captured through the

1 clean-down and assessed whether that escalator is safe
2 or not to be put back in service. And, granted, they
3 are getting heavy use and for that matter they
4 absolutely need to be done, clean-downs need to be
5 coinciding with Cat 1 testing. It's the best timing
6 for it. There's just -- there's no other way around
7 it. So, that's my appeal to the audience why I put
8 this one in. Thank you.

9 MR. NAIPO: Thank you. Any other questions
10 or clarification needed before we move to vote? Any
11 clarifying comments from anybody? Mr. Friesen.

12 MR. FRIESEN: Wade Friesen, Vertical
13 Options. So, I've kind of seen this both ways. We
14 had some escalators on service for a while that do not
15 necessarily require annual clean-down because of their
16 particular use and they didn't get as dirty. On the
17 flip side, I have seen some that at, you know, less
18 than a year had a layer of fuzz that was a fire
19 hazard, amongst other issues. But I think in this day
20 and age with companies trying to cut corners and
21 trying to reduce service time as much as possible, in
22 my opinion this is needed to ensure the safety of the
23 riding public. Thanks.

24 MR. NAIPO: Thank you. I think cut corners
25 is maybe the wrong phrase we want to use. Mitigate

1 cost. All right. Candace.

2 MS. LAU: Candace Lau. Hey, I just wanted
3 to add that this used to be a WAC code. Its been in
4 there for years, and years, and years, and I believe
5 it's still in the city of Seattle codes, and there was
6 no reason why -- in my mind there was no reason why it
7 should have went away, but it did, and this is to just
8 bring it back because it's the right thing to do.
9 That's my opinion.

10 MR. NAIPO: All right. Thank you. Does
11 anybody -- Oh, Jan, yes.

12 MS. GOULD: Let me unmute. Yeah, 8.6.8.13
13 last sentence, "The frequency of cleaning shall depend
14 on service and conditions, but an examination to
15 determine if cleaning is necessary should be required
16 at least once a year." That's in ASME. That's it.
17 Thank you.

18 MR. NAIPO: All-righty. Any additional
19 questions or clarifications needed? All-righty. With
20 that, I ask that we put this to a vote on proposal
21 0041. This is for adding back the escalator cleaning
22 requirement that used to be in the WAC per Candace's
23 statement to where it needed to be done once annually,
24 and also that it could be done in conjunction with the
25 Category 1 testing.

1 If you are for that, so for us to be able to add
2 escalator cleaning performed at least annually, if
3 you're for that please raise your hand and vote yea at
4 this time for that change. Vote yea for that change.
5 All-righty. Thank you for those who have voted. You
6 can go ahead and lower your hands. Thank you again
7 very much. If you voted yea, please lower your hands.

8 Those who are in opposition of this to keep the
9 current requirement as it stands, please vote nay and
10 raise your hands now. Please vote nay if you are in
11 opposition of this change. Please raise your hand now
12 if you're voting nay. All-righty. Thank you for
13 those votes.

14 Lastly, if you vote to abstain from this, please
15 raise your hand and vote to abstain, please raise your
16 hand now. If you vote to abstain, please raise your
17 hand now.

18 All-righty. Melissa, will you please read the
19 vote tally for proposal 41.

20 MS. ERIKSEN: Yes. There were 22 yeas, 2
21 nays, and 0 abstentions.

22 MR. NAIPO: Thank you.

23 ///

24 ///

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Adjourn

MR. NAIPO: All-righty. So, that is going to conclude today. So, that got us through roughly a third of all of the WAC changes that we needed to do. That was 34 WAC changes that we were able to address today. I still feel confident that once we get done with all of these 675s because I feel like this is where a lot of conversations are going to be had because this is amendment to adopted standards, so people take that very, very seriously, and I'm okay with that. What I ask is, if you have time -- I'm going to try to get you guys out of here five, ten minutes early, okay. What I ask is that you -- if there are any questions or comments that you have on how today was ran, please feel free to e-mail me or Melissa. Be as blunt as possible. I can take it, all right. This is -- I'm going to be honest with you, this is my first time facilitating a virtual thing with now really it's just 25 people, but, still, this is the first time I've ever had to do this. Usually I'm doing this in-person and it's a lot easier for me. I'm a lot more comfortable with that. I've had to do

1 a lot of extra steps here that I feel I wouldn't have
 2 to do in-person. So, if there are things, because I
 3 know some of you have gone through this process
 4 before, if you have anything that you feel could help
 5 move this along a little bit quicker over the next
 6 couple days, please feel free to e-mail me. If you're
 7 like, Paoa, I don't like that car behind you. I think
 8 it needs to be a puppy dog or one of your grandkids,
 9 hey, that's fine, tell me. I'll do that, okay. But I
 10 thank you guys very much for your time. I know it was
 11 a hard day. I know the next two days aren't going to
 12 be any easier, but, really, thank you everyone for
 13 everything that you guys are doing. I really
 14 appreciate it. I feel like the votes that have been
 15 cast haven't been arbitrary or just sort of thrown out
 16 there just, yeah, I'll vote yea for this and no. You
 17 guys, I feel like, are really vested and you have a
 18 vested interest in the vote that you're casting, and I
 19 really appreciate that.

20 Like I said, we got through thirty-some -- 37.
 21 But, anyways, is there any questions that anybody has
 22 about tomorrow, or what you know is coming down the
 23 pipeline, or anything like that? Anybody have any
 24 questions? All right.

25 MR. DOLGIKH: Paoa, you did a fantastic job.

1 Melissa, thank you very much. It was amazing for me,
2 too, because this is my first time on TAC and I don't
3 know how it was conducted in-person, but just to put
4 my 10 cents or 2 cents in actually, which feel I
5 should, you guys did fantastic. So, I appreciate how
6 it all has been handled, and it was a very homey and
7 friendly atmosphere, and it was fantastic. Thank you.

8 UNIDENTIFIED SPEAKER: Is this where we vote
9 Sergey off the island?

10 UNIDENTIFIED SPEAKER: Put it to a vote
11 when --

12 MR. DOLGIKH: As long as I don't have to
13 wear a loin cloth, I'd be okay.

14 MS. ERIKSEN: Paoa.

15 MR. NAIPO: So, with that, since there isn't
16 any other questions or anything like that, like I
17 said, again, there's a free line of communication
18 between all of us, to be honest with you, but me in
19 particular or Melissa will be taking this to heart on
20 anything we can do to improve this process for you
21 because we know how daunting it is for you, and if you
22 have any suggestions please put them forth.

23 With that, if there's no other questions, I move
24 to adjourn this and close this today. Get a good
25 night's rest, get some dinner, get ready to hit the

1 ground running tomorrow at eight o'clock, guys. I
2 really appreciate it. Thank you guys so much.

3 MS. ERIKSEN: Thank you, everyone.

4

5

6

(Adjourned at 4:50 p.m.)

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

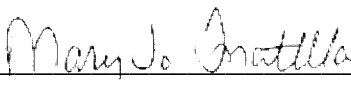
I, Mary Jo Fratella, a Certified Court Reporter in
and for the State of Washington, do hereby certify:

That the foregoing proceedings occurred before me at
the time and place stated therein and that the proceedings
were by me stenographically reported and later transcribed
by means of computer-aided transcription;

That the foregoing transcript is complete and
accurate insofar as the proceedings were audible, clear,
and intelligible;

I do further certify that I am in no way related to
any party in the matter, nor do I have a financial
interest in this matter or the outcome thereof;

IN WITNESS WHEREOF, I have hereunto set my hand this
22nd day of February, 2022.



Mary Jo Fratella, CCR, RPR
Certified Court Reporter, CCR No. 2083



A				
A.17.3 258:16 261:25	55:14 57:1,2,16 58:12 60:16 61:2 61:15 63:10 66:25 67:7,9,19 68:3 71:7 72:22 74:19	231:16,19 235:16 235:17 247:1 254:21,23,24 267:9,11 275:23 275:24 281:14,15 281:16	219:3 220:16,20 228:16,17,20,20 234:6,9 243:9 271:19	actuated 118:6 220:7 actuates 102:18 actuating 115:18 adapt 31:11 add 47:15 54:14 58:12 62:7 76:25 107:8,10 124:15 136:6 139:13,15 140:5 145:12 177:8 201:20 209:11 210:13 256:16 268:12 275:4 277:2,2 280:3 281:1
A.2 265:3	ability 35:23 44:22 45:18 68:22 104:14 164:4 166:15 188:13 194:3 207:10 264:25	abstaining 8:13 11:5,9 12:22 74:11 96:7 156:10 156:11 167:4 172:4 173:9,10 187:3,4 210:3,4,5 214:14 247:2 249:19,21,22	accessibility 54:24 60:9 65:2 accessible 78:24 129:8 194:21 accessing 132:14 accident 233:8 accidents 212:12 acclaim 92:19 accommodate 167:23 171:11	added 35:13 169:3 190:22 209:12 211:20 219:20 220:5 257:11,12 257:16,18 266:6 268:21
a.m 3:3	able 3:24 14:11 15:5 16:12,19 20:10 38:4 48:22 63:14 67:23 68:21 81:1 85:23 95:12 104:4,9 105:4 112:19,23 120:14 123:23 132:16 175:12 177:21 180:6 193:18 199:8 213:5 220:10,16 224:20 228:19 229:13 253:8 265:6,11 281:1 282:8	abstains 54:2 abstention 54:10 90:17 134:24 173:15 250:5 abstentions 58:8 74:16 96:12 100:19 101:20 121:16 156:17 167:11 187:1,10 200:6 203:1 206:11 210:10 214:19 217:3,5 224:6 231:24 235:22 247:7 255:3 267:15 276:4 281:21	access 54:24 60:9 65:2 accessible 78:24 129:8 194:21 accessing 132:14 accident 233:8 accidents 212:12 acclaim 92:19 accommodate 167:23 171:11 accomplished 66:22 236:23 account 35:21 145:18 191:11 258:8 accredited 158:21 accumulated 109:1 accumulation 277:9 accuracy 65:7 accurate 37:4 286:11 acetaminophen 22:19,21 achieved 158:6 acquired 246:6 activate 107:14 117:23 198:6 activates 253:4 activation 147:23 206:16 272:2 active 27:1 105:23 actively 132:15 189:10 actual 38:7 45:8,19 142:8 148:16 212:22 242:7 259:20 264:19 actuality 273:7 actuate 102:22	adding 54:21 74:18 75:5 76:18 77:3 77:12 91:1 93:11 93:13 95:17 97:3 100:3 122:16 136:7 140:25 142:10 151:19 154:7 182:21 192:17 225:7 236:13 250:15 258:22 268:7 275:9 280:21 addition 36:16 151:16 263:20 additional 17:24 36:6 43:17 94:15 95:5 107:5 114:20 120:8 140:25 141:15 149:1 150:1 151:13 152:12 153:1 154:7 165:21 166:12 169:13
A17 36:17 106:12 137:18 138:12 160:10 169:17 197:20 227:23	abstain 4:14 10:12 10:25 11:4 15:20 15:23 35:2 50:17 51:17 58:2,4 90:6 90:8 96:6 100:14 101:15,16 121:9 121:11 134:13,19 167:5,6 171:23,24 172:2 188:23 200:1 202:18,19 202:20 206:6 210:1 214:13 223:25 224:2	accept 87:20 159:22 164:1,12 acceptable 99:6 acceptance 47:5,7 49:13 164:21 236:11 244:4 251:12 access 67:8 68:23 70:20 123:11 127:4,16 129:16 132:11,12 138:21 143:12 157:5 167:19 169:5 179:17 217:18	accident 233:8 accidents 212:12 acclaim 92:19 accommodate 167:23 171:11 accomplished 66:22 236:23 account 35:21 145:18 191:11 258:8 accredited 158:21 accumulated 109:1 accumulation 277:9 accuracy 65:7 accurate 37:4 286:11 acetaminophen 22:19,21 achieved 158:6 acquired 246:6 activate 107:14 117:23 198:6 activates 253:4 activation 147:23 206:16 272:2 active 27:1 105:23 actively 132:15 189:10 actual 38:7 45:8,19 142:8 148:16 212:22 242:7 259:20 264:19 actuality 273:7 actuate 102:22	
A17.1 35:10,11,14 125:2,21,24 136:6 147:14 149:14 158:7,8 160:18 163:16 164:8 166:8,21 180:20 191:25 196:18 210:19 233:17 247:9 258:13 259:22 260:21 261:2,6,8,24,25 262:21 263:12,16 270:16 272:7,8 277:6,7				
A17.1-2016/B44-16 268:2,14				
A17.2 33:21 34:13				
A17.3 256:14,25 257:2 258:20 259:2,8 260:4,8 260:20,25 261:3 261:13,21 262:1 262:10 263:4,6,11 263:16 264:10 265:15 266:5				
A17.5 125:24 169:21				
A17.7 158:10,11,12 158:18,22 159:11 159:14,19,23,24 163:9,12,21 164:9 164:21 166:4,16				
A18 55:7 56:16 63:3 72:1,11				
A18.1 54:15 55:13				

171:4 180:23 198:22 200:13 201:18 202:2 208:17 212:17 221:17 222:17 224:11 234:24 249:4 254:1 269:23 275:1 280:18 Additionally 35:23 55:1 123:15 179:11 additions 152:25 address 10:3 37:24 43:6 77:18 78:22 81:1 83:10 180:14 230:15 259:17 282:8 addressed 41:13 57:3 61:20 75:5,7 78:6 101:5 131:11 147:7 152:21 159:1 183:7 232:5 278:17 addresses 155:12 155:15,17 165:11 182:7 184:4 230:14 addressing 43:25 48:13 78:9 80:20 88:23,24 adds 74:25 adequate 103:23 234:13 adjourn 2:24 8:6 282:1 284:24 Adjourned 285:6 adjust 166:6 233:19 238:17 251:16 259:25 adjusted 39:24 45:14 46:9 189:1 189:7 190:3 adjusting 38:9	161:9 235:4 260:1 adjustment 191:2 227:8 adjustments 224:19 adjusts 190:1 admin@capitolp... 1:24 admit 98:9 adopt 61:12 153:5 162:4,9 163:5 212:15 215:14 258:7 261:12,21 adopted 34:14 54:14 55:14 58:15 72:23 73:23 74:18 86:4 88:9 101:22 136:5 153:6,8 155:24 161:12,20 161:20,23 162:2,3 162:11 167:17 179:5 233:16 235:25 256:15 260:4 261:11,24 263:4,6 272:17 282:12 adopting 77:25 81:24 161:14 162:10 163:24 advance 27:5 advantage 240:19 advisor 29:17 Advisory 1:4 3:2,6 6:18 advocate 85:16 105:16 189:4 193:11 AECO 158:20 159:1 163:21 164:2,5,11 affect 10:21,22,24 89:4 115:9 afforded 175:2 247:16	afternoon 77:20 78:4 age 279:20 agenda 2:3,6 4:1 6:1,5,7 8:17 18:24 ago 41:13 105:7 agree 39:8 42:11 65:9 66:12 83:15 83:21 84:3,9 85:3 85:4,4 86:2,10,16 87:4 92:11 93:3 93:10 94:4 95:3 98:22 127:8 132:21 151:7 159:10 162:13 165:18 170:18 177:6 185:21,21 189:22 201:5 208:20 212:13 213:13 245:7 257:20 258:4 261:20 265:22 274:15 agreeing 84:13 agreement 177:7 194:8 ahead 13:18 47:2 52:16 57:22 58:1 59:2 81:6 88:5 91:21 96:3 101:8 101:9 120:24 121:7,24 134:7,11 134:19 156:3 171:17 172:24 173:20 178:7 197:1 202:16 205:20,21 206:5 209:20,22 214:5 214:12 217:12 223:6,13,18 235:11 246:14,25 250:2,9 254:13 281:6 AHJ 44:22 164:1,4	268:20,23 aimed 68:2 airport 125:14 213:1 airports 277:19 278:21 airway 26:7 alarm 206:16 268:3 268:15,19 270:7 271:2,15 272:1,9 273:14,16 275:5 275:13 alarms 197:13 Alexander 27:18 27:19,19 77:7 align 160:8 238:17 aligned 143:2 All- 202:2 All-right 167:8 208:24 274:25 All-righty 3:17 33:7 51:15 66:5 73:7 75:2 89:25 96:9,13,18 97:21 101:3 120:9 121:12,17 122:7 130:1 133:22,24 134:25 135:1 156:8,12 157:13 170:16 171:6 173:23 187:6 199:17 202:21 205:9 206:12 209:11 210:11 224:7,8 231:20,25 232:17 235:3,19 246:24 249:5 250:6,7 254:12,19 255:4 257:4 261:17 267:16,17 275:2,14 280:18 280:19 281:5,12 281:18 282:5 alleviate 253:14	allocated 140:16 allotted 7:18 allow 35:6,7 38:10 43:1,2,9,15 44:4 44:12 50:7 51:4,6 51:6,14 106:4,19 112:13 113:10 129:20 157:21,24 180:1 181:15 191:11 205:17 238:15 allowable 43:11 allowance 37:23 40:14 allowed 35:12 36:17 43:13,23 44:17 118:7 137:17 159:18 174:13 212:9 allowing 21:2 37:14 42:20,21 43:2 51:2,2 103:9 118:9,14 128:25 129:22 137:4 157:20 159:19 163:25 164:3 183:3 189:6 198:8 203:5 205:18 209:2,6,10 allows 35:15 44:18 71:17 95:13 104:4 104:12 150:21 163:25 185:15 alluded 4:16 53:15 85:9 245:25 alluding 84:22 177:16 178:17 aloe 22:14,14 alteration 182:20 184:11 185:5,6,25 186:5,10 236:13 244:10 256:10,11 256:20 257:18,25 258:5,15,20,25
--	--	---	--	--

259:3,6,8,17	247:9 267:23,23	angular 218:21	223:4 234:19	100:22 158:20
260:19,25 261:3	267:25	animals 278:20	279:11 280:11	182:14
262:11,14,20,21	amended 17:1	announce 72:16	283:21,23	applies 69:12,17
262:23 263:3,4,8	36:23 54:15 57:6	annual 68:9 69:6	anybody's 74:7	70:13 71:1 72:1,6
263:13,15,24	92:10 136:2	74:23 76:1,5	anymore 64:17	72:20 80:12 81:6
264:1,4 265:17,24	190:16	251:13 264:12	anyone's 240:21	116:17 124:13
266:6,9 267:4	amending 57:16	279:15	241:4	191:12 212:3
alterations 170:6	74:19 77:11 85:1	annually 277:4,24	anyway 53:12	268:11 269:6
170:13 181:21,23	87:16 90:22 102:6	280:23 281:2	57:11 87:6 93:1	274:22
182:4,4,8 185:10	135:6 217:20	answer 9:22 10:5	154:9 192:8	apply 71:3 72:4,25
256:9,16,17 257:1	222:20 225:17	16:10 17:22,23	anyways 283:21	91:3 93:15 95:20
260:6,8 261:14,15	250:9	64:9 72:10 75:19	AOE 146:10	97:4 99:14 191:14
261:25 265:15	amendment 54:13	75:23 153:13,14	apart 168:22	203:3 227:15
266:7,15,19,22	58:11 60:12 74:18	160:21 162:1	apartments 104:24	applying 76:10
altered 244:5,11	79:4 84:18 86:21	183:4 193:16,19	apologize 19:8 36:1	99:16 114:21
alternate 36:8 37:1	95:10 98:4 101:22	211:24 232:11	69:23 71:23	216:2,6 232:15
37:23 43:10,10	103:20 105:16	243:11 264:16	150:15 160:19	appreciate 8:24
44:16 47:5 159:18	137:9 147:6	270:2 271:22	172:13 208:16	27:3 32:25 79:18
180:5 181:17	154:16,24 155:23	answered 57:12	209:17 250:8	80:6 117:18 132:9
230:17	157:14 164:19	108:21 123:23	253:23 276:25	135:14,20,23
alternative 35:6,9	183:23 184:9	150:17 164:16	apparently 187:3	152:13 176:12,20
35:12,13,24 36:23	187:12 216:9	195:4 202:2	appeal 279:7	176:22 224:24
36:25 37:1,3,9,14	226:18 232:1	answering 75:16	appears 62:11	283:14,19 284:5
38:4 40:7 42:14	233:16 248:17	183:6	210:25	285:2
42:20 43:1,13	250:7 256:9	answers 222:15	append 267:22,23	appreciated 220:11
44:23 46:6 47:21	282:12	237:22	268:1,13	apprentice 39:1
48:9,17 50:7,9,21	amendments 20:8	anxiety 224:25	appending 269:3	approach 91:17
50:22 51:4,7,14	84:12,23 120:15	anybody 5:1 8:17	269:11	92:11 166:10
60:19,25 61:5,7,8	136:5 165:1	8:18,21 12:22	appendix 218:13	211:1
63:3,4,5 157:20	167:17 179:4	17:21 18:4,6,7,24	222:10	approaches 187:20
157:21,24	215:21 235:25	20:3 34:23 35:2	apples 48:11,11	191:21
alternatives 248:13	amends 150:4	48:14,14,21 50:3	149:8	approaching 91:3
amazing 284:1	243:7	52:22 69:15 70:8	applicability	92:6 93:14,23
ambiguity 88:2	amount 18:2	74:11 75:23 81:1	256:10	95:19
ambiguous 92:18	118:16 189:3	100:23 101:14	applicable 86:25	appropriate 73:16
amend 73:15 79:14	220:25	119:4 128:23	87:1 122:19	77:10 97:25 104:9
85:10 88:15 96:19	amusement 211:17	129:3 130:2,4	244:12 256:13	208:8 238:22
102:2 122:12	analysis 44:5 49:25	137:10,24 141:14	263:1	approval 164:22
136:6 152:22	158:25 159:3	144:14 189:25	application 33:25	approve 44:22
157:14 166:3	and/or 210:15	197:25 198:23	91:10 97:12 159:5	76:21
184:10 206:13	213:23 236:6	200:1 202:1	230:19,21 256:22	approved 36:15
210:12 214:21	angle 218:22,22	203:11 204:7	256:25	52:5
217:17 225:4	221:22	205:8 211:11	applications 126:3	approximately
233:17 236:1	angles 69:3	214:7,8 220:10	applied 91:6 97:7	218:17

April 136:12 137:13	126:2 158:6,8,10 160:10,12,17,21	audio 109:15,18 117:2,5,11 143:16	b 64:1 67:5,12 73:16 91:3 93:13	Barnhart 19:7,7,13 19:21 20:1 27:23
arbitrary 277:15 283:15	163:4 166:16,16 166:21 180:13	169:7 195:15 196:24 273:10	97:3 102:5,20 160:19 248:23	27:23 69:22,25,25 82:13 83:14,18
area 24:4,6,9,13 28:25 30:3 112:7	196:18 210:19 243:16 251:10,19	author 136:19 authority 68:8,22	250:12 263:2	84:6 91:22,22 97:23,24 124:3,4
123:10,15,16 126:16 140:5	256:14 268:1,13 269:7 277:5,7	69:4 94:22,24 141:1,8 159:22	baby 23:8 baby's 23:10	124:23,25 125:5 131:8,9,9 138:9
147:17 200:19,22	280:16	164:1,20 165:1 256:15 263:4	back 7:15,17 8:3,7 28:6 29:15 32:6	138:10 146:7,8,8 158:16,17 159:10
areas 210:24 211:17 225:5	ASME's 185:9	268:10	46:17 48:3 52:17 52:21 53:21 64:8	165:25 166:1,1,15 167:13 172:4
234:7 277:20	aspect 129:2 239:8	authorize 35:24 authorized 103:10	68:17 76:14 96:16 96:19 102:12	208:10,11 257:19 257:20 274:16
arguing 49:14	assemblies 247:17	194:22	108:9 111:4 112:19 113:17	Barnhart's 274:11
argument 119:3	assembly 168:11,13 218:18	Auto 189:20	114:9,14 115:6,23 115:25 118:10,15	barricade 127:18
arguments 238:11	assess 108:8 116:13	automatic 118:8 119:23 188:19	118:24 121:21 122:1 135:23,24	barricaded 126:9
arises 14:17	assessed 279:1	189:8,13 192:17 193:5 195:5,7	141:18 154:21 165:15 173:21,23	barricades 125:15 127:19 129:1,13
arm 23:8 218:18	assesses 109:3	196:4 197:24 199:3,10,13,15	174:24 175:5 178:13 191:10	129:17 132:5,21 219:15
arranged 146:2	assessment 108:15 277:15	200:11 201:5 202:5,14 203:4	192:13,13,16 194:10,16 195:10	based 30:9 69:4 98:11 136:22,22
arrested 252:12	assign 20:2	205:5,19,25 207:17,24 209:2,7	197:23 198:2 205:4 211:18	160:3
ascending 250:10 250:12,15,22	associate 19:14	209:10	213:4 220:6 224:14 233:13	baseline 47:7
251:1 252:6,19	associated 136:24 143:24 149:16	automatically 188:4,11 201:15	240:23,25 264:3 271:15 273:19	basement 108:17 108:19
253:4 254:6	211:3 236:16 251:3 268:4 270:8	205:12 207:2,8	276:12,20 279:2 280:8,21	basically 24:2 30:3 30:9 36:5 49:5
ASCII 111:24	assumed 253:25	available 56:22 59:12 123:20,22	280:8,21	60:13 61:12 64:24 65:5 69:12 72:9
aside 220:3	assumes 187:21	242:5 268:9,20,22 269:16 274:6	background 98:7	82:17 86:14 92:22 105:8 110:10
asked 35:5 69:10 78:2 243:8	assuming 7:5 66:8 110:7 160:18	average 218:18	backs 240:10	127:17 128:7 148:5,7,13 161:16
asking 5:2 34:10,11 48:20 61:23 84:11	189:9 253:13	avoid 83:22 169:22 251:16	backup 229:7	166:7 211:15 227:6 251:10
84:17 106:23	assumption 221:4,6	avoids 80:15	bacteria 25:7	260:17 270:5
136:1 162:25	asymmetric 226:9	aware 26:9 47:6 80:21 143:6,8	bad 25:16 116:12 139:14 212:12	basing 48:10
167:20 174:7	atmosphere 65:25 66:1 284:7	169:25	252:4 265:18 278:22	basis 34:1 69:6 240:2,7,17
182:11 183:7,24	attaches 210:16 213:14,24	awareness 136:25	baker 65:13 67:2	bat 113:25
184:3,6 188:3	attempt 62:21 211:1	axles 278:12	bandage 24:6	Bates 28:20 95:8 103:18 160:6
194:13,15 199:2,4	attendance 6:14 7:4 16:11 255:19		bank 48:16	
223:8 228:8	attended 21:11			
256:16 267:23	attention 131:20			
273:12	audible 286:11			
asks 12:21 194:14	audience 279:7			
ASME 30:7,8,10 33:21 35:9,11				
49:20 54:15 57:16				
58:12 59:3 77:12				
93:7,24 125:24				

190:9 227:2 274:18	135:4,4 238:13 243:8 276:6,11	bothering 128:21	80:7	28:22 59:11,11
bathroom 22:17	bigger 170:21	bottom 201:10,13	brings 49:15 116:9	70:10 98:11,14,18
beam 229:9	biggest 4:15	220:18 234:7	162:25	104:24 108:4
bearing 238:7	billionaires 43:14	274:4 277:3	Brinkman 30:5,6	110:23 111:8,10
beat 154:8,14	billowing 145:9	bounced 173:19	36:4,4 47:3,3	112:21,24 113:5
178:12 215:18	binder 242:1	box 10:20 15:14	56:14,14 63:1,1	129:23 143:24
beauty 23:15	bit 4:2 7:17 21:1	boxes 114:6	65:11,12,12 71:23	179:16 180:3
becoming 168:13	60:5 82:3 117:9	boy 267:17	71:24,24 75:18,18	193:8 236:8,14,21
beds 114:7	118:3 121:20	brain 32:23	76:15,16,17 82:2	246:11 253:10
believe 8:14 10:16	135:8 148:10	brake 38:8 39:23	88:6,6 93:18,19	271:25
11:7 17:4 63:21	163:15 174:5,15	40:4 187:18,24	93:19 98:5,6,6	buildings 103:21
64:6 70:2,4,24	175:4,12,17	206:23 225:10,10	106:9,9 113:7,8,8	103:24 106:15
71:4 77:9 79:12	178:22,23 218:10	225:14,14 227:8,9	117:19,19 125:9	112:15 211:19
84:15 88:12 89:14	242:20 245:5,9	228:14,21 229:2	125:10 137:11,12	261:15
89:16 119:12	258:18 283:5	229:15 250:11	138:3 142:23,24	built 163:13
138:12 154:7	black 22:1 260:16	251:3 252:7,21	142:24 159:8,9,9	bumped 129:2
160:17,19 174:9	blah 16:3,3,3	253:7 254:8	169:14,15 170:2	bunch 38:5 168:23
180:13 182:10	164:21,21,21	brakes 229:23	170:14 179:22,23	204:15 278:15
183:25 190:22	265:4,5,5	252:4	179:23 180:8,17	burden 54:19 63:14
193:6 197:20	blanketed 161:15	braking 187:16	180:18,18 190:19	burial 249:6
198:15 228:3,8	162:18	206:21	197:18,19,19	buried 247:10,11
251:13 264:7	blistering 21:24,25	break 7:13,14,15	213:11,12,12	247:20 248:25
278:12 280:4	block 227:6,15	33:8,10 39:3,10	227:3,4,4 233:4,5	249:10
believed 17:14	blue 208:12 260:22	40:5 41:6 51:23	233:5 251:7,8	burn 21:15 22:5,7
believes 83:19	261:1 263:20	96:15 121:20	262:6,7,7	22:11,11,15,19,21
Bellevue 110:10	blunt 282:19	173:18 176:7	Brinkman's 230:20	23:17,22 24:6,14
belong 85:18	board 108:22	187:2 224:9,12	Bristol 1:18	25:3,5,9,16,22
237:20 238:21	251:24 252:2	breaks 6:5 7:8,9,18	broadcast 14:9	26:1,6
belongs 237:23	boat 88:22	25:5 41:5,7 224:9	broke 93:12 129:4	burned 21:17 22:9
beneficial 193:12	Bob 27:25,25 28:2	breath 7:16	197:11,11	22:24 23:1,20
best 16:5 20:16	66:11 175:21	breathing 24:17	broken 38:19	24:4,13,24,24
25:1 87:25 127:22	176:15,20 196:8	brick 110:19	168:22 192:14	274:4
128:25 159:25	198:15,15 217:10	bridge 176:23	197:14 198:5	burning 22:9
226:11 279:5	bodies 163:22	177:10 271:7	203:17	burns 21:19,20,22
better 25:15 32:17	bodily 147:24	briefly 129:12	brought 45:2 68:5	21:25 24:1,7
66:19 71:19	body 130:8 168:1,5	133:3 186:9	133:18 152:20	142:3
126:13 141:12	bolstering 266:5	bring 41:14 46:3	161:7 165:9	bus 248:21
219:13 264:5	bolt 41:4	81:19 87:7 94:21	181:13	business 64:16
271:10	book 160:18 162:9	147:10 150:18	Brown 28:6,7	71:10,12 111:12
beyond 88:16	198:19 242:11,18	159:13,13 162:14	248:5	busy 132:12 208:18
154:23,24,25	242:20	162:20 165:5	bubble 204:14	butter 25:13,17
big 7:20 52:24	books 162:12	183:12,25 220:17	budget 5:20	button 28:2 90:14
121:18 126:10	242:22	259:18 280:8	build 83:10 146:16	195:14,17,23
		bringing 61:10	building 4:25 28:17	197:24

bypass 233:10
bypassed 189:12

C

c 3:14 63:24 64:2
 67:3,5,14 73:16
 102:8 158:11
 160:14,20 167:21
 171:8 217:20
 218:13 256:14
 263:4 286:1,1
C-103 1:18
cabinet 122:25,25
 125:17 130:10
 131:17
cabinets 129:20
cable 220:5,17
cabling 107:23
call 14:15 16:17
 26:22 27:1,4
 34:16 55:11 87:9
 100:4 110:24
 223:6 240:10,23
 240:25 242:11
 259:18 267:2
 274:10
called 16:14 273:8
calling 40:21 116:5
 273:6,8
calls 9:22
camera 2:13 11:19
 11:22 12:3 13:21
Campbell 28:11,12
Candace 20:6
 30:18,19 42:9,10
 43:5 66:23,24
 69:21 70:22 84:8
 84:9 93:2,3 94:7
 131:15,16 132:9
 146:21,22 149:3
 151:1,3 153:11
 154:12,13 164:17
 164:18 165:18
 170:3,4 181:18

182:5,16 184:7
 194:11,12 201:19
 201:20 217:9
 234:21,23 245:6,7
 245:21 249:24
 258:10,11 260:13
 260:14 261:17,18
 262:17 265:22
 270:1,2,24 272:5
 272:6 280:1,2
Candace's 43:25
 245:21 280:22
candles 233:20,25
 234:1,2,4 235:4
cap 178:8
capabilities 97:18
 97:25 98:3
capability 67:22
capacity 152:19
CAPITOL 1:16
capture 14:8 53:18
captured 278:25
car 23:12 45:10
 90:23,24 91:12
 97:1,13,18 99:11
 102:10,11 104:10
 106:19 107:13,15
 110:18 113:10,14
 113:21 114:15
 115:17 117:24
 118:23 119:2,7,15
 119:25 129:16,18
 132:12,14 136:9
 136:10 137:23,24
 142:4,5 146:1
 150:6,8 154:20,23
 170:22,25 179:18
 180:1,7 181:2
 182:4,21 183:17
 183:20 184:11
 185:19 186:7,11
 225:5,5,12,12,16
 225:16 226:21,23
 226:24 227:9,11

228:4,12 229:17
 229:23 230:1,2,4
 230:5,8,10,18
 250:10,10,12,14
 250:16,22,23
 251:1,2 252:6,6
 252:12 254:6,7
 273:9 283:7
card 239:10
care 70:1 109:17
 125:2 271:13
careful 23:19 26:8
 118:9
carefully 104:19
Carini 28:14,15,16
 247:24,24
Carl 15:24 16:3,8,8
 28:19,20 43:7,8
 59:14,15,25 63:19
 64:7 73:12,13,19
 95:7,8 103:17,18
 129:9 132:10
 160:4,5,6,22
 190:8,9 210:3
 222:1,17 226:16
 227:1 248:15
 274:10,17,18
carried 225:11
carry 105:2
cars 38:20 107:25
 110:15 111:11
 113:19,20
carts 212:11,11
Cary 15:25 16:3,8
 28:20,20 43:8,8
 59:15,15 60:1
 63:20 73:14,19,19
 95:8,8 103:18,18
 129:10 160:6,6
 190:9,9 222:2
 226:17 227:1
 248:16 274:18,18
case 49:15 116:19
 159:18 166:8

198:9,21 230:16
 241:16 242:11
 271:17
cases 23:24 158:23
 159:2,12 180:2
 212:10 227:16
cast 34:25 50:3,23
 51:9,20 57:15,15
 57:20 58:5 73:6
 73:10,24 89:9
 90:1 99:19 120:9
 125:9 133:24
 134:22 150:2
 155:8 171:18
 180:10,24 184:5
 186:8 192:15
 199:9,18 208:22
 221:15 230:24
 246:7 266:2,24,25
 275:15 283:15
casting 50:18 73:7
 74:3 85:7 89:10
 89:20 95:16,16
 99:10 120:10
 133:25 150:3
 166:13 180:24
 202:3 205:10
 208:25 213:20
 223:9,14 231:1
 266:4 283:18
cat 114:8 251:12
 277:5,25 278:14
 279:5
catastroph-- 103:5
catastrophe 103:6
catch 144:16
catching 144:14
categories 65:20
category 29:20
 35:8 47:17 76:11
 76:11 79:11,11
 239:13 240:10
 250:20 252:18
 280:25

cats 32:21,22
caught 38:21
 179:10 187:19
 226:4 278:25
cause 23:22 109:14
 124:14 145:5
 187:16 188:8
 201:14,14,16
 206:16,21 207:5
caused 140:3
 145:14
causes 22:5
causing 49:11,17
 169:6 194:4
 201:23 203:21
caution 107:20
 108:6,10
caveat 44:21 47:9
CCR 1:15 286:19
 286:20
ceiling 126:17
cell 9:23
center 107:23
 219:5 225:20
 226:10 228:10
 231:4
centers 55:4
central 30:6
cents 284:4,4
certain 19:21 35:15
 45:21 141:11
 154:6 185:2
 211:17 229:1
 235:5 245:16
certainly 43:15
 95:13 137:13
 146:11 159:10
 227:19 248:17
certificate 164:2,5
certification
 158:21
Certified 3:5 286:4
 286:20
certify 286:5,13

certifying 163:22	241:11 242:7,20	check 56:18 68:16	245:21 247:22,23	clean-downs 278:7
CFR 122:18,18	245:23 246:9,12	68:17 105:13	249:4 253:11	278:23 279:4
179:14,15	246:13,18,21	108:18 272:25	257:4 264:9,14	cleaned 277:9
Chair 31:22	249:8,9,12,14,16	check-out 239:15	266:3 268:25	cleaning 192:12
challenge 240:15	251:23,24 254:9	checking 108:4	269:21 274:21	277:3,6,7,10,12
challenges 99:1	254:11,12,16,17	checkmark 12:14	279:10	277:14,21,23
240:11	255:11 256:3,21	checks 54:16,17,18	clarifications 6:22	280:13,15,21
chance 25:16 111:7	257:13,22 262:12	54:20,22 56:6,12	16:24 34:9,12	281:2
139:18 140:4	263:8 266:18,21	57:18 72:4 104:9	36:2 57:14 73:6	clear 30:8 42:22,23
164:14 178:14	266:22 267:3,7,20	105:10 200:21	75:1 80:16 124:1	85:17 116:4
change 5:20 6:10	275:3,3,9,12,13	chemicals 22:11	125:8 166:12	154:10 198:3
17:3,17 18:11,13	275:20,21 281:4,4	chest 10:7	169:13 171:5	203:10 222:5
18:15 53:1,16,17	281:11	chief 28:7,12	188:22 204:18	237:2 239:20
54:5,16 57:17	change-outs 230:16	children 23:6	205:8 208:22	243:11 244:15
66:6 77:19 78:3	changed 17:1 65:2	chime 48:24	211:24 221:15	245:17 248:24
80:5 82:10 83:9	78:2 83:6 94:3	chip 276:11	235:2 269:17	261:4 262:2 269:9
87:12 88:14 89:25	146:25 160:20	chipped 175:18	280:19	286:11
90:3 93:15,22	164:23	choice 132:2,3,4,11	clarify 42:18,19	clearance 122:17
94:3 99:17,21	changes 4:13 8:11	132:18,22 133:12	46:20 73:14 83:15	clearances 128:10
101:4 115:14,25	8:15 16:12,21,22	choose 77:13	84:2 133:3,16,23	179:8
120:17,20,22	16:23 20:12 115:1	132:13	161:25 162:1	clearly 160:22
124:5 125:19	115:9 134:1 153:1	churches 55:3	163:8 185:4 193:1	clears 223:5
129:11 134:3,5,6	175:12 191:13	circuits 42:3	195:1 198:23	Clery 31:17,20,21
134:9,10 138:2	216:6 242:19	circulation 148:13	204:6 208:11	52:2,11,14 244:13
148:2 150:13	251:9 256:18,18	circumstances	254:2 275:1	244:14
155:25 156:2,5,7	263:7 282:7,8	141:11,24	clarifying 15:10,20	cleat 217:24 218:4
159:6 160:16	changing 66:7	city 28:13 29:16	57:8 58:24 73:4	218:5,15 222:23
166:20,25 171:13	93:21 233:25	30:23 40:13 69:9	97:20 99:9 100:23	click 13:13
171:15,19,21	channel 14:10	89:2 128:1 143:22	103:16 118:22	climb 111:11
172:18,20 174:20	chapter 72:20,22	191:19 197:7	130:4 137:6	climbers 69:13
174:23,25 175:2	73:1 128:2 259:15	208:19 234:17	141:15 150:1	Cline 29:18,19,19
179:21 186:13,20	charcoal 144:7	241:13 243:6	158:15 168:15	134:15,16
190:21 196:2,3	charge 169:9	280:5	179:20 180:9	close 8:4,5 112:18
199:6,13,15,21	charged 136:20	claims 41:12	226:15,15 230:23	131:12 170:24,25
202:8,9,13,15	Charlie 67:3	clarification 43:5	230:25 234:15	174:12 193:25
206:3,3 209:6,9	charred 22:1	52:2 55:7 60:5	237:12 238:4	221:10 284:24
209:21,23 214:2,4	chart 118:4	63:20 68:1 72:15	251:5,5,6 279:11	closed 217:21
214:9,11 220:23	chasing 65:5	75:14 91:20	clarity 181:20	218:14 220:25
223:1,12,13,15,19	chat 66:25 67:7,9	115:21 137:11	238:20 268:21	222:21
223:22 226:1,19	100:21 117:15,20	160:7 163:3 175:1	classified 226:13	closely 183:1
227:5,18 231:6,8	119:21 143:19	190:8 201:19	clause 82:16 146:12	closer 170:22 220:7
231:11,13 232:9	145:21 165:9	203:10 211:11	clean 24:4 278:10	220:18 258:1
232:18 235:6,8,12	196:16 223:4	212:19 218:25	clean-down 278:17	closest 222:11
235:13 237:13	263:25 274:12	219:23,25 228:1	279:1,15	closing 131:6

222:23	260:17,18 261:2	comes 4:19 38:6	125:9,11 130:4	company 29:24
cloth 284:13	262:4 263:1,2,2,6	61:9 64:18 70:8	133:23 136:21	32:16 58:22 59:4
co-worker 121:5	263:9,10 267:5	127:18 144:17	137:6,12 138:11	64:14,15,16,18
coating 248:9	269:7,10 270:6,19	185:25 198:2	141:16 143:12	76:9 158:21 237:5
code 16:23 29:17	270:21 271:23,24	217:5 240:20	155:8 156:21	237:8 238:8,8
33:24 35:15 36:9	272:14,17 277:21	244:21 273:19	168:15 171:5	239:7,20 240:3
37:2 40:13 42:19	280:3	274:1	174:14,25 195:10	243:20 271:7
42:24,25 43:11	code's 247:14	comfort 26:3	198:22 200:14	273:14
49:23 54:13,24	codes 34:14 41:19	comfortable 282:25	202:2 204:5	company's 62:16
57:5 61:24 63:21	115:5 123:5 163:4	coming 23:9 52:5	207:21 212:19	71:9,15 237:10
66:7 67:1,7 69:1	164:25 236:19	76:4 83:9 109:7,8	251:5,7 258:4	239:10
71:3 72:1 75:8	272:18 280:5	109:20 135:23	279:11 282:17	company-specific
77:12,13 80:17,25	codified 156:24	178:25 201:12	commercial 65:25	62:22
82:4 84:2,10	codifying 8:15	230:2,6 255:21	67:19 68:3,21	compare 233:12
85:10 86:7,19,24	cognizant 23:18	283:22	69:3,11,12,18	compared 158:13
87:1,18 88:10	coincide 86:6	comment 37:20	70:2,9,24 71:1,3	183:1
98:11,14,18 99:12	coincides 80:4	38:4 40:23 42:11	80:24,25 85:15,21	comparison 48:11
106:12,24 113:10	coinciding 279:5	43:3 46:5,11	86:17,17,19 91:7	compiled 225:7
114:17,22 115:8	cold 22:12,15 23:17	48:14 63:2 65:8	91:14,15 97:8,10	complete 80:22
119:16,21 122:20	23:17 24:9 25:2	71:4,25 75:15,16	97:15	83:4 158:25
126:2 130:8	collapses 185:19	75:19 76:17 78:12	commitment 190:5	286:10
137:18 139:25	collapsible 181:9	81:2 87:8 95:5	committee 1:4 3:2	completed 43:16
143:24 146:23	185:16	105:19 106:20	3:6 4:17 6:18	47:23 76:6
148:10 151:17,18	collapsibles 181:15	107:8,11 114:20	49:20 59:16 78:1	completely 84:3
153:5,6 154:4	colleague 44:17	123:20 131:10,19	85:11 103:19	149:23 152:11
158:3,5 159:2	color 208:14	132:1,6 136:18,21	104:19 169:17	218:20
160:21 161:13	column 266:9	136:24 138:8	180:14 251:10	compliance 54:25
162:3,4,6,7,10	combination	142:25 144:2	255:12,13	158:5 190:2 236:3
164:9 166:16,21	160:12	146:6 147:8	committees 30:10	236:23 237:8
169:17 175:14	combplate 187:20	148:17 153:14	30:11	239:10 250:18
180:13 181:23	187:23 191:22	155:6 165:3	common 219:14	262:10 264:17
182:2,6,8,17,17	194:6	170:13 179:24	commonly 189:12	compliant 136:13
186:6 189:19	come 3:24 7:15,17	180:12 181:25	communication	138:17,18,20
190:1,2,4 194:14	8:3 29:15 53:21	193:18,21 257:21	98:8,13 99:5	139:25 266:23
196:9,12,20	56:22 64:8 104:8	274:12	284:17	267:5
197:20 198:18,19	113:23 121:21	commenter 138:15	communities	comply 122:17
199:22 202:7	122:1 137:24	comments 34:9	103:22	123:6 125:23
205:17 207:23	175:5 180:22	36:6 44:15 46:14	Comp 41:12	166:8 240:15
212:9 221:3	191:10 194:19	46:24 48:22 49:12	companies 99:3	259:8 260:6,20
226:22 227:7,23	195:10 211:12	52:23 58:25 75:2	139:9 240:7,9	261:3,14 262:13
234:18 237:9	213:4 217:3 243:1	85:24 88:1 91:20	244:25 271:15	component 137:17
239:4,20 240:8	258:16,19 259:1	94:16 97:20 99:9	279:20	168:10 169:4
241:7,8 245:24	260:24 263:11	100:23 101:2	companies' 240:1	components 137:16
248:24 256:14	271:15 276:12,20	103:16 117:17	240:17	158:9 229:2

247:17 277:8	confined 80:15 83:22	considerably 256:23	contradictory 37:20 61:4 92:17 152:17 153:7	conversations 5:4 5:10 6:19 16:20 46:16,17 79:20,23 174:15 175:14 177:18 224:18 255:20 282:11
compounded 168:4	confirm 51:1 65:13	consideration 81:23 145:17 257:24	contribute 107:20	converts 149:17
computer-aided 286:9	confirmation 121:5	considerations 140:11	control 13:15 36:12 80:11 82:17 89:6 122:15,15,16 124:18,19 125:16 125:23 127:22 128:3,6,11 129:20 129:24 134:1 139:16 147:18 179:8 232:3,4 234:5,8 236:2,5 236:16 239:6 241:17 245:14,23 246:4,10,19 268:7 274:14	conveyance 86:18 195:9 236:9,15,19 237:23,24 266:23 267:5
concept 108:6	confirmed 226:8	considered 36:11 49:24 54:22 56:6 58:22 69:11 85:15 92:24 114:9 180:19 194:17 256:17 257:9,11	controller 80:13 103:15 106:23 107:2,3,16 113:13 122:13,23 123:9 124:12 145:24,24 225:11,11 232:2 256:18 257:13 268:7 273:10,21	conveyances 4:23 54:23 56:7 67:20 95:20 108:9 157:15 196:22 242:15,25 266:20
Concepts 31:22	confirming 252:12	consistently 56:11	control-- 129:20	conveyances 4:23 54:23 56:7 67:20 95:20 108:9 157:15 196:22 242:15,25 266:20
concern 44:1 47:15 56:16 68:13 82:4 91:6,24 97:6 169:19 190:23 191:7 192:16 213:13 221:19	conflict 98:18 122:20 123:4,17 250:17	consisting 149:16	controlled 145:16 252:25 253:5,21	cook 25:14
concerned 212:22 221:23 257:8	conflicting 237:22	constantly 133:15 139:10,11	controlling 137:23	cooking 22:8,9 23:3 23:8,9 24:24
concerns 37:8,10 40:15 41:10 52:22 168:9	conflicts 183:2	constricting 23:25	controllers 127:12 129:21 147:17,17 261:16	cool 8:24 17:17 21:9 24:4 173:6 216:20 217:16 255:4
conclude 282:6	conform 90:24 96:22 146:3 158:10 162:22 256:13 262:25	consulting 28:21	controller 80:13 103:15 106:23 107:2,3,16 113:13 122:13,23 123:9 124:12 145:24,24 225:11,11 232:2 256:18 257:13 268:7 273:10,21	copies 240:11
concluded 121:13	conformance 158:7 158:11 159:23 160:10,12 162:18	contacted 123:21	controlling 137:23	core 122:20
concludes 135:1	conforming 158:6	contactors 145:4	controls 81:12 140:12 225:15,15 274:8	corner 13:11
conclusion 26:8 250:21	confused 146:19 239:9 245:9	contacts 167:19	controlling 137:23	corners 279:20,24
concur 143:3	confusing 34:4 53:11 149:20 163:1 181:11 244:9	containing 64:1 67:13	controlling 137:23	correct 19:15 20:20 36:19 42:24,25 48:18 66:9 77:20 85:8 134:15 152:11 160:25 182:6,23 190:11 221:4 253:9,15,25 261:22
concurrently 277:5	confusion 60:4 61:9,16 62:10 85:14 237:18 263:23	continue 8:4 55:23 104:12 177:13	controlling 137:23	corrected 198:11 268:8 271:3 274:15
condition 116:13 188:14 207:11 253:2,3,20	conjunction 37:24 182:22 183:13 274:7 280:24	continued 95:14 276:15	controlling 137:23	correcting 114:17
conditions 45:22,24 103:3,5 129:12 152:8 180:2 181:24 212:12 277:11 280:14	connected 273:10 273:20	continuing 177:15	controlling 137:23	correction 117:21 243:12
conduct 54:19 68:12,15	Connecticut 27:16	continuous 206:24	controls 81:12 140:12 225:15,15 274:8	correctly 83:24 89:11 112:21 132:17 169:10
conducted 158:25 284:3	connects 79:22 210:15 213:14,24	continuously 242:22 277:18	controlling 137:23	
confer 52:9	consensus 3:24 8:12 35:14 46:14 46:25 155:20	contra-- 182:25	controlling 137:23	
confident 15:22 282:9	consent 212:13	contract 64:17	controlling 137:23	
configuration 143:15 212:10 277:17	consequent 68:10	contractor 4:25 28:3 32:5 229:10 237:21	controlling 137:23	
configurations 226:12	consider 44:19 95:1 136:23	contractors 265:14	controlling 137:23	
		contracts 70:12	controlling 137:23	
		contradict 37:22 153:4 182:24 184:20,22	controlling 137:23	
		contradiction 130:12	controlling 137:23	

220:4 267:19
cost 160:2 256:23
 280:1
costs 43:15
count 12:23 13:8
 104:7 188:9 207:6
 210:3
counted 13:18 15:4
 172:19
counter 22:17
counter- 105:11
counterweight
 105:25
counterweights
 108:1 113:20
counties 242:17
counting 112:19
 135:16
counts 15:11
county 45:7
couple 15:9 33:9
 37:16 43:21 44:15
 49:9 52:23 56:19
 66:10 72:7 88:8
 101:2 117:16
 137:12 145:2
 153:10 191:13
 239:2,24 240:11
 283:6
couples 210:16
 213:14,24
course 37:6 230:17
 231:23,23
court 1:18 3:5 16:2
 38:14,15 55:22
 56:1 117:7,8,12
 176:13,13,17
 216:16 218:9,10
 260:9,9,12 286:4
 286:20
cover 24:4 153:2
 199:5
covered 62:2 84:1
 88:7 147:2 157:15

164:25 209:4
covering 10:16
covers 67:19 79:13
 163:15
Crap 21:13
crash 252:6
crawling 278:11
crazy 133:13
cream 22:15,19,21
create 17:18 98:17
 108:12
creates 148:25
 164:11
creating 96:24
 210:25 218:19
crew 192:12
crews 195:15
critical 105:4
critically 92:18
crucial 140:25
 277:20
crumbled 108:3
crushing 230:2
curiosity 129:2
curious 48:11
 127:3 269:20
current 50:6 55:12
 57:11 98:10
 136:22 157:23
 262:9 281:9
currently 42:19,24
 42:25 44:6,9,17
 55:14 59:20,23
 74:22 76:10 77:1
 112:10,11 137:17
 146:23 182:18
 183:17,19 196:9
 196:11,19 226:7
 226:12 258:13
 259:7 261:2
 267:24,25 268:1
 268:18 270:3
customer 70:5
 204:22 265:1

cut 5:1 14:8 87:21
 87:23 111:1,7
 178:21 279:20,24
cycles 40:13
cylinders 143:2
 248:7

D

d 2:1 3:14 67:17
 102:11 179:15
 184:25 185:5
damage 49:11,17
 81:12 103:12
 106:3 109:14
 112:14,16 113:19
 118:13,24 192:9
 194:5,7 201:14,17
 201:17 203:16
 211:4 251:16
 252:24
damaged 113:18
 116:13 240:13,18
damages 25:2
 108:8,12 109:3,22
damaging 278:19
danger 92:24
 136:23 179:14
dangerous 92:23
 93:5 137:21
 212:14 278:9
dangers 139:12
darn 49:21
data 44:5 45:8,12
 46:6,8 160:3
date 265:3
daunting 284:21
day 1:8 3:1 20:18
 23:13 89:19 91:8
 119:3 135:2,19
 137:15 175:15
 258:20 265:1
 279:19 283:11
 286:17
days 3:20,21 9:21

265:3,4 283:6,11
dead 154:9 178:12
deal 24:11 77:10
 108:24 129:18
 196:21 271:15
dealing 24:2 25:7
 111:15 130:23
 132:18 257:2
death 154:9,14
debating 237:25
 238:1
debris 118:25
 119:7
decide 165:15
 255:15
decided 256:3
decides 70:6
decision 18:12,17
 159:17 160:3
 174:4 177:22
 238:3,4 264:15
decisions 176:4
 180:16
decommissioned
 236:18
decreases 168:2
dedicate 129:22
dedicated 128:6,10
deep 22:1 140:17
defect 258:19
deficiencies 268:8
 271:3 274:14
define 4:19 5:15
 257:18 266:8,12
 266:13
defined 179:9,11
 263:24
definitely 40:9 43:5
 77:23 85:6 130:25
 138:19 178:15
 271:6
definition 149:15
 181:3 194:20
 241:15 257:25

258:5 259:17,20
 259:21 260:1
 264:4,11 266:14
 269:3
definitions 257:9
 258:12 259:14,14
 259:16
deflector 228:17
degree 21:20,22,25
 22:3,13,20,22
 24:1 122:21 144:9
degrees 212:9
delay 112:12
 206:17
delete 82:5
deleted 168:9
delta 119:24
demonstrate
 250:18,21
demonstrated 37:3
 250:24
demonstrates
 239:10
deny 159:22
Depart-- 159:16
department 1:1
 30:20 35:7,23
 160:2 164:20,22
 261:7,23 262:3
 263:5,5
depend 277:11
 280:13
dependent 3:22
 229:9
depending 7:19
 11:10 24:14 26:1
 45:23 203:20
 204:2
deployed 180:6
depressed 189:10
derive 238:21
description 129:15
design 103:24
 164:22 180:1,5,20

181:17 277:17	191:20,24 193:2,5	199:6 200:9 203:8	261:14	62:1,2 63:16
designation 86:18	193:22 199:2,12	227:12 228:12	discuss 4:18 5:7	64:13,19 67:10,11
269:10	199:16 200:10,21	230:20 232:9	43:21	71:11,17,20 72:12
designed 47:25	201:2,3 202:4	233:7 238:16	discussed 120:13	73:23 77:4 78:23
106:1 147:23	203:4,9,14 204:23	239:11,12,17,17	156:22	236:16 237:2
153:21 210:15	204:24 205:14	242:6,16,17,21	discussing 57:2	238:1,10 239:4,13
213:23 229:4	206:14,15,18,20	243:24 244:25	193:4	239:23 245:8,15
252:22	206:25 207:5,8,21	269:7	discussion 7:14	264:21
designs 229:1	207:25 209:1,5,10	differentiate 79:11	43:13 135:5	documentations
desire 81:19	220:5,9 222:12	80:24	146:10 167:13	68:23
Despite 137:1	253:3,4 256:21,24	differently 23:1	discussions 135:9	documented
destroy 196:1	268:15,19 271:9	24:15 85:20	180:19,21 266:8	271:19
destroyed 195:18	271:17 272:2,9	182:15	displace 105:24	documents 61:19
195:23	275:13	differing 17:9 18:9	displaced 105:12	237:7
detail 220:10	devices 39:10 96:20	34:6	105:25	dog 283:8
detailed 104:10	96:21 132:16	difficult 244:19	displacement	dogs 32:23
210:21	167:18 197:10	245:2 258:5,6	111:20	doing 3:20 4:21
details 271:9	205:1 228:19,19	difficulties 130:23	displaying 120:5	8:21 20:9 21:18
detect 251:25	250:11 251:2	Dig 247:14	disposable 44:10	23:19 41:6 79:18
detecting 91:18	254:7 268:3,5	dimensions 222:14	disposal 71:17,21	80:7 82:18 84:7
92:25	270:7,9 273:17	diminish 94:20	disruption 143:17	87:16 88:17 93:11
detection 91:2,18	275:5	95:3 174:16	dissipate 169:9	96:23 108:14
92:5 93:14,23	devil's 193:11	177:25	distance 38:8 47:19	116:16 119:2
95:18 102:7	diagram 67:12	diminishing 154:5	49:2 167:25 168:1	126:21 128:23
115:17 117:22	222:10	dinner 284:25	168:4 203:23	129:3 131:21,22
118:3,4	diagrams 63:12	direct 35:20 48:13	204:2 218:5,21	132:24 135:2
detector 94:12	239:14	130:12 132:10	221:3,11 222:20	155:16 159:3
258:21,25 262:23	die 31:11 139:19	229:19	222:24 223:15	165:11 179:1
263:9,14 270:17	differ 269:21	direction 42:7	distortion 109:16	189:6 196:3
270:20 271:12	difference 39:20	127:23 162:5	109:18	208:18 220:1
determinations	125:18 228:22	201:11 204:2	distractions 10:1	223:10 224:14,18
255:18	263:24	230:9 250:16	district 108:2	225:1 227:8,20
determine 67:6	different 13:13	252:20	Ditto 161:2	229:15 230:7
159:21 277:12	17:13 23:2 24:11	directly 10:24	dive 135:24	244:6 250:23
280:15	25:8 34:6 37:10	163:5 180:19	division 141:20	251:15,17 252:18
determined 152:23	63:10 65:21 69:3	248:12	159:17	253:1,5 257:13
developed 163:13	75:19 85:22 88:9	dirt 277:10	dizziness 24:17	258:23 265:17
developers 264:22	88:13 108:20	dirty 279:16	doctor 22:23 25:19	277:22 282:24
deviates 206:19	109:10 114:21	disagree 258:8,12	doctor's 26:7	283:13
deviation 206:23	125:12,16 126:15	disagreeing 84:13	document 54:19	Dolgikh 12:11,24
device 46:4 64:4	141:6 148:4	disallow 44:20	87:24 242:19	28:24,24 39:19
67:16 102:7	149:24 152:19	disassemble 229:5	documentation	44:25,25 53:5,10
115:17 187:14,20	155:3,5 184:8	discern 152:20	58:14 60:14,20	60:4,18,23 64:23
188:1,8,11 189:9	186:3 194:25	discourage 260:7	61:7,13,14,18	64:25 68:5 69:7

72:14,17,18 81:15 81:15 86:9,9 92:8 92:8 94:17,17 107:19 116:2,3 130:6 133:2,2 140:8,8 148:3,3 153:12,12 161:3,5 161:6 162:13 186:22 232:7 237:15,16 259:11 259:11 269:1,1 272:23,23 278:3,4 283:25 284:12	195:16 downward 154:5 dragged 278:21 draw 20:25 175:15 drift 203:25 241:5 drifts 203:24 dripping 24:5 drive 256:18 drives 147:17 driving 80:13 147:19 225:9,14 229:15 driving-machine 187:18 206:22 drop 13:13 229:2 dropping 96:24 drops 238:9 Duane 30:21,22 38:1 69:8,9 81:2,2 81:5,14 85:25 86:1 104:16 105:17,20 107:4 107:10,12 111:18 114:13,18 127:6 127:10 163:7 164:8,15 185:11 191:19 192:22,24 196:23,25 197:7 204:9 208:19,23 232:11 234:17 241:12,13 242:8 dude 52:24 due 91:10 97:11 136:14 226:5 265:3 277:16 dumb 93:5 dunk 24:9 duper 24:9 duplex 273:25 duplicate 232:7,8 232:14 233:8 duplicates 224:21 duplication 125:22 125:25	duty 41:21 Dylan 14:23 29:2,3 29:5,6 30:14,16 48:5,6,18 55:16 55:18,23 56:15 64:10,11 65:10 75:3,4 78:11,13 78:19,20 101:16 109:5,6 111:16,17 112:4 131:2,3 150:14,16 151:18 151:21,22 205:21 Dylan's 29:25 48:14 153:13 dynamic 187:16 206:21	276:12 282:24 283:12 easily 236:24 240:18 easy 178:11 234:9 eat 195:20 242:14 echo 56:15 138:11 edge 95:13 222:4,7 258:19,21,25 262:22,23 263:8,9 263:14 edges 258:15 edit 87:21 editing 20:15,24,24 85:6 89:16 edition 35:13 55:7 55:12 57:2,10 76:20 98:10,16 editions 55:14 57:5 98:12 edits 20:17 21:2 120:12 educate 18:11 205:9 educated 11:6 15:18 18:12,16 174:21,23 177:22 178:2 182:12 207:22 educatedly 135:11 educating 18:15 189:24 effect 4:22 67:21 effective 75:6 188:19 207:16 effectively 63:16 188:14 207:11 efficiently 238:17 effort 3:23 egregiously 47:19 egress 118:17 219:9 219:9,16 eight 9:20 285:1 either 4:14,22	50:16 111:19 145:17 151:16 154:14 175:8 181:5 197:20 206:18,19 220:16 226:12 233:7 241:23 251:23 260:4 electric 88:24 187:17 206:22 225:7 232:15,19 233:18 268:11 269:6 274:22 electrical 23:22 28:2 122:16 123:13 125:22 128:9 132:16 141:24 148:6,12 149:5,17 168:10 169:22 228:19 232:19 electrically 137:23 147:16 150:10,22 153:17,20 electrician 273:14 electricity 22:11 23:23 electrify 170:20 electrifying 169:19 electrocuting 169:23 electrocution 226:5 Electrolysis 247:14 electromechanical 188:13 207:10 electronic 150:10 167:18 240:1,6,16 243:21 electronically 147:21 168:12 240:5,6 241:23 242:5 243:10 elegant 258:7 element 23:4
		E		
door-doo-doo-doo... 196:23		e 2:1 3:14,14 102:16 119:22 266:9 286:1,1		
door 91:18 94:12 95:12 102:15 112:22 124:7,9,9 124:12,13 128:19 129:18 130:13 131:12,18 133:5 133:19 167:18 168:11 169:4 217:18,21 218:14 219:4,5,18 220:1 220:2,6,10,18,25 221:1,7,21 222:21 223:16 227:14 256:21,23 258:15 258:19		e-mail 282:18 283:6 e-mails 4:16 9:22 earlier 25:21 27:2 47:16 53:16 77:7 84:11,17,22 104:17 149:12 163:14 164:3 170:19 197:8 274:21 early 7:22 174:11 175:4 282:16 earthquake 101:24 102:3,18,23,24,25 103:4,9 104:2,3 104:21 105:6 107:21,24 110:16 112:8 113:17 115:2,10 118:5,7 119:22 120:2,6,12 ease 85:19 181:10 easier 16:16 190:4 219:8,9 221:7		
doorjamb 130:21				
doors 90:23,23,24 90:24 91:1,4 92:4 92:14,16,23 93:4 93:12,21 112:17 130:10 218:19 219:15 220:14 222:25 274:2,2				
double-check 191:18				
double-checking 233:11				
doubt 189:23				
downtown 107:22				

<p>Elena 28:10,11 elevating 24:19 elevator 1:4 3:1 27:19 28:7,12,21 28:24 30:17,19,22 31:2,6,15 32:5,20 33:3 35:17,18,22 39:25 40:1 44:25 45:21 48:10 49:4 58:22 59:4,13,21 60:23 62:17 64:12 64:18 72:18 74:22 80:13 81:15 82:8 84:1 86:9 91:7 92:8 94:18 97:8 102:6,9,18,22 103:2,3,6,8,13,15 104:4,5,8,22 105:15 106:5,5,23 107:1 108:13 109:1,14,15,16 110:4,5,22 111:19 111:22,23 112:16 112:19,22,25 113:3,4,6,22 114:3,10,23,24 115:5,6,13,20 116:3,7,15,17,23 118:10,12 119:8 119:25 120:14,15 120:19,21 125:23 129:4,14 132:15 136:8,10 137:14 137:16 139:16 140:8,13,20 142:1 143:18 144:20 145:11,23 146:4 146:15,15 147:12 147:15,21 148:3 150:6,8 153:12,17 153:20 154:20 158:21 159:16 168:5 169:6 179:17 182:18</p>	<p>188:15,20 189:7 194:18,23 207:12 207:17 213:8 225:9,10,14,15,19 226:23,23 227:12 227:17,21 228:16 229:5,14,17,23 231:3 236:10,21 237:16,21 238:5,8 238:8 242:14 243:12 244:25 252:20,23,24 253:1,8 259:12 268:4,6,7,9,20,23 269:1,7 270:8 271:12,13 272:23 273:5,25 274:1,8 274:8,13 278:4 elevators 33:21 38:5 48:2,25 54:23 56:7,11 60:8 61:15 65:19 81:11 93:5 101:24 105:8 106:13 115:2 120:11 137:20 143:25 144:15 145:1,14 163:14 175:24 185:3 227:16 229:14 232:16,19 234:22 248:1,2 268:12 269:4,6,9 274:23 eleven 66:7 72:7 96:13 eliminate 93:22 98:14 139:2 166:3 211:4 218:20 259:5 eliminated 82:17 88:10 eliminates 91:17 97:17 eliminating 98:13</p>	<p>211:15 elimination 211:2 emergency 49:1 96:20,21 97:1 99:11 101:24 102:6,9,17,21,21 103:9,14 106:13 106:21,24 108:7 108:23 109:10,13 110:12,24 112:23 112:25 113:2 114:10 115:3,12 115:16,19 116:6 119:4,11 120:12 120:13,18,20 143:23 225:10,14 227:8 250:11 251:3 253:7 254:8 emotionally 15:17 135:11 emotions 138:24 employer 179:12 employers 139:10 empty 102:10 104:11 115:17 EMTs 119:5 enact 99:4 enclosed 122:24 enclosure 113:13 encourage 95:9 103:19 ended 82:15 253:6 energized 168:13 energy 149:17 229:24 enforce 258:6 262:1 enforceable 210:21 enforced 236:19 260:8 261:12 enforcement 136:15 221:24 237:9 enforces 34:15</p>	<p>enforcing 260:5 261:7,8,13,22 262:3 263:17,18 engage 251:16 engaged 7:12 engagement 2:8 6:7 6:23 9:8,16 18:25 engineer 104:25 engineered 136:13 138:16 142:9 170:7 engineering 29:7 123:8,25 136:17 164:10 168:7,10 170:12 179:7,19 188:18 207:16 226:7 247:17 enhanced 98:8 ensure 207:14 237:8 248:25 268:5 274:12 279:22 ensures 236:24,25 247:17 enter 103:7 119:6 126:10 140:24 141:2 219:9 entered 148:14 entering 147:16,22 148:7 151:11 153:21 entire 130:8,8 131:6 172:10 203:18 entirety 257:3 entities 239:4,17 entity 236:25,25 237:6 entrance 112:16 entries 118:24 entry 147:24 203:4 203:9,14 204:24 205:14 223:16 environment 7:11</p>	<p>95:2 128:24 132:13,19 144:11 249:2 252:25 253:21 environmental 247:15 environments 66:15 124:19 EQ 118:7 equipment 37:6,9 38:6 39:3,16 41:20 42:5,6 43:25 45:24 47:17 47:23 49:11,18,25 54:20 60:16 61:3 61:15 63:11,17 64:20 65:3,4,19 65:21,24 66:3,14 67:25 68:3,25 71:7,8,16 72:21 72:24,25 73:2 75:12 76:1,6,11 76:13 81:7 82:6 82:18,20,22 83:19 83:23 84:1,16,20 85:15 86:6 95:18 99:1,4 103:11 106:3 107:25 111:12 123:3,13 123:14 127:1 128:9,16 129:6 131:25 132:17 137:1,5 139:15,25 140:6,12,25 141:7 141:9 145:15,16 147:11,12 149:2,7 150:21 151:25 152:1,4,7,8 154:8 157:4,9,12 168:5 169:11 196:1 201:22 210:14 211:4 213:22 225:19,24 226:8 228:18 231:3</p>
--	---	--	---	---

232:9 236:3,7,12 236:18 238:13,18 244:5,6,11 251:17 277:16 278:19 equivalent 158:13 158:19,23 Eric 29:8,11 38:11 38:16 39:8,21 113:16 116:14 126:5,23 139:7 140:9,24 200:15 201:1 203:13 205:21 211:14 214:7 215:4,24 219:2,17 228:2 Eriksen 3:7 12:19 13:5 19:4 20:6 21:9 26:19 27:10 27:13,18,22,25 28:4,10,14,19,23 29:2,5,8,10,13,14 29:18,21 30:1,4 30:14,18,21,25 31:4,7,13,17,24 32:3,6,15 33:2 34:20 40:19 50:25 51:25 53:25 54:8 58:7 71:22 72:13 72:16 73:12 74:9 74:14 78:8,17 90:11,14,16,19 96:2,11 99:23 100:4,9,11,18 101:8,12,19 119:19 121:15 126:5 127:6,9,24 134:23 138:7 156:16 167:10 172:6,15,22 173:4 173:6,14 176:19 186:25 187:8 198:14 200:5 202:25 206:10 209:14,18 210:9	214:18 216:9,13 216:18,20 217:2,8 223:3 224:5 231:23 235:21 246:22 247:6 250:4 255:2 267:14 276:3 281:20 284:14 285:3 ESAC 5:10,12 16:13 20:16,19 31:22 52:3,5 255:7,12,13,22,25 escalator 125:14 187:13,17,22,25 188:10 189:18,25 191:8,20 192:12 194:1,20,24,25 195:25 199:2,7,12 199:16,16 201:10 201:11 203:23 204:12 205:15 207:7 212:3 214:22 234:20 277:3,14,16,23 278:6,11,16 279:1 280:21 281:2 escalators 33:21 108:4 125:13 126:7,9 127:20 132:1,2,2 194:18 211:6 212:2 213:22 215:13,15 215:23,25 216:3 234:22 235:1,5 277:8 278:18,21 278:24 279:14 ESD 257:22 especially 142:10 156:22 211:17 278:23 essence 179:16 essential 108:14 163:23 238:3	essentially 104:14 226:25 establish 47:7 158:13,19,23 establishes 158:24 evacuate 103:25 112:20 113:5 evacuation 103:21 103:23 104:15 108:16 113:2 evaluate 164:5 evaluation 159:20 Evans 19:14 29:14 32:7,12,12 event 55:4 104:1 105:24 106:2 122:19 255:5 events 188:9 207:6 eventually 128:4 everybody 8:18 12:14 13:1,5,9 22:14,25 26:22 28:8 31:8 72:21 97:22 139:14 163:9 201:9 202:11 209:16 215:14 239:2 245:17 259:4 265:18 everybody's 222:15 everyone's 66:9 exact 97:9 100:24 181:23 207:20 exactly 11:1 42:18 55:11 87:22,23 118:21 245:10 253:19 256:2 257:11 266:13 272:6 exam 62:13,15 examination 62:15 64:2 67:14 277:12 280:14 examinations	58:13,17,20 61:22 61:25 62:5 63:23 73:22 78:23 example 128:17 213:1 252:17 257:12 examples 204:8 212:7 238:14 exams 59:22 241:20 excessive 189:3 exclude 72:7,10 excluded 62:24 excluding 135:6 exclusive 154:1 excuse 73:8 91:2,15 125:24 196:17 206:19 237:25 executive 174:4 exempt 62:11,13 86:3,13 87:5 exempting 80:10 80:17 88:9 89:21 exemption 81:25 244:23 exercise 83:12 exist 73:1 92:2 98:15 123:7 136:16 168:6 188:18 existing 39:15 180:2 181:6,23 182:8,9,18 208:12 274:23 exists 79:5 123:24 170:21 179:18 207:15 225:23 226:6 expand 259:23 expect 255:25 expense 237:10 experience 30:9,13 108:10 114:1,24 116:9 190:25	192:12 226:13 experienced 39:23 expires 112:12 explain 184:20 explanation 256:4 exposed 123:10 132:16 229:16 exposure 249:1 expresses 61:7 extensive 103:12 extent 132:21 219:15 external 148:21 278:24 extra 165:20 189:14 283:1 extraordinaire 30:23 extreme 145:8 extremely 93:5 136:18 278:9 eye 127:17 263:9 eyes 113:24 205:2
				F
				f 123:1 134:2 286:1 fabulous 12:24 face 13:12 faces 178:18 facilitating 114:22 148:1 152:15 282:21 facilitators 3:7 facilities 55:2 110:12 244:18 facility 245:4 fact 44:18 49:14 94:21 108:16 124:9 200:10 240:16 factor 81:8 factors 247:15 factory 41:22 139:21

faculty 128:21	fasteners 210:17	feet 24:19 49:3	fine 6:15 11:3,12	273:4 282:15
fading 7:13	214:1	91:11,12 97:12,13	46:21 68:20 78:17	fix 265:3 271:16
fail 38:19 39:4	fat 23:16	102:14 142:4	183:16 217:12	fixating 145:10
45:12 46:3 49:1	fatalities 136:15	203:22 219:6	283:9	flammable 142:11
failed 38:9 49:1	fatality 136:14	feet/1,400 91:13	finger 203:17	148:24
252:21	138:11,15 140:3	97:14	finish 33:2 197:1	flash 143:25
failing 41:24	179:10,12	felt 78:1,6 191:4,5	272:15,19	flat 158:19 159:6
251:15	fault 100:2 240:21	FEMA 111:24	fire 29:4 55:19	187:22
fails 45:8 49:18	240:23 241:3	fence 48:8 50:16	110:21 114:2	flexibility 44:19
142:1	252:3	109:4 174:19	119:5 142:8 143:5	flip 279:17
failure 40:6,8,8	favor 57:19 89:22	175:6	144:14,16 192:13	flood 108:19
46:9 142:21	95:21 99:15	field 29:11,25 30:2	239:14 268:3,15	111:24,25
144:13 145:12	120:20 121:24	38:16 113:16	268:18 269:16,22	floor 102:12 126:17
253:20	127:5 134:4	114:24 126:23,24	269:22 270:7	127:15 218:3
failures 41:22 42:2	150:19 171:13	139:8 140:1	271:2,8,15,23	234:2,4 272:3
49:14	183:19 197:16	211:14 228:2	272:1,9 273:16	flow 118:4
fainting 24:16	237:10 253:13	fight 128:5	275:5,13 279:18	fluid 143:1,7 144:9
fair 255:18	favorite 25:12	fighter 114:2 119:5	fired 205:4	249:1
fairly 119:16	feasible 104:5	239:14 271:24	fireman 119:12	focus 46:5 128:22
170:24 193:25	248:19	fighter's 269:22	fires 143:6	129:5 179:9,11
fake 71:19	February 1:7 3:4	fighters 110:21	firm 164:10 194:8	226:3 259:13
fall 168:22 179:12	286:17	fighting 242:3	236:7	focused 128:22
falling 7:12	fed 135:17	figure 5:7 15:8 65:6	first 3:25 4:2 17:16	folks 48:7 80:21
falls 211:3 226:4	feel 10:23 11:5,6	82:14 86:21 87:3	21:19,22 22:13	110:13 190:20
false 158:20 197:13	15:10,15,16,18,19	161:17 184:14	24:1,22,23 25:12	follow 141:2
197:13	15:22 20:22 26:25	218:13 244:1	26:24 33:8,9	170:15 181:5
familiar 44:3	34:12 44:20 50:14	253:5	34:12 47:16 51:23	253:18
114:16 241:2	50:17 51:17 67:21	filled 76:13	52:23 55:23 91:23	followed 35:10,11
243:25	68:2 83:3,8 85:1,2	filters 144:8	108:14 110:3	241:24
fantastic 283:25	87:11,12,17 89:11	final 36:16 164:20	111:1,2 135:1	following 41:22
284:5,7	89:13 113:1	165:1 230:23	153:11 183:15	67:12 119:24
far 6:5 10:4 13:14	115:24 135:10,13	255:17	239:24 265:16	145:22 147:14
16:11 19:1 52:22	155:14,17 156:22	finally 5:11 206:6	282:21,23 284:2	160:13 192:3,4
57:16 68:20 78:14	156:24 175:11,15	242:1	fit 278:12	256:13 263:1
81:8 85:9 91:15	175:18 177:24	financial 286:14	five 8:6 44:10 45:4	follows 74:20
91:16 97:16	183:8,16 193:15	find 4:18 39:2 40:4	45:17,22 46:1	122:12,13 136:6
112:25 116:5	203:8 208:2	47:23 78:16 91:23	49:17 51:23,24	157:15 187:12
135:25 139:4	253:12 276:7,10	110:14 141:22	52:16,17 72:4	206:14 225:4
159:3 174:2	282:9,10,18 283:1	192:14 241:20,23	74:21,23 75:5	232:2 233:17
175:19 189:1	283:4,6,14,17	252:4,10,11,25	76:1,6 79:12	247:9 268:2,14
192:20 195:6	284:4	270:12	96:14,16 120:3	food 26:2 114:7
221:2	feeling 22:3 165:10	finding 240:25	122:3 173:17,20	foot 45:10 49:4
fashion 50:10	feelings 16:20	findings 268:9,15	173:21 224:9,12	219:6 233:19,24
221:2	feels 96:5	268:19,21 275:4	224:14 243:15,17	233:25 234:1,2,4

235:4	framework 8:19	118:13 147:24	gas 248:8	18:7 42:4 47:2
force 189:3 253:8	frankly 92:9	180:3 187:24	gear 72:24 95:1	50:16 52:15 57:22
foregoing 286:6,10	126:20 129:7	198:7 251:11,11	108:13	57:25 59:1 64:16
foremost 4:1 17:16	Fratella 1:15 3:4	252:10 256:22	geared 248:6	66:20 68:16 75:13
forever 189:19	286:4,19	fully 230:8	general 4:25	81:6 85:6 87:21
forgetting 72:18	free 1:18 10:23	fumes 142:8 144:18	194:21 197:25	88:5 91:15,16,21
forgot 84:5 100:7	15:10,16 50:17	fuming 148:25	245:13	96:3 97:16 101:8
126:24 211:8	282:18 283:6	fun 21:11 22:11	generally 242:25	101:9 104:22
227:2	284:17	function 21:11 99:2	271:25	105:10 112:19
form 50:10 81:21	freedom 237:1	109:19 199:6,15	gentleman's 271:22	114:9 118:15
formatting 93:16	freezing 23:16	252:22 271:10	gents 114:17	120:24 121:7,24
forms 62:15	freight 211:18	277:17	Gerald 28:4,6	125:14 127:23
forth 4:25 15:5	frequency 239:8	functionality 195:5	52:12 80:3 196:16	128:4,17 134:7,11
20:13 45:25 46:18	277:10 280:13	195:7 250:24	223:3 248:3	134:19 135:18
60:24 95:2 141:5	frickin' 116:8	274:8	255:17 256:1	139:4 141:22
153:4 165:18	friction 22:10	functioning 39:12	Geronimo 76:19	152:16 153:11
178:3,4,13 181:13	210:17 214:1	271:5	getting 7:14 21:17	156:3 157:2 158:2
211:18 242:13	friendly 20:8 84:12	functions 109:18	24:24 32:21 39:14	159:2 164:4
255:12,14 264:21	84:18,23 86:21	158:9	41:11 60:11 76:13	165:15 169:10
265:5 284:22	284:7	fundamental 240:7	76:17 77:17 78:4	171:16 172:24
forward 5:12 6:20	Friesen 32:4,4	240:16	83:24 88:16 99:1	173:20 178:7
10:16 19:3 80:8	37:18,18 43:20,20	fundamentally	107:2 145:4 171:1	182:19 184:17
164:4 255:24	49:8 59:6,6 71:6,6	240:1	240:24,24 260:15	189:22 192:6
265:7 266:4	75:10,10,24,24	further 103:12	273:5 279:3	194:3 196:7 197:1
276:19	80:18,18 85:13,13	113:5 135:8	girl 33:6	198:7 200:21
fought 128:5	98:21,21 105:18	136:15 156:22	gist 275:3 277:23	202:16 204:10,14
found 49:14 110:7	105:18 144:22,23	168:9 177:8	give 6:20 17:20,23	205:20,21 206:5
123:17 143:13	144:23 170:16,17	190:13,13 194:4	18:1 26:1 45:18	209:20,22 214:5
225:24 235:1	170:17 188:24,24	201:16,17 220:19	46:19 48:22 49:5	214:11 215:22
242:1 253:20,20	192:24,25,25	245:24 286:13	55:24 81:23	217:12 223:6,13
foundation 168:3	200:24,25,25	future 237:8	139:24 144:19	223:17 229:11
four 14:10 44:10	204:19,19 207:25	fuzz 279:18	174:18,20 175:1	230:8 235:10
122:2 126:16,17	208:1,1 219:24,24		184:24 202:1	238:2 242:25
179:9,12 219:6	221:16,18,18	G	212:18 222:10	245:14 246:14,25
226:3 233:1 243:8	243:19,19 257:5,6	g 2:1 3:14 74:20,20	230:22 252:17	250:2 254:13
276:15	257:6 269:18,19	76:18,19	gives 15:3 34:4	255:9,12 256:5
fourth 21:20,20	269:19 279:11,12	gain 94:11 238:20	38:8 222:14	264:3 276:16,16
22:3,22	279:12	gallery 97:21	giving 6:24 10:11	281:6
frame 5:19 21:1	front 139:23	gang 114:5	17:22 66:17 265:1	go-to 22:18 25:1,1
177:25 192:19	160:18	gap 271:7	glad 27:16 28:25	goal 82:19
265:9	full 42:2,15 43:23	garbled 196:24	128:3 177:6,7	goes 6:5 22:14 81:8
frames 112:16	44:6 45:6 46:2	273:10	global 163:23	124:25 130:12
264:11,18,25	47:6,9 48:9,15	garner 4:13 177:21	go 4:2,3 6:9,24 7:1	134:17 193:22
265:21	49:17 60:19	188:22	13:18,19 17:2	198:2 252:5

256:14	144:24 145:20	90:19 100:11	gravity 225:20	guide 33:20,23 34:2
going 3:20,22,25	146:25 150:18,18	121:6 136:3 139:9	226:10 228:11	34:7,14
4:1,2,18,20,22 5:2	154:8 155:22	142:12 161:18	231:4	guilty 127:11
5:3,6,8,17,20 6:6	157:18,22,25	167:1 171:2	grease 277:9	gum 204:14
6:9,15,17,17,19	158:2 162:21,22	172:23 176:6	great 6:15 10:15	guy 107:22 108:1
7:6,22 8:8,19,20	165:4,5,6,23	177:9 178:4	22:14,18 45:21	175:25 189:18
8:23 9:19 10:17	169:8,15 170:1	186:20 199:18	84:7 135:2 136:19	192:11,11 197:23
11:25 12:23 13:3	173:17,24,24	225:1 231:14	174:6 177:17	204:12 241:24
13:6,11 14:8,11	174:4,20 175:9,10	243:13 246:14	193:17 238:25	244:2 278:11
15:1,12 16:9,22	175:14,15 176:4,5	250:1 255:23	257:8	guys 3:23 5:12,17
16:24,24,25 17:20	177:15,21 178:2	278:17 284:24	greater 118:16	6:17,20 7:12 9:24
18:7,13 19:1,1,20	178:13,18,19,20	gotcha 53:10	218:23	10:11,22 15:18
19:23 20:17 21:13	178:21 184:16	gotten 224:23	green 53:6,11,19	16:25 17:3,20
21:14 23:14,23	186:4,8 187:11	Gould 9:1 29:16,16	73:9	19:2 21:14 32:25
24:2,20 25:16,22	191:2 192:10	40:12 55:6,6	Greenbusch 29:6	32:25 33:1,11
25:25 26:5,21	193:9,10,17,21,25	56:25 57:8,10	48:6 78:20 111:17	40:20 52:7,17,18
27:1,4 32:24,24	195:9 197:11,15	59:3 89:2,2	150:17 151:22	67:21 68:1 79:18
33:18 37:21 40:3	197:15,16,23	119:11 128:1,1	Greetings 29:16	80:7 83:2,4,8
40:8 41:2 45:10	198:5,6 199:9	143:22,22 163:3	grippers 252:9	87:12,17,20 88:1
50:5 51:23 52:4,7	203:3,25 204:1	164:8,8 172:12,13	ground 8:9 53:2	88:1 96:16 114:19
52:19 57:15 59:7	208:6,7 212:25	183:22,23 184:1	247:10,12,13,20	121:19,19,22
60:1 61:2 70:8	216:14 217:23	184:24,24 232:24	248:2 249:7,10	124:2 135:2,12,17
73:15,17,24 75:5	224:8 225:3	232:25 234:20	265:25 285:1	135:19,19 152:13
75:18 77:24 78:2	226:19,21 228:20	243:6,6 260:3,11	group 4:13 10:15	152:14 156:20
80:3,3 82:25 83:4	232:24 233:10,11	260:11 261:10	11:2 26:20,21	164:16 165:5,19
83:7,11 88:19	233:12 239:7	269:14,14 280:12	27:17 63:14 83:19	173:21 174:5
89:20 93:20 94:13	254:5 255:11,12	governing 137:1	101:25 102:1,2	175:3,20,20
96:14 105:3,10,12	255:21 256:8	government 34:2	120:1 177:20	177:13,24 183:12
105:19 106:1,11	258:14,16,19	governor 228:21	Growers 32:2	223:10 224:13,13
108:18,18,19,22	259:1,3 260:19,24	252:1	242:10	224:14,17,17,18
108:23 109:9,17	262:12 265:8,9,17	governs 45:23	guard 167:21,22,23	224:20 234:1
109:17 110:20,24	266:4,13 274:3,20	269:7	170:25 171:9,10	253:15 255:7,10
111:3,18,19,23	276:6,8,9,14,16	grab 22:15 219:6,7	171:11	256:4 265:2
118:2,21,25 119:1	276:17,18,18,19	grabbed 25:13	guards 168:19,22	276:10,11 282:15
119:4,5 120:10	276:21 278:5,20	grabbing 208:5	guess 29:23 31:11	283:10,13,17
121:19 122:4,7,10	282:5,11,15,20	216:10	44:15 48:7 78:21	284:5 285:1,2
122:11 127:4	283:11	grain 32:1,2 242:10	79:2 80:20 82:2,9	guys's 224:17
129:21 130:6,17	good 17:17 25:1,15	244:16,16,21	85:14 93:23	
131:10,16,25	27:14 28:11,15	grandkids 283:8	182:23 183:5	H
135:4,7,10,12,14	29:19,22 30:5	grandma's 22:15	184:15,20 221:4	hair 21:15
135:15 136:2,4	31:8 32:16 34:19	grandparents 23:6	222:5 238:19,19	half 7:25 35:22
138:1,19 139:19	40:25 41:2 44:14	granted 45:2,3,20	255:6 272:16	122:2 224:10
139:24 141:4,18	55:9 66:9 68:6	81:17 135:8 199:1	278:4	hammer 178:18
141:24 142:3	82:10 84:17 90:4	224:21 279:2	guessing 228:12	hand 9:1 12:14,21

12:22,23 13:2,3,6 13:11,12,16,19 14:15,15 15:1,6 16:6 19:5 20:15 34:16,17,23,24 35:3 39:19 40:17 48:23 50:2,4,24 51:25 53:3 55:17 57:20,21,22,24,25 58:3 64:23 66:11 69:21 73:12 74:1 74:2,4,5,8,12 77:22 89:24 90:3 90:5,7,8 95:23 96:1,6,8 100:1,15 101:2,15 107:5 119:18 120:19,22 121:2,4,10,11,25 122:1,6 130:7 133:1 134:4,5,6 134:10,11,14 150:25 155:17,18 156:1,2,6,7,11,12 160:23 164:15 165:22 166:19,21 166:24 167:1,2,5 167:7 168:18 171:14,15,21,24 172:2,8,12,15,18 173:2,3,8,10,11 175:21 176:18 183:14,21 186:12 186:14,16,24 187:4 192:23 198:13,24 200:2 200:15 202:12,20 202:21 204:10,25 208:23 209:22 210:5 211:9 212:17 214:3,5,9 214:11,14,15 216:5,5 217:10,13 217:15 223:2,14 224:1,2 231:7,8	231:12,13,17,19 232:23 235:8,9,17 235:18 241:21 247:2,3 249:9,11 249:15,16,23 253:18 254:10,12 254:18,23,24 266:21 267:10,11 274:17,19 275:21 275:22,25 278:1 281:3,11,15,16,17 286:16 handheld 214:22 handle 36:7 42:5 handled 19:18 77:8 284:6 handlehold 218:6 handling 28:2 29:20 210:14 213:23 handrail 181:6,10 184:11 185:9,15 185:16,17 186:7 195:18,20,21 203:4,8,14,17 204:21,24 205:14 206:14,15,18,19 207:7,21,25 208:5 209:1,5,9 215:15 215:16 handrailing 204:3 handrails 182:21 183:18,20 204:8 hands 2:14 12:7 34:22 51:10,12,16 51:18 58:1 59:12 66:19 68:14 74:7 96:4 100:13 101:10,11,14 114:19 120:24 121:7 134:7,12,19 155:14 156:3,9 171:17,19,22 172:20,25 186:17	199:19,24 202:10 202:16 205:20,22 206:5,7 209:20,25 210:2 214:6,12 217:8 223:18,24 231:10,14,18 235:11,14 246:15 246:17,19,25 249:17,20,21 254:14,16,20,22 267:1,2,8 275:16 275:19,24 281:6,7 281:10 hang 176:21 hanging 110:17 happen 5:14 16:25 42:13 45:11 46:21 144:15 145:15 163:25 208:7 227:10 250:25 happened 114:5 137:13 139:20 195:18 240:14 273:7,7 happening 128:20 211:21 241:4,6 264:14 happens 39:23 45:7 45:9 104:22 128:19 139:17 142:2,7,21 167:15 193:24 194:5 198:9 229:17 255:5 happy 27:20 31:10 hard 38:7 128:6 236:22 283:11 harm 118:16 164:3 harm's 111:4 126:22 128:24 hate 176:6 215:17 Hawks 31:24,25,25 242:8,9,9 hazard 92:2 123:24	124:6 136:13 138:16,22 139:2 143:5 145:10 148:12 158:25 159:3 168:1,13 170:21 179:7,18 185:18 188:16 207:13,14 218:19 218:20 225:22 226:6 229:16,19 279:19 hazardous 123:3 148:25 188:14 207:11 234:14 hazards 103:8 123:6,7,11 136:16 139:12 148:6,25 149:1,5 159:1,4 168:6 169:22 181:18 188:17 210:25 211:3 226:4 230:19,20 hazy 87:6 head 26:4 209:13 248:4 heads 110:11 headway 135:3 hear 13:17 14:12 27:12 39:20 77:14 81:4 117:7,11 121:21 156:20 215:5 heard 86:16 115:22 201:2 265:2 hearing 10:2 155:20 253:25 255:20 heart 24:13 284:19 heat 23:9 heated 7:15 heavy 8:14 35:17 277:18 279:3 heck 162:17 273:12 273:18	height 120:4 181:7 181:17 185:2 heights 181:3 held 3:2 228:11 hell 224:9 help 10:17 18:2 24:6 26:7 36:10 88:19 111:11 115:21 175:7 177:18 178:3 188:22 190:19 198:23 205:9 207:22 211:11 233:2 239:2 245:4 253:14 262:12 264:4 283:4 helpful 26:25 56:18 177:1 helps 47:7 175:25 Henderson 165:10 herd 32:21 hereunto 286:16 hey 5:13,17 6:8 7:13,24 8:18,22 10:13,21 11:1,5 13:16,17 15:14 16:7 17:16 20:22 50:14 53:20 79:22 84:19,25 85:2 86:13 87:17 88:2 89:13,14,15 115:15 135:24 148:8 149:4 152:20 153:6 154:25 155:11,14 156:25 162:21 165:16 174:24 175:18 178:2,20 181:14 183:6,9 184:4 185:25 208:20 213:7 224:22 255:11,15 258:18 266:8,10 266:16 270:11
--	--	---	--	---

272:12 273:8 280:2 283:9 hi 21:9 26:19 28:6 29:19 42:10 95:8 high 59:21 104:23 144:9 201:12,13 277:16,19 high-rise 104:24 higher 54:22 56:6 122:21 123:8,25 136:17 158:24 168:8 179:19 188:19 207:16 226:7 highlight 50:20 highlighted 106:10 hire 70:16 history 184:25 hit 8:9 13:15 28:1 53:2 109:24 284:25 hits 203:22 hoist 228:4,4 229:12 230:18 hoisting 229:8 hoistway 82:6 90:23,24 102:4,19 102:23,24 103:4,8 104:3,11 105:1,9 105:22 107:14 108:3 109:3 110:17,18,22 111:21 112:2,9,13 113:12 115:18 117:23 118:5,12 118:25 119:7 120:2 143:5,6 144:20 145:25 146:3 147:11,13 153:19 154:22 157:5,7 167:18,19 168:10 223:16 225:25 252:8 hoistways 113:17	114:1 hold 19:4 77:24 89:6 117:3 174:24 177:9 196:7 home 240:24 homeowner 66:20 71:12 homeowners 66:16 67:21 homes 104:23 110:13 homework 174:5 homey 284:6 honest 183:1 282:20 284:18 honestly 79:25 hope 8:1 222:15 248:3 hopefully 3:21 6:25 26:9 46:25 77:20 78:4 135:17 199:7 225:2 hoping 8:4,10,10 85:23 horizontal 220:20 221:21 222:4,11 horizontally 217:24 218:15 222:22 horrific 22:4 horse 154:8 178:12 hospital 105:4 hospitals 104:23 106:15 110:12 hot 23:5,12,13 24:9 hour 7:25 122:2 191:4 192:19 200:12 203:12 205:13,25 207:3 224:10 hours 9:20 55:3 56:9 104:20 188:5 188:12 189:21 191:4 195:8 196:5	198:4 199:3,11 202:6 203:5 205:19 206:1 207:9,24 224:10 housed 34:4 62:3 115:7 Housekeeping 2:16 14:20 houses 191:8 How-To 11:17 How-To/Housek... 2:12 huge 126:10 211:17 human 116:6,6,7 136:20 168:1,5 hunch 127:11 hundreds 38:25 91:8 111:9 hung 110:23 hurt 23:10 24:12 38:23,24 40:2 41:11 83:25 116:7 171:1 hydrated 135:18 hydraulic 48:2 88:25 100:22,25 101:5 136:7 137:3 137:16 138:25 139:16 140:12,16 143:1,7,25 144:9 144:9,15 145:1,23 146:13,16 147:18 147:18,19 148:18 148:20 149:13,15 149:19,20,23 150:5,21 151:25 154:17 248:1,2 249:1 256:19 268:12 269:6,7,9 274:22 hydraulics 138:14 146:14 157:10,11 hydro 81:12,20 85:21	hypothermia 24:10 <hr/> I <hr/> i.e 255:17 IBC 98:9,16 Ibuprofen 22:20,22 ice 25:2 icons 13:13 idea 21:13 110:25 119:13 142:12,22 176:6 192:20 257:8 271:10 ideas 239:3 identify 38:15 igloo 76:22 ignore 112:12 II 28:25 97:1 99:11 119:13 illegal 195:24 Illinois 30:6 illiterate 32:13 illuminating 179:25 180:5 illumination 234:3 imagine 240:21 241:2 imbedded 126:2 immediately 25:24 198:6 imminent 136:23 179:14 immune 145:16 impact 11:7 15:12 15:13 18:13 204:1 213:15 impacted 200:20 impacts 11:8 77:16 194:6,6 impair 26:7 impending 104:6 imperative 46:2 273:21,23 implement 231:2 implemented 5:19	35:25 implicitly 274:14 imply 227:18 important 15:2 17:5 36:16 42:14 64:12 94:5 201:23 227:11 278:8,9 impose 54:18 improve 36:10 180:7 284:20 improving 154:6 in- 248:1 in-ground 247:25 248:7,13 in-person 16:15 282:24 283:2 284:3 inability 112:21 inaccuracies 37:8 inaccuracy 269:2 inappropriate 76:4 inaudible/indisce... 41:18 55:19 60:12 81:22 inception 247:14 inch 45:9 120:4 inches 185:17 217:23,24 218:2,4 218:7,15,17,17,23 222:3,6,22 223:21 incline 234:8 include 63:4 64:3 67:11,15 74:19 179:13 256:20 included 106:12 including 157:16 258:15 269:9 incorporate 81:7 incorporated 98:8 increase 189:15 increased 54:21 136:14 increases 168:2 171:1
--	--	---	--	---

increasing 235:6,9	initiation 187:16 206:21	256:12 259:24 262:25 263:2	148:12 155:16 177:18 222:3 228:3	39:9 105:6 138:24 170:12
independent 159:19 160:1	injuries 35:22 140:4 201:23	installation's 225:25	intentional 206:17	irresponsible 201:15
indicates 250:19 274:3	injury 35:18	installations 182:9 225:8 228:25 229:8 247:16	interconnected 116:11	island 284:9
indication 198:10	inlet 215:15	installed 42:1 47:17 64:15 73:1 136:8 146:13,15 150:5 154:17 170:11 181:4 196:10,13 226:12,20 229:10 236:9,15 244:5 247:18	interest 232:25 283:18 286:15	isolated 133:10 141:10 168:12
indicator 120:5	inside 98:2 103:15 106:22 107:13 110:4,5 113:3,10 113:21 118:22 129:23 131:7 140:25 161:16 200:17 217:18 225:12,16 273:20	installs 182:3,3 instance 164:6 253:6 273:4,6	interested 127:3 240:24 269:25	isolating 86:23
indiscernible 169:7 195:15	insofar 286:11	instances 177:4 182:14 273:25	interesting 91:23	issue 70:7 106:18 129:21 139:21 149:13 158:17 191:1 201:4,24 208:4 210:23 213:17 243:22
individual 164:5	inspect 103:7 141:9	installing 137:4 181:6 220:15	interfaced 268:6 274:13	issues 34:5 113:21 144:12,20 145:14 169:6,25 176:1 228:25 247:14 278:25 279:19
individuals 128:15	inspected 194:9	installs 182:3,3	interior 23:12 234:3	it'd 148:19
inducing 144:19	inspecting 243:11	instance 164:6 253:6 273:4,6	interiors 277:8	it'll 13:13 81:11 109:14 169:8 181:9 203:16
Industries 1:1 27:20 30:20 31:3 31:16	inspection 33:20,23 45:20 113:12 141:4 198:7 225:9 225:13 227:20 236:11 244:4 247:19 250:15 263:15 264:12	instances 177:4 182:14 273:25	interject 14:14	item 18:7 46:9 61:11 76:18,19,21 79:12 148:25 154:3 164:21 184:13,13
industry 32:1 94:24 238:15 239:1 244:16,21	inspections 34:6 68:10,11,12 143:16 230:15 272:25	instantaneous 203:24	internal 149:17 200:18,21	items 2:3 9:21 46:3 72:7 148:5 180:21 265:3
inevitably 110:19	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	instruction 64:1 67:13	interpret 109:20	IUEC 31:9 41:1
infection 25:8	inspections 34:6 68:10,11,12 143:16 230:15 272:25	instructions 58:13 58:16,21 59:17 61:21,25 62:4 63:23 64:3 67:15 70:3,4,6,14,19 73:21 241:18 242:4	interpreting 109:12	
information 38:7 43:17 45:13 59:9 61:8 66:16,18 76:5 164:24 165:24 174:12 200:9,16 237:1 269:23	inspections 34:6 68:10,11,12 143:16 230:15 272:25	instructor 278:4	Interruption 188:7 207:4	<hr/> J <hr/>
inherent 118:23 139:12	inspections 34:6 68:10,11,12 143:16 230:15 272:25	insure 188:17	intervals 45:25	J 218:13 222:10
inherently 94:13 118:14	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	intact 112:11	intervention 194:22	J-1 218:13
initial 43:24 49:13 119:1 175:6	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	integrity 108:5	intricacies 176:1	jamb 129:20 170:24
initially 47:9 251:18	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	intended 33:22 34:1 84:5 210:20	introduce 15:25 32:18 84:6	jamb 129:20 170:24
initiate 103:11 120:3	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	intense 26:1 175:14	introduces 25:7 179:7	jamb 129:20 170:24
initiated 103:2 251:25	inspector 27:20 28:7,25 30:23 31:2 45:1 60:23 64:12 72:18 81:16 86:10 92:9 94:18 116:3 140:9 148:4 237:16 259:12 269:2 272:24	intent 16:18 17:4 17:11,12,15 34:7 56:23 67:20 68:7	introduces 25:7 179:7	jamb 129:20 170:24
initiates 257:14	inspectors 28:12 30:17 33:23 55:1 116:15 185:1 243:1 264:11		introduction 33:25	jamb 129:20 170:24
initiating 268:3,5 268:15,19 270:7,9 272:2,9 273:17 275:5,13	inspectors 28:12 30:17 33:23 55:1 116:15 185:1 243:1 264:11		introductions 2:21 4:3 7:2,2,6 20:5 26:12,16,21	jamb 129:20 170:24
	install 155:2		intrusion 249:1	jamb 127:13
	installation 137:3 236:12 248:1		inverse 168:2	James 27:18,19 29:18,19 77:7 134:15,15 223:8
			investigating 188:20 207:18	Jan 8:25 29:15,16 40:11 42:2 55:5,6
			involve 103:12	
			involved 19:23 23:7	

56:24 59:1 89:1,2 119:10,17 127:25 128:1 143:21,22 163:2 164:7,8 172:12,16 183:23 184:23,24 232:22 232:25 235:23 243:5,6 260:2,11 260:16 261:9 269:13,14 280:11 Jo 1:15 3:4 286:4 286:19 job 18:10 41:6 45:4 52:24 71:18,18 79:21 135:2 153:3 237:7 241:1 243:25 283:25 jobs 109:2 John 28:14,15 247:23,24 joining 27:4 Jon 29:22 30:2 64:24,25 65:9 94:10,18 95:4 111:16 113:18,18 114:18 129:9 141:17 142:14 182:23 192:3 229:21,21 246:22 251:21 253:17 Jonathan 29:21 30:1 39:6,7,22 41:16,17 47:12,14 63:9 76:7,8 88:20 88:21 110:1,2 112:4,6 118:19,20 128:14 132:8 133:11 144:5 149:11 157:3 169:2 181:1 182:2 193:20 201:8 212:21 219:12 220:13 222:9 228:24 252:16	264:8 270:25 journeyman 39:1 joy 121:3 judgment 17:13 juju 278:22 jump 8:8 96:19 175:10 192:13 236:4 jumped 250:8 278:1 jumping 121:3 jurisdiction 35:25 36:13,15 68:9,22 69:5 94:22,25 141:2,8 159:24 256:15 263:5 268:10 jurisdiction's 237:9 jurisdictions 129:19 137:3 164:11 justification 33:22 123:3 126:2 188:10 250:17 justified 227:19 justifies 88:12 justify 109:21 <hr/> K <hr/> k 13:15 97:3 99:13 99:16,18 keep 24:12 32:24 51:13 58:19 61:24 69:14 74:8 93:6 113:1 128:10 137:8,25 141:18 146:17 157:22 171:2 178:12,19 191:7 194:2 199:22 219:15 223:19 225:1 242:11,22 243:20 243:21 245:1 267:4 277:2 281:8	keep-- 277:2 keeping 51:2 122:14 151:20 225:1 243:10 246:5 keeps 274:2 kept 58:14 60:14 60:17 61:22 62:1 62:19 63:7 73:22 122:16 275:5,6 Kevin 30:4,5 36:3,4 47:2,3,12 56:13 56:14,24 62:25 63:1,8 65:12 71:23,23,24 75:15 75:18 76:15,17 82:1,23 87:9 88:5 88:6 93:19 98:6 106:8,9 107:13 113:8 117:18,19 138:3,25 142:24 159:9 170:2,5 179:23 180:8,11 180:12,16,18 190:18 197:19 213:12 227:4 233:5 262:7 Kevin's 82:15 107:11 138:11 164:2 key 102:3,19,23 106:25 107:13 110:3,4,5 114:15 115:18 118:22 119:16 120:1 126:25 194:16,16 197:22 266:23 272:7 273:22 kicked 126:8 kid 208:4 kidding 130:7 kids 126:8 127:2 kill 176:8 killed 136:12	kind 24:22 39:13 46:12 47:15 53:11 61:4,4,10,16 65:8 66:15 69:15 76:3 84:22 92:17 108:15 109:23,24 109:24 112:1 127:7 130:9,25 132:9 138:23 146:22 148:9 150:17 151:6 154:10 161:7,11 161:14,17 163:20 164:24 168:18 194:12 208:2 220:19 222:2 258:17 264:9,14 265:18 269:11 271:7 279:13 kinds 176:8 knew 82:25 130:6 136:2 195:22,25 know 5:2,17 7:2,15 7:17 9:16 11:4,23 13:11,16 16:2,15 16:16 20:8,12 22:5 23:3,13 25:10 27:5 32:23 36:8,9 38:21 39:13,13 41:24 42:18,22 43:25 44:8 45:22 46:9 46:18,20 49:12,15 49:16,23 50:16 52:8 53:13,14,16 55:23 56:19 59:10 61:8 66:7,13 67:22 68:10,25 69:17 70:9 71:13 71:19 79:21 81:8 81:20 83:11 84:4 85:5 87:14 89:13 89:22 92:11 94:2 99:4 102:16	104:24 105:1,6,11 106:10,11,18 108:22 109:3,22 110:9,20 111:13 113:24 114:8,24 115:7 119:14 125:11,18 126:21 127:2,11,14,20,21 129:1 131:20 133:11 135:2,6,17 135:24 137:13,21 137:25 138:7 139:19 140:5,15 140:23 141:19 142:4,25 143:12 144:7,18,19 145:1 145:3,13,16 146:16 152:16,16 152:17 153:7 155:11 159:11,12 161:15 162:16,19 163:9,10,14,24 169:16,18,22 170:7,18 172:7 174:13,25 175:23 176:8,9,9,20 177:14,16,17 178:6,23 181:22 184:1,19 185:16 189:10 190:24 191:7 192:18 193:4,11 194:7,13 195:4,6 197:8,22 198:16 201:9 208:3,24 212:11 227:7,14,19 228:6 233:2,20,24 234:19 237:19 238:14 240:20,21 242:3,4 243:23 244:6,14,24 251:11,14,15 255:5 261:4,19 262:8,16 265:9,14
---	--	---	---	---

265:20 269:14 271:7,11 276:24 278:7 279:17 283:3,10,11,22 284:3,21 knowing 5:5 144:18 162:24 185:25 189:8 knowledge 72:24 109:1 111:14 161:12 195:22 200:8 known 25:11 knows 5:13 55:11 72:22 139:14 156:19 256:2	landed 229:24 landing 102:13 landings 234:7 language 37:21 41:15 119:11,22 128:2 137:1 143:19 160:7,9 161:9,22 185:9 208:9 210:21 226:2,24,25 227:7 239:21 241:8 257:10,18 259:18 268:21 274:21,23 languages 126:10 lard 25:18 large 24:7 43:12 184:25 Larson 27:7,12,14 27:15 44:13,14 143:10,11,20 145:21 163:18,19 163:19 173:5 212:5,6,7 230:11 230:12,13 238:23 238:24,25 258:2,3 258:3 263:22,23 271:20,21,22 Lastly 281:14 latching 130:14 lately 271:14 latest 45:1 Lathe 14:25 15:7 30:15,16,16 64:11 64:11 65:10 75:4 75:4 78:13,13 131:3,3 Lau 20:7 30:19,19 42:10 66:24,24 70:23 84:9,9 93:3 93:3 131:16,16 146:22,22 151:3,3 154:13,13 164:18 164:18 170:4,4 181:19 182:5,5,16	184:8 194:12,12 201:20,20 234:21 245:7,7 258:11,11 260:14,14 261:18 262:18 270:2,3 272:6,6 280:2,2 law 17:5,6 42:10 laws 20:13 layer 279:18 layered 25:17 laying 24:21 lead 24:10 103:5,5 103:11 lean 93:24 leaning 82:9 165:17 learning 109:9 leave 9:23 61:2,6 64:13 66:15 73:17 86:4 92:4 105:25 150:21 177:12 212:24 220:1 226:25 227:23 248:23 leaves 277:14 leaving 59:10 118:16 159:24 238:9 left 8:8 26:25 50:16 59:23 62:20,21,24 66:19 71:11 72:12 75:12,25 159:23 199:24 238:2 276:7 legacy 225:25 legal 236:24 legally 179:13,17 legitimate 166:9 legs 24:19 leisure 175:5 length 103:13 203:15,18,20 lengthy 135:7 Leopard 30:22,22 38:3 48:23 69:9,9	81:4,5 86:1,1 104:17 107:7,12 107:12 114:14 127:10,10 137:7,8 163:8 168:16,17 185:12 191:16,17 191:19 196:24 197:1,7,7 204:11 204:12 208:17,19 208:19 232:11,14 232:21 234:16,17 241:13,13 Lerch 28:20 95:8 103:18 160:6 190:9 227:1 274:18 let's 10:7 21:10,17 27:6,6 36:21 86:13 104:18 128:17 149:20 154:21 224:25 259:18 261:1 lethal 137:4 letter 154:1 243:13 lettering 120:3 126:11 letting 13:16 18:16 118:12 level 5:10 42:4 116:10 124:15 158:24 234:2,5 license 190:2 licensed 65:18,24 66:3,21 70:17 74:22 licensing 65:20 licensure 244:23 life 22:7 44:12 111:13 116:18 123:18 136:20 158:4 190:4 211:1 273:24 274:5 lift 54:19,20 55:1 56:22 64:15 70:10	70:20 146:16 195:17 lifts 54:24 55:2 56:9,17 64:18 69:13 146:14 light 85:7 234:5 lighter 41:21 lighting 233:18 234:5,8,14 235:2 235:6,10 liked 185:8 likelihood 35:18 limb 123:18 158:4 211:2 limit 97:15 98:1 211:4 247:25 253:10 limitation 151:24 limitations 91:10 91:14 97:11,15 147:3 152:2 limited 67:12 91:11 91:12,12 92:1 97:12,13,13 98:1 98:1 130:23 157:17 226:3 256:18 limiting 139:8 140:14 256:25 line 18:7 86:5 109:24 110:11 136:8,10 150:5,7 151:16 154:17,20 154:22 184:13,13 248:9 271:3 274:4 277:25 284:17 lines 208:3 linkage 38:19 220:17 linkages 40:5 lint 277:10 liquid 149:18 list 5:11 13:8 30:6 34:14 77:18
L				
L 21:11 28:25 30:16 41:11 45:1 72:19 75:4 78:13 81:16 86:10 92:9 94:18 116:3 131:3 133:2 140:9 148:4 153:13 161:6 237:16 259:11 272:24 L& 269:2 L.A 114:5,7 labeled 102:3 120:1 120:5 labor 1:1 27:20 30:20 31:2,9,16 41:1 Laboratories 27:24 lacerations 211:3 lack 71:19 189:24 195:22 258:4 ladder 217:25 218:1,3,6,16 219:4,18 220:7,21 220:23,24 221:22 222:5,7,12,13,23 ladies 33:11				

listed 45:5 115:4	187:21 201:10	244:12	lost 197:3	lowering 64:4
listening 95:6	217:19 232:3	look 10:21 17:15	lot 3:22 5:7 6:14	67:16 217:22
156:20 161:24	234:8,9,10 241:2	69:2,15 70:25	11:4 16:16 23:7	lowers 188:12
literally 111:3	268:24	82:3 111:7 113:23	23:10 25:3 38:18	207:9
258:24	location 136:7	130:2 148:11	41:11 45:7 49:24	loyal 168:21
little 4:1 7:14,17,22	137:22 146:11	152:16 185:12	61:19 62:18 65:1	luck 40:2
9:17 13:12,12	147:11 148:24	189:20,22 193:9	66:16 71:7 73:3	luggage 212:25
20:22 21:1 60:5	150:4	257:25 265:20	79:25 88:2 105:7	213:7,8,15
76:16 82:3 98:7	locations 244:20	looked 82:14	136:1,2 146:9	LULA 80:22 82:4
117:9 118:3	245:2 247:18	104:18 124:9	159:12 167:13	86:13 91:9 94:12
121:20 135:7,8	lock 124:14 125:18	169:18 182:25	170:6 172:9	95:10,17 100:22
146:19 148:10	220:2 226:22	184:22 209:12	175:11,13,16,23	LULAs 80:20 81:6
163:15 168:17	227:6,15 228:9	251:8	188:25 189:23	81:18 86:17 88:12
174:5,15 175:4,12	locked 111:22	looking 19:2 26:6	208:2 237:21	88:24,25 91:9
175:17 178:6,22	122:25,25 124:7,9	45:9,11 62:11	238:11 239:5	93:6 97:10 98:24
178:22 218:10	124:19 125:6,17	64:7 65:14 70:25	244:15,20 245:25	101:1,6 232:14
224:24 242:19,20	128:19 150:22	78:21 84:14 86:2	248:13 257:24	lumens 233:21
245:5,9 250:8	locking 130:14	86:12,14 88:15	271:14 272:24	lunch 7:19,25 8:3
252:13 257:15	167:18 228:11	92:9 94:24 97:21	278:24 282:11,24	121:18,23,24,25
258:1,18 264:5	230:3	110:15 116:20	282:25 283:1	122:2,6,9 135:15
269:20 283:5	locks 142:4 228:7	118:4 130:8 136:6	lots 81:9,10,11	135:21 224:20,25
live 30:6	233:22 234:1,4	141:5 148:11,15	204:13	lx 233:20,25
lived 25:12	log 67:17 269:22	148:16 160:8	Louisiana 25:12	Lyall 55:11 57:3,3
living 242:19	270:3,10,15,17,22	161:8,8 162:17	low 170:19 185:8	59:19 62:6,9 77:5
load 8:15 35:8 38:7	272:7,8,12,13,15	163:23 190:20	252:11	77:6 79:7,8
39:10 41:7 42:2	272:19 275:7	191:23,24,25	lower 15:1,5 51:16	180:10,12
42:15 43:24 44:6	logging 76:5 272:14	196:18 212:1	57:22 58:1 74:4,6	lying 114:25
45:7 46:2 47:6,9	272:20 274:15	213:16 217:20	90:5 96:3 100:1	
48:9,15 49:17	logic 145:16	227:13 241:16	100:13 101:10,13	<hr/> M <hr/>
60:19 157:16	logs 62:14,20 72:6	261:5 267:25	121:7 134:7,12,19	M 179:15
167:23 171:11	74:24 239:14,15	looks 24:16 34:25	156:3,9 169:8	machine 80:23 89:6
187:24,24 225:21	246:2,2 271:8	37:16 59:1 78:18	171:17,22 172:2	108:17 113:13
226:9 229:12	275:11	79:6,10 93:17	172:24 173:8	114:6 119:14
230:9 231:5	loin 284:13	97:9 121:2 122:7	186:17 187:20	122:14,15 124:8
250:13,20,21,22	long 47:20 56:17	153:11 185:13	191:22 202:16	124:10,12,18
loaded 230:8	109:18 128:5,6,11	214:21 232:7,15	205:20,22 206:5	127:21 128:3,6,10
local 29:12 136:15	141:4 145:1 191:9	233:19 266:12	209:20,24 210:2	128:18 130:12
159:21	203:22 219:19	loose 111:2,7	214:5,8,12 223:23	131:7,18 132:5
located 80:11,14,23	237:17 284:12	224:10	231:10,14,18	133:5,18,20 145:9
83:20 111:24	long-winded	lord 186:20	235:11,14 246:14	145:23,23 148:21
113:10,11 122:14	178:24	lose 17:6 188:8	246:17,25 249:17	149:13,15,23
122:23 132:3	longer 21:1 44:12	190:1 207:5	249:20 254:13,20	154:17 188:14
145:24 147:13,20	174:15 187:2	215:17	254:22 267:1,8	207:11 225:10,10
167:22 171:10	218:17 236:18	loss 226:13 251:24	275:16,19 281:6,7	225:14,25 227:13

227:17 228:14,15 228:21 229:2,14 229:16,18 230:16 230:21 232:3 233:18 234:7 248:20 machine-room-less 225:8 227:16 230:19 machinery 44:3 80:10 124:18 134:1 225:23 232:4 234:12 277:18 machines 80:13 85:16 136:7 146:13 147:19 148:18 149:20 150:5 157:6 256:19 Madison 30:1,2,2 41:17,17 110:1,2 110:2 113:18 118:19,20,20 141:16,17,17 142:18 192:2,3,4 229:20,21,21 251:20,21,21 253:12 main 9:19 18:8 20:14 124:5 139:16 266:19 maintain 56:12 137:20,20 197:13 236:3 243:4 maintained 74:25 123:12 maintaining 36:12 236:7 maintenance 46:1 58:18 59:11 62:14 64:14 77:1,4 78:24 111:10 114:3 123:14	130:24 141:20 192:11 225:9,13 226:21 230:7,14 236:2,15 237:5 239:6,7,20 240:7 240:9 241:17 242:12 243:16 245:12,14,23 246:1,1,2,4,10,19 247:19 277:21 278:24 major 140:12 201:14 256:16,17 257:1,10,12,18,25 258:5 259:19 261:15 266:7,8,15 266:19,22 majority 77:24 86:16 119:12 174:3 225:24 276:23 majors 110:11 making 15:18,22 75:15,16 85:6 88:1 93:16 113:4 115:17 116:20,21 120:15 135:3 154:23 156:23 161:14 163:24 177:22 180:15 205:5 218:18,23 219:3,8 236:22 237:7 238:4,4 256:6 260:6 266:19 267:18,21 male 276:24 malfunction 40:4 malls 277:19 man 25:11 53:4 113:22 203:11 manager 126:7 managers 28:18 mandate 270:15 mandated 58:21	277:21 mandatory 37:2 222:10 manipulating 140:20 manner 43:16 91:7 97:7 253:5 manual 64:1 67:13 67:16 69:16 188:1 188:6 189:19 190:23 191:8 192:17 194:14,17 194:17,20 195:1 197:25 198:8 200:13 202:7 203:6 205:13 206:2,25 207:3 manually 64:4 193:7 210:15 manufacturer 41:23 139:24 manufacturer's 252:18 manufacturers 44:8 220:14 226:8 251:23 manufacturers' 67:15 marginal 116:8 mark 73:9 marked 120:2 273:3 marketplace 159:13 marking 271:4 Marshall's 29:4 55:20 Mary 1:15 3:4 286:4,19 mass 168:6 material 28:2 29:20 210:15 211:16 213:23 248:11 mates 210:16	213:14,24 matter 77:3 116:24 119:9 130:17 141:9 150:12 220:24 221:9 279:3 286:14,15 matters 68:14 116:19 maximum 102:14 McKenzie 31:1,1 MCP 62:18 75:14 76:2,12 236:2 237:13,19,23 238:4,5,9,21 239:5,11,11,12,19 241:21 246:13 269:23 MCPs 62:19 236:22 237:20 239:23 241:16 242:7 244:22 mean 5:1 10:19,24 12:2,15 53:6 60:9 66:16 79:3 86:15 87:13 92:2 108:25 111:2 116:15 125:1 126:18 128:4 142:22 145:8 148:11 151:23 161:13,17 162:3 163:9 169:20 192:10 217:15 259:16 263:9 264:13 271:4 meaning 96:25 262:22 means 10:13 11:1 25:10 44:23 50:9 53:7,12 61:14 92:25 99:7 118:17 132:14 143:15,17 145:25 146:4 147:20,22 153:19	153:21 158:22 162:4 175:2 184:10 187:15 189:5 194:21 201:5 210:13 217:18,19 220:8 225:18 226:22 229:6,13 230:1,4 230:17,17 233:24 242:6 265:14 286:9 means' 91:18 meant 84:20 measured 221:20 221:20,22,23 222:4 measurement 221:24 222:11 223:20 measurements 217:20 mechanic 29:11,25 30:2 38:17 62:19 68:14 71:13,14 113:16 114:23 126:24 127:15 129:16 130:24 139:8 180:6 185:18 191:9 211:14 221:11 228:2 238:16 240:22 243:25 273:19 mechanic's 205:2 242:11,18 mechanical 40:6,8 40:8 46:4 141:23 148:6,12 149:5 226:22 228:18 mechanically 137:23 147:16,22 150:11,22 153:18 153:20 213:24 mechanics 31:6
---	---	---	---	--

45:18 55:1 71:18 74:22 106:14 109:2 131:21 137:14 185:21 196:20 240:4 241:20 242:23 243:23	30:7 31:23 159:1 members 2:9 7:3,6 9:11 16:11,13,19 34:15 59:16 95:9 165:19 211:24 255:13 Members/Obser... 9:12 memory 251:24 mention 59:8 66:25 99:2 278:20 mentioned 48:25 81:17 149:3 198:4 243:24 merit 83:8 merits 164:6 mess 278:8 messaging 97:5,25 met 139:25 151:10 263:16 metal 23:13 76:10 meters 102:13 method 47:21 methodologies 35:6 36:23 37:14 methodologies' 35:9 methods 36:13 37:1 37:3,23 38:4 47:6 123:8,25 136:17 168:8 179:19 188:19 207:16 226:7 mic 14:5 117:4 mice 242:13 Microsoft 2:12 3:3 11:17 middle 107:21,22 110:17 244:17 252:8 265:25 Mike 31:4,5,7 65:15,16 66:10,13 76:23,23,24 100:4 212:16	militant 9:18 military-ish 9:17 millimeter 218:2 millimeters 120:4 217:22,23 218:7 222:22 223:20 Mills 29:9,11,11 38:12,16,16 39:8 113:15,16,16 116:14 126:6,23 139:6,7,8 140:10 178:7,8 189:17,18 195:6,12 200:16 203:11,13,13 211:13,14,14 219:1,2,2,17 221:5,6,12 228:1 228:2,2 mind 49:16 64:8,25 69:14 138:1 280:6 minds 18:11,15 Mine 142:18 minimize 224:22 minimizing 223:15 minimum 94:23 120:3 188:12 207:9 218:5 234:13 243:15 256:13 262:25 minor 106:2 minus 102:17 minute 45:10 51:23 51:24 52:16 91:11 96:15 97:12 102:14 135:15,16 165:13 173:17,20 224:9,12 minutes 6:25 7:1 17:22 18:1 52:17 56:19 96:16 121:18 135:20 173:21 224:14 276:7,8 282:16 misadjusted	204:21 misheard 110:6 missed 19:6 146:22 150:14 missing 67:4 112:2 192:7,15 misspoke 110:8 mistake 172:12,15 mistaken 114:15 mistakenly 140:2 misunderstandin... 254:2 misunderstood 239:1 mitigate 132:20 139:11 149:5 220:8 279:25 mitigate/eliminate 226:2 mitigates 148:6 mitigating 130:22 159:4 mitigation 211:2 mixed 239:5 Maintenance 236:5 mobile 95:12 Mobility 31:21 mod 244:7 257:12 259:18 mode 103:6,11 107:1 112:8 118:7 119:23 modern 145:13,13 145:15 257:10 modernization 244:7 257:10 259:19,19 modernizations 257:1 modicum 95:13 modifying 179:7 258:18,23 money 129:22	monitoring 99:2 206:14,15 207:8 207:21,25 209:1,5 209:10 216:17 Montgomery 29:2 29:3,3 55:18,25 55:25 56:2,15 109:6,6 211:7,8 month 243:13 monthly 54:16 57:17 271:23 moot 147:1,6 morning 8:7,7 21:13 27:15 28:11 28:15 29:19,22 30:5 31:8 32:13 40:25 44:14 276:10,20 motion 70:1 145:23 147:17 225:15 252:23 motor 122:13,22 123:9 142:3 144:13,16 145:24 147:17 148:20 149:16 187:18 206:23 225:11,15 230:1 232:2 motors 147:4,19 mounted 129:20 145:7 mouth 26:2 move 6:19 10:15 35:17 48:12 76:21 90:10 101:3 105:5 127:18 141:16 142:14 156:18 157:25 160:23 171:5 178:14 193:14 211:18 212:19 215:18 227:21 229:18 230:10 231:1 233:15 235:3
--	--	--	--	---

249:5 254:3 266:4 275:2 276:19 279:10 283:5 284:23 moved 41:8 movement 105:2 136:8,10 146:1 147:15 150:6,7 151:11 154:18,20 154:22 155:2 225:17,18,22 226:5 227:10 250:11,23 251:2 254:7 mover 211:16 movie 195:16 197:23 moving 20:4 33:21 35:4,20 53:9 54:12 58:10 74:17 77:25 78:5,7 80:9 90:21 101:21 133:15 153:17 154:4 157:14 167:16 169:4 170:22,25 194:20 194:24 201:11 210:11,14,17,22 211:16 212:3,8,8 213:1,2,7,22,23 213:25 214:20 215:1,8,9,11,22 216:1,4,4 217:6 225:24 231:2 232:1 233:16 235:25 247:8 256:7 265:7 MRL 80:22 81:18 85:21 226:11 228:13,25 229:23 229:25 MRLs 81:17,20 123:4 225:23 226:20 228:6	231:2 muffled 117:2,4,5,9 117:11 mugs 10:7 multi-tasking 23:7 multiple 7:18 14:7 38:19 41:19,21 47:18 49:12 126:10 174:22 191:2 210:24 251:22 mush 32:23 mute 2:15 14:1,5 69:22 muted 14:13 16:15 26:12,12,20 27:7 27:9 31:18,19 81:3 138:5,6,10 215:5 myriad 247:15	60:3,16 61:17 62:25 63:8,19 64:6,22 65:11,15 66:5,23 67:8 69:8 69:19,24 70:22 71:5 73:5,13,18 73:21 74:10,17 75:9,15,21 76:7 76:14,23 77:5,14 78:11,18,25 79:6 79:16 81:1,14 82:1,12,24 83:17 84:7,24 85:24 86:8 87:9 88:20 89:1,8 90:13,15 90:18,20 92:7 93:2,8 94:7,14 95:7,15 96:3,13 96:18 98:5,20 99:8,25 100:12,20 101:9,13,21 104:16 105:17 106:8 107:4,9,18 109:5 110:1 111:16 112:4 113:7,15 114:12 114:18 116:1 117:1,3,6,10,14 118:1,19 119:10 119:17 120:7 121:17 124:17,22 124:24 125:4,7 127:25 128:12 129:9 130:1 131:2 131:8,15 132:7,25 133:22 134:18,25 135:22 137:10 139:6 140:7 141:14 142:14,23 143:10,21 144:4 144:22 145:19 146:21 147:9 149:10,25 150:24 151:21 152:10	154:12 155:7 156:18 157:13 159:8 160:4,15 161:1,4,25 163:2 163:7,11,17 164:7 164:13 165:4,8 166:11 167:12,15 168:25 169:12 170:3,14 171:4 172:5,14,17,23 173:7,16,23 176:12,18 177:12 178:15 180:9,17 180:23 181:13 182:1,11 183:5,24 184:2,23 185:11 185:23 186:23 187:2,11 189:17 190:7,12,18 191:16 192:2,22 193:14 194:11 195:3 196:2,15,25 197:3,18 198:12 198:22 200:7,24 201:7,18,25 203:2 204:5,9,17 205:7 206:12 208:10,13 208:16,21 209:15 209:19 210:11 211:10,23 212:5 212:16 213:3,19 214:20 215:4,9,20 216:11,14,19,21 217:6,9,12 218:12 219:10,22 220:12 220:22 221:8,13 222:1,8,16 223:7 223:12 224:7,16 227:3,25 228:23 229:20 230:11,22 231:25 232:8,13 232:17,22 233:3 233:10,23 234:23 235:23 238:23	241:12 242:8 243:5,18 244:13 245:6,20 246:24 247:8 248:3,15 249:3 250:6 251:20 252:15 253:11,22 255:4 257:16 258:2,10 259:10 260:2,13 261:9,17 262:5,17 263:21 264:6,16 266:1 267:16 269:13,17,25 270:23 271:20 272:5,22 274:10 274:25 276:5 279:9,24 280:10 280:18 281:22 282:5 284:15 name 26:24 27:15 28:15 32:19 38:15 40:22 55:23,24 110:13 111:10 126:23 176:15 197:4 nap 114:9 narrows 154:3 natural 24:20 naturally 127:3 nature 59:9 71:10 229:3 257:14 nay 4:14 8:13 10:19 10:25 11:1 12:15 12:22 13:20 15:23 34:22,24 39:5,16 40:9 41:3,15 42:8 42:11,18 50:11 51:12 54:2 57:23 57:24 60:22 61:13 63:18 64:21 74:5 85:4 87:13 89:13 90:3,4,5 94:1 95:25 96:12 99:22 100:13 101:10,14
---	---	---	---	---

121:2,4,8 134:15 135:12 156:6,8 166:25 167:1,2 171:18,20,22 172:1 173:1,2,5,8 175:8 186:15,18 186:21,23 188:23 199:21,23 202:14 202:15 206:3,3 209:23 210:2 214:9,10,19 215:16 223:21,22 231:12,14,18 235:12,13,22 246:20,21 249:15 249:16,18,20,24 254:17,18,22 267:6,7 275:20 281:9,10,12 nays 15:4 54:9 58:8 74:15 100:19 101:20 121:16 134:24 156:17 167:11 187:9 200:6 203:1 206:11 210:10 217:3,5 224:6 231:24 247:7 250:5 267:15 276:4 281:21 near 23:24 nearly 95:12 NEC 169:6 necessarily 43:17 46:8 49:10 64:15 65:25 83:15,21 84:3 94:20 194:1 273:23 279:15 necessary 54:22 56:6 62:16 99:3 140:17 143:15 145:25 227:20 237:2 277:12,20 280:15	necessity 62:14 277:15 need 5:6 7:13 10:9 13:5 14:14 15:25 16:2,3 20:22 22:22,25 26:5 30:7 33:5 35:16 40:22 42:17,19,23 50:25 51:17 52:24 53:21 58:19 60:5 60:17 61:12 70:3 70:4 71:3 79:14 81:6 82:20 83:9 83:20 85:8,10 86:21 87:6,7 88:22 92:5 96:5 98:2 106:15 108:21 120:9 121:3 131:20 137:25 140:18 144:21 149:5,6 150:2 152:25 153:1,5,18 155:11 156:24 160:20 162:14 165:2,20 165:21 168:19 169:3 175:1 176:24 177:11 178:6 181:10 183:10 184:5 185:4 187:2 191:17 205:13 211:24 229:13 230:17,24 235:16 242:10 247:1 254:1 261:21 264:3,14 265:13 265:24 266:8,11 266:12,16 269:8 269:10,20 270:14 272:12 279:4,4 needed 34:9 36:2 39:4 57:14 73:6 100:24 124:1	125:8,25 133:23 178:5 180:10 190:8 198:23 204:18 208:22 218:25 221:15 234:15 235:3 247:22,23 249:5 251:6 257:5,17 266:3 268:25 275:1 279:10,22 280:19,23 282:7 needing 26:6 74:7 137:10 237:4 needs 38:9,10 50:11 56:22 57:6 65:7 70:9,11,17 83:6 89:16 94:3 100:14 101:15 111:6 121:9 127:16 129:16 150:19 155:23 156:22 171:23 194:9,9 199:25 200:14 202:1,18 205:2 223:25 245:10 246:4 255:9,15 257:11 257:24 258:12 267:5 271:6 272:17 283:8 negative 11:8 18:14 neighborhood 259:15 neospirin 22:18,21 never 21:11 26:9 38:23 40:4 54:25 114:16 136:13 138:16 161:12,23 172:15 190:3,3 195:24 201:2 243:11 new 17:11 21:21 43:22,25 44:19 45:20 119:16	145:15 159:13 182:3,3 247:16 248:1 259:18,24 264:9 newer 41:20 42:6 229:8 newest 23:15 newly 55:14 NFPA 122:17,17 125:20,20,24 162:8,9 269:15 Nice 90:20 night's 284:25 nine 224:21 268:13 Nisqually 107:21 110:9 111:9 112:7 112:14 non- 222:9 non-- 218:8 non-collapsible 185:14 non-destructive 252:5 non-mandatory 218:13 non-stop 114:8 non-voting 9:12 31:23 non-voting/obser... 2:10 nonchalantly 161:11 noon 7:23 noon-ish 7:24 Nope 66:11 normally 200:19 225:24 Northwest 32:2 242:10 nos 90:17 173:15 255:3 note 66:6 73:4 100:21 163:16 213:3 257:16	noted 73:18 notes 20:23 43:12 76:2 notice 24:18 113:24 notification 64:9 notion 43:22 nuisance 189:1,13 189:23 191:5,12 193:13 198:2,9 201:3 204:8,20 208:6 nuisances 204:16 numb 22:3 number 17:1 54:12 61:11 67:4 78:16 103:21,22 177:14 216:17 218:11 246:8 271:18,19 278:18 numbers 100:2 216:9,10 233:1 <hr/> O <hr/> O 3:14 o'clock 7:19 8:6 96:14 285:1 O-u-r-y 176:16 object 92:25 93:23 187:18,23 objective 277:15 objects 91:3,18 92:6 93:14 95:19 observe 6:14 observers 27:2 observing 16:14 obsolete 71:9 obstruction 187:14 188:11 191:20 193:2 197:10 199:2,12,16 203:21 obtain 37:7 38:7 obtained 164:24 obvious 22:8
---	---	---	---	---

obviously 19:14 36:12 60:21 104:5 104:7 106:15 143:1 148:18 273:1	269:25 270:21 276:16 278:3 280:11	251:20 254:3 255:10 259:3,16 260:22 261:1 262:18,23 265:12 267:19,22 268:1 270:10,22 273:21 274:25 276:5 278:16 282:13,16 283:9 284:13	280:23 282:9 one's 53:20 ones 20:21 41:3 52:4,7 216:17 276:12,19 onward 72:21 Oops 28:1 open 16:24 25:17 102:14 112:17,21 126:18 129:18 130:16 219:3,15 220:1,3 221:1 222:24 opened 110:23 opening 200:23 219:5,18 256:24 opens 274:2 operate 111:19 120:14 250:16 operated 146:2 234:10 operating 111:23 119:25 250:14 277:18 operation 64:4 67:16 90:22,23 96:21 99:11 101:23 103:1,9 104:10 105:21,25 115:2 118:8,10 119:23 120:11 123:14 188:5,7,12 200:12 202:6 205:13 206:1 207:3,5,9 operational 54:16 54:17,18,20 56:21 57:17 64:3 67:15 72:3 operations 96:20 97:1 101:24 102:25 115:3 120:12 206:4 operator 170:22	227:14 opinion 17:7,9,10 85:19 87:2 131:3 176:6 182:12 274:5 279:22 280:9 opinions 18:10 20:25 39:21 46:21 61:1 184:6 opportunity 6:21 10:11 14:17 17:20 46:19 89:12 130:3 174:18,21 202:1 212:18 230:23 oppose 90:2 opposed 70:1 77:11 99:5 125:17 131:6 132:5 134:9,10 188:15 207:12 227:5 231:11,13 275:18,19,21 opposing 150:23 opposite 248:21 opposition 92:3 98:3 124:5 138:23 156:5,7 171:20 173:3 186:19 205:24 209:21,23 214:8,10 223:19 223:22 246:16,18 246:20 254:15,17 267:3,7 281:8,11 option 159:22 185:8 189:14 options 32:5 37:19 43:21 49:8 59:7 71:7 75:11,25 80:19 85:14 98:22 105:19 144:24 170:18 188:25 193:1 201:1 204:20 208:2 219:25 221:19 243:20 257:7
occasionally 81:9 occupied 55:3 56:10 occur 103:3 106:1 occurred 286:6 October 72:23 260:4 odd 130:19 offer 177:3 office 29:4 55:20 136:25 offices 244:20 official 90:16 officially 30:8,11 32:18 offline 52:10 oh 8:2 19:21 24:24 26:20 27:11 28:6 52:1,23 53:2 55:11 57:9 66:9 69:20,24 73:8,13 74:7 75:2 81:2 90:13 94:7 107:9 119:17 122:11 128:14 133:8 150:13 160:15 169:14 170:16 173:18,19 180:25 181:19 187:2 191:18 192:23 196:22 197:3,5 208:17 211:8 213:10 217:9,9,10 217:15 222:18 223:2,8 227:1 234:24 235:24 241:14 249:24 251:7 257:17,19 260:11 267:17	oil 145:5 239:14 240:13,18 277:9 okay 4:20 7:5,10 9:21,25 10:10,12 10:25 13:10 15:3 15:9,10,11 16:21 17:23 18:10 19:13 19:22 29:14 34:10 34:21 36:21 38:11 40:11,25 48:21 49:7 50:1,9 52:11 52:14,24 57:9,15 59:5 65:11 66:11 72:21 75:9,21 77:21,21 78:19 79:16 82:24 83:5 83:13,17 86:8 88:3 89:1,23 91:21 94:7 97:9 100:12,20 101:17 101:21 114:20 115:12 122:9 124:24 125:4 134:7 135:9,25 136:3 146:18 157:18,25 158:2 161:5 164:16 165:8 166:22 172:5,14 173:3,6 173:16 174:6 178:19 179:21 183:9 187:14 192:23 197:5 209:18,19 215:20 215:25 216:2,4,6 216:11,17,21 217:15 221:8,11 222:18 223:12 225:4 231:25 232:22 233:10,14 234:24 246:14	old 22:16 71:8 108:4 110:13 145:13 Olympia 1:18 28:25 45:1 60:23 72:19 omitted 68:20 205:16 omitting 99:18 199:13 on-site 58:14 60:17 61:13,14,18,22 62:1 63:7,12 64:13 67:10,11 72:12 73:23 74:25 78:24 194:22 238:1 239:13,23 241:9 242:13 243:14 245:8,10 245:15 on-site' 58:19 once 11:10,24 15:3 16:22 17:5,21 18:4 19:1 26:23 28:8 69:14 106:14 116:14,20 121:23 122:8 130:3 148:22 176:3 178:10 189:21 192:15 198:10 199:3 204:15 206:2 216:14 236:13 268:3 270:7,19,20 277:4 277:13,24 280:16		

269:20 279:13
oranges 149:8
Orchard 29:23
order 37:7 41:5
 109:22 127:15
 137:19 162:21
 219:19 259:8
organization
 158:22
original 78:12
originally 190:21
OSHA 136:25
 179:9,11 180:14
 180:20 226:3
others' 10:7
OTIS 108:3
Oury 27:25 28:1,2
 66:12 176:15,15
 196:6,7,8 198:15
 217:11
outcome 286:15
outlined 35:11
outside 10:20 15:14
 18:23 62:6 113:11
 117:23 122:23
 128:20 143:16
 146:2 149:7 222:4
 222:7
outward 143:16
overall 86:19 87:19
 89:12
overhead 180:4
 185:8 227:13,17
 229:3,10 230:5,10
 248:18,22 253:9
overheat 145:5
overly 47:20
overreach 44:20
overspeed 48:4
 250:10,12,16,22
 251:1 252:1,19,19
 253:3,4 254:6
overt 240:22
overtime 195:19

overwhelmed
 114:3,4 116:15
owned 59:3
owner 4:25 59:4,11
 59:12,18 68:11,13
 70:10 71:12
 179:16 237:20,21
 238:5,6,10
owner's 59:13,23
 69:16
owners 28:17,22
 54:19 65:23
 129:22 236:21
 238:2 248:23
 265:14
ownership 63:14

P

P 3:14
p.m 27:16 135:21
 285:6
Pace 28:2 29:20
PACIFIC 1:16
package 80:22
page 2:3 72:20
 76:12
pain 22:20
painful 21:23,24
 22:2
paint 239:3
pale 22:6 24:17
pan 23:5
panel 30:7 113:12
 119:25 125:16
 131:12,13 169:19
 169:24 170:20
 269:16
panels 130:10
Paoa 12:11,19
 32:17 78:8 116:2
 161:7 176:25
 177:10 283:7,25
 284:14
Paoakalani 3:7

32:19
paper 240:4,11
paperwork 139:23
 242:14
paragraph 74:20
 74:20 82:4 269:5
parameters 45:5
 146:24 147:4
paramount 136:21
paraphrases
 148:10
paren 35:7 37:13
 51:13 157:23
 160:19 165:10,13
parents 23:5
park 23:14
parks 211:17
part 20:19 24:3
 27:17 58:14,17
 60:6,8,10 61:23
 66:2 68:7,25
 71:25 73:23 74:24
 76:12,25 78:22
 82:25 86:17 87:1
 89:4 93:21 99:12
 115:24 122:19
 125:19 130:21
 135:1 146:14
 150:21 157:7
 163:4,6 166:21
 168:11 184:25
 185:5 190:10
 197:21 210:20
 212:2,2 219:25
 234:11 238:3,5,5
 238:6,10,20
 255:22 260:16,22
 260:23 261:1
 263:20,23 267:21
 270:25 274:15
partake 3:19
participants 2:10
 9:12 27:1
participate 9:25

participation 13:8
 96:16
particular 46:3
 61:11 62:16 68:19
 81:24 106:3 154:2
 162:15 189:8
 238:18 241:1
 279:16 284:19
parts 65:21 72:4
 96:25 114:21
 162:8,10 241:25
party 159:19,20
 160:1 163:22
 286:14
pass 46:8,10 53:12
 53:12 104:18
 213:6 254:5 259:2
 259:9 263:14
passed 52:3,8 53:7
 273:3,13,19
passenger 82:8
 93:5 143:18 146:5
passengers 142:1,6
 210:23 212:4
 213:2
passes 118:6
 156:23 255:8
 257:19 266:11,15
passing 35:14
 105:16 110:18
 128:19 234:11
pasted 87:22,23
path 91:19
Patrick 31:7,9,14
 40:16,24,25 41:16
 122:11 173:18
 209:11,12 217:14
Paul 19:7,12 27:22
 27:23 69:19,20,25
 70:22,23 82:12
 83:13 84:6,7
 91:21,22 97:22,23
 124:22 131:9
 138:8,10,10

145:19 146:8
 166:1 172:2
 175:22 274:11
Paul's 98:22
pay 131:20
penalties 265:1
penalty 265:4
people 4:15 5:1,7
 6:12,13,14 7:16
 8:22 10:9,20
 13:16,20 14:7,10
 14:12 15:16 16:17
 16:18 17:5,10
 20:12 26:22,25
 38:22 41:11 46:23
 58:25 59:11 60:25
 61:5,18 66:10
 73:3 79:20,20
 86:16 87:4 93:9
 103:25 104:12
 105:5 108:7,13,25
 110:21 111:3,10
 111:10,11 112:20
 112:22 113:2,5
 114:4,4,21 115:22
 116:22 117:16
 118:11 119:20
 121:3 125:15
 126:8,21 127:18
 129:7 131:22,23
 135:11 136:1
 141:8,10 142:17
 142:22 159:16
 172:7 174:13,18
 174:25 175:1
 178:17 183:24
 192:13 207:22
 212:25 215:18
 219:20 230:23
 233:8 237:3,19
 239:5 245:25
 253:1 255:21
 276:23 278:19
 282:13,22

people's 18:11,15 20:25 184:6	213:21	193:8 194:3,22,23 207:12,17 236:10 236:21 268:9,20 268:23 269:22	piggyback 41:2 118:2 140:9 144:25 146:6 201:1	112:13 123:4 129:8 139:14 144:10 151:12,14 151:15 155:15 183:11 228:7,9 229:6 236:3,17 242:1,16,24,24 256:23 264:19 286:7
perception 34:4	permitting 20:14 188:10 207:7,24 255:6	persons 37:5,8,10 123:15,19 136:23 236:22	pillow 26:4	places 278:13
perfect 8:10 27:14 94:18	perpetuity 236:17	perspective 105:21 141:4 230:18	pin 228:7	plan 5:18 8:16 58:18 171:2 239:8
perform 59:22,22 62:12,13,16,23 63:16 71:14 74:23 103:15 106:22 133:4 250:19	Perry 30:25 31:1	perspectives 141:6	pinches 211:3	plane 217:21 218:14 221:21 222:21
performance 163:13	person 17:12,18 22:6 24:15 25:19 26:2 31:10 38:18 54:14 66:2 70:15 70:19 84:20 87:22 92:21 110:5 111:8 113:2,23 115:1,15 123:20 127:11 133:4 136:9,12 140:14 150:7 154:21 170:10 186:1 194:19 230:3 251:15 263:18	pertain 115:5	pins 228:8 230:3	plates 234:6
performed 35:16 37:4 147:24 256:11 257:2 262:20,21,24 274:7 277:4,4,24 277:25 281:2	person(s) 236:6	pets 278:20	pipe 248:11,11	playing 208:4
performing 37:9,11 58:13,17,20 61:22 61:25 62:5 63:23 64:2,14 67:14 73:22	personal 30:12 87:2,2,7 108:10 129:5	Phase 97:1 99:11 119:13,13 272:3,4 274:1	pipeline 283:23	please 9:21,23 10:5 11:22 13:21 14:4 14:12 15:15 16:14 18:8 25:14 26:23 34:16,17,22,24 35:2 38:15 40:23 50:4,23 51:9,10 51:12,15,18 54:6 55:24 57:21,23,25 58:2,6 72:16 73:25 74:2,3,4,5,6 74:8,11,13 77:22 89:17,23,24 90:2 90:3,4,5,7,7 95:21 95:22,25 96:6,7 99:16,17,22 100:1 100:1,13 101:2,6 101:10,13,15 120:19,22 121:1,4 121:7,10,11,14 122:6 130:5 134:5 134:6,9,11,14,21 136:18,23 150:25 155:16,18,25 156:2,6,7,9,10,12 156:14 160:22
period 49:18 128:19 152:5 154:2 166:8	personnel 35:17,19 35:22 63:15 102:6 102:7,9,10,17,18 102:21,22 103:2,7 103:10,10,14 104:8,22 106:4,5 106:22,24 107:17 108:13,23 109:13 112:25 113:1,22 114:11 115:5,13 115:14,16,19,20 116:6,7,17,23 119:5,8,12 120:14 120:16,18,21,21 123:11 141:7,20 142:13 143:18 146:5 188:15,20	photo 263:9 97:19 260:25 263:14	pip 80:11,23 81:8 81:11 82:18,20,22 83:20,23,25 84:16 84:21 85:17 86:6 129:16 132:11,14 137:1 138:13,15 139:2,4,9,12,14 139:17 140:5,13 140:19 141:1,12 142:11 143:1,5 145:7,25 146:17 147:5,16,20,22,24 148:7,9,13 149:1 149:7,21,22,23 151:11,25 152:1,5 152:7,9 153:21 154:19,19 155:3 185:1 217:19,25 218:1,3,6,16 219:4,9,9,16,18 219:21 220:1,7,16 220:21 221:22 222:5,7,12,13,23	pit 80:11,23 81:8 81:11 82:18,20,22 83:20,23,25 84:16 84:21 85:17 86:6 129:16 132:11,14 137:1 138:13,15 139:2,4,9,12,14 139:17 140:5,13 140:19 141:1,12 142:11 143:1,5 145:7,25 146:17 147:5,16,20,22,24 148:7,9,13 149:1 149:7,21,22,23 151:11,25 152:1,5 152:7,9 153:21 154:19,19 155:3 185:1 217:19,25 218:1,3,6,16 219:4,9,9,16,18 219:21 220:1,7,16 220:21 221:22 222:5,7,12,13,23
periodic 74:21	personally 38:23 39:8 47:16 99:4 113:1	phrase 274:12 279:25	pit 80:11,23 81:8 81:11 82:18,20,22 83:20,23,25 84:16 84:21 85:17 86:6 129:16 132:11,14 137:1 138:13,15 139:2,4,9,12,14 139:17 140:5,13 140:19 141:1,12 142:11 143:1,5 145:7,25 146:17 147:5,16,20,22,24 148:7,9,13 149:1 149:7,21,22,23 151:11,25 152:1,5 152:7,9 153:21 154:19,19 155:3 185:1 217:19,25 218:1,3,6,16 219:4,9,9,16,18 219:21 220:1,7,16 220:21 221:22 222:5,7,12,13,23	pits 137:1,15,19 138:1,21,22 140:16,24 143:13
periods 56:17 191:9	personnel 35:17,19 35:22 63:15 102:6 102:7,9,10,17,18 102:21,22 103:2,7 103:10,10,14 104:8,22 106:4,5 106:22,24 107:17 108:13,23 109:13 112:25 113:1,22 114:11 115:5,13 115:14,16,19,20 116:6,7,17,23 119:5,8,12 120:14 120:16,18,21,21 123:11 141:7,20 142:13 143:18 146:5 188:15,20	physical 45:19 236:8,14 243:21	place 5:8,9,22 17:7 73:16 77:10 95:10 106:17 107:23	
permanent 181:6 233:18		physically 12:12 13:2 39:22,23 45:19 46:4 48:2 204:10 246:5,10 246:13 248:22		
permanently 236:9 236:15		picture 223:4 239:3		
Permissive 226:1		pictures 170:8,10		
permit 123:13 263:8,13,15 264:1		piece 65:2 80:17 85:10,15 87:15 110:20 132:17 139:24 140:12,25 154:7 204:13 228:18 232:9 244:6 268:13		
permits 259:6		pieces 38:19 39:2 47:23 63:10 149:6 157:12 195:20 239:4 241:25 243:7		
permitted 37:2 80:25 91:1,4 92:5 92:14,17 93:7,13 122:23 141:11 143:17 146:4 147:12 188:4 207:1 210:14		pigeon-holed 157:10		

163:11 166:19,21 166:24,25 167:2,5 167:7 171:13,15 171:19,21,22,24 172:1,11,18,20,24 173:1,3,8,9,10,12 183:14,20 186:12 186:14,15,17,23 187:3,4,6 198:24 199:14,17,19,23 200:2,3,15 202:8 202:9,10,14,15,16 202:19,21 203:9 205:17,18 206:2,3 206:6,8 209:8,8 209:16,22,24 210:2,2,5,7 214:3 214:3,4,5,9,10,11 214:14,15,16 216:5,7,24 223:1 223:13,21,22 224:1,2,3 231:7,8 231:10,12,13,14 231:17,18,19,21 235:7,8,12,13,16 235:18,19 246:12 246:13,16,17,19 246:21,25 247:1,2 247:4 249:8,10,11 249:14,16,17,20 249:21,22 250:2 254:10,11,13,16 254:18,22,23,24 255:1 262:15 266:21,24 267:1,6 267:7,8,9,11,12 275:16,18,20,22 275:23,24 276:1 281:3,7,9,10,11 281:14,15,16,18 282:18 283:6 284:22 pleasure 32:13 point 15:5,21 35:3	45:1 46:16 47:8 49:19 52:2 63:20 66:13 72:7 74:6 79:2 81:22 82:9 83:1 91:2 92:21 92:21 93:20 94:19 98:22 99:6 109:15 112:2 114:10 118:24 132:13 133:5,18 144:1,24 146:23 147:1,6 149:8 152:2,5 154:15,23,24,25 160:7 163:3,20 164:2 170:18 181:19 187:14,21 189:2 192:9 194:1 200:16 204:1 213:2 220:18 222:11 230:13,20 243:24 248:22,23 265:18 273:12,17 274:20,20,21 point-- 66:8 pointed 44:17 155:4 points 44:16 88:8 103:22 156:20 162:5,11 207:22 228:11 policies 139:11 policing 68:18 policy 243:20 poor 192:20 pop 11:25 197:5 popped 32:10 Port 29:23 portion 35:9 37:12 86:24 152:6,7 165:9 245:13 259:22 portions 162:14 Portland 105:7 pose 58:25 75:21	121:19 130:15 203:9 237:17 246:7 posed 17:21 posing 142:16 168:13 position 41:9 82:15 187:22 217:21 218:14 220:25 222:21 positions 120:2 positive 10:13,15 11:2,8 15:15 18:14 151:19 positively 4:22 possess 99:3 possession 70:11 possibilities 186:3 possibility 103:10 166:3 196:4 264:20 possible 9:24,25 11:13 16:5 20:16 24:13 53:19 66:6 106:14,16 128:5 128:11 177:23 204:25 264:23 279:21 282:19 possibly 10:2,22,22 75:16 117:15 256:1 post-earthquake/... 108:15 posting 140:11 potential 103:8 226:3 potentially 64:16 104:2 111:12 240:12,25 pounds 35:20 38:25 91:13 97:14 power 90:22,23 149:19 187:17 188:7 206:22	207:4 practice 219:14 247:16 practices 136:22 226:11 preamble 72:2 precautions 106:17 precisely 59:7 133:18 preclude 212:25 213:9 prefer 82:7 preliminary 80:7 premise 44:18 prepared 139:4 prescriptive 158:14 159:2 164:9,10 presence 188:16 207:13 present 40:3 45:4 54:24 61:15 188:15 207:12 presented 13:14 83:3 181:16 presents 123:10 pressing 225:1 pressure 48:3 133:14,15 149:18 pretty 22:4 49:21 50:14 55:20 56:3 72:5 77:16 86:12 88:7 95:17 120:13 121:18 145:8 166:14 192:19,20 255:18 273:3 278:18 prevail 185:7 prevent 36:25 83:24 136:15 143:5 151:11 155:2 180:3 225:18 230:2,5 277:9 prevented 147:15	153:17 preventive 211:20 previous 17:10 40:12 92:21,21 106:10 107:20 148:17 217:1 241:14 257:21 258:4 271:22 previously 39:11 52:9 177:3 198:16 260:15 primarily 240:4 primary 229:7 printed 44:4 prior 7:21 60:18 72:25 73:1 146:7 147:16,22 148:7 151:11 153:20 194:23 244:8 priority 54:23 56:7 private 236:24,25 proactive 210:25 proactively 210:20 probability 171:1 probably 22:6 25:10 64:7 72:8 77:9 81:6 84:15 86:3 127:22 145:2 148:22 163:15 176:6 191:4 197:12 213:16 217:13 problem 118:23 123:2 124:14 128:18 139:1 150:16 191:1 200:18 218:20 237:5 253:6 257:23 269:12 problematic 247:13 problems 108:12 252:11 procedure 65:4 procedures 46:7
---	--	---	---	---

58:23 59:21 61:3 62:12,16,18,23 63:7,11 64:1 65:14,23 67:13 68:23 71:15 141:3 239:15,16 241:22 242:12 252:18 proceedings 1:5 286:6,7,11 process 6:16 11:13 18:6 20:25 33:23 35:14 43:12 89:19 104:2 159:15 163:21,22,25 176:11 229:11 272:16 283:3 284:20 produce 48:3 211:18 product 20:16 production 264:24 professional 66:21 professionals 66:20 program 4:18 5:2 5:11,13 32:20,21 33:3 34:15 77:1,4 80:1 152:12 153:3 236:2,5,16 239:6 241:17 245:14,24 246:4,10,19 255:16,16 264:19 prohibit 247:15 prohibited 84:21 103:1,1 105:22 136:11 150:8 210:18 214:1 247:12,21 prohibiting 210:21 249:6,10 prohibits 150:9 project 248:20 promote 158:4 211:5 promptly 135:23	prong 251:23 proper 63:16 71:20 137:22 191:25 269:10 properly 37:4,6 39:12,15,24 48:3 64:19 70:12 99:2 112:17 158:20 189:7,25 252:7 268:6 271:2,5,18 274:13 278:10 property 28:17 59:18 109:10 proponent 88:15 proposal 16:25 33:19 36:1,5 44:21 50:19 53:23 54:5,6,12 57:16 58:6,10 62:11 73:8,10 74:17 76:18 77:15,18 78:5,7,15,16 82:16 89:21 90:21 91:16 92:3 95:17 96:10,19 97:17 100:21 101:6,21 120:11 121:13 122:10,12 125:1 133:25 134:22 136:5 138:2 143:23 146:17 150:3,25 152:25 155:18 156:15 158:18 166:2,14 167:9,16 171:7 173:13 177:4 179:4 187:7,11 191:18 199:10 202:4,24 205:10 206:13 210:8,12 210:20 213:21 214:17 216:10,22 217:4,4 222:20 225:3 231:2,22	232:1 237:1 239:21 247:5 249:6 250:2,8,9 254:5 256:8 258:9 266:5 267:13,20 275:3 276:2,21 280:20 281:19 proposals 43:1 52:3 54:4,9 89:4 174:2 196:17 propose 50:5 174:13,24 175:19 proposed 4:21 36:14 55:13 79:5 80:21 86:15 148:2 184:9 215:20 237:4 proposing 91:25 160:16 175:9 186:1 215:24 proprietary 58:22 59:9 238:12,15 protect 24:6 116:22 126:12,19 132:22 211:1 protected 123:16 247:18 248:11 protecting 126:25 127:1 128:15 136:20 138:21 protection 95:12 123:7,24 128:25 136:16 137:22 138:13 144:3 168:7 179:18 188:18 207:15 219:13 226:6 227:10 250:10,13 250:22,23 251:2 254:7 protocol 80:15 83:23 protocols 110:11 proven 188:16	207:13 provide 43:16 63:15 130:3,5 138:13 148:8 158:3 189:14 210:21 216:24 226:8 230:3 234:13 240:9 250:2 264:25 provided 46:6 64:5 67:17 97:2 99:12 119:23,25 122:24 123:8,12,25 129:15 130:10 136:17 146:1 160:3 168:7 179:19 187:15 188:18 206:15 207:15 217:19 218:1,3 225:19 226:6 231:3 234:6 236:6,17 provider 130:25 237:5 238:5,16 273:5 providers 65:1 provides 94:23 219:13 236:25 268:21 providing 122:21 144:11 151:24 provision 72:10 153:16 236:24 265:23 provisional 153:15 provisions 142:7 151:8,10 181:2,7 185:14,15 proximity 123:9 public 38:23 39:2 41:8 42:5 54:21 111:1 115:6,23 116:5 118:15 123:4,4,7,10,15	124:7,11 125:13 126:11,12,19,19 126:25 127:17 129:3,13 130:16 130:16 132:12,19 132:23 133:10,15 138:18 142:12 144:12 145:10 158:5 168:14 188:17 189:24 190:5 192:15,20 194:21 197:25 207:14 211:5 219:13,21 277:19 279:23 publicly 129:8 published 136:14 138:17,20 pull 55:10 129:17 195:19 pulled 21:14 190:20 pulling 86:19 pump 142:3 144:13 147:19 149:16 pumping 148:22 pumps 256:19 puppy 283:8 purchased 179:16 purpose 2:4 4:7,11 6:6,23 133:9,9 148:14 158:3,3 161:9 purview 9:23 push 121:22 122:5 122:7 195:17,23 pushed 255:6,16 pushing 7:23 41:12 put 3:23 5:12 17:6 24:7,25 25:5 26:3 34:22 36:17 42:6 49:2 50:19 51:10 53:6 56:16 63:13 65:25 66:1,14,25
--	---	--	---	--

69:21 70:19 73:9 82:6 89:6 90:14 93:17 94:11 100:6 106:17 107:7 108:9 112:18 116:24 119:20,21 120:24 126:22 130:19 132:4 138:19 139:15 141:12 143:19 145:21 149:22 151:24 152:1,7 153:3 154:18,19 154:21 155:9,23 164:14 165:18 167:2 170:22 172:8 178:4,8 181:3 196:11,16 197:20 199:19,24 202:10 211:8 213:3 217:15 223:4,18 233:8 241:8 255:11,14 258:6 262:22 263:25 264:18,21 266:9 269:10 270:13 274:12 278:5 279:2,7 280:20 284:3,10 284:22	qualified 66:3 70:18 103:7,14 106:22 116:23 quality 271:16 quarter 120:4 question 10:4 12:10 13:4,7 14:24 16:7 16:8 17:25 18:1 20:6,7 37:17,19 38:1 46:20 47:4 48:7 49:16 55:9 56:25 57:2,11 60:11,24 61:10,11 63:2 64:10 68:1,6 69:10,20 72:11 75:17,22,25 80:20 81:2,16 85:12 97:24 107:5 110:3 113:9 114:20 115:21 124:17 141:18 142:15 151:1 160:22 161:6,10,23 162:1 164:14 170:15 175:7 179:24 182:1 183:4,5 192:23 193:16,19 195:4 212:17 221:17 222:3,15 222:18 234:24 235:24 237:17,22 264:16 271:23 273:17	120:8 123:22 124:1 125:8,10 130:3,5 133:23 135:10 137:6,11 141:15 142:10 146:9 150:1 153:10 155:8 158:15 164:16 166:12 168:15 169:13 171:5 175:7 177:21 179:20 180:9,23 188:22,23 190:7 198:23 201:18 202:2 203:10 204:5,17 205:8 208:17,21 211:11 211:23 212:18 218:25 219:22 221:14 223:5,6 226:15 227:25 230:24,25 234:15 234:25 235:2 237:12 238:25 247:22,23 249:4 251:5,6 254:1 257:4 266:1,2 268:25 269:18 275:1 279:9 280:19 282:17 283:21,24 284:16 284:23	quicker 116:13 175:13 178:23 283:5 quickly 3:23,25 73:14 108:8 165:12 199:8 Quiett 29:21,22,22 39:6,7,7 47:13,14 47:14 63:8,9,9 64:24,25 65:9 76:7,8,8 88:20,21 88:21 94:8,9,10 95:4 112:5,6,6 113:19 118:1,2 128:12,13,14 132:7,8,8 144:4,5 144:5 149:10,11 149:11 157:2,3,3 169:1,2,2 180:25 181:1,1,13 193:15 193:20,20 201:7,8 201:8 212:20,21 212:21 219:11,12 219:12 220:12,13 220:13 222:8,9,9 228:23,24,24 229:21 252:15,16 252:16 253:12,16 253:17,17 264:6,8 264:8 265:12 270:24,25,25 quite 6:13 7:4 9:17 44:3 49:20 50:15 88:3 126:20 169:18 210:13 244:16,21 260:3 quote/quote 58:19 quote/unquote 44:10	raced 223:3 radiation 22:10 railing 180:2 182:4 186:2,3,12 railings 181:3 rails 228:5 raise 2:14 12:7,21 12:22,22 13:2,3,5 13:16 14:15,15 16:6 34:16,23,24 35:3 48:23 50:4 51:12,18 57:19,21 57:23,25 58:3 66:10 74:2,5,11 77:22 90:7,7 95:22,25 96:6,8 101:2,11,15 120:22 121:1,4,10 121:11,24 122:1,6 130:7 134:5,6,9 134:11,14 150:25 155:16,18,25 156:2,6,7,11,12 160:22 165:22 166:19,21,24,25 167:5,7 171:13,15 171:19,21,24 172:18,20 173:1,3 173:10,11 183:14 183:20 186:14,24 187:4 198:24 200:2,15 202:19 202:21 204:10 206:7 209:22 210:5 214:4,11,14 214:15 216:5 223:1,14 224:1 231:7,8,12,13,17 231:19 235:7,9,17 235:18 246:19 247:1,2 249:8,11 249:14,16,21,23 253:18 254:10,11 254:16,18,23,24
puts 45:8 71:12 113:24 141:3 265:18	questions 6:21 8:17 8:21 15:10,21 16:23 17:21,21,24 18:4,5,6,24 19:1 20:4 34:8,11 36:2 37:16 52:22 57:14 58:24 73:5 75:1 80:16 87:25 91:20 94:15 97:20 99:8 100:23 101:1 103:16 108:21	Questions/Clarifi... 2:17 18:20 quick 10:8 11:13 20:7 64:7,24 67:9 72:14 75:22 87:10 88:8 96:14 99:23 108:18 127:9 145:20 147:9 149:12 165:22 172:6 173:17 178:11 185:12 223:8 274:11	R R 3:14 286:1 RAC 104:19 race 224:2	
Q				
quake 110:9 111:9 112:7,14				

266:21 267:10,11 275:20,22,23,24 281:3,10,11,15,15 281:16 raised 9:1 19:6 34:18 39:19 47:4 50:3 107:6 119:18 198:13 274:17 raising 24:18 50:23 74:1 89:24 90:3 100:15 120:19 134:4 186:12,16 214:3,9 216:5 278:1 ramification 177:20 ran 47:18 113:20 129:1 228:25 282:18 random 238:19 range 206:25 218:22 rarity 91:9 97:11 rate 138:15 rated 112:1 157:16 187:24 229:12 rationale 17:2,4,6 17:15 34:8 36:6 36:20,22,24,24 54:18 56:4 59:10 74:21 83:2,4,5,15 83:22 84:3,13,14 84:14,25 86:5 87:5,11,18,19,23 88:12 89:15,23 91:5,24 92:10 97:5 102:24 106:21 125:11 143:13 158:18 159:6 167:25 190:21 191:14 225:22 251:9,17 256:20 277:7 re-- 192:10 195:21	261:24 re-do 172:11 194:19 re-program 271:16 re-raised 64:23 133:1 re-setting 115:16 re-start 188:6 re-tested 46:11 re-vote 11:12 reach 33:5,6 218:19,22,22,24 219:5,19 221:1 222:24 234:9 256:24 reaches 187:23 reaching 5:16 221:10 234:11 react 24:15 reaction 24:20 read 17:12,14 36:20 53:23 54:6 58:6 67:9 74:13 79:10 89:3 96:10 100:16 101:18 104:17 117:15 121:14 134:21 145:20 149:4 151:23 153:14 156:14 167:9 173:12 176:2,3 187:6,15 197:9 200:3 202:23 206:8 210:7 213:17 214:17 216:15,23 224:3 225:18 228:3 231:21 235:19 247:4 248:6 255:1 258:24 262:18 263:12 266:2 267:12 270:4,6 274:11 276:1,8 281:18	readily 78:24 reading 86:15 92:20 124:2 139:22 150:14 152:14 259:21 262:15 reads 61:17 109:12 160:9 ready 46:15 47:1 50:3 51:11,12 73:6 97:22 123:13 133:24 135:18 215:22 284:25 real 3:25 64:7,23 67:9 75:22 87:10 99:23 127:9 145:20 147:9 149:12 165:22 172:6 199:8 208:4 223:8 250:25 274:11 real-- 14:6 realistic 104:7 248:19 reality 14:6 98:14 226:19 realize 87:20 realizes 111:5 really 4:18 5:6 10:17 11:7 14:9 16:18 18:15 23:16 23:17 25:2 27:3 36:10 38:10 42:14 42:22 61:19 67:24 68:6,12 79:17,19 80:6 86:12 87:6 87:17,18 88:13,18 93:15,16,20 94:9 94:11 98:23 105:4 109:21 117:4,12 131:20,23 132:2 135:23 140:18 155:11 156:25 165:2 174:20	175:2,25 176:20 177:6,7,19 178:24 184:5,13,21 191:12 201:22,23 205:2 224:23 227:19 242:7 243:22 244:3,19 245:2 258:6 262:8 266:12 282:22 283:12,13,17,19 285:2 reason 13:7 19:22 42:3 56:16 64:13 66:1 93:25 94:5 106:12 109:13 123:2 131:4 133:5 133:7,7,9,20 140:21,23 189:19 219:25 265:5 280:6,6 reasoning 56:4 reasons 24:8 59:17 87:3 118:11 137:15 227:12 241:7,10 rebuilt 230:16 rebuttal 46:17 recall 19:8 268:4 270:8 272:3 274:1 recalled 271:12,13 recalls 41:24 47:22 recess 52:20 96:17 135:21 173:22 224:15 recognizes 35:15 recommend 37:11 64:20 76:20 88:17 recommendation 15:22 recommendations 5:12 reconvene 7:16 record 75:13 119:21 152:4	237:24 243:15 244:8 268:8,15 275:4 recorded 268:19,22 records 74:20,24 75:5 76:25 236:22 239:9,9,11,12,22 239:24 240:1,4,6 240:9,16,17 241:1 241:4,8,15,22 242:18 243:10,14 243:16,21,21 244:2 246:1 268:24 269:15 273:1,24 274:5,6 recount 172:21 red 21:23,24 22:1 53:12 196:9 208:14 reduce 82:11 193:12 279:21 reduced 104:13 179:8 reducers 141:21 reducing 35:18 reduction 123:18 refer 163:10 reference 33:24 34:5 53:8,20 57:7 66:7 87:19 125:19 126:6 156:21 161:19 162:2,7,7 162:8 163:5,6 166:16 180:20 190:11 207:22,23 213:4 235:5 257:17 271:24 referenced 34:2 78:3 119:20 125:21 182:2 references 162:4,11 162:16 163:4 195:15 referencing 63:21
---	---	---	--	---

160:20	regular 245:3	196:4 199:3,15	286:8	237:3,7 239:4
referred 242:2	regularly 271:1	200:11 256:3	reporter 3:5 16:2	245:19 250:16
referring 78:14	regulate 69:6	267:1	38:14,15 55:22	251:12 262:13,13
161:22 162:15	regulated 85:22	removed 25:19	56:1 117:7,8,12	268:16 269:24
241:18	regulating 68:9	34:14 98:19	176:13,14,17	271:11 275:14
refers 161:11 162:2	85:20	104:14 150:20	216:16 218:9,10	277:5,13 280:15
191:20 269:4	regulations.' 34:2	187:17 206:22	260:9,10,12 286:4	requirement 54:15
reflect 12:13	reiterate 44:15	removes 150:9	286:20	55:15 58:16,18
273:23	reiterating 178:13	202:12	reporting 1:16	62:22 63:22 74:19
reflected 166:4	reject 129:11 164:1	removing 25:24	136:24	74:24,25 82:17
refuge 141:22	rejecting 106:6	33:20 43:9 50:6	reports 44:4 45:3,3	86:13,20 91:17
refuse 277:10	related 180:14	50:21,22 63:13	represent 4:14	92:1,10 96:24
regarding 6:22	286:13	80:16 97:24 102:5	10:20 19:19 30:8	97:17 98:7,12,15
33:19 34:8,10	relates 137:2	102:8 120:20	30:16 32:1 43:15	100:25 106:24
36:1 37:13 44:7	relationship 168:3	148:12 151:17	65:7	122:21 148:15
54:4,5,5,13 62:7	relax 7:17	171:8 189:5	representative 29:7	151:13 168:4,8
67:10 71:25 73:21	relevant 157:4	199:10 202:5,14	represented 15:13	171:9 179:6 183:9
81:17 99:11	relinquishing	203:4 205:11	196:21	185:7 220:20
100:25 101:5,23	120:13	207:23 232:3	representing 28:17	223:20 230:14
120:11 133:25	relying 60:25	250:14	28:21 29:20,24	235:5,7,10 241:10
157:19 164:20	159:15	reoccurs 105:14	30:7 31:5,9 32:12	248:24 250:17
171:8,19 174:10	remain 106:16	reopening 256:21	41:1 64:11	251:19 258:22,23
182:12 183:17	236:17	256:24	represents 250:24	268:18 270:3,4
185:24 186:7,9,10	remainder 137:2	repair 114:4 128:7	reproduced 240:18	271:23 272:7,8
186:11 187:13	remains 197:14	repairs 103:12	reproducing	280:22 281:9
190:12 195:5	remedy 25:11	230:15 240:10	240:14	requirement(s)
199:9,10 200:10	remember 22:17,25	264:2	request 159:23	122:20
202:4 203:8	46:15 61:18 114:5	repealed 37:12	requested 68:11	requirements
205:11,14 207:20	139:22 146:25	repeat 218:11	211:1	58:12 62:12 82:23
207:23 209:1	REMEMBERED	274:19	require 47:6 60:13	88:11 91:14,16
211:6 214:21,22	3:1	repeated 49:10	72:11 111:25	97:16 99:18
215:22 220:23	remind 40:20	replace 102:17,21	146:1 188:6 207:3	111:25 112:1
232:18 235:1	remind-- 137:2	229:2	226:21 227:6	122:17,20 125:20
237:13 245:23	Remote 233:18	replaced 44:11	243:7 245:1	130:13,20 138:12
246:3,18 247:20	removal 43:14	145:22	252:19 260:24	147:14 150:23
250:7,12 251:1	148:6	replacements 264:3	272:1,18 279:15	158:6,8,10,11,13
254:3,6 256:8,9	remove 11:9 13:19	replacing 102:9	required 35:21	158:19 160:10,12
266:5 267:20	23:24 25:22,23,24	120:18,21	37:22 43:24 47:10	162:19 163:23
277:3	51:3,6 63:23	replies 17:25	62:20 64:2 67:14	167:20 169:21
regardless 85:19	77:11,17 91:25	reply 17:23 18:1	67:17 91:19	186:2,14 225:6
86:20 138:1	100:1 102:1,21	48:13	106:25 130:14	234:14 236:4
256:11 262:24	112:23 126:1	report 163:24	136:9,22 143:4	239:18 240:15
regards 142:21	143:24 149:6	233:13 239:10	150:7 182:9	256:10,12,14
Region 31:1	164:22 186:1	reported 210:24	206:16 229:12	262:24 263:1,3,25

265:16 266:20 275:10 requires 55:13 65:18 111:6 189:3 200:13 226:22 240:8,8 241:9 250:18 259:22 262:10 274:14 requiring 58:12 61:21 128:2 169:6 194:22 202:7 203:6 rescue 143:18 146:5 research 98:10 resent 188:20 reservation 39:13 reservoirs 147:18 reset 102:7 106:6 111:21 117:22 118:5,7 119:1 121:20 188:2,4,6 188:11 189:8,9,14 189:19 191:3,6,8 191:10,11 192:17 192:18 193:5,10 194:14,17,17,19 194:20 195:1,5,7 195:14,17,23 196:5 197:25 198:3,8 199:3,11 199:14,15 200:12 200:13 201:5,16 202:5,7,14 203:5 203:6,16 205:5,12 205:14,19 206:1,2 206:25 207:2,3,8 207:17,24 209:10 resets 189:21 190:23 196:5 209:2,7 resetting 197:23 residence 69:14 residential 66:1,14	67:19,21 68:2,3,9 68:10,13,19 69:3 69:11,13,18 70:2 70:4,5,13,14 71:2 72:1,5 residents 69:15 respect 10:5 11:23 14:13 18:9 136:19 212:13 225:20 226:10 228:10 231:4 respond 47:4 108:8 131:17 responder 109:10 responders 111:2 responding 240:22 response 108:14 132:10 142:25 143:11 217:14 responses 178:21 responsibilities 2:9 6:11 9:11 responsibility 239:19 272:1 responsible 113:4 rest 72:5 79:21 82:3 115:8 121:21 122:22 132:23 135:18 175:10 264:15 284:25 restart 192:10 193:10 194:4 197:12,15 201:16 207:4 restarting 194:23 194:25 rested 135:18 restricted 181:17 restrictive 91:13 97:14 result 35:20 77:17 123:17 168:12 179:8,9,11 225:16 275:7	resulted 159:4 resulting 143:6 results 37:5,7 49:6 54:3 58:6 62:15 74:13 79:12 100:16,18 200:3 216:3,11,12,24 218:21 231:21 235:20 276:1 retain 89:5 208:9 retained 243:17 244:8 269:15 retains 35:23 retard 252:22 retention 243:15 retirements 104:23 retroactive 182:6 182:17 185:5 260:6 return 103:13 104:4 118:8,10 reversed 204:23 review 2:23 4:12 8:1,4 33:15 44:22 161:7 165:12,13 213:5 255:14,17 reviewed 49:20 79:21 revised 226:2 revision 260:23 262:19 263:20 revisions 263:10 revolved 146:10 reworded 211:20 Ricky 52:12 117:20 118:22 119:20,21 165:10,18 223:3,5 rid 42:21 43:2 62:22 151:5 184:12,16 ride 189:25 rides 252:23 riding 4:23 42:5 54:21 110:6 116:5	130:16 142:12 144:12 168:14 188:17 207:14 277:19 279:23 rig 230:18 rigged 189:12 rigging 226:11 right 4:12 5:5 7:8 8:8,16,23 9:4 13:1 13:11,14,20 16:15 17:17 18:8,17 19:2 20:3,4 21:9 27:10,14,16 31:13 32:17,23 34:23,25 35:4,6 36:19 46:13 50:5,17,18 51:9,18,22 52:15 53:2 54:11 57:13 57:21,25 58:9,25 60:10,18 66:10 69:19,21 70:25 71:5,14 74:2,6,10 74:13 77:5,22,23 79:16 81:5 85:7 89:8 90:4,4,9,20 90:21 94:14 95:15 95:23 96:19 99:9 99:19 100:15 101:7,9,13,17 103:25 107:9,13 108:8 109:5 113:25 114:12,18 118:19,23 121:3,6 121:6 122:3,11 125:7 128:17 130:7 134:18,19 138:9 140:13,18 145:20 146:23 148:19 150:3 152:25 153:9 155:7,19 156:2,18 160:4 161:1,21 162:18 163:17,21 164:11,18,25	165:20,23 166:6 166:11,13,23 167:1,12,16 168:25 171:16,21 172:17,23,25 173:7,11,16,19,20 173:25 176:12,22 177:13 178:16 181:21 184:9,23 185:23 186:14,16 190:4 197:4 198:24 199:19,23 200:1 201:25 202:10,13,16 203:2,11 205:20 205:23 206:4 208:7,21 209:12 209:15,19,20,24 210:4 211:13 213:19 214:5,7,16 214:20 215:10,13 216:7,21 217:16 217:16 219:4,10 221:4,13,14,16 222:18 223:7,13 223:16,23 225:3 228:14 230:22,25 231:9,14 233:3 234:19,25 235:10 235:24 239:22 241:12 243:2 245:20 247:8 248:15 249:3,12 249:17,25 250:1 251:7 253:16,22 254:25 257:14,21 258:14 259:14 260:16,17 261:2,6 261:22 262:5 263:7 265:23 266:3 267:17 270:23 274:10 275:22,25 276:5 278:6 280:1,8,10
---	---	--	--	--

282:20 283:24	RPR 1:15 286:19	Russ's 146:6	163:15,23 168:3	232:20 251:13
righty 202:3 210:6	rub 25:22		169:21 180:7	253:19 258:17,21
213:20	rubbing 23:25 24:4	S	185:20,20 188:12	258:22 260:18,22
rigid 116:21	110:18	S 3:14	188:17 189:5,15	261:1,2,6,8,11,18
rigorous 35:14	Ruddder 31:15	S.W 1:18	192:20 207:9,14	261:20,25 262:2,4
ring 105:8,10,23	Rudder 31:14,15	safe 19:18 43:16	219:20 220:2	262:19,23 263:6
112:10	117:1,2,5,11,13	88:23 94:13 111:6	228:18 237:7,11	263:10,10,11,12
ripped 240:13,19	rug 22:10	113:4 123:14	262:22 263:8	263:16 265:22
rise 43:8 59:15,21	rule 2:23 16:22	124:10,11 159:5	273:4,24 274:5	270:13 274:22
91:11 95:9 97:13	17:1 33:15 37:12	218:23 220:22	279:22	276:22 278:23
103:19 104:23	50:12 68:19 78:3	247:14 250:21	save 25:19 39:2	says 4:12,12 12:20
129:10	80:6 83:21 153:8	279:1	43:14 129:22	37:21 57:11 64:1
risk 111:13 138:19	185:1,7 188:14	safeguard 142:7	saved 38:22	67:1 70:15 71:4
168:2 277:16	207:11 256:3,5	safely 63:16 109:16	saves 243:23,23	82:22 83:22 85:1
risks 226:14	rules 2:8 6:7,8,22	109:23 129:24	244:1	92:13 106:21
robust 43:12	9:8,16,18 18:24	159:14 169:5	saving 41:7	126:14 130:10
roles 2:9 6:11 8:20	20:13 82:5,7,11	179:17 191:6	saw 55:16 107:5	143:14 146:12
9:11	138:21	219:16 220:20	166:5 185:1 197:4	150:11 152:6,8
roll 24:21 145:5	ruling 188:15	227:1 229:13	197:5 204:9	153:15 154:1
rolled 38:24	207:12	safer 159:4 179:25	saying 14:12 40:21	155:23 160:9,11
rolling 38:24 39:24	run 56:11,20,20	185:18	42:18,23 56:3	160:11 162:17,18
room 80:14 89:6	71:8 105:22	safeties 38:20 41:24	57:6 60:13 61:6	163:12 164:19
113:13 119:14	106:19 107:1	44:9,11,12 45:14	61:12,18 65:22	183:17,20 186:6
122:14,15,16	114:8 118:12	47:19 107:25	71:2 84:13 85:7	194:21 211:19
124:8,10,12,18,19	119:15 242:21	111:21	86:25 88:8 92:19	212:2 213:13
125:17 126:15,15	248:22 271:14	safety 2:19 4:3,23	94:25 108:6,22	250:11 268:1,1
128:3,18,20	272:3 273:9	6:24 10:14 20:4	115:15 116:18	270:6,10,21 271:3
129:24 130:12	runaway 212:11	21:6,10 35:16	125:16 128:25	272:12,14 273:19
131:7,18 132:5	rung 217:24 218:4	36:11 39:10 45:17	131:21,22 132:9	scan 102:19,23,24
133:5,18,21	218:5,15 222:13	46:1 48:15 54:21	132:10,20 133:8	103:6,11 104:3,11
227:17 228:15	222:23 223:16	80:15 81:8 82:11	133:11 140:10	105:1,22 107:1,14
229:14,18 230:21	running 8:9 53:2	85:18 88:19 91:5	146:11 147:2	111:21 112:2,9,13
232:3,3 233:18	110:15 112:9	91:24 92:1,22,23	150:10 151:4,7,18	115:18 117:23
248:20	119:7 187:25	94:20,23 95:3,13	151:25 154:16,18	118:6,12 119:2
rooms 114:6 128:3	248:18 285:1	97:5 105:20	154:19,24 155:1	120:2
128:7,11 145:9	runs 45:21	106:16 116:9,22	157:23 165:16	scanning 105:9
225:25	Russ 27:6,7,15	122:21 124:15	166:7 176:25	scenario 115:10
rope 252:9	44:13 45:2 143:20	126:12,20,20	177:10,16 178:5	129:19 136:24
ropes 105:13	143:21 145:21	129:5,6,7 130:15	181:8 182:20	225:23 250:25
roughly 165:16	163:19 164:13	131:24 137:20	184:2,10,15,21	scenarios 227:6
282:6	173:4,4 212:6	139:11 141:19,24	192:24 197:2	scheduled 7:9 33:8
rounds 15:9	230:12 238:24	142:20 154:4,5,6	199:25 215:7	240:5
route 104:15	258:3 263:21,22	158:4,12,13,19,23	216:6 219:3,17	schedules 242:13
routes 103:24	271:21 272:6	158:24 159:21	221:8 228:5	scheme 53:13

Schindler 195:14	86:7 89:4 125:2	166:2 168:20,22	sequence 104:10	session 20:24
school 128:17,19	secure 147:21	170:8,10,10	Sergey 28:23,24	set 6:9 48:3 107:25
129:15	153:19	188:25 193:5	39:18 44:24,25	114:6 125:15
scope 210:19 212:1	secured 128:24	195:13 204:13,20	53:3 60:3,23	141:25 189:2
212:2	security 102:2,2	212:7 228:6	64:22,24 68:4	197:10 203:14
Scott 31:14,15,17	120:1 192:11	264:13 279:13,17	69:7,10 71:22	219:14 286:16
31:18,21 51:25	see 5:3 6:13 7:12	sees 12:14	72:13,18 81:14,15	sets 44:10 252:7
52:1 117:3,3,17	10:18 11:24 12:2	seismic 102:7 106:2	86:9 92:7,8 94:16	setting 14:6 16:16
scratched 40:14	12:25 13:12 15:14	106:18 111:19	94:17 107:9,18	seven 72:4 209:14
screen 12:1 13:2	15:21 22:22 36:21	112:12 115:16	109:20 116:1,3	209:19
se 69:16	41:5 42:4 52:4,4	117:22 118:3,4	130:5 132:25	Shafer 217:13
Sears 108:4	52:17 55:10 73:2	self 130:14	133:2 140:7,8	shaking 248:4
seatbelts 23:11,12	73:3 75:22 79:14	self- 130:13	148:2,3 151:6	shallow 24:17
Seattle 28:13 29:17	79:22 84:12 85:2	self-closing 130:11	153:11,12 155:4	shape 81:21
40:13 42:2 89:3	91:8,9 96:16 97:8	130:13,15,20	160:23 161:5	share 165:6 173:25
107:22 110:9	98:10 105:11,13	131:4,11 133:4,6	237:14,16 259:10	shear 40:2
128:1 143:22	110:25 111:1	133:17,19	259:11 268:25	sheared 38:19
195:16 243:6	114:1 115:7	self-latching 133:6	269:1 272:22,23	sheets 45:8 246:2
280:5	118:23 119:6,24	133:19	278:1,4 284:9	Shift 13:15
second 21:20,24	122:19 124:2	self-locking 130:11	Sergey's 12:10	shiv 228:17
22:20 24:1 33:25	125:18 133:1	self-resetting	274:21	shock 24:16 169:22
39:21 42:17	135:19 151:3,6	190:22	serious 24:7 26:6	shoes 179:2
102:14 111:18	152:17 155:5	self-supporting	31:21 50:15 201:4	shook 49:22 209:13
147:10 206:24,24	165:2,6 169:23	229:4	seriously 36:11	shopping 212:11
232:5 239:8	173:21 175:20	sending 243:24	205:3 219:7	short 47:19 111:3
secondary 220:2	178:17 183:12,13	sense 87:13,18,19	282:13	137:8 144:16
seconds 101:3	184:22 187:22,25	89:11 94:6 186:5	serve 34:1	191:3 252:23
104:6 178:9,14	189:6 192:5	260:7	service 64:18 76:13	short-handed
secret 238:13	193:12,18 200:19	sensor 195:21	85:19 103:14	45:16
secrets 237:10	200:22 204:21	215:16	106:16 108:9	shortcomings
section 33:24 43:9	208:18 218:8,12	sensors 106:18	112:20 116:17	45:15
68:19 70:24 72:2	221:19 224:14	sent 4:17 44:5	118:15,17 128:8	shorting 144:13
75:8 77:11 90:24	229:11 232:22	sent-- 92:13	130:24 141:6	shot 41:13 256:1
96:22 122:12	234:6 236:5,13,22	sentence 33:25	237:24 238:9	show 57:6 119:1,1
150:19 153:13	237:4 243:2,22	82:21 91:23 92:13	239:9,15,25 240:3	165:5
167:17 187:12	244:7 264:20,22	190:14,15 268:11	240:8,17,22 271:8	shown 39:12 82:16
193:3 206:13	265:21 269:11	269:5 277:14	271:24 273:5	shows 222:10 252:3
217:17 225:4	271:1 276:9	280:13	277:11 279:2,14	shunt 268:4 270:8
226:18 232:1	seeing 41:20,21	separate 151:7	279:21 280:14	270:17,20 272:10
233:6,17 234:13	131:19 161:21	155:3,5 157:1	servicemen 128:8	273:15
236:1 245:18	220:9 265:16	181:5 182:14	services 141:7	shut 105:8,15 189:7
247:9 250:9	seen 49:5 114:16	184:17,18 244:19	servicing 63:15	195:9 208:8 274:3
256:12	127:13 143:8	separated 68:7	149:2,7 238:13	shutdowns 191:3
sections 37:25 72:5	145:2,8,12 159:2	September 260:5	servicing 30:10	193:13

shutting 193:6	246:5,6,11,13	slippage 105:13	someone's 14:11	sounds 9:17 48:15
sic 102:20 147:21	275:14	slow 102:25 112:9	17:7	50:14 67:18 77:14
167:19 168:12	sites 242:21	120:6 168:17	soon 14:25 52:18	83:1 88:1 103:17
225:7	sits 128:16 148:20	218:10 252:13	183:15 243:9	114:21 178:16
sick 24:20	sitting 21:12 22:17	253:8	sorry 8:2 9:1,2 19:6	196:3,15,20 232:5
side 48:10,10,16,24	82:13	slower 251:14	26:21 28:1 38:14	264:2
48:25 108:3	situation 71:14	slowest 250:14	38:16 52:1 53:3	southeast 31:25
109:23 149:1	104:6 112:18,23	slowing 208:5	55:22,25 60:22	space 80:10,11,14
220:6 228:7	116:12 119:6	slows 119:23	69:7,22 72:7,17	80:15 83:22
248:21 279:17	201:3 208:6	small 203:25 259:5	72:17 73:9,10,19	107:23 122:14,15
sides 48:7 126:16	212:14 219:17	smaller 257:1	74:7,8,10 76:16	123:9,12 124:7,18
176:1 228:12	240:21	smell 144:11	90:13,15,18 99:23	124:18 126:15,17
sight 17:6 151:16	situations 47:18	smells 25:14,15	100:2,4,7 107:10	127:21,22 130:23
167:21,22,22	145:8 189:13	smiley 13:12	109:4 126:23	132:5 134:1,1
168:19,22 170:25	240:12 241:3	smoke 144:17	127:9,10 128:14	140:15,18 232:4,4
171:9,10,10	248:18 271:14	145:2,5,8 270:17	132:25 134:16	spaces 122:24
sign 126:14	six 41:9 206:24	270:20 271:12	138:9 139:7	123:4,7 125:13
signaled 98:23	219:6	273:14	150:13 151:1	234:10,14
signaling 96:20,21	size 91:12 97:13	smokes 273:16	159:6 160:16	span 44:12
significant 105:24	168:6 180:3	snapshot 133:12	168:17 172:6	speak 14:17 16:1,7
194:5 252:24	278:12	snorkels 144:7	175:22 176:15	16:12 30:12 38:12
signing 269:22	skew 46:18	snow 81:10	190:9 191:19	38:17 42:8 76:9
signs 5:13 24:16	skin 21:23,24 22:1	so-and-so 40:21	192:3 196:7,23,25	85:23 92:3,21
39:12	23:1,10 24:8,17	so-called 237:10	197:5,6 208:18	98:3 129:11
silos 244:17	25:3,5 52:25	soaked 240:13,18	211:8 215:4 217:9	138:23 139:7,8
similar 40:14 62:17	skip 157:18 175:10	socket 252:2	217:11 218:9	169:15 176:24
126:3 190:23	276:6,9,18,21	SODO 108:2	222:18 223:2	178:9,10 226:17
191:14 273:3	skipped 8:2	software 40:7	232:25 246:22	248:16
similarly 248:10	skipping 276:13,13	145:14	249:24 260:11	speaker 32:8,10
simple 93:22	skirt 187:13,19	soil 248:12	267:17 276:24	124:21 127:7
simply 37:2 118:11	188:10,25 190:1	solely 229:9	sort 4:16 53:15	138:5 160:25
163:25 271:4	191:20 192:8	solve 218:20	68:18 79:23 94:12	161:2 163:12
single 45:17 109:11	193:2,22,23 194:2	solves 237:4	153:22 156:23	165:7 175:22
singled 98:24	197:9 199:2,12,16	somebody 23:21	165:11,18,24	190:17 208:14
137:18	200:18 208:3	24:19 56:19,21	173:25 177:15	214:24 215:1,3,7
sir 124:4 232:13	slapping 170:8	71:24 83:24 85:23	178:17 183:7	215:11 223:11
sit 46:17 56:17	slid 49:2	86:2 98:2 107:15	184:4,6 193:8	233:22 241:14
site 58:14 59:23	slide 38:8 45:10	110:3,25 111:5	194:13 209:3	284:8,10
60:14 62:1,20,21	47:18	149:12 162:21	220:5,9 259:24	speakers 93:4
62:24 73:22 104:8	slides 23:13	176:7 177:5 193:9	283:15	106:10 107:20
236:7,14 237:7,14	sliding 91:1,4 92:4	194:15 198:4,16	sorted 267:19,19	speaking 12:11
238:7 241:1 242:4	92:14,16,23 93:4	243:24 272:12	sorts 239:16	14:5 30:12 39:16
242:18 243:3,8,22	93:10,12,21	274:3	sound 28:16 117:9	153:24,24 174:22
244:2 245:12,19	slightly 24:5,5	somebody's 204:25	247:24 248:19	176:14 260:10

speaks 148:16 243:16	69:10 81:9 191:19 197:8 208:20 234:18 241:14	179:5 180:15 233:17 236:1,20 266:24 282:12	245:4 260:4,8 261:24 264:1 270:15 286:5	217:24 218:5,6,16 220:19 222:23
special 71:15,15	spoke 39:22 60:19 64:25 87:4 144:24	standing 131:5	stated 35:7 43:11 46:21 59:17 97:2	stepped 28:5 29:15
specialist 30:20 31:16 32:20	154:3 177:5 186:9 237:19	standpoint 154:10	118:11 163:14 186:2 286:7	steps 200:21 201:22 238:12 283:1
specialists 80:2 152:18	spot 29:25 71:13 140:15 265:18	stands 45:15,16 185:19,19 233:20 281:9	statement 79:7 96:25 106:21	stereo 14:9,9
specialized 61:2	sprains 35:19	Starbucks 108:2	123:2 124:20 142:17 151:2	stick 93:24 251:18
specialty 244:22	spreadsheet 87:23 166:5	staring 10:7	161:15,25 162:15 170:15 180:16	sticking 94:5
specific 12:13 33:5 44:23 45:13,25 63:11 65:2,4 68:24,25 86:24 141:3 143:19 148:23,24 162:20 164:2 177:20 235:1 238:15 265:15	square 91:13 97:14	start 4:12 5:1 7:12 8:6,14 14:17 16:7 16:22 27:6,6 33:18 48:1 76:14 103:17 111:23 136:4 173:20 179:3 192:17 276:11	234:24 280:23	stone 6:9
specifically 63:22 65:3,20 86:23 92:12 98:24 140:16 212:8 230:14 239:21 248:5,6 273:16	stacking 201:22	started 3:18 19:10 73:20 110:14 193:8 266:17	statements 115:23 150:1 158:15 166:13 201:19 203:9 211:12 226:16	stop 38:20 49:4 67:23 123:6 187:23 203:24 211:20
specified 122:24	stair 69:13	starting 6:6 52:18 59:1 102:12 179:3	203:9 211:12 226:16	stopped 38:22
specifies 234:19	stairway 126:7	starts 7:14 11:24 33:11 52:18 119:22 146:11	states 34:1 50:6 51:13 56:5 78:23 80:10 137:4 158:18 161:16 179:13 210:24	stopping 49:2 253:7
speed 39:11 91:11 97:12 102:13,25 104:13 112:10 119:23 120:6 195:21 206:14,15 206:18,19,20,23 207:7,21,25 209:1 209:5,9 215:16 216:17 250:15 251:11,12,14 252:10,11,12,13 253:9	stakeholder 4:13 4:24 8:12 10:4,15 11:2 177:20	state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	226:16	stops 185:2 193:24 197:13 201:12
specified 122:24	stakeholders 5:14 5:16 10:18 15:12 18:13 183:8,8 255:24	state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	static 169:9 stating 57:4 99:13 115:3 148:7 190:13 266:6	stored 229:24
specifies 234:19	stand 116:4	state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	statue 244:23 status 188:8 207:6 statute 245:1 stay 14:13 16:15 50:11 181:11 stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8	story 142:5
speed 39:11 91:11 97:12 102:13,25 104:13 112:10 119:23 120:6 195:21 206:14,15 206:18,19,20,23 207:7,21,25 209:1 209:5,9 215:16 216:17 250:15 251:11,12,14 252:10,11,12,13 253:9	stand-alone 244:17 standard 35:10 43:18 60:12 93:25 94:6,20 101:23 155:24 158:12 162:2 180:20 181:14 188:13 189:5 207:10 259:2 260:21 267:4	state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	stating 57:4 99:13 115:3 148:7 190:13 266:6	stowable 180:1
spelled 149:14	standards 74:18 94:23 123:5,16 136:5,14 138:17 138:18,20 158:14 163:13,15 167:17	state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8 step 10:19 115:25 187:19,19,21,22 191:21,23 192:15 193:23 200:10 201:2,11,13 202:4 204:22 206:20	Strafer 31:8,9 40:25 41:1
spells 245:9		state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	statue 244:23 status 188:8 207:6 statute 245:1 stay 14:13 16:15 50:11 181:11 stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8 step 10:19 115:25 187:19,19,21,22 191:21,23 192:15 193:23 200:10 201:2,11,13 202:4 204:22 206:20	straight 21:15 42:4 175:11
spent 104:20 175:16		state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8 step 10:19 115:25 187:19,19,21,22 191:21,23 192:15 193:23 200:10 201:2,11,13 202:4 204:22 206:20	Strains 35:19
spill 23:4		state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	statue 244:23 status 188:8 207:6 statute 245:1 stay 14:13 16:15 50:11 181:11 stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8 step 10:19 115:25 187:19,19,21,22 191:21,23 192:15 193:23 200:10 201:2,11,13 202:4 204:22 206:20	strapped 230:4
Spokane 30:24		state 1:1 3:5 16:8 28:8 29:4 37:15 38:10 42:12 44:5 46:16 50:7,10 51:14 55:1,19 65:17 69:5 72:23 81:20 82:20 94:25 98:11 99:16 104:15 114:10 123:5 127:14 129:10 136:25 140:23 143:23 157:23 159:16,16 161:12 185:1,3 195:13 196:10,13 198:17,19 205:19 209:2,7 211:21 226:20 243:14	stays 7:11 197:11 steak 25:14 steep 212:9,10 stenographically 286:8 step 10:19 115:25 187:19,19,21,22 191:21,23 192:15 193:23 200:10 201:2,11,13 202:4 204:22 206:20	stream 41:4

180:4 181:9	62:2 79:18 80:4	suggest 84:24 89:9	117:6 137:18,25	208:3 228:20
183:10 185:6	88:22 113:25	185:23 232:25	138:3 139:4 142:9	234:5,8 252:1
186:6 188:3 196:9	114:6 115:3,15,18	suggested 77:8	142:15 153:3,6	272:7 273:22
196:12 247:11	131:25 136:1	220:9	155:9 156:16,25	switches 107:13
strike-out 185:22	140:5 145:4 147:5	suggesting 83:19	165:4 166:4 172:1	111:25 117:21
192:1 197:9,17	152:20 168:24	92:15 220:4	179:25 180:18,21	167:19 168:19
striking 36:22	170:19 181:18	277:24	191:24 205:3	169:20 188:25
37:13 82:18,21	190:6 197:24	suggestion 63:17	210:13 213:4,7,8	189:6,15 192:18
84:19 89:22 96:23	228:16 245:11,12	69:2 148:18	213:17 220:3,24	symmetric 226:9
120:18 122:14,15	246:3 271:18	259:13,25	233:12 235:7	symmetrically
127:21 134:1	276:9,25 278:15	suggestions 53:1	240:2 244:3	225:20 228:9
158:7 160:9	stupid 204:13	284:22	245:22 246:17	231:4
162:24 166:15,17	style 92:19	suggests 76:18	253:24 255:2	symptoms 21:22,22
166:20 179:5	subject 138:22	suitable 247:18	256:2 259:4	system 47:24 104:3
186:10,11,13	147:13 153:25	Suite 1:18	260:14 262:11	111:6 113:6
190:10 207:1	236:19	summer 23:12	265:2 267:18,21	118:14,15 125:23
225:8,13 226:18	subjected 250:13	sun 22:5,7 25:9	275:10,19	139:16 181:11
226:24 236:8,11	subjective 226:1	sunburn 23:3	surprised 24:23	183:3 195:9 198:1
244:3	submersible	super 24:8	278:2	220:17,17 229:7,8
string 105:9,11,23	148:19,20	supervisor 31:2	surrounded 126:9	229:25 251:25
112:10,11	submission 77:15	supplies 149:18	126:16	252:4 265:6,10
stringent 94:22	submissions 233:13	supply 65:22	surrounding	271:2,5
116:20	submit 255:10	support 26:21 43:9	146:24 147:4	systems 60:9
strip 273:11	submittal 165:15	94:1 167:23	surroundings	110:16 116:10
strong 81:19	submittals 233:12	171:11 225:19	23:18 26:9	144:7 158:8
strongly 103:19	submitted 5:18	231:3,3 241:11,19	swap 4:1	251:24 271:16
struck 84:10	20:12 36:22 135:5	243:14	sway 46:22	
107:24 130:9,9,19	157:19 276:23,25	supported 228:5	swelling 21:25	T
179:10 194:9	276:25	229:5	22:20	T 286:1,1
198:18,18,20,25	submitting 102:1	supporting 226:9	switch 41:25 102:3	TAC 4:17 5:11 7:3
201:6 226:4	115:1	supposed 70:16	102:19,23 107:1	7:5,5 16:11,19
structural 110:19	Subpart 179:15,15	109:19 141:23	110:3,4 111:20,20	18:10 19:8 20:21
112:15 113:19	substantial 106:3	244:14 271:9	111:21 112:12	27:1 78:1 79:19
structure 118:18	244:10	sure 7:4,11 11:22	113:9,11 114:15	83:7 85:11 95:9
157:7 229:3,4,6	substantially	13:21 14:4 16:14	117:21,23 118:3,5	103:19 213:6
230:5,6 236:9,14	244:11	19:23 23:22 24:3	118:22 119:14,16	234:15 237:12
246:11	substantive 168:6	32:9 34:17 42:25	120:1 167:22,24	255:25 284:2
strung 242:16	subsystems 158:9	43:6 46:23 49:15	170:23 171:10,12	tackle 121:21
stuck 112:22	successfully 129:21	49:21 53:5,11,18	185:20 189:2,10	Tacoma 110:10
145:11 204:22	sucked 204:25	56:20 72:21 78:15	190:1 191:1 192:5	tagging 76:5 77:2
students 128:21	sudden 185:1	80:4 82:19 85:6	194:2,16,16	tags 75:11,25 76:1
stuff 4:2 5:18 8:5	suffer 236:21	88:3 93:8 98:17	197:11,14,15	76:10 77:2
10:8 14:8,12	suffering 103:11	102:10 106:17	198:5 199:11	tail 65:5
25:18 30:11 44:8	suffers 252:9	113:4 115:17	200:19 201:10	take 3:21 7:1,10,13

7:13,15,16,19,21 10:2 15:8 17:24 18:5 33:10 34:12 46:14,25 51:23 52:25 68:13 70:1 84:25 88:14 96:14 100:7 112:13 114:8 121:20,23 121:25 122:2,5,9 135:15 140:4 141:5 145:17 158:17 165:13 173:17 185:24 191:11 215:24 217:14 224:8,11 258:14,25 259:6 260:19,25 261:2 262:22 263:7 276:8 282:13,19 taken 1:13 52:20 68:20 96:17 133:17 135:21 137:22 173:22 190:2 221:25 224:15 238:12 263:14 268:13 takes 56:19 79:25 103:13 104:10 125:2 220:19 237:6 talk 21:10,14,17 26:19 27:7 31:20 52:13 197:22 213:5 talked 33:4 129:12 talking 11:24 14:11 26:23 48:1 49:10 55:8 57:1 60:7,9 61:20 62:4 66:13 67:2,3 73:20 79:1 86:22 124:6 127:12 131:18 138:6,7 149:19 153:25 157:11	162:23,23 182:13 191:21 192:5,7 193:1 215:6 239:22,22,23 244:10 245:11,13 253:15 273:16 talks 245:15,24 tallies 11:10 53:23 54:1,7 121:14 156:14 167:9 202:23 tally 96:10 173:12 187:7 206:8 210:7 214:17 224:3 231:22 247:4 250:1,2 255:1 267:12 281:19 tangled 168:23 tank 144:14,17,17 147:18 148:20 tanks 81:12 136:7 137:16 138:25 142:20 145:2 146:10,12,17 148:16 150:4 tar 248:9 taught 24:23 teachers 128:21 team 90:19,20 230:13 242:23 Teams 2:12 3:3 11:17 tech 31:15 211:24 technical 1:4 3:2,6 6:18 30:19 80:2,2 152:18 technically 29:24 32:13 45:12 technician 65:18 technological 99:1 technologies 159:13 technology 35:15 44:2,19,19 159:18	teeth 258:6 Tel 1:18 tell 16:25 224:23 242:2 270:14,16 283:9 telling 162:21 176:7 182:22 261:23 263:17 273:6,8 tells 92:12 258:14 temporarily 117:22 ten 35:7 37:13 51:13 157:23 282:15 tend 151:7 178:23 241:5 242:13 tendency 93:24 tens 38:24 91:8 97:8 term 71:19 terminal 102:12,12 102:13 248:21 273:11 terminology 153:23 198:25 terms 9:17 258:7 territories 179:13 test 35:6,9 36:13,23 37:1,4,6,9,14,23 38:8,9 41:4,12 44:1 45:9,14,16 45:17,19 46:8,9 46:10,10 47:7,9 47:17 48:9,15,15 49:13,16 62:13 63:6 64:19 65:3 65:14 70:8,9,12 70:14,17,18 71:14 73:22 75:11,25 76:1,10,25 77:2 79:12 113:12 236:11 241:23 245:11 246:2,2 250:19,20 251:4	251:11,15 252:2,3 252:10,11,14,19 252:21 253:5 268:11,19 269:5 270:5,19 272:2,8 272:9,10 273:4,14 274:22 tested 39:11 65:7 115:4 268:5 270:9 271:18 272:11,12 272:17 273:3,13 273:18 testing 35:10,12,13 35:24 36:8,14,25 37:3,22 38:18 39:2,15 40:7 41:18 42:2,14,15 42:20 43:1,10,10 43:13,15,18,24 44:4,6,16 45:4,7 46:7,7 47:5,5,8,21 48:25 49:13,19,25 50:8,9,21,23 51:5 51:7,14 60:19,25 61:3,6,8 63:3,4,5 63:10,17 65:5 76:11,12 157:15 157:20,21,24 160:1 227:20 238:17 245:17 247:19 251:11,14 251:21 252:6,17 253:2 268:16 269:8 270:17,18 271:4,24 272:20 275:14 277:5,25 278:15 279:5 280:25 tests 35:8,16,21 36:13 37:9,11 39:9 41:3 42:12 46:2 49:11 58:14 58:17,20 59:22 60:19 61:22 62:1	62:5,14,17,23 63:24 64:2 65:6 67:14 68:15 70:3 70:4,15,16 74:21 74:23 78:23 143:15 145:25 240:10 250:12,13 251:3 254:6 273:1 273:22 274:7 text 191:22 208:12 thank 3:18 8:24 12:24 19:2 20:2 26:10 27:3,17,18 27:22,25 28:4,10 28:14,19 29:2,5,8 29:13,18,21 30:1 30:4,14,18,21,25 31:4,7,24 32:3,6 32:15,25 33:2 34:20 35:4 36:18 38:11 39:18 41:16 42:9 43:4,6,7,18 44:13,23 47:11,12 49:7 50:1 51:9,19 52:14 53:25 54:8 54:11 55:16 56:1 56:13,24 57:13,22 57:25 58:7,9 59:14,19 62:25 63:8,19 64:21 66:3 69:6,8,19 70:20,22 71:5,21 71:22 72:13 73:4 74:3,6 75:9 78:17 79:16,24 80:8 81:14,25 82:1,23 82:24 84:5,7 87:8 88:19 89:1,8,25 90:9,18 92:6,7 94:7,14 95:5,14 95:23 96:2,4,11 96:15 98:5,19 99:7,19 100:9,15 100:18,20 101:9
---	---	--	--	--

101:12,17,19	203:2,11 204:9,12	280:10,17 281:5,6	6:10,20,22 11:11	105:15 106:20
104:15,16 105:17	205:7,20,23 206:5	281:12,22 283:10	17:5 20:9 24:18	108:13 110:24
106:6,8 107:3,18	206:7,12 208:10	283:12 284:1,7	42:13 43:21 49:9	112:1 116:19,24
111:15,16 112:4	209:18,20,24	285:2,3	60:20 66:17 67:23	117:4 119:8
113:7,15 114:12	210:6,9,11 211:23	Thankfully 21:15	68:17 79:22 80:1	125:25 126:1,13
116:2,25 117:20	212:4,5,6,15,16	thanks 15:7 28:8	80:8 104:25	127:5,22 137:25
117:25 118:21	213:19 214:6,8,11	31:11 80:25 97:23	105:14 108:1	142:17,19,22
119:9,10,17 120:7	214:15,16,18	114:17 134:18	115:11 126:21	143:13 144:6
120:23,23 121:15	215:10 216:13,20	189:16 193:13	132:4 135:5	145:10 148:4
124:4,16 125:7	217:6,16 219:10	205:6 208:9	142:10,11 143:14	151:18,19 152:4,5
126:3,5 127:6,24	219:22 220:11	221:25 244:12	145:6,9 149:24	157:3 163:20
128:12 129:9,10	221:13 222:1,16	279:23	151:7,14 152:15	164:3 165:17
129:25 130:25	223:7,17,17,23	theater 197:23	154:6 155:1,4,6	169:16 170:20
131:7,9,15 132:7	224:2,5,7,13,17	theaters 195:16	157:1 171:3	171:2 175:3 176:4
132:25 133:21	224:18,19,25	thereof 286:15	175:17 178:24	176:10,10 181:10
134:7,11,20,20,23	227:3,24,25	thermal 22:9	181:5 183:6 184:3	182:24 183:2
134:25 135:19,22	228:23 229:19,20	they'd 243:3	184:14,17,18	190:10,13 191:17
137:10 138:2	230:10,11,12,21	thick 52:25	189:11 204:14,15	195:3 197:22
139:5,6 140:7	231:9,15,18,20,25	thing 9:20 10:14	213:9 215:23	201:6,15 204:24
141:14 142:13,23	233:3,24 234:23	11:2,11 16:10	229:3 239:2,13,16	208:8 213:14
143:9,11,20,21	235:10,11,14,14	18:8 19:19 20:14	241:18 242:14,24	215:15 227:18,22
144:22 145:18,19	235:18,21,23	21:12 24:11,23	245:16,25 253:14	234:1 238:3
146:8,20,21 149:9	238:22,24 241:11	25:4,13,23 42:17	255:9,21 259:16	240:19 241:7,10
149:24 150:23	242:8 243:4,5,18	49:9 50:15 60:6	273:2,13,15,18	241:16 242:10
153:9 154:11	244:13 245:6,20	61:3 65:17 67:1	278:22 283:2	244:18 251:18
156:2,3,8,12	245:20 246:15,23	70:6,13 81:9 83:8	think 11:1 15:14	255:18 257:7,10
157:12 159:7	246:24 247:3,8	85:8 97:9 108:16	19:9,14 20:11,12	257:15,24 260:7
160:4,23 161:1,5	248:15 249:3,13	124:5,13 130:9	22:25 29:23 36:5	261:18 263:23
161:24 163:7,17	249:17,18,25	131:17 139:9	36:10,16,17 37:23	264:3 265:13
163:19 164:6,13	250:4,6 251:20	140:20 151:6	39:4 42:7,17 44:2	270:11,13,22
164:16 166:10,22	252:14,15 253:16	152:22 155:10	46:1 49:9,23 56:3	272:20 273:21
167:10,12 168:25	253:22,25 254:12	164:15 165:17,24	56:12 62:8,9	279:19,24 283:7
170:1 171:3,4,16	254:14,18,19,25	168:18 170:24	63:12 64:12 65:6	thinking 12:17
172:22 173:6,7,11	257:15 258:1,9,10	172:10 176:25	66:19 68:5,6,21	22:7 25:9 81:5
173:14,16 174:7	259:10 260:1,12	178:2,4 187:15	69:1,11 71:1,10	88:7 157:10
176:17 180:7	262:5,16 263:21	193:6,9 195:24	71:17 72:8 73:3	thinner 23:11
182:1 185:11	263:22 264:5,6	203:13 205:1,5	75:6 77:7 78:11	third 21:20,25
186:22 187:8	266:25 267:7,11	208:5 212:22	78:25 79:13 81:3	22:22 39:21
190:7,11,17	267:16 269:12,24	214:23 240:20	81:18,23 83:5	127:15 159:19,20
191:15,16 192:1	270:23,23 271:20	242:19 252:9	84:5,19 85:18	160:1 163:22
192:21 198:11,12	271:21 272:4,5,22	259:1 261:19	86:2,3 88:7,14,16	239:12 282:7
199:19,23 200:2,5	274:9,16,25	273:9 280:8	88:18 92:3 94:1,2	thirty-some 283:20
200:7,24 201:6,25	275:15,16,22,25	282:21	94:5 95:13 98:17	Thomas 242:9
202:10,16,21,25	276:5 279:8,9,24	things 3:24 4:15	99:5 104:1,7	thoroughly 49:21

169:17,18	99:21 100:14	272:24,25 273:2	toss 52:16 117:15	242:23
thought 44:7 79:7	101:1 103:13	276:15	total 187:7 278:7	traveled 102:11
107:7 175:20	109:11 112:12	timing 279:5	totally 6:15 11:3,5	travels 127:14
176:5 186:18	121:22 123:10,22	tip 2:19 4:3 6:24	17:13 157:1	203:18
191:6,10 197:4	125:13 131:6	20:4 21:6	182:13	treadway 210:16
214:24 272:16,19	132:19 133:12,14	tips 26:10	touch 23:4 198:1	213:25
thoughts 239:24	135:7 136:3 138:4	today 6:8 8:9,11,16	touched 195:25	treat 22:13
thousand 63:25	138:14 139:9	27:21 72:11 174:5	229:22	treating 259:23
thousands 35:20	157:24 161:18	227:22 243:12,13	touching 248:12	treatment 22:15
38:25,25 185:3	165:20,21 167:4	258:24 259:3	tough 71:13	tremendously
226:20	174:17 175:16	260:18 262:2,13	Tower 108:2	116:16
three 3:20,21 9:21	177:25 178:7,23	262:18 270:5,6	tracked 240:5	trends 23:15
14:10 40:12 46:24	179:24 180:4	282:6,9,18 284:24	tracking 20:21	trickle 81:21
78:22 79:12 89:5	188:5,11 190:23	today's 4:11 46:7	traction 108:17	259:20
89:19 102:1 120:1	191:3,9 192:19	token 40:3	157:4,6 226:13	tried 87:24 99:6
122:2 142:4	193:24 198:3,8	told 25:21 31:20	227:13 269:4	trigger 104:3
145:13 165:14,23	199:11 200:12	176:16	traditional 63:6	256:22 261:13
196:17 209:4	202:6 204:21	Toll 1:18	228:15	262:11 265:15,24
217:8 219:6	205:7,11,12 207:2	Tom 31:24,25 32:3	traffic 277:20	266:20,23
222:22 239:3,3,4	207:8,24 208:20	245:4	tragedy 138:11	trip 115:11 189:13
239:17,17 243:7	209:16 215:14	tomorrow 8:7,7,14	tragic 137:14	191:5 194:2 198:2
261:11 276:15	232:25 236:11,12	174:11,13 175:4	train 108:25 197:4	204:14 268:4
throw 46:12 65:8	237:17 244:1,4,5	233:14 276:10,20	trained 37:7 104:25	270:8,18,20
83:7 95:5 135:12	244:8,10 249:11	283:22 285:1	107:17 108:24,25	272:10 273:15
135:15 241:24	255:6,16 260:18	tonight 174:11	113:22 116:22	tripped 105:9
265:12	263:2,3 264:11,17	175:4	123:11	111:20 112:11
throwing 112:3	264:18,19,25	tons 107:24	training 39:15	189:4 193:7 201:3
153:23 259:25	265:8,16,21 266:5	tool 238:15	111:14 116:9	201:4 204:3,23
thrown 283:15	266:6 267:4	top 13:11 76:15	transcribed 286:8	tripping 185:17
throws 132:19	278:17 279:21	102:13 129:16	transcript 1:5	189:2 195:21
thumbs 8:22 12:15	281:4 282:14,21	132:12,14 179:18	286:10	trips 191:12 204:8
tie 255:2 256:8	282:23 283:10	180:1,7 181:2	transcription 286:9	204:15,20
tied 262:11	284:2 286:7	182:4,21 183:17	Transit 28:16	trouble 25:20 66:18
tight 21:1	timer 51:24 52:16	183:20 184:11	247:25 248:19	76:16 117:9 196:1
tiles 11:25 13:1	52:19 135:16	185:19 186:7,11	transition 216:15	troubleshoot
Tim 19:14,22 20:2	173:20 188:8	197:13 203:19	transitioning	132:17 133:13
29:14 32:6,6,12	207:6	218:5,6 220:15	216:25	140:19
time 3:19 5:19 10:9	times 23:7 45:7	222:13 225:5,12	transport 212:4	troubleshooting
18:2,5 20:14,17	47:21 62:19 65:1	225:16 226:21,23	transportation	128:18 132:15
20:18 21:1,16	87:10 108:7	226:24 229:17	210:23	140:21 149:2
35:3 49:18 51:15	165:23 167:15	230:1 234:7	trapped 98:2 113:3	troubleshoot 133:13
51:22 53:22 56:8	174:22 204:13	topic 135:4 239:1	142:6	troubling 136:19
56:17 84:17 90:2	230:6 236:10	topical 22:14	travel 110:22	true 65:1 99:6
90:6 95:22 96:7,8	237:22 243:8	tops 169:5	203:15 204:1	124:20,20,23

170:5 180:16
truss 234:3
trusting 139:23
trustworthy 168:21
try 8:19 9:19,21,22
 11:12 14:13 24:18
 46:18,22 53:18
 66:16 88:15 127:4
 175:5 178:15,21
 178:22 185:16
 243:3 259:5 270:2
 282:15
trying 17:18 20:22
 25:23 41:14 46:19
 48:23 65:5 67:22
 67:24 70:25 76:3
 79:9 82:3,14 85:2
 87:3 92:18 94:11
 95:19 111:11
 112:20 124:16
 126:1 128:22
 152:19 154:10
 161:17 166:6
 224:22 238:20
 244:1 253:18
 262:8 263:19,19
 278:14 279:20,21
tsunami 103:21,23
 104:1,2,6,21
 108:16
Tuesday 3:4
turn 2:13 11:19
 40:21,22 106:25
 113:23 161:3
 194:16,16
turnaround 193:25
 194:7
turned 23:23
 194:10
Turner 29:5,6,6
 48:5,6,6,19 78:19
 78:20,20 79:2
 111:16,17,17
 150:16,16 151:22

151:22
turning 110:5
 115:6,23 149:22
turnover 43:23,24
tweaked 20:22
twenty-- 72:22
twice 19:1 165:22
 208:7
two 17:22,25 24:8
 33:24 36:7 37:13
 40:13 46:13 54:4
 54:8 59:1 63:24
 68:6 69:3 89:4
 91:9 93:4 96:24
 106:10 117:21
 120:5 122:2,19
 141:6,7 145:12,13
 148:4 149:23
 151:7 155:3,5
 157:1 165:10,13
 181:4,12 182:13
 184:17,18,22
 190:15 199:1
 203:7 206:24
 216:23 222:14
 224:10 228:8,11
 228:12,22 233:7
 233:13 255:9
 258:4 271:19
 283:11
tying 63:3
type 16:16 24:14
 25:8 34:11 45:15
 45:24,24 68:15
 95:1,2 107:17
 108:15 115:11
 175:16 186:3
 188:2 196:5,21
 206:25 207:20
 208:6 209:7 213:9
 232:9 235:1 246:3
 248:10 273:15
types 21:19 41:25
 68:23 113:21

157:8 205:1 206:4
typical 91:7 97:7
 97:10
typically 107:17
 190:24 200:18
 228:4,21 248:8
typo 72:8

U

Uh-hmm 27:13
UL 19:8 32:12
 69:25 91:22
 138:10 146:9
 166:1
ultimately 59:13
um 69:18 121:17
 217:17,17,17,17
unable 65:3
unacceptable
 188:21 207:18
unanimous 167:14
unattended 227:9
 250:10 251:2
 254:7
unbalanced 230:9
unclick 267:1
underlined 208:15
underneath 26:4
 39:25 203:19
understand 4:16
 6:10,16 7:24 8:18
 8:23 10:9,13 11:7
 17:3,12,16 46:23
 50:13 53:6 75:11
 76:3 83:2 85:21
 86:11 87:17,24
 88:13 89:15 92:12
 93:9 98:23 106:2
 108:5 109:7,8,20
 112:8 133:17
 136:18 137:21
 138:24 141:23
 145:6 163:9
 174:18,19 175:25

177:19 178:25
 179:21 181:22
 196:14 220:4
 233:23 239:2
 255:8 261:10
 262:8 264:5
understanding
 6:11 47:20 52:6
 60:8,15 80:19
 98:25 105:21
 116:10 118:13
 139:20 151:9,9
 166:2 181:16
 189:11 196:8
 211:12 212:24
 250:20 253:24
 255:23 261:5,20
understands 79:17
 156:19 245:22
 259:4
understood 17:11
 262:9
Underwriters
 27:24
undisclosed 164:23
undue 54:19 63:14
unexpected 225:17
 225:22 226:5
unfair 20:11 260:3
unforeseen 164:23
unfortunately 10:1
 14:5 20:20 22:2
 123:21,23 140:2
 152:12 189:24
 264:17
UNIDENTIFIED
 32:8,10 124:21
 127:7 138:5
 160:25 161:2
 163:12 165:7
 175:22 190:17
 208:14 214:24
 215:1,3,7,11
 223:11 233:22

284:8,10
unintended 250:23
unique 68:24
 125:12 239:15
 244:16,21
uniqueness 69:4
unit 149:15,19
 189:9 192:10,13
 193:6,24 194:4,5
 194:8,10 197:17
 200:17,23 201:12
 201:13,14,16
 203:15,18,20
 204:2 205:4 208:7
 236:5 241:5
United 137:3
 179:12 210:24
units 41:25 145:6
 196:12
unknown 103:3,4
unlock 217:18
 218:18 220:10,15
unlocking 221:7
 222:12
unmute 14:16
 280:12
unmuted 32:8
 76:17
unobtainable 71:11
unplug 252:1
unsafe 137:4 237:8
untrained 37:8,10
 123:11 194:2
unusually 212:10
updating 139:11
upgrading 242:22
upper 187:20
 191:21
upthrust 191:23
 192:5 193:3
 200:10,17 201:2
 202:4
upward 154:4
urge 59:15

usage 94:4	159:15	103:25 218:2,4	53:23 54:1,7	223:6,9,21,22,23
use 26:10 37:5,7	variety 108:20	222:12	57:15,15,19,20,23	224:1,3 230:24
42:15 45:24 59:23	137:15,15	vested 283:17,18	57:24 59:16 61:11	231:1,7,8,12,14
70:6,7 91:10,13	various 30:11	vetted 169:17	63:18 64:20 73:7	231:16,22 235:3,7
92:1 97:11,15,15	111:25	264:18	73:7,10,15,25	235:9,12,13,15,17
98:1,1 104:4,12	vasoline 25:18	video 97:5,24 98:12	74:4,11,13 76:20	246:12,14,20,21
106:4 109:17,22	vast 119:12	video/messaging	77:22,24 84:25	246:23 247:1
111:6 119:13	ventilated 145:7	97:18	85:4,5 87:13,15	249:5,9,11,12,15
128:17 129:1,1	verbiage 20:20	videoconferencing	88:17 89:7,12,17	249:16,19,21,22
151:14 161:21	83:3,5,10 102:5	3:3	89:20,23,24 90:1	249:24 254:3,5,10
169:10 181:7	122:22 147:25	view 87:2 92:17	90:3,4,17 94:1	254:12,16,18,21
210:17 211:17	148:1 160:17	93:1 162:14,20,25	95:9,22,23 96:4,6	254:23,24 255:1
213:25 229:7	186:11 190:14	237:23 238:6	96:7,10,11 97:22	266:2,4,21,24
233:1 247:25	196:16 199:22	242:6	99:10,16,17,20,22	267:1,6,7,10,12
277:18 279:3,16	200:8 202:7 203:3	viewable 236:8,10	99:24 100:14	275:11,12,15,17
279:25	207:20 209:3	241:9 242:5 246:5	101:6,15 103:19	275:20,23,24
useable 37:7	213:9 259:20	vinegar 25:15	104:13 120:9,10	279:10 280:20
useful 61:8	260:1	violate 123:5	120:19 121:4,9,11	281:3,4,9,10,14
user 91:25	verification 44:1	124:14	125:9 130:17	281:15,16,19
user(s) 91:6 97:6	229:11	violation 179:14	133:24,25 134:3,8	283:16,18 284:8
uses 91:8 210:13	verified 70:23	violations 179:14	134:14,20 150:2,3	284:10
213:21	236:23	virtual 7:10 14:5,6	150:19,20 155:8	voted 34:21 53:7
usually 53:12 191:2	verify 19:10 45:16	14:6 282:21	156:1,6,8,10,12	90:5 99:25 100:5
192:6 282:23	version 46:11 63:25	visible 200:19	166:14 167:5,6,9	100:13 101:14
utilize 157:16	230:21	visual 120:5	167:14 171:14,15	121:7 134:15
utilized 210:22	versus 69:3 260:1	visually 200:22	171:18,20,24,24	155:11 157:22
utmost 91:5,24	vertical 32:4 37:18	voice 99:5	173:13 174:12	166:23 167:2
97:6	43:20 49:8 59:6	voiced 61:1	175:6 180:10,24	171:16,22 172:1,7
	71:6 75:10,24	voltage 169:8	180:24 184:5,18	172:8,24 173:8
	80:18 85:13 92:4	170:19	184:19 185:24	186:17 205:22
V	92:14,16,23 93:4	volume 18:3	186:8,12,15 187:3	210:2 215:23
vague 257:15	93:12 98:21	volunteered 16:19	188:23 197:16	231:10,17 233:9
valid 58:18 93:25	103:21 104:14	vote 4:13 8:12	198:23 199:9,14	246:17,25 249:18
161:13 241:10	105:2,18 144:23	10:10,11,19,23,25	199:17,18,21,23	249:20 254:13,19
validity 89:14	170:17 179:8	11:3,9,10 12:12	200:4 202:3,8,9	254:21,25 266:25
135:13 174:16	188:24 192:25	12:20 14:25 15:11	202:14,15,19,23	275:18 281:5,7
valuable 129:23	200:25 204:19	15:19 18:5 19:15	204:3,6 205:10,18	votes 13:18 19:20
value 10:9,18	208:1 219:24	19:20 20:1 34:12	205:18 206:2,3,8	51:20 58:5 73:24
valve 139:17,18	221:18 225:17	34:24,25 39:16	207:23 208:22,25	74:15 89:9 95:16
142:2	226:5 243:19	40:9 42:21,23	209:8,8,16 210:5	95:16 101:18
valves 42:1 48:4	257:6 269:19	43:6 46:15 47:1	210:7 211:12	120:23,24 134:21
147:18 149:16	279:12	50:4,11,12,18,19	212:15,19 214:3,3	156:4 172:8,9,19
van 241:24 242:1	vertically 90:25	50:23 51:8,9,11	214:9,10,17 216:2	205:21 210:3
variables 108:11	91:3 93:10,21	51:12,18 52:7	216:7 221:15	213:20 214:6
variance 153:22				

215:24 216:1,3,15 216:25 217:2,13 222:19 231:15 235:11 246:8,15 267:9 281:13 283:14 voting 2:9 4:14 7:3 7:5 8:13 9:11 10:12 11:13 12:12 12:13,20,21 13:17 13:20 15:17 19:10 19:11,17 20:2 34:13,15,15,17,22 42:22 50:6,8,11 50:22 51:1,1,3,5,6 51:13 54:3 60:6 60:11,22 61:13 73:10,25 74:1,5 77:25 81:24 86:11 95:25 101:3,4,10 101:16 120:17 121:2,10,12 135:11,13 140:22 141:16 150:24 151:4,5 152:24 153:10 155:22 165:19 166:9,19 167:1,5,6 170:1 171:6,7 172:2,18 173:1,2 183:22 186:4,21,23 187:5 199:5 202:11,19 202:20 209:4,23 210:1 216:23,24 217:13 222:6 223:17 231:19 235:4,20 275:2 276:2 281:12	34:3 50:6,12 51:3 58:11 73:8 75:6,7 75:8 77:8,12,15 77:18 78:3,14 80:6 90:21 94:19 135:6 146:23 147:2,3,7,10 148:2 149:3 150:10,19 151:5 151:10,17,17,23 152:6,14 153:2,4 153:8,8,15,15 155:1,12,14,17 160:8,11,11 164:18,25 166:6 181:2,14,16 182:2 182:7,12,15,17 183:9,12,14,17,19 184:4,25 185:7,13 196:17,18 234:18 256:3 259:14 260:20 262:9 264:10 267:25 268:16 272:10,16 274:24 277:1 280:3,22 282:7,8 WACs 181:6 Wade 32:3,4 37:16 37:17,18 43:19,20 45:2 47:4 48:12 48:13 49:7,8 53:15 59:5,6 71:5 71:6 75:9,10,21 75:24 80:17,18 81:17 85:12,13 86:2,10 98:20,21 105:17,18 144:23 170:17 188:23,24 192:25 194:13 200:25 204:18,19 208:1,20 219:23 219:24 221:18 243:18,19 257:6 269:19 279:12	Wade's 75:16 81:2 193:17,19 195:4 wait 75:20 104:8 107:9,10 117:3 197:5 214:22 232:4 257:17 267:23 waiting 121:5 153:16 202:11 walk 194:15 195:17 210:17,22 211:16 213:1,8,25 walking 40:1 walks 33:21 194:20 194:24 212:3,8,8 213:22 215:2,8,9 215:12,22 216:1,4 walls 110:17 126:17 want 3:18 4:15 5:7 5:14 6:16 7:3,11 9:24,25 10:12 15:16,18 17:3,15 20:23 24:11 25:3 25:4,5 26:3,11 32:17 40:7 42:10 44:14 46:23 53:1 53:17 56:10,12 62:23 66:24 71:2 72:14,19 76:20 79:17,18 83:12 84:2 85:9,17 89:5 90:25 93:8 95:3 100:6 108:10 109:9,13 116:4 117:6 121:20,25 122:1 128:4,10 131:19 138:10 140:3,9 142:15,19 142:22 154:13,16 155:9 162:20 163:8 170:4 171:20 174:16,16 174:18,20 175:17	175:19 177:25 178:24 184:10,11 184:12 194:12 196:12 199:21,22 201:20 213:6 214:7 216:22 220:3 224:16,23 227:10 230:1,9,13 233:21 243:12 244:15 245:17 247:10 252:24 255:7 259:4 261:4 262:2 267:2 272:11 274:19 276:11,16 278:13 279:25 wanted 19:9 40:17 43:21 46:4,12 47:4 53:5,11 61:4 61:5 65:8 66:12 73:4,14 75:14 83:14 84:16 87:22 93:17 95:5 107:10 133:3,16 144:2,25 148:17 154:14 163:20 181:19 193:1 195:1 199:7 222:5 245:4,22 253:24 274:11 280:2 wanting 34:24 51:8 58:3 63:22 93:9 149:22 186:6 190:15 196:4 200:11 233:19 237:15,17 277:2 wants 183:13 warehouses 242:17 warrant 226:1 warranted 136:16 washcloth 24:5 Washington 1:1 3:5 28:7 29:23 30:3 32:1 35:10	50:7 51:14 65:18 69:5 72:23 98:10 103:23 104:15 123:6 140:23 143:23 161:13 185:4 196:11,13 198:17 209:3,8 243:15 264:1 286:5 wasn't 19:23 264:18 265:6,10 265:11 273:10,11 watch 126:21 watching 24:15 water 23:4 24:7,25 25:2,6,6 26:2 81:10,11 114:7 waving 9:2 way 5:4 8:13 11:8 13:19 18:14 25:15 42:15 46:22 47:25 50:12 57:4 61:17 68:18 73:2,3,17 81:21 86:4 92:19 93:6 105:9 109:11 109:12,18 111:4 112:8 116:8 126:22 127:19 128:24 139:2 143:20 146:18,19 149:3 151:23 153:22,22 159:14 160:8 165:14 166:7 167:15 169:9,25 170:7 176:9 177:9 189:12 197:10 212:23 213:17 227:22,23 228:6,9 248:6,22 251:18 257:21 259:7 262:14 279:6 286:13 ways 116:21 258:7
W				
WA 1:18 WAC 2:23 4:12 8:1 8:11 16:20,22 17:1,18 33:15,19				

279:13	116:19,20 118:21	147:6 174:2	65:15,16,16 76:23	106:22 109:16
we'll 3:18 4:3 7:1	121:6,23 122:4,7	175:15,18 177:3,4	76:24,24 100:5,7	110:7 114:9
7:13,17,19,24 8:3	122:8,11 126:1	209:3 215:12,17	100:10,21 211:25	115:12 116:10,16
8:6 11:4,12 14:15	128:25 131:18	224:20,23 228:25	212:1	127:15 128:22
18:5 20:1 29:15	133:7,24 135:3,14	240:11 271:14,14	wind 175:17	131:22,25 132:24
33:8 34:12 46:25	136:3,4 138:7	wealth 109:1	wire 140:1 168:23	133:4 135:24
50:18 52:17 53:2	139:4,23 140:24	wear 284:13	wired 273:11	136:9 137:19
76:14 77:19 78:3	143:3,4 148:10,15	weather 45:23	wiring 63:12 67:12	139:13,15 150:7
89:17 103:17	148:21 149:19	week 55:3 56:9	139:21 167:24	152:12,14 154:21
117:15 135:23	151:4,5 152:24	91:9 264:24	169:4 171:12	157:5,8 160:1
150:3 157:2	153:9,25 155:22	weekly 54:16,20,22	239:14	175:23 178:1
165:15 166:13	157:5,10,25 161:7	55:15 56:5,10,12	wise 36:7	181:24 220:1
171:7 173:18	161:8,14 162:9,15	56:18 57:17 72:3	wish 135:8 206:6	224:17,23 225:1
175:12 192:14	162:17,21,22,22	weigh 11:11	224:1 231:16	229:13,15,22
199:8 202:3	162:23,24 165:6	weight 39:1,24 40:1	235:17 268:12	242:6,23 264:22
205:10 208:25	169:4,8 172:23	43:18,24	witness 38:5 45:17	266:14,16 271:8
209:15 213:20	173:17,25 174:8,8	weights 35:17,21	286:16	worked 71:7
222:16,19 233:14	175:9,10 177:14	37:5,21 38:21,22	witnessed 48:8,14	103:20 144:15
235:3 236:4 276:9	178:18,19,21	38:24 39:10,11	48:21,24	248:20
we're 3:20,24,25	179:5 181:4,8	40:3,14 41:8,12	witnessing 42:12	worker 80:14 85:18
4:21 5:5,20 6:6,17	183:16 184:16	42:3 45:6 47:25	42:13 241:20	working 4:24 30:10
6:19 8:8,19,20,23	186:8 187:1	48:4 49:2 105:12	Wohlschlag	83:25 107:3 123:9
9:19,20 10:6,6	191:21 192:7	230:8	55:12 59:20 62:8	123:12 125:12,15
12:13,23 14:11	193:3 196:18	Welcome 29:17	62:9 77:6,7 79:8,9	127:1 128:8,9,15
17:20 18:14 19:24	199:9 216:6 220:1	173:23	180:11,12 204:7	129:4,6,13 131:5
20:10,22 21:18	222:6 224:8,11,22	welfare 123:18	women 128:8	131:12,13 137:14
24:2 26:5 32:24	229:15,16,22	158:5 211:5	276:24	138:13 140:14
33:18 39:14 40:20	230:7 233:2 244:3	went 195:19 271:12	won 223:5	141:21,25 142:13
41:14,20,21 42:3	244:6,10 254:5	280:7	wonderful 30:23	157:8 180:7
42:13,18,22,23	255:11,20 256:8	weren't 123:21	wondering 78:21	221:11 225:5
46:15,18,22,25	257:13 258:19	western 103:22	147:5 232:10	226:24 227:12,14
49:9 51:1,3,22	260:24 261:4,5,6	wet 24:5,6 112:1	wood 22:11	228:13,15 229:18
53:9,9 55:7 57:15	261:18,19,20	whatnot 142:20	word 107:20	229:25 230:3
60:9,13,21,21	263:11 265:7,17	wheel 192:7,15	wording 145:22	244:25 271:2
61:12,19 62:3	266:13 269:3,9,11	WHEREOF	212:23	Workman's 41:12
67:3,4,4,22 68:11	273:16 276:9,14	286:16	work 3:19,22 8:19	workplace 129:23
72:19 73:6,7,17	276:17,18,18,19	whichever 67:3,6	9:19,21,21 18:3,7	works 13:7 47:21
73:24 76:4,5 80:3	we've 17:8 18:25	122:18	20:19 32:1,22	195:8
83:7 86:14,23	46:13 59:1 71:7	white 22:1	33:1,9,11 47:10	world 8:10 23:16
88:3,16,16,22	78:18 110:23	wide 219:18	65:19,23 66:3	81:22 250:25
89:10 92:22 94:10	113:25 118:24,25	widely 238:25	76:2,9 79:24,25	worlds 159:25
96:14 106:23,23	121:18 125:12	willing 117:17	80:7 82:19 83:13	worries 9:3,3 69:24
111:2,3,4 112:1	128:5 135:24	willingness 3:19	87:16 89:17 90:19	100:10 211:10,10
112:18,18 114:9	136:3 145:7,12	Wilson 31:4,5,5	90:20 103:15	worry 117:13

worse 25:17 88:11
worship 95:11
worst 127:2
worth 213:16
wouldn't 47:10
 49:22 86:5 130:19
 131:4 257:22,23
 283:1
wreckage 140:15
 140:18
wrenching 41:5
write 20:13 83:20
 146:18 243:12
 272:13
writers 241:7
writing 17:5 92:19
 264:12
written 41:10 42:19
 57:4 58:18 62:18
 72:11 76:25 77:4
 83:16 84:4 87:11
 88:18 89:10,10,11
 92:20 93:7,25
 146:12,19,20
 211:21 227:7,22
 236:2 256:21
 257:21 258:13
 259:7 260:16,22
 262:21 265:20
 267:6 268:23
 270:4,11,18
wrong 26:20 28:1
 42:7 63:21 87:14
 139:22 141:22
 143:7 159:6 197:9
 198:10 205:4
 213:15 262:15
 270:12 279:25
wrote 84:15 127:12
 185:2 272:11
www.capitolpaci...
 1:24

X**Y**

yea 4:14 8:13 10:23
 12:15,20,21 13:18
 15:22 19:20,20
 34:13,15,17,21
 40:9 42:18 50:8
 50:22 51:9 57:19
 57:20 61:12 73:25
 74:1,3 77:22
 89:23,24 90:1
 95:22,23 96:12
 99:16,17,20,25
 101:6 120:19
 134:4 135:12
 150:24 156:1
 166:19 171:14,15
 171:16 172:18,24
 175:8 186:12,17
 188:23 199:14
 200:23 202:9
 204:3 205:18,22
 209:8,8,16 214:3
 214:4 215:15
 223:14,17 231:7,8
 235:7,9 246:12,14
 246:17 249:9,11
 249:12 254:10,12
 266:22,24 275:11
 275:12,18 281:3,4
 281:7 283:16
yeah 16:5 19:16,21
 20:7 32:19 36:4
 46:5 47:3,14
 48:24 49:4 53:19
 56:2,14 59:15
 62:9 63:1,9,20
 65:12,16 66:12
 74:14 76:8 77:6
 77:23 78:25 79:1
 82:2 83:14 88:6
 88:21 89:2,17
 93:3 94:9,17 95:8
 106:9 107:12
 110:2 112:6 113:8

114:14 117:8,10
 117:19 118:2,20
 124:23 125:10
 127:7 128:13
 130:25 131:16
 132:8 137:12
 141:17 142:24
 148:3 149:11
 151:3 154:13
 157:21 159:9
 160:6,25 163:19
 166:1 169:2,15
 175:22,23 182:5
 182:25 184:2
 192:3 193:20
 197:19 199:17,18
 201:20 202:8
 204:13 205:18,21
 208:16 213:12
 214:24 216:19
 219:12 220:13
 222:2 223:11,16
 226:17 227:4
 229:21 233:5
 234:21 245:7
 248:16 251:8
 253:18 257:20
 258:11 259:11
 260:14 262:7
 264:7,8 272:6,23
 274:18 280:12
 283:16
year 20:9 45:4,17
 46:1 74:21,21,23
 75:5 76:1 145:13
 268:3 270:7,19,20
 273:4 277:13
 279:18 280:16
years 30:10 41:9,13
 41:20 45:22 49:17
 76:6 105:7 109:2
 125:13 126:7
 159:11 169:24
 220:16 243:16,17

251:22 261:11
 273:13 280:4,4,4
yeas 15:4 54:2,9
 58:8 74:15 100:19
 101:20 121:16
 134:24 156:16
 167:11 187:9
 200:5 203:1
 206:11 210:10
 214:19 217:3,5
 224:6 231:24
 235:22 247:6
 250:4 267:14
 276:3 281:20
yellow 248:9
yep 177:5 216:21
 271:12
yeses 90:17 173:15
 255:3
yield 37:4

Z

zero 22:3
zone 111:24

0

0 54:2 58:8 74:15
 96:12,12 100:19
 101:20 167:10,11
 187:9,9 250:4
 276:4 281:21
0001 36:5,20
0021 267:20 275:4
0039 256:8 266:5
 267:13
0041 276:19,21
 280:21
00675 75:8 77:11
 160:8 262:9
0077 233:6
0084 191:19
0085 191:23
0087 216:18,19
0095 235:4,20

0096 235:25 246:9
 247:5
0097 249:6 250:3
01 113:17
0106 250:9
02552 147:3,7,10
 148:5
06 75:7

1

1 1:8 3:1 27:20 54:2
 54:9 76:11 90:17
 134:24 173:15
 214:19 235:22
 250:5,20 252:18
 277:5,25 278:14
 279:5 280:25
1,000 217:22
 223:20
1,200 218:7
1,825 218:2
1.1.1 157:16
1.2.1 158:3 160:17
 161:8 166:15
1:30 7:9
10 134:24 233:25
 233:25 251:22
 284:4
100 203:22 233:25
100% 114:16
106 250:8 254:5
 255:1
11 2:12,13 70:24
 71:1,25 72:1,20
 73:1
11-- 117:24
11.1 72:3
11.1.12(c) 54:15
11.1.2(c) 57:17
11.2 72:6,8
11.2.1 67:17 74:19
11.3 62:2 66:7 67:2
 67:5,9 72:9
11.3(b) 65:13 66:8

11.3(c) 58:12 61:21 66:8	97:14 206:10 217:3	134:2 232:2	120:11 121:13	23701 75:6 77:9
11.3.1 67:2,5,10	18.1 8:15 60:7	2.7.6.4 145:21	2022.0077 122:10	78:14,18,21 79:6
11.3.1(b) 63:24	61:20 63:25 67:25	2.7.6.4.1 146:3	122:12 133:25	79:13
11:00 7:9	180 265:4	2.7.6.4.2 146:3	134:22	24 185:17 188:5,12
12 2:14 7:19 58:8	19 29:12 54:9 203:1	20 49:3 173:14	2022.0079 136:5	189:21 191:4
135:25 212:9	224:5 234:2,4	20-- 216:22	150:4,25 156:15	192:19 195:8
12:00 7:21 8:3	267:14	200 234:1,4	2022.0080 37:20	196:5 198:4 199:3
12:03 27:16	1910 122:18 179:15	2010 197:21	157:14	199:11 200:12
12:07 135:21	1926 122:18 179:15	2013 35:13 43:11	2022.0081 158:2	202:6 203:5
12:30 8:3	1st 72:23 260:5	197:21	166:14 167:9	205:13,19,25
13 200:5 255:2,3		2016 196:18	2022.0082 167:17	206:1 207:2,9,24
14 2:15,16 58:8	<u>2</u>	2017 33:22 57:1	171:8 173:13	250:5
134:24 218:17	2 31:1 72:18 90:17	72:20,22	2022.0083 179:4	24/7 114:8
15 7:1 38:5 49:1	156:17 203:1	2018 72:24 98:9,11	186:8 187:7	2401 1:18
121:18 159:11	206:11 214:19	98:16 136:12	2022.0084 187:12	25 13:1 30:9 91:12
174:2,2 175:19	217:3 247:7	137:13 139:20	199:10 200:4	97:13 167:11
15% 206:20,23	267:15 272:4	260:5	2022.0085 202:4,24	187:9 217:23
150 102:14	276:3 281:20	2019 63:25 196:18	2022.0086 205:10	218:15,23,23
16 41:19 156:16	284:4	2020 57:1 63:25	206:9 216:12	222:6,22 282:22
174:1,1 210:10	2-- 218:11	66:25 67:7 76:19	2022.0087 206:13	2552 152:23 153:15
217:5 231:24	2.12 167:18	2021 67:9	208:25 210:8	155:15,17,20
247:6	2.12.7.2.1 167:20	2022 1:7 3:4 78:9	2022.0088 210:12	156:24 157:3,11
17 121:16 158:12	171:8	233:2 286:17	213:21 214:17	26 2:21 54:1 96:12
174:8 177:15	2.12.7.2.1(c) 168:8	2022.0-- 78:7	2022.0089 216:12	174:10
17.1 8:15 44:17,18	2.12.7.2.2 167:21	2022.0001 36:24	216:25	27 82:8 174:9
86:19 94:23	171:9	50:19 51:21 54:6	2022.0092 217:7	270 244:23
122:12 150:4	2.13 90:25	2022.0022 33:19	222:20 224:4	28 276:7,8
157:14,15 160:13	2.13.5.3 91:2 93:14	53:23 54:1	2022.0093 225:3	282 2:24
161:9,10,14	2.13.5.4 91:19	2022.0045 36:2	231:2,22	29 122:18,18
162:23 187:12	2.2 217:18	50:20 51:20 54:6	2022.0094 232:1	179:14,15
206:13 210:12	2.2.4.2.1 218:8,12	2022.0047 54:13	2022.0095 233:16	296-96-00675 73:8
217:17 225:4	2.27 96:22	57:16 58:6	20222 216:22	90:22
236:1 263:24	2.27.1.1.3(c)-(e)	2022.0048 58:10	2083 1:15 286:20	296-96-00675(10)
264:4	97:3 99:13,15,18	73:9,11 74:15	21 2:19 235:21	51:4
17.2 161:20	2.27.3.3 97:1	2022.0049 73:8	276:2	296-96-00675(8)
17.3 256:22 258:8	2.5.1.27 96:20	74:17 78:5	22 74:15 90:17	268:16
266:20,24 267:5	2.7 122:12 125:2	2022.0069 80:9	100:19 276:3	296-96-0675(5)
17.7 160:13 161:11	225:4 232:2	89:21 90:16	281:20	277:1
161:11,15,16	2.7.5.1 225:4	2022.0070 90:21	22nd 286:17	296-960-00675
162:15,19,23,24	2.7.5.1.1 225:6,12	95:17 96:10	23 101:20 183:25	58:11
162:25 163:24,25	2.7.5.1.4 225:6	2022.0071 96:19	214:18	296.96.00650 33:19
164:4 166:9,20	2.7.5.2 80:11 86:14	99:10 100:17	23,000 264:10	296.96.00675(8)
18 2:17 41:19 91:12	2.7.6.3.2 122:13	2022.0072 101:6,18	23.1.1.7 182:9,19	267:25
		2022.0075 101:22	184:16 185:13	

3	86:3,4 88:24 89:21 5.3 91:2	70E 122:18 72 218:2,4 269:15 75 102:13 77 122:1 79 155:18	800 1:18 84 187:11 89 217:4	
3 100:19 101:20 121:16 173:15 210:10 217:5 224:6 267:14 3.1.5 247:9 3.19.5 247:10 3.24.5 136:7 146:11 150:4 3.7.18 143:14 145:21 3:00 7:9 30 91:11 97:12 128:2 135:15,16 135:20 178:9,14 242:15 300 45:10 49:4 242:6 33 2:23 34 282:8 352-2054 1:18 360 1:18 37 283:20 39 217:23 218:17 222:3 223:21 3D 94:12 95:12	6	8	9	
4	6 2:6 121:16 187:14 206:11 210:20 212:2,3 217:3 231:24 6.1 187:12 206:13 233:17 234:13 6.1.3.6.5 187:22 6.1.3.9.3 190:10 6.1.3.9.3(a)(2) 187:25 6.1.3.9.3(b)(2) 188:1 6.1.5.3.4 187:16 206:21 6.1.6.3.1(b) 206:17 6.1.6.3.6 187:13 190:12 6.1.6.4 206:14 6.1.7.2 234:3 6.1.7.3 234:6 6.2.3.x 210:13 600 203:22 635 217:22 222:22 650 259:15 675 135:25 155:24 157:23 165:11 166:3 174:3,10 177:13 178:19 179:4 267:24 675(10) 35:5 675(2) 165:25 675s 175:10 282:10	70E 122:18 72 218:2,4 269:15 75 102:13 77 122:1 79 155:18	8 1:7 3:4 247:6 251:22 267:24 8.10.1.5 236:13 8.4.10.1 101:23 8.4.10.1.1(e) 117:24 8.4.10.1.1(e)(1) 101:25 8.4.10.1.3 102:16 102:20 8.4.10.1.3(d) 119:24 8.4.10.1.3(d)(2) 102:5 8.4.10.1.3(d)(3) 102:8 8.4.10.1.3(d)(5) 102:11 8.6 236:1,4 250:7,9 8.6.1.1.1 236:6 8.6.1.2.1 236:1 8.6.1.2.2 245:9,15 8.6.1.4.1(c) 268:14 8.6.11.1 271:25 8.6.11.10 35:8 8.6.4.19 269:3 8.6.4.19.11 250:7 8.6.4.19.6 268:2 8.6.5.14 269:8 8.6.8.13 277:6,7 280:12 8.7 181:20 182:19 182:21 184:10 256:12 262:25 8.7.1.1 256:9 262:19 8.7.2.14.5.2 179:6 8:30 3:3 8:7	9 2:8,9 122:19 163:4,6 200:5 9:30 7:9 8:2 33:8,10 9:40 51:22 90 216:17 217:4 265:1,3 97 247:9 98502 1:18
5	7			
5 29:20 35:8 47:17 74:15 76:11 203:1 251:12 268:14 5.2.1.13 90:22 5.2.1.4.2.2 80:10	7 54:9 156:16 210:10 217:5 70 122:17 125:20 125:20,24 162:9,9 700 175:11 266:14			

DEPARTMENT OF LABOR AND INDUSTRIES

STATE OF WASHINGTON

ELEVATOR TECHNICAL ADVISORY COMMITTEE MEETING

TRANSCRIPT OF PROCEEDINGS

February 9, 2022

Day 2

Taken Before:

Mary Jo Fratella, RPR, CCR #2083

of

CAPITOL PACIFIC REPORTING, INC.

2401 Bristol Court S.W., Suite C-103, Olympia, WA 98502

Tel (360) 352-2054 Toll Free (800) 407-0148

www.capitolpacificreporting.com

admin@capitolpacificreporting.com

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A G E N D A

AGENDA ITEMS

PAGE NO.

WAC Rule Review

289

Adjourn

548

1 BE IT REMEMBERED that Day 2 of an Elevator
2 Technical Advisory Committee Meeting was held via
3 Microsoft Teams videoconferencing at 8:30 a.m. on
4 Wednesday, February 9, 2022, before Mary Jo Fratella,
5 Washington State Certified Court Reporter.

6 The Technical Advisory Committee
7 facilitators were Melissa Eriksen and Paoakalani
8 Naipo.

9

10 * * * *

11

12

13

14 P R O C E E D I N G S

15

16

17

18 WAC Rule Review

19

20

21 MR. NAIPO: So, with that, we are going to
22 start our review of proposal 0036 and this is
23 regarding adding a new section to 675. ASME A17.1
24 section 8.1 is amended as follows, 8.1.6 Network
25 Safety. Access to any conveyance in this code as

1 described in 1.1.1 using remote control to change
2 software, firmware, operate any device, component,
3 assembly or entity installed in or connected to the
4 equipment inclusive of adding, deleting, or changing
5 the value of any variable parameter, value, or timer
6 from any entity located beyond the physical building
7 or structure where the conveyance is installed shall
8 not be allowed. A remote connection to any equipment
9 connected to any conveyance in this code as described
10 in 1.1.1 that establishes any remote control
11 connection indirectly shall also be considered in
12 violation of this requirement.

13 (b) Remote monitoring from any entity shall:

14 (1) not be capable of remotely uploading or
15 downloading any software or firmware to or from the
16 connected device -- or conveyance.

17 (2) Only be capable of receiving information of
18 the status of the connected equipment, including the
19 functions necessary to exchange standardized signals
20 between devices and a computer network regulating the
21 transfer of the monitored data.

22 (3) Not be capable of operating any device,
23 component, assembly, or entity installed in or
24 connected to the equipment.

25 (4) Not be capable of adding, deleting, or

1 changing the value of any variable, parameter, value,
2 or timer.

3 (5) Produce reporting of all exchanges
4 transmitted and received. The reporting shall:

5 (a) Indicate the date each exchange took place.
6 The format should provide a day, month, and year each
7 event took place configured as day, month, and year.

8 (b) Indicate the time each exchange took place.
9 The format should provide the hour, minute, and
10 seconds each event occurred configured as hours,
11 minutes, and seconds.

12 (c) Indicate the title of the exchange. A
13 glossary of the titles and the description shall be
14 provided and kept on site for the life of the
15 conveyance.

16 Be distributed monthly -- or (d) Be distributed
17 monthly to the owner of the conveyance.

18 (e) Be available and accessible on site by
19 elevator personnel and the owner of the conveyance or
20 their representative at any time without the use of
21 any tool or device having to be provided by the person
22 acquiring the reporting."

23 Da, da, da, da, da. A17.1 is amended adding the
24 following, 8.6.1.7.6 Network Connected Conveyances and
25 Associated Equipment. Any conveyance described in

1 1.1.1 connected to a network shall be equipped with a
2 network disconnect switch to physically disconnect a
3 conveyance connected to a network by disconnecting the
4 network connection. This network disconnect switch is
5 provided to provide persons the ability to protect
6 affected persons and buildings through isolation as
7 they determine necessary. Network connected equipment
8 shall comply with:

9 (a) The network disconnect switch contact shall
10 be physically and positively opened and closed
11 manually, terminate all transmitting and receiving of
12 signals once opened, terminate all power over ethernet
13 connection once opened. No portion of a part,
14 assembly, device, and/or it's required and connected
15 circuit and/or parts used for this switching is and/or
16 has any parallel provision may reside in part or
17 completely as a solid state entity. Software enabling
18 and disabling is prohibited. Bypassing the network
19 disconnect switch is prohibited.

20 (b) The network disconnect switch shall be
21 located inside of a room accessed with keys for that
22 room and not used to open any other lock in the
23 building or structure. Keys to the room containing
24 the network disconnect switch shall be kept on the
25 premises in a location readily accessible to qualified

1 persons only. A log showing access to the room
2 containing the network disconnect switch shall be
3 maintained with the building owner. The log shall
4 contain date, time, access, name of person, name of
5 company or organization, and purpose for access.

6 (c) The network disconnect shall be permanently
7 marked" in bold or in all caps NETWORK DISCONNECT
8 SWITCH [insert equipment identification here]. The
9 marking shall be on the Network Disconnect Switch
10 assembly and shall be readily visible. Letters used
11 shall be block type and at least 13 millimeters to
12 half inch in height.

13 The Network Disconnect Switch shall be provided
14 with markings to indicate the open or closed position.

15 (e) The Network Disconnect Switch shall be
16 capable of being locked in the open position. The
17 provisions for locking shall remain in place with or
18 without the lock installed.

19 (f) The Network Disconnect Switch shall be
20 permitted to open automatically to isolate the
21 equipment from a network.

22 (g) The Network Disconnect Device -- or (g) The
23 Network Disconnect Switch shall not be closed by a
24 control circuit type device.

25 (h) The installation of a network disconnect

1 switch shall be required on new and existing equipment
2 connected to a network.

3 (i) The Network Disconnect Switch shall be
4 installed on all network connection configurations,
5 including wireless connections.

6 (j) Peripherals attached temporarily such as
7 service tools, laptops, etc., are considered an
8 external entity and would be subject to the Network
9 Disconnect Switch. Exception: Elevator personnel
10 employed to interact with the equipment while at the
11 equipment shall be permitted to access the equipment
12 even while the Network Disconnect Switch is off. The
13 connection elevator personnel use will be connected on
14 the equipment side of the Network Disconnect Switch.

15 ASME A17.1 requirement 8.6.1.1.3 is amended as
16 follows, 8.6.1.1.3 it is not the intent of section 8.6
17 to require changes to the equipment to meet the
18 design, equipment name plates, or performance
19 standards other than those specified in 8.6.1.1.2
20 unless specifically stated in section 8.6 (see
21 8.6.1.7.6, 8.6.3.2, 8.6.5.8, 8.6.8.3, and 8.6.8.4.3).

22 Justification for this regarding the network:
23 "A network being understood and perhaps defined in an
24 industry currently used in a microprocessor where two
25 or more computers that are linked in order to share

1 resources, exchange files, or allow electronic
 2 communications comprise a network. A network can be
 3 intranet or internet. The computers on a network may
 4 be linked through discreet (wired), wireless
 5 communication, or wireless signals derived from any
 6 signal on the electromagnetic spectrum. For years
 7 equipment manufacturers have created equipment that
 8 can be and are connected to networks for use to sell
 9 their products and services, but no provision has been
 10 made to provide the protection to an affected person
 11 and/or building from the hazards associated with an
 12 entity affecting a conveyance connected to a network.
 13 This concern is increased with the increased practices
 14 of utilizing networks to monitor and/or interact with
 15 conveyances. The hazards of network connections
 16 include, but are not limited to, struck by, caught
 17 between, falls, electrocution, improper operation due
 18 to changes made to a system incorrectly via a network,
 19 as well as privacy and contract abuse concerns.
 20 Public welfare in the form of financial loss to
 21 building owners is happening and will continue to
 22 occur if left unaddressed as it currently is. Hazards
 23 and dangers exist to a building and its personnel.

24 Questions for clarifications on this.

25 UNIDENTIFIED SPEAKER: Paoa, you were muted.

1 Can you repeat all that again?

2 UNIDENTIFIED SPEAKER: I know, right.

3 MR. NAIPO: If that was the case... So,
4 questions. It looks like Sergey.

5 MR. DOLGIKH: Yes, sir. So -- Pardon me.
6 So, the last paragraph you read it says add new, and
7 it's 3.36.4 under 00675 WAC, this entire paragraph is
8 taken from code directly and being put in here as add
9 new. Why do we need that? It's already in the code.
10 Why do we add something that's already in the code
11 into WAC? I mean literally it's just a word and word
12 copy.

13 MR. NAIPO: This right here?

14 MR. DOLGIKH: Yeah, the 36.4, yeah, that
15 one, yes.

16 MR. NAIPO: I am not sure if that's --

17 MR. DOLGIKH: So -- Yeah. So, if you would
18 go into 8.6.1.1.3 it says exact the same thing, but it
19 says that it shall be amended as follows. So, if
20 we're amending something, we're adding something
21 different. But if we are adding the same thing that's
22 in the code, it doesn't make any sense. Just a
23 question.

24 MR. NAIPO: Okay.

25 MR. DOLGIKH: Thank you.

1 MR. NAIPO: Thank you. Eric, Mr. Mills.

2 MR. MILLS: Eric Mills, field mechanic. I
3 believe the intention of this is -- There's actually
4 websites out there now that tell you how to hack an
5 elevator, that tell you how to build a board where you
6 can use your phone to give it calls and open up a hall
7 station and put stuff in there, and they've been
8 around for -- the one I saw was dated 2017; so, it's
9 nothing new. But with remote monitoring and
10 everything else that's happening, and I know some of
11 it's not legal in this state yet, but elevators are
12 getting more modern, and if computers can be hacked
13 elevators will be able to be hacked if they're
14 connected to a network. I'm pretty sure that major
15 manufacturers aren't putting firewalls up that are
16 Pentagon grade or anything like that. If they can get
17 in the Pentagon, who's to say they can't hack a TK,
18 or an Otis, or an MCE, or any type of controller and
19 then make these things do things that they're not.
20 There's even a book out that came out last year about
21 this, and it's fiction, but theoretically it's
22 becoming possible as they get more advanced, and so
23 with the hacking ability is why, you know, when you're
24 working on it, it would give you an opportunity to
25 disconnect it from the internet or whatever, how ever

1 it's monitored, where hopefully it would stop that
2 from happening. It's not going to stop somebody
3 putting in a push button bluetooth connector, but it's
4 out there. It's all over the internet, if you want to
5 look for it. It's actually pretty scary.

6 MR. NAIPO: Thank you. Mr. Larson.

7 MR. LARSON: Good morning. This is Russ
8 Larson. A couple comments about this proposal. You
9 know, the A17.1 code committee is addressing cyber.
10 There's proposals ongoing now. They're also doing the
11 same with RIO, which is Remote Interaction Operation.
12 Again, the code committee as a whole is considering
13 lots of proposals and lots of ideas with respect to
14 that. In addition, many of the voice video tech
15 systems which are -- which are starting to be
16 installed in Washington now will use networks. So,
17 the notion of having a disconnect switch which will
18 disable emergency elevator communications, you know,
19 seems to be contrary to the intent of the code.

20 In addition to that I think some of the specific
21 reporting requirements that are in this proposal
22 really aren't feasible when you get into the voice,
23 video, text systems. You know, for example, you know,
24 how -- how would that be implemented with reporting a
25 video feed, you know, from an elevator.

1 So, for those reasons, I don't support this
2 proposal. But thank you.

3 MR. NAIPO: Thank you. So, I'll ask again,
4 are there any -- is there anyone who has any
5 additional questions to help with clarification? Mr.
6 Brinkman.

7 MR. BRINKMAN: Yes. Thank you. Kevin
8 Brinkman. Not a question, but I wanted to follow up a
9 little bit on what Russ just commented on. This has
10 been going -- you know, work has been going on in ASME
11 for three or four years probably trying to develop
12 proposals and language to address these concerns, and
13 I don't think jumping to a -- you know, something that
14 hasn't been vetted by a larger number of people makes
15 sense at this point. This proposal I'm not sure where
16 it came from, or how it was developed, or how many
17 people were involved, but I do know that the ASME
18 process involved many people with different
19 backgrounds and was very thorough, thoroughly vetted,
20 as well. It's also based on using some international
21 or existing standards that are out there, specifically
22 IEC 62443 which deals with cyber security for general
23 industry. You know, piggybacking off of that, it
24 involved a hazard analysis to look at what concerns we
25 have for elevators. It was a very detailed study and

1 search, and it's, you know, proposed and pending for
 2 the 2022 edition; so, I think jumping to something
 3 that hasn't been vetted by a larger group by people
 4 that are experts in this field is kind of putting the
 5 cart before the horse.

6 You know, in addition we have to keep in mind
 7 that there are other elevator safeties out there that
 8 we have to -- that are part of this, as well. I mean
 9 we have all our EPDs, etc., that are not connected
 10 directly to the network, and these things have to
 11 function as per A17.1 already, so trying to say that,
 12 you know, this is going to change how elevators
 13 operate in a big way I think is incorrect. Remote
 14 monitoring has been out there for several decades now
 15 and I'm not aware of any, you know, really any
 16 situations where elevators have been taken over and
 17 done things. I mean I've heard some issues with maybe
 18 hacking of the telephone, but it's not a life
 19 threatening or life safety issue at that point. So,
 20 thank you.

21 MR. NAIPO: Jan.

22 MS. GOULD: Just one quick comment. For
 23 those that don't currently like remote monitoring, the
 24 ASME A17.1, for those who aren't on ASME committees,
 25 the A117 2022 is out for public comment and there's

1 proposed language in there to allow the elevator to
2 perform their tests themselves. Have a look at that.
3 Sorry, Jan Gould, if I didn't say it.

4 MR. NAIPO: Good job, Jan. Mr. Leopard.

5 MR. LEOPARD: I'm just looking at the
6 number -- Duane Leopard, city of Spokane. I was just
7 looking at the numbering. What's the intent with 8.1,
8 8.1.6. Network Safety there at the top? Are they
9 talking about adding that to the code because right
10 now there is no 8.1.6 entitled Network Safety in the
11 code.

12 MR. NAIPO: I am not sure, to be honest
13 with you. Like I stated before, all I did was -- I
14 didn't vet anybody's submissions, just cut and paste,
15 because I figured that that's what we do here. So, if
16 the number is incorrect, if 8.6 isn't where network
17 safety is, I'm not sure exactly where that would go,
18 but it sounds to me like there is two things that this
19 person is wanting to address. It's regarding being
20 connected to the network and the capabilities that
21 someone would have to be able to change parameters of
22 the elevator, but at the same time to remove that by
23 putting in a disconnect. So, we're looking at two
24 things with this. Do we want to go forth with, hey,
25 removing the capabilities of being connected to the

1 network and doing what is stated here, as well as do
2 we feel that, hey, putting in something that
3 disconnects it from the network so therefore it
4 doesn't have any capability outside of someone who is
5 working on it being able to plug into it and then
6 being able to change the parameters that they need to
7 on-site instead of being able to do it remotely. It
8 sounds like those are the two thing that we are trying
9 to address with this.

10 Jan, did you have an additional question or
11 statement?

12 MS. GOULD: No.

13 MR. NAIPO: All right. So, with -- Oh, Mr.
14 Wilson.

15 MR. WILSON: Yeah, Mike Wilson here. The
16 question is have we heard of or are we aware of
17 anybody, any company of having uploading or changing
18 the software on an elevator remotely?

19 MR. NAIPO: Is there anybody that can
20 address that question directly? All right. Maybe
21 Wade or Jon will be able to. Wade, Wade Friesen.

22 MR. FRIESEN: Wade Friesen, Vertical
23 options. I don't -- I don't have any direct
24 information to answer that question as to whether or
25 not software can be uploaded or downloaded remotely.

1 I have heard through the grapevine, though, that there
 2 are some companies that have the ability to modify
 3 parameters remotely. I don't know that that has been
 4 done, but I think that that is more the intent if we
 5 read section A of what this is trying to do. It is
 6 trying to help safety by making sure that nobody can
 7 make any changes to the motion control, or doors, or
 8 anything without somebody physically on site to see
 9 what those changes are doing because that's where
 10 we're endangering the riding the public. Thanks.

11 MR. NAIPO: Thank you. Mr. Quiett.

12 MR. QUIETT: Jonathan Quiett. Good morning.
 13 This kind of problem stems from a few years ago with
 14 Otis's remedy where you had to actually call in to the
 15 Otis line and have them remotely reset certain
 16 functionality of the elevator before it would run
 17 again. I know I worked for TK and I know they do have
 18 a version of their max unit that is remote monitoring
 19 they use in Europe that does have the ability to
 20 function as a controller as far as resetting false --
 21 you know, putting the elevator back in service
 22 remotely. From what I'm told and what I can see
 23 through looking at the software level of it, it's not
 24 doing that with units here in Washington state
 25 specifically, but that's -- you know, we need to have

1 the means to be able to disable that if necessary.
 2 And the adding the disconnect, I do understand why
 3 that language is here. If we have a centralized point
 4 where we disconnect it from a network, that keeps the
 5 rest of the elevator functionality working. Many
 6 elevators are connected to one another via -- via
 7 ethernet. They use, you know, internet switches and
 8 things like of that nature; so, it controls group
 9 functionality, plus intergroup emergency power,
 10 connection to log-in panels, things of that nature
 11 that the customer uses. So, if we have a means to
 12 disconnect only the outside connection while leaving
 13 the internal inter-- the internal intranet connection
 14 functional, that gives us the ability to keep the
 15 building functioning at a high rate.

16 MR. NAIPO: Thank you. Is there anybody who
 17 is possibly able to answer Mr. Wilson's question about
 18 any companies out there possibly doing remote
 19 parameter changes currently in the state of
 20 Washington? Yes, Mr. Leopard.

21 MR. LEOPARD: Duane Leopard, city of
 22 Spokane. I can come close to answering it. I've
 23 heard a few companies are trying it, want to use it,
 24 want to put it out there, but I don't know if they've
 25 implemented it yet. Also, you know, being on the RAC

1 Committee, I know that it's under review by -- you
2 know, the possibility of using it is under heavy
3 review and scrutiny.

4 MR. NAIPO: Okay. Thank you. What I
5 suggest is that -- Oh, Mr. Brinkman.

6 MR. BRINKMAN: Yeah, this is Kevin Brinkman.
7 I do know that the proposal that's under consideration
8 for the 2022 edition would only allow software to be
9 changed if a mechanic was on site. It could be sent
10 to the site remotely, but it would have to be uploaded
11 to the equipment by the mechanic and then tested prior
12 to being put into operation, the way it's worded
13 today.

14 MR. NAIPO: And just so people understand,
15 that isn't -- that that's still a proposal, is that in
16 the 2022 edition that's being asked for comments right
17 now?

18 MR. BRINKMAN: Yes. It's still a proposal
19 until it's finished with the public review and the
20 rest of ASME process. It's not official, so it can't
21 be used at this point; however, it's something that is
22 being worked on.

23 MR. NAIPO: Thank you. Thank you for that
24 clarification. What I suggest is it seems like this
25 is two totally separate -- not -- not two totally

1 separate, they are interconnected, but they are two
2 drastically different things regarding networks. One
3 is being able to adjust parameters of certain parts of
4 an elevator via network connection. And, then, the
5 other one is being able to remove that capability via
6 a network disconnect switch. So, what I'd like to do
7 is vote on these as two as two separate sort of
8 entities, not as one big -- Also, it sounds like, hey,
9 some people are "I can see the need for a network
10 disconnect switch, but I'm not sure about the, you
11 know, changing parameters" or vice versa. So, I
12 suggest we vote on these two a little separately. So,
13 what I've done is I've changed the first part
14 regarding the actual things that you can change via
15 the network and what we're wanting to -- what the
16 person is trying to remove that capability for to
17 36(a). So, what I'd like to do is vote on that
18 portion of this now.

19 If you are for this change, which is limiting or
20 negating the capability for parameters in the elevator
21 to be changed via a network connection, I ask that you
22 please vote yea for that change. If you are for that
23 change, please raise your hand and vote yea at this
24 time. Again, this is removing the capability of
25 network parameters or a network connection to change

1 the parameters of the elevator.

2 Are you good? All right. Thank you. Thank you
3 for those votes.

4 Now, for those who are okay with the way the
5 code is currently written allowing for the
6 capabilities of network connection and a capability of
7 change to be done remotely, please raise your hand and
8 vote nay for this change. Vote nay now if you are
9 okay with the way the verbiage and allowance of the
10 code is now. All right. Thank you for those.

11 All-righty. And for those who vote to abstain,
12 please raise your hand now. If you vote to abstain,
13 please raise your hand now. Thank you.

14 So, before we read the results of 0036(a), I'd
15 like to cast a vote on 0036(b), which is regarding the
16 network disconnect switch to where you will remove the
17 computer or the capability of the elevator to be
18 connected to remotely via a network at all via this
19 disconnect switch, this is proposal 36(b), please cast
20 your vote now for yea if you are in favor of that
21 network disconnect switch. Please vote yea now. All-
22 righty. Thank you, everyone.

23 If you are against the proposal of adding a
24 network disconnect switch to the capabilities of the
25 elevator, please vote nay now. Please raise your hand

1 if you vote nay for this network disconnect switch.

2 Perry, if you voted yea on the network switch...
3 Thank you. All-righty. Thank you, everyone. Please
4 lower your hands.

5 At this time if there is anyone that wishes to
6 abstain or vote to abstain we ask that you please
7 raise your hand now. Thank you.

8 Melissa, will you please read the vote tallies
9 both for 36(a) and 36(b) at this time.

10 MS. ERIKSEN: Yes. The vote tally for (a)
11 there were 7 yeas, 16 nays, and 1 abstention. For (b)
12 there were 8 yeas, 16 nays, and 1 abstention.

13 MR. NAIPO: Thank you. All-righty. And
14 with that, we will move to -- Oh, Jan, did you have a
15 question?

16 MS. GOULD: Yes. Jan Gould. I failed to
17 mention we've had this in our code for two cycles.
18 It's 3029.2 Remote Monitoring and Operation.
19 Elevators and other conveyances found operating with a
20 device that can directly affect a change in its
21 controls from a remote location is prohibited unless
22 it is operated under the direct on-site supervision of
23 a person who is a licensed elevator mechanic in
24 accordance with section 3003.2. Just that's it.
25 Thank you.

1 MR. NAIPO: I'd like to pose to the TAC is
2 this something -- Since this is what the city of
3 Seattle already has in place where they're prohibiting
4 a network change to parameters and that it has to be
5 done on-site, as well from it sounds like Kevin
6 Brinkman's information regarding that's sort of where
7 ASME is going with the proposals that are in public
8 comment right now, is that something that you feel the
9 program, the elevator program, should adopt, as well?
10 Just leaving that -- I just want to pose that out
11 there. If you feel like the elevator program should
12 sort of fall in line with how the city of Seattle
13 sort of takes advantage of what this is really trying
14 to say, as well as what the ASME Committee is coming
15 out with, I ask that you please raise your hand. Yes,
16 Jonathan.

17 MR. QUIETT: Yeah, Jonathan Quiett. I think
18 for me and many of the people in the industry that
19 I've talked to about this, we just want to make sure
20 that there can't be somebody remotely unloading
21 software, making changes without us having any
22 knowledge of what's going on is the real end game goal
23 we want. We have to have somebody on-site to vet it
24 to make sure it is uploaded properly, to make sure the
25 elevator still runs properly and all the safety

1 functions work properly after a software change.

2 MR. NAIPO: Thank you. And, Jan, I've
3 asked to clarify that, is that the intent of what the
4 city of Seattle has prohibited is sort of falling in
5 line with what Mr. Quiett's statement was?

6 MS. GOULD: Jan Gould. Yes. And I'm wrong.
7 Its been in there since the 2012 building code is that
8 a mechanic be present when there's changes.

9 MR. NAIPO: All right. Thank you. Mr.
10 Mills.

11 MR. MILLS: I just want to second what Jon
12 said. I'm sorry, Eric Mills, field mechanic. The
13 idea, even when I burned a new chip, because chips go
14 bad, I'd have to retest the software and retest the
15 unit and make sure everything is right. I try, if
16 it's not corroded, I write down the parameters and
17 whatever I'm burning and then I still burn the chip.
18 I test everything to make sure it still works and is
19 still code compliant. That's our job. It's the
20 riding safety of the public. We've got to do that.
21 So, I'm in total concurrence with what Seattle has. I
22 think Washington should adopt the same.

23 MR NAIPO: Because we don't have that
24 verbiage actually drafted out to vet, what I will say
25 is that the Program will put forth this proposal in

1 time for the ESAC to review; so, all ESAC members who
2 are part of his TAC expect to see that as an added
3 piece. Even though this was voted down, what I will
4 do is I will work with Jan to draft up what will be
5 put into the Program's -- the Program's WAC and we'll
6 go that route. Yes, Mr. Larson.

7 MR. LARSON: Good morning. This is Russ
8 Larson. Just a point of clarification and that is
9 that the 2019 edition of A17.1 has a requirement that
10 they report to as USI, Unique Software Identifier, and
11 the requirement in that section of the code is to keep
12 it a log on -- as part of on-site documentation of any
13 executable software changes that have been done. So,
14 I just wanted to bring that to the group's attention
15 that there are other provisions that are being
16 incorporated in the code that provides some of these
17 protections. Thank you.

18 MR. NAIPO: Jan.

19 MS. GOULD: Jan Gould. Yes, but that's
20 limited. So, anyway, does anyone want to do a
21 friendly amendment, is that possible, or how do people
22 feel, just move on to the next rule or proposal?

23 MR. NAIPO: Yeah, that was -- I wanted to
24 sort of put it to a vote, but that would be my intent
25 is that, hey, we would draft this up, and, again,

1 permitting, if it is something that we could do maybe
2 on the back end of tomorrow, we can address that then
3 tomorrow if we want to move forward with this drafting
4 of this language, but we'll put that to a vote real
5 quick. Mr. Leopard.

6 MR. LEOPARD: You know, I kind of like the
7 idea behind it, but I'll vote it no because I don't
8 like the execution of it. You know, it's long-winded.
9 And actually amending the actual A17.1 code, I'd say
10 let's rewrite this to an actual WAC.

11 MR. NAIPO: All right. Thank you. So, in
12 reference to what Duane was saying, if everyone is
13 okay with that, that is what I'm proposing is that a
14 new WAC will be written regarding network connections
15 and the capabilities of it to sort of fall in line
16 with the same verbiage that is prohibited in the city
17 of Seattle. If you are for that, and time permitting,
18 we will work on that draft language in this TAC
19 Committee, if not, it will be done and presented at
20 the ESAC level next month. Mr. Brinkman.

21 MR. BRINKMAN: Yeah, I feel a little
22 uncomfortable voting on something I haven't really
23 seen the language. If we could see it and maybe
24 postpone that vote until tomorrow, I would feel more
25 comfortable if we can get the language overnight and

1 have a chance to look at it.

2 MR. NAIPO: That's heard. I will get that
3 to you. Jan, is that possible for us to be able send
4 that out in an e-mail later on this afternoon to
5 people so that they can review it?

6 MS. GOULD: Oh, yes, I'll get it for you.
7 Jan Gould.

8 MR. NAIPO: Thank you. Thank you for that.
9 So, thank you for that, Mr. Brinkman. So, we will
10 convene this vote tomorrow after everyone gets the
11 city of Seattle's exclusion of network capabilities
12 and stuff like that. So, Mr. Turner.

13 MR. TURNER: Dylan Turner, Greenbusch. I
14 posted in chat just so folks are aware.

15 MR. NAIPO: Okay. Thank you. Thank you
16 very much. All-righty. I'll put a quick note in
17 here. We will convene a vote on new verbiage being
18 drafted either in this TAC committee, time permitting,
19 or that will be drafted and presented at the ESAC
20 level next month.

21 UNIDENTIFIED SPEAKER: (Audio difficulty)

22 UNIDENTIFIED SPEAKER: (Audio difficulty)

23 THE COURT REPORTER: I'm sorry, this is the
24 court reporter, I didn't -- it sounded like a female
25 was speaking and I didn't catch what she said.

1 MR. NAIPO: Yeah, I think someone's mic was
2 unmuted and someone just stepped in, so...

3 THE COURT REPORTER: Oh, okay. Thank you.

4 MR. NAIPO: Okay, moving down to the next
5 one, we are on to proposal 0035, Add New, Amend A17.1
6 8.6.4.20.11 as follows, 8.6.4.20.11 is regarding
7 Emergency Brake.

8 (a) Emergency Brake and Ascending Car Overspeed
9 Protection. For passenger elevators and all freight
10 elevators the emergency brake shall be tested for
11 compliance with 2.19.3.2. Verify the setting of the
12 ascending car overspeed detection means.

13 (b) Emergency Brake and Unattended Car Movement
14 Protection. Test the unintended car movement
15 protection and the emergency brake in the down
16 direction with 125% of rated load at the landing above
17 the bottom landing. Test the unintended car movement
18 protection and the emergency brake with empty car in
19 the up direction. All tests are performed with the
20 car and hoistway doors open in accordance with
21 2.19.2.2(1).

22 The math of unintended car movement protection
23 is "if it is detected that unintended car movement in
24 either direction away from the landing with the
25 hoistway door not in the locked position and the car

1 door or gate not in the closed position, then
2 complying with 2.19.2.2." Testing only in the down
3 direction does not ensure compliance. Contractors
4 have been performing tests by simulation, bypassing
5 signals rather than ensuring doors are in the
6 compliant position.

7 Question of clarifications or clarification?

8 Mr. Friesen.

9 MR. FRIESEN: Wade Friesen, Vertical
10 Options. I was unaware that any of the testing was
11 going on besides the way it's currently described. Is
12 this a change? I'm just unaware that this was being
13 done any other way than the way it's currently
14 written. I'm just not seeing the need for this.
15 Thanks.

16 MR. NAIPO: Thank you. Any other questions
17 or comments of clarification maybe to answer Mr.
18 Friesen's question? Mr. Mills.

19 MR. MILLS: Some of the manufacturers
20 recommend removing wires from the hall logs depending
21 on the controller what numbers that she'd written,
22 just pull this wire, pull this wire that simulates
23 doors, pull, unplug a board which will simulate doors
24 open, and what this is saying is to actually do the
25 test with doors open because there might be something,

1 maybe the pipe's wrong in the middle of the hoistway
 2 and when the car moves up, and it's a piece of pipe,
 3 it's better to do that and should be done on initial
 4 turnover, but it's better to find out these things
 5 with an unoccupied car than with people in the car in
 6 an emergency situation. So, it's simulated door locks
 7 instead of actually having the door locks open, and I
 8 believe that's what it is. And also some of the
 9 testing says up to 125%. It doesn't clarify 125% and
 10 I think it's clean-up is what the intent was.

11 MR. NAIPO: Thank you. Any other questions
 12 or clarifying statements needed so people understand
 13 what this change is doing? Anyone?

14 MR. NAIPO: Mr. Quiett.

15 MR. QUIETT: Yeah, I could speak to the
 16 automated -- It's Jonathan Quiett. I can speak for
 17 the automated testing with the TK product line, and
 18 the newest version or the newer versions of software
 19 require you to do the test, perform the test one time
 20 with the doors open before it'll let you use the
 21 automated testing with the doors closed. But, again,
 22 that's strictly for TK. But I understand what is
 23 being said with this because the common way, the
 24 common practice to do this is prove your door locks
 25 work and then do something to make the controller

1 think your door lock is open when you're doing the
2 test.

3 MR. NAIPO: Thank you. So, if there are no
4 additional questions or comments, I propose we move
5 this to a vote. We are going to be voting on proposal
6 0035 and it sounds like changing unintended or
7 emergency brake, emergency brake and ascending car
8 overspeed protection, and emergency brake and
9 unintended car movement protection, just clarifying
10 how they do that work instead of bypassing things, but
11 actually doing it -- actually doing it instead of
12 bypassing it and trying to trick the system that it
13 is, you know, open or unlocked, or whatever. So, if
14 you are for that change -- Oh, Mr. Brinkman.

15 MR. BRINKMAN: Yeah, Kevin Brinkman. Sorry
16 to come in late, but I've been reading through this
17 and I don't see anything here but unplugging wires or
18 brakes, or I'm not sure how this proposal would
19 address the concern that was raised by Mr. Quiett and
20 Mr. Mills. To me it's talking about testing only in
21 one direction and not testing in both directions. So,
22 I'm -- If -- Am I looking at the wrong proposal or I
23 don't see anything in the wording that would suggest
24 you have to change the way you're testing the door
25 lock and doors. So, I must be missing something. I'm

1 confused. Sorry.

2 MR. NAIPO: No, you're fine. Mr. Madison.

3 MR. MADISON: Yeah, Jon Madison. To
4 address what Kevin said is at the lower end of that
5 where it says all tests are performed with the car and
6 hoistway doors open in accordance with 2.19.2.2(a),
7 just an example of what Jon or Jon Quiett was stating,
8 on TK products a lot of them have a door disconnect
9 switch, which you would flip that on, which simulates
10 a door open. The doors are actually closed. It isn't
11 a bad safety precaution, especially when we get around
12 to these MRLs where you can't see the elevator. But
13 also with Kone's product part of their test is to
14 disconnect a plug that the gates are wired to and to
15 simulate that you trip the overspeed on the governor
16 and that goes back to the ascending car overspeed test
17 and the top, and you do that while also unplugging the
18 hoistway door lock plug on the ACUM board right in the
19 car, or in the controller, I'm sorry. So, those doors
20 are closed during the test and this is stating where
21 you're verifying that the doors are open while you're
22 performing the unintended motion, and then they're
23 asking that you verify the setting of the ascending
24 car overspeed detection means. Like I said, those
25 tests are done on inspection speeds on some cars.

1 They're done with the doors closed on other
 2 manufacturers. Otis is similar. They have you shut
 3 off power to the doors to simulate that they're open.
 4 So, I think they're asking that we follow the code by
 5 how it's written and that's verifying the settings for
 6 the ascending overspeed test and verifying that the
 7 car doors are open when you're doing the unintended
 8 motion. Thanks.

9 MR. NAIPO: Thank you. Candace.

10 MS. LAU: Candace Lau. Yeah, I -- To
 11 piggyback on what Jon just said, when this code first
 12 came out, this requirement first came out, everybody
 13 was doing these tests with the doors open, and then --
 14 and then the companies came back and said, "Hey, this
 15 is unsafe. Testing with doors open is unsafe." And
 16 so they start writing procedures to eliminate -- to
 17 get around, I guess, testing with the doors open. So,
 18 that's what Jon is alluding to is that currently there
 19 is a lot of procedures where the doors are physically
 20 closed, but they're simulating it by how he just
 21 described it. They're simulating that the doors are
 22 open to do this test as opposed to really physically
 23 leaving that door open. That's the way when this code
 24 was first written that's how we all tested it and
 25 until the procedures came out, and then we were going

1 by the procedures that the companies wrote. So, I
2 believe that this is written, as Jon was saying, to --
3 to actually do what the code is saying, do it with the
4 doors open. I think that that's what it's trying to
5 say.

6 MR. NAIPO: All right. So, there's some
7 statements in the chat that I want to read real quick
8 from Ricky Henderson, a 25 -- 125% is only for
9 passenger cars.

10 Jan had made the comment that it is already a
11 requirement in the code, no need for additional
12 language.

13 Gerald actually posted, "The code for 2019 reads
14 now 8.6.4.20.11 Emergency Brake (a) Emergency Brake
15 and Ascending Car Overspeed Protection. For Passenger
16 elevators and all freight elevators, the emergency
17 brake shall be tested for compliance with 2.19.3.2.
18 Verify the setting of the ascending car overspeed
19 detection means. (b) Emergency Brake and Unintended
20 Car Movement Protection. Test the unintended car
21 movement protection and emergency brake in the down
22 direction with 125% of rated load at the landing above
23 the bottom landing. And then the added line. So,
24 what's in 2019 is exactly what's here, but the person
25 added two extra sentences there at the end of (b),

1 test the unintended car movement protection and
2 emergency brake with empty car in the up direction.
3 All tests are performed with the car and hoistway
4 doors open in accordance with 2.19.2.2(a)."

5 So, there's that. So, the person is adding --
6 Let's go -- adding these lines right here. Jan.

7 MS. GOULD: Jan Gould. In 2019 and previous
8 that language says the detection -- detect unintended
9 car movement in either direction away from the landing
10 with the hoistway door not in the locked position and
11 the car doors or gate not in the closed position.
12 Just a comment.

13 MR. NAIPO: All right. Thank you. Mr.
14 Madison.

15 MR. MADISON: Yeah, Jon Madison. I think
16 there's a few things. The 125% test would be done on
17 the five year. The empty car would be done on the
18 annuals. And, then, on this I think part of what's
19 trying to be addressed is if the state, or the city,
20 or the AHJ in general has accepted processes or
21 procedures from a company that aren't following the
22 code that may be what this individual is trying to
23 address at that point. I'm not sure, but that's kind
24 of what it looks like. Thank you.

25 MR. NAIPO: Thank you.

1 MR. DOLGIKH: Sergey Dolgikh, Elevator
 2 Inspector, L & I. So, just by looking at how it was
 3 worded and such, the only real change that happens to
 4 this body of code, right, is that the clarification as
 5 to how tests shall be performed and pinpointing that
 6 the door shall be open. So, why not just remove the
 7 body of code language out of this proposal and just
 8 keep that to it being within -- within this proposal,
 9 just that last sentence, the test -- "Test the
 10 unintended car movement protection and emergency brake
 11 with an empty car in the up direction. All tests are
 12 performed with the car and the hoistway doors open in
 13 accordance with 2.19.2.2(a)." So, that small sentence
 14 will clarify the intent of the code, and, you know,
 15 with -- if doors are -- if door locks not to be locked
 16 are -- or and hoistway doors are not to be in closed
 17 position, it doesn't necessarily specify that the
 18 doors shall be open for this test. It just says it
 19 doesn't latch the lock. So, anyway, just -- just a
 20 suggestion, just take out the rest of code for 20.19
 21 that repeats the code and just put that additional
 22 sentence to clarify the intent of the code. Thank
 23 you.

24 MR. NAIPO: Jan, did you have another
 25 comment?

1 MS. GOULD: Oh, lazy listener here, sorry.

2 MR. NAIPO: All right. Mr. Quiett.

3 MR. QUIETT: Jonathan Quiett. Something
4 else that we have to kind of think about with this,
5 too, is I went and looked at the A17.2, right. We're
6 still going to have that somewhere in the WAC as the
7 guide for testing. It does say in there to simulate a
8 door open condition. So, it's -- You know, we have to
9 be mindful of how we go about this.

10 MR. NAIPO: All-righty. So, what I ask is
11 that we put this to a vote, if everyone is ready, on
12 proposal 0035 regarding adding in 675 regarding,
13 "8.6.4.20.11 Emergency Brake, Test the unintended car
14 movement protection and the emergency brake with empty
15 car in the up direction. All tests are performed with
16 the car and hoistway doors in accordance with
17 2.19.2.2(a)."

18 If you are for that change, I ask that you
19 please raise your hand now. If you are for that
20 change, please raise your hand now and vote yea. If
21 you are for that change, please raise your hand and
22 vote yea. Are you good? All right, thank you. Thank
23 you for everyone who voted. Please lower your hands.

24 If you are not for that change, I ask that you
25 please raise your hand and vote nay. If you are in

1 opposition of that change, I ask that you please raise
2 your hand and vote nay. All-righty. Thank you
3 everyone.

4 For those who wish to vote to abstain -- If you
5 voted nay, please lower your hand. Thank you. If you
6 are voting to abstain, please your hand now. If
7 you're voting to abstain, please vote and raise your
8 hand now.

9 MS. GOULD: Jan Gould, I think Dylan had his
10 hand up for a nay. Am I wrong?

11 MR. NAIPO: I don't think so.

12 UNIDENTIFIED SPEAKER: Which Dylan?

13 UNIDENTIFIED SPEAKER: There's only one of
14 us now.

15 MR. NAIPO: All right. Thank you for that.
16 Melissa, will you please read the vote tally for
17 proposal 0035.

18 MS. ERIKSEN: There were 11 yeas, 11 nays,
19 and 2 abstentions.

20 MR. NAIPO: You said 11 yeas and 11 nays?

21 MS. ERIKSEN: Uh-hum.

22 MR. NAIPO: All right. Thank you.

23 UNIDENTIFIED SPEAKER: Does that mean the
24 abstentions have it since the 11s cross each other
25 out?

1 THE COURT REPORTER: And, I'm sorry, who was
2 just speaking?

3 MS. ERIKSEN: Oh, Perry McKenzie, for the
4 court reporter, Perry McKenzie.

5 MR. MCKENZIE: Oh, I'm sorry. Perry
6 McKenzie. I'll keep my mouth shut. Thank you.

7 MR. NAIPO: All right. Here we go with
8 proposal 91, Amend 17.1 section 8.6 as follows,
9 8.6.1.6.5 Fire Extinguishers. The code currently
10 reads, "In jurisdictions not enforcing NBCC, class ABC
11 fire extinguishers shall be provided in elevator
12 electrical machine rooms, control rooms, and control
13 spaces outside the hoistway intended for full bodily
14 entry and walk-in machinery, and control rooms for
15 escalators and moving walks, and they shall be located
16 convenient to the access door." Adding verbiage, "For
17 machine-room-less (MRL) installations, class 'ABC'
18 fire extinguishers shall be conspicuously located
19 where they are readily accessible outside of an
20 elevator hoistway within 24 feet (6.4m) of the center
21 line of each elevator entrance assembly at each
22 landing and in line of sight. In the event of side or
23 rear elevator entrance assemblies, a class 'ABC' fire
24 extinguishers shall be conspicuously located in
25 accordance with this requirement for every entrance

1 assembly."

2 Justification: As code making bodies developed
 3 MRL language and manufacturers began selling MRLs,
 4 which in many cases have not met established
 5 standards, fire extinguisher placement for the
 6 protection of affected persons and mitigation of fire
 7 in a building or structure is of concern. Four
 8 persons have died in a fire in a hoistway, thus fire
 9 is a real threat. I did not propose putting it in a
 10 hoistway. Currently the elevator industry
 11 predominantly manufactures and installs elevator
 12 configurations known as machine-room-less type
 13 elevators. The advent of this configuration
 14 eliminates what legacy equipment utilized, known as a
 15 machine room. Despite these machine-room-less type
 16 elevators by design having an electromechanical
 17 equipment now installed in a building hallway where
 18 employees and members of the public may be present in
 19 normal and emergency scenarios, no provision has been
 20 made to address the hazards associated with this
 21 equipment in a public place. The electrical equipment
 22 is subject to NFPA 70, 620.5 Working Clearances, which
 23 require a 36" deep by 30" wide minimum clearance in
 24 the hallway in front of the equipment. This
 25 essentially consumes a 36" by 30" by 6-1/2' minimum

1 volume of hallway, etc. NFPA 70E also establishes
2 clearances that would encroach this public area.

3 Lastly, with the machine room no longer
4 existent, the area of various service activities
5 related to a machine-room-less type elevator are now
6 performed in this public area. This, in turn, may
7 become a hazard in some scenarios wherein it
8 encroaches a means of egress route as regulated in 29
9 CFR 1910. These routes must be 28" minimum and
10 minimize damage to or danger to employees and the
11 public. Additionally, model codes such as the
12 International Fire Code have minimum corridor widths
13 which vary, but may be encroached.

14 Questions of clarification? Any questions for
15 clarification? Any comments for clarification on this
16 change, any comments? Mr. Quiett.

17 MR. QUIETT: Jonathan Quiett. It looks like
18 you've got more to read because there's a cl.

19 MR. NAIPO: Oh.

20 MR. QUIETT: It goes down further.

21 MR. NAIPO: Oh, my gosh. Thank you. Yes,
22 this is one of those that has a huge explanation and
23 only one block. Okay. "Additionally, model codes
24 such as the International Fire Code have minimum
25 corridor widths which vary, but may be encroached due

1 to the clearances set forth by NFPA 70 29 CFR 1910 and
 2 NFPA 70E, 21 feet was chosen to be consistent with
 3 NFPA 72 establishing the elevator lobby in the form of
 4 where fire alarm initiating devices is restricted to.
 5 This starts to outline what an elevator lobby might be
 6 dimensionally. This distance is liberal as compared
 7 to the average size of an elevator machine room no
 8 longer in popular use due to cost rather than safety.
 9 Line of sight was chosen due to the removal of the
 10 machine room. These MRL environments are designed
 11 inconsistently and therefore the line of sight affords
 12 protection. The proposal understands this may result
 13 in a jurisdiction not only requiring an extinguisher
 14 in this proximity to address electrical equipment
 15 previously in a machine room now being in this public
 16 area, but may also result in one being required simply
 17 due to elevator hall buttons, signals, and key
 18 switches that are electrical. Due to additional
 19 hazards in the elevator hoistway not described in this
 20 proposal and no safe means identified as of yet to
 21 propose a portable fire extinguisher in an elevator
 22 hoistway, having an extinguisher at each landing in
 23 this proximity may be the mitigation to address this.
 24 Due to these hazards associated with machine-room-less
 25 type elevators being now present in public areas

1 exposing employees and the public to unmitigated risk,
2 this proposal attempts to provide some mitigation in
3 the form of more ready access to a portable fire
4 extinguisher to establish minimum requirements
5 consistent with nationally recognized good practice
6 for providing a reasonable level of life safety and
7 property protection from the hazards of fire explosion
8 or dangerous conditions in new and existing buildings,
9 structures, and premises, and to provide a reasonable
10 level of safety to persons affected by elevator
11 equipment in a public space and at time of egress.
12 Routes and emergency for persons -- Four persons have
13 died in a fire in a hoistway, thus fire is a real
14 threat.

15 Thank you, Mr. Quiett, for that. Mr. Larson.

16 MR. LARSON: Good morning. Russ Larson.
17 The -- This proposal identifies, you know, fire
18 extinguishers and MRL configurations versus machine
19 room configurations, and the hazard in the rationale
20 refers to controllers or inspection and test panels;
21 however, the proposal is not limited to the location
22 of the controller or inspection test panel. Rather,
23 what the proposal is for is every landing served by
24 the elevator. Therefore, the proposal seems overly
25 broad and the proposed solution doesn't seem to match

1 the hazard identified. Thank you.

2 MR. NAIPO: Thank you. Jan.

3 MS. GOULD: Jan Gould. I'm just saying I'm
4 in support because it's the same distance that a smoke
5 detector in a lobby can be from an entrance.

6 MR. NAIPO: Okay. Thank you. Any other
7 questions needed? Any other questions needed for
8 clarification? Any additional statements of
9 clarification? All right. With that, I propose that
10 we vote on this change to proposal 0091 regarding MRLs
11 and the placement of fire extinguishers within -- at
12 the hoistway landings and in certain configuration and
13 distances regarding the distance from the doors and in
14 line of sight.

15 If you are for this change, I ask that you
16 please raise your hand and vote yea. If you are for
17 this change, please raise your hand and vote yea. Thank
18 you. For those who have voted, please lower your
19 hands.

20 For those who are in opposition of this change,
21 please raise your hand and vote nay now. If you are
22 in opposition of this change, please raise your hand
23 and vote nay now. All right. Thank you for those who
24 voted. Please lower your hands.

25 And for those who vote to abstain, please raise

1 your hand now. For those who wish to abstain, please
2 raise your hand and vote now. Thank you.

3 Melissa, will you please read the vote tally for
4 proposal 0091.

5 MS. ERIKSEN: There were 11 yeas, 12 nays,
6 and 2 abstentions.

7 MR. NAIPO: Thank you. And with that we're
8 going to take our first break. We're going to take a
9 five minute break; so, everyone get up, stretch, use
10 the restroom real quick, grab some water, whatever you
11 may need, and we'll see guys back in about five
12 minutes when the timer goes off. Thank you guys very
13 much.

14 (Recess taken)

15 MR. NAIPO: I hope everyone had a good
16 break. We're out of 675. We're out of that.
17 Hopefully the rest of today will go a lot quicker.
18 We'll see. We'll see. Maybe that's just my wishful
19 thinking, but, anyways, thank you guys for the work
20 you guys just did on 675. I have a feeling some
21 submissions that were had may have to go into 675,
22 but we'll get to those when we get to them, but we're
23 now on to our new section. We're on to section 700,
24 which is definitions. I'll be honest with you, this
25 was submitted -- this first chunk was submitted by the

1 program and these were things that we felt we needed
2 to change and have updated for people for better
3 clarity in our WAC. So, here we go.

4 First adding of definition is Authority Having
5 Jurisdiction, AHJ: The organization, office, or
6 individual responsible for enforcement of this code.
7 Where compliance with this code has been mandated by
8 legislation or regulation, the "Authority Having
9 Jurisdiction" is the regulatory authority.

10 Conveyance work means the alteration,
11 construction, dismantling, erection, installation,
12 maintenance, relocation, and wiring of a conveyance
13 from demarcation point of load side mainline power
14 conductors (wires) ran to the first piece of
15 designated elevator controller equipment by elevator
16 contractor. All work after that demarcation point
17 will be considered elevator conveyance work.

18 Construction Personnel Hoist (CHP) Oh, my gosh,
19 I am not sharing my screen. Sorry about that. Thank
20 you. Thank you very much, Perry and Carl. I
21 apologize about that. There we go. Hopefully that's
22 better. I'm sorry about that. I assumed I already
23 was. I forgot that the timer was up there. So, all
24 right. Construction Personnel Hoist, this is where
25 we're at right now. Construction Personnel Hoist

1 (CPH) are installed inside or outside buildings or
2 structures during construction, alteration, demolition
3 operations, and are used to raise and lower workers
4 and other personnel connected with or related to the
5 structure. These personnel hoists are exclusively
6 covered in ANSI, American National Standard, A10.4
7 safety requirements for personnel hoists and employee
8 elevators for construction and demolition operations.

9 Controller, meaning shall include, but not be
10 limited to:

11 (i) Controller: A device or group of devices
12 that serves to control in a predetermined manner the
13 apparatus to which it is connected.

14 (ii) Controller, motion: An operative unit
15 comprising a device or a group of devices for
16 actuating the moving member.

17 (iii) Controller motor: The operative units of
18 a motion control system comprising the started devices
19 and/or power conversions -- power conversion equipment
20 required to drive an electric motor.

21 (iv) Controller operation: An operative unit
22 comprising a device or group of devices for actuating
23 the motion control.

24 "Machine Room Less - MRL means that there isn't
25 a machine room that contains the actual controls and

1 lifting machine for electric traction elevators or the
2 actual controls and pumping machine/tank for hydraulic
3 elevators. These are located inside the hoistway or
4 pit.

5 Machine Room (i) Machine room and control room,
6 remote, elevator, dumb waiter, material lift: A
7 machine room, or a control room that is not attached
8 to the outside perimeter or surface of the walls,
9 ceiling, or floor of the -- Of course this ran out. I
10 apologize.

11 MS. ERIKSEN: This is Melissa. So, it's --
12 the rest of it is like two down.

13 MR. NAIPO: Oh, is it?

14 MS. ERIKSEN: Yeah.

15 MR. NAIPO: Oh, right there. There it is.
16 Why did it do that? Okay, I apologize about that.
17 Let me go back up here. So I'll read the last
18 sentence again. Machine room and control room,
19 remote, elevator, dumb waiter, material lift: A
20 machine room, or control room that is not attached to
21 the outside perimeter or surface of the walls,
22 ceiling, or floor of the hoistway.

23 Vertical Reciprocating Conveyors, better known
24 as VRCs, which are designed to raise and lower
25 materials from one elevation to another. They are

1 primarily hydraulically or electromechanically
 2 activated and powered. VRCs are mounted in a
 3 stationary position. The equipment may perform a
 4 stand-alone function. These adhere to the reference
 5 standards for maintenance and installation referred to
 6 in WAC 296-96-05000.

7 Rationale: Needed clarification for equipment
 8 descriptions and updated new definitions that has
 9 shown to be required in WAC. These additions stem
 10 from recent different interpretations/opinions on
 11 verbiage used, as well to assist stakeholders in
 12 identifying these clarifications.

13 Any clarifying questions needing answered? Mr.
 14 Oury. Bob. You're muted, if you're talking, Bob.

15 MR. OURY: Bob Oury. The last paragraph
 16 referring to vertical reciprocating conveyors should
 17 not be part of this of definitions as the State has
 18 never acknowledged vertical reciprocating conveyors or
 19 VRCs. When -- When they were invented back in the
 20 early eighties the state of Washington chose to write
 21 their own code for material lifts because the code for
 22 VRCs is written in ANSI B20.1, which the State does
 23 not recognize because it's a code for conveyors, not
 24 for conveyances, and it doesn't have the safety
 25 standards that the WAC has. To enter VRCs into

1 definitions now is only going to add confusion and
 2 they would probably have to adopt B20.1 to even be
 3 able to regulate them. And the code, the ANSI
 4 standard for VRCs is so minimal that it's -- it's
 5 going to allow a lot of people, especially from out of
 6 state, to think that they can sell and install VRCs in
 7 the state of Washington, which they can't do. The
 8 State has always felt that VRCs are a conveyor, and if
 9 the VRC, in order for the state to acknowledge it and
 10 not permit it, it should have a roller conveyor on the
 11 carriage itself and automated in-fed exit and be a
 12 conveyor. So, I think adding it at, you know, 35
 13 years later or 40 years later is only going to add
 14 confusion to the material lift code in WAC in part (c)
 15 minimum standards, and I would be totally against it.

16 MR. NAIPO: Thank you. There is a comment
 17 in the chat: We currently deal with them as material
 18 lifts covered under WAC 296-96-00-- I think you mean
 19 05000, but never wrote it down anywhere. That's from
 20 the Chief. Next question or comment. Sergey.

21 MR. DOLGIKH: Sergey Dolgikh, Elevator
 22 Inspector L & I. I -- I wanted to make a suggestion
 23 for this one, but after hearing Mr. Oury speak I
 24 strongly agree with him. I used to, in my past life,
 25 design conveyors for other systems and I believe that

1 this would bring a lot of confusion on top of
 2 confusion we already have considering that we
 3 allocated them as stand-alone material lifts and back
 4 in the day they were controlled by a WAC just like it
 5 was mentioned. So, this particular definition, if we
 6 can do a friendly amendment, I suggest we do.

7 My second portion, as initial portion and why I
 8 raised my hand, was yesterday we discussed a lot about
 9 alteration, major alterations, and the definition that
 10 could be put in WAC of a mod, modernization, or a
 11 major alteration. What it consists of, to clarify it,
 12 I think -- I suggest that maybe we could do a friendly
 13 amendment and for the future for ESAC or something
 14 like that, and then imbed that definition in here in
 15 700 for major alteration or a mod. Thank you.

16 MR. NAIPO: Thank you. Mr. Brinkman.

17 MR. BRINKMAN: Thank you. Kevin Brinkman.
 18 I want to comment on the definitions for controller.
 19 A17.1 2019 already has definitions for controller,
 20 controller motion, control motor, and operation; so,
 21 if anything, I would think these would have to be
 22 either amendments to that or why not just use the ones
 23 in A17, which would be my preference because I don't
 24 think they're -- looking at them quickly, I didn't see
 25 much difference. And similar to I think the -- And

1 then the other comment I had was relative to machine
 2 room. I believe I heard you say remote, and I may be
 3 mistaken, but the description seems to be more for
 4 remote machine room, which is also defined in A17.1.
 5 So, I guess I'm curious why we need these here or
 6 what's different about them, if somebody can point me
 7 in the right direction why we need some changes here.
 8 Thank you.

9 MR. NAIPO: So, this is one of the times I'm
 10 going to allow the chief to speak on this one, Gerald,
 11 if you could.

12 MR. BROWN: Hi. Thank you. I found it
 13 necessary -- I'm the one that wrote this. I found it
 14 necessary to author the definitions of controller
 15 conveyance for the defining points of VRCs, and I'll
 16 take those kind of one at a time. We lost a legal
 17 challenge on what is conveyance work, and where that
 18 work begins and ends fairly recently dealing with a
 19 transformer issue that the State has been plagued with
 20 for almost two years that's still kind of ongoing in
 21 part, and the Assistant Attorney General kept pointing
 22 out because we didn't have a clear definition of what
 23 conveyance work was or what controllers were. That's
 24 why I ran to the A17.1. Even though it's an adopted
 25 code, it didn't pass legal muster because the

1 electrical program talked about control cabinets and
 2 things like this that trumped us because we did not
 3 have a definition in the WAC. And so I thought it was
 4 awful stupid because, hey, it's in the adopted code,
 5 but it just wasn't good enough from the legal
 6 perspective. So, we added it in here to protect our
 7 work and to keep conveyance work that way.

8 Running back over to material lifts, if you look
 9 at 296-96-5010, and I had it wrong in the comments and
 10 I apologize, it addresses talking about conveyances
 11 that lack a platform, use rollers, belts, track, power
 12 conveyors, or carry similar load surfaces that are
 13 found in B21, how we do not consider those to be
 14 conveyances. We do consider the standard stand-alone
 15 VRCs similar to brand names like P-Flow, Autoquip,
 16 etc., that's basically under rated freight elevator,
 17 we bring it up to a higher level of expectation or
 18 require them that when they want to install VRCs in
 19 our state that we classify them as material lifts, but
 20 we never it wrote it down anywhere that that's why we
 21 may install this stuff like they did out at Amazon and
 22 other locations in our state that we consider them to
 23 be material lifts, not passenger elevators, that we
 24 consider them to be material lifts, and we make them
 25 add the extra safety equipment on them dealing with

1 entrances, gates, and other things, that we make them
 2 add that on there, and recently Otis came back and
 3 said, "Hey, we filed for a permit for a VRC and now
 4 you're telling us it's a material lift. Where does it
 5 say that in the code, or the WAC, or the RCW?" And
 6 now it does. This is a reasonable expectation if you
 7 want to do work in our state and install this unit
 8 instead of a freight elevator that you understand that
 9 you have to add these additional safety items on there
 10 to make that happen, and so that's why the clearances
 11 on entrances and all that other stuff, everything that
 12 we have in our -- in our material lift code that was
 13 designed to protect that. You know, currently we have
 14 a denial of the permit because they don't meet the
 15 material lift code and so the customer comes back and
 16 says, "Where does it say that?" Well, now it does,
 17 and that was the whole purpose of telling what VRCs
 18 are and what section that they're covered under. And
 19 so it only seemed fair that if you're going to come to
 20 the State and put in this product that you understand
 21 that we are expecting you to jump through these hoops.

22 Was that the only questions on definitions?

23 MR. NAIPO: As it stands now, Gerald. If
 24 there are additional questions that are had by the TAC
 25 Committee I'll make sure to call upon you. Thank you.

1 MR. BROWN: Thank you.

2 MR. NAIPO: Carl.

3 MR. CARY: Yeah. I'm confused by the
 4 definitions of machine-room-less MRL elevator. It
 5 says that there isn't a -- The definition says that,
 6 "There isn't a machine room that contains the actual
 7 controls and lifting machine for electric traction
 8 elevators or actual controls and pumping machine/tank
 9 or hydraulic elevators. These are located inside the
 10 hoistway or pit." So, that last sentence I have a
 11 concern with because an MRL is still an MRL if it has
 12 a control room, right, be it remote or adjacent. The
 13 controls don't -- This definition appears to say it is
 14 only an MRL if it's located -- the equipment is
 15 located inside the hoistway or pit, and so I disagree
 16 with that definition. I couldn't find it anywhere in
 17 A17, that specific definition.

18 And then I do see the definition of machine room
 19 there in A17. I guess I'm struggling with that
 20 definition because it can still -- you can still --
 21 It says a machine room or a control room that it is
 22 not attached to the outside perimeter surface of the
 23 walls, ceilings, or floor. You can still have a
 24 control room that is adjacent on the top landing. You
 25 can have it -- which means it is attached to the

1 outside perimeter or surface of the walls. You could
2 have it adjacent to the lowest landing or another
3 floor. I guess I don't necessarily agree with that
4 definition either.

5 MR. NAIPO: Thank you for that, Carl. And
6 just to make sure I copied this correctly, the machine
7 room portion of it and where it says to put the
8 controls for the control room stuff adjacent, outside
9 perimeter, that's what you have the issue with,
10 correct, that middle part of this last line right
11 here?

12 MR. CARY: Yeah. Carl Cary, Lerch Bates.
13 Sorry, I should have said that first. Yeah, it's that
14 part of it.

15 MR. NAIPO: Thank you.

16 MR. CARY: Not attached to the outside
17 perimeter or surfaces and walls, yeah, there it is.

18 MR. NAIPO: Bob.

19 MR. OURY: Bob Oury. So, to respond to
20 Gerald's comments on why he added the definition of
21 vertical reciprocating conveyor to the definitions,
22 I've been selling material lifts in the state of
23 Washington since 1989 and the State has never accepted
24 a permit application for a VRC because they don't
25 acknowledge VRCs and they don't mandate or govern to

1 B20.1. If another elevator company wants to sell a
2 VRC in the state of Washington they have to go to that
3 manufacturer like I do. And I sell Flow, I sell
4 Autoquip, I sell Custom Industrial. All of those are
5 manufacturers that make VRCs and put them in
6 nationally, but in the state of Washington we do not
7 call them VRCs, and when I get a quote from P-Flow or
8 anyone else I have to go to the WAC and make sure that
9 they are giving me all of the safety standards that we
10 provide on a material lift, not a VRC. A VRC, as
11 defined in B20.1 is about three paragraphs and we
12 don't govern to that. We're far beyond that. And
13 Otis has put many lifts into Amazon and they should
14 know this, and if they're applying for their permits
15 as VRCs the state of Washington should not accept it,
16 and Otis should do their homework and they should know
17 this. So, I think to allow manufactures or anyone
18 else in the elevator industry or the material handling
19 industry to think that they can put a VRC in the state
20 of Washington is asking for trouble because the people
21 reviewing the permit applications understand WAC and
22 understand material lifts. They do not acknowledge
23 vertical reciprocating conveyors and this is a
24 slippery slope. Once you start accepting that, I'm
25 not sure what the next step is, but it's going in the

1 wrong direction for safety because our standards are
2 far higher, and Autoquip understands, and P-Flow
3 understands it, and Custom Industrial understands it,
4 and you need to be knowledgeable if you're going to be
5 selling this type of product in the state of
6 Washington. So, I don't think that should be part of
7 our definitions unless we are going to adopt B20.1.

8 MR. NAIPO: Thank you, Bob.

9 MR. OURY: Thanks.

10 MR. NAIPO: Candace.

11 MS. LAU: Candace Lau. I'm going to piggy
12 back on what Bob Oury just says -- said. What he said
13 is absolutely true. We -- We receive permits that
14 I've been explain-- trying to explain to the industry
15 that we don't inspect VRCs. We have no
16 classifications for VRCs. What we inspect in this
17 state are today called standard application material
18 lifts. It used to just be material lifts. In 2018 we
19 adopted the A17.1 codes for type A and type B material
20 lifts. So, now in this state we have type A material
21 lift and type B material lifts that we have adopted
22 codes for out of the A17.1, and they have their own
23 codes, and then the State changed our definition of
24 material lifts to standard -- they changed the
25 definition to standard application material lifts.

1 So, there's been a lot of confusion since we adopted
2 those A17.1 codes as to what we're doing.

3 There needs to be more education on what we're
4 doing exactly because when we adopted those codes it's
5 just out there and everybody is confused. So, when we
6 receive permits for material lifts, in general the
7 plans don't show you a whole lot, and so we try to
8 look for stuff that is a requirement out of WAC part
9 5000, but we don't always see everything, but what we
10 always get is when Frank Coucher (phonetic spelling)
11 receives the permit applications for VRCs they have no
12 idea what these are, and then they'll -- there's all
13 this confusion. They send e-mails out. They don't
14 know what this is. So, I think this definition is an
15 attempt to define that, and I think later on there is
16 going to be -- somewhere in here there may be some
17 other codes that are asked to be revised, I don't
18 know, I don't remember, but dealing with this because
19 there's all this confusion.

20 Now, adding this definition to it -- you know,
21 the way it's worded I don't know if that's going to --
22 It's like what Bob was saying, it may add more
23 confusion to it because I don't think it's the intent
24 of the Department to say that we're going to add this
25 definition on there and we're going to approve VRCs.

1 I done think that's the intent of the Department. I
2 think the intent is that we are -- It's just a
3 definition so that there is something there that we
4 can talk about, I guess, because these have to be,
5 like you said, Bob, they have to comply with part 5000
6 of the WAC code. I don't know if that makes sense.

7 MR. NAIPO: Thank you, Candace. Mr. Turner.

8 MR. TURNER: Dylan Turner, Greenbusch. I
9 just wanted to point out there is also a proposal,
10 it's 2022.0025, that adds additional language to WAC
11 05000 basically stating that if a VRC were to be
12 installed it must meet the requirements of an A or B
13 material lift. So, just even discussing this
14 definition I think it's important that people are
15 aware that there also is a proposal out there that
16 clarifies that if a VRC is installed it needs to meet
17 those requirements. Thanks.

18 MR. NAIPO: Thank you, Dylan. Mr. Oury.

19 MR. OURY: Thank you. Bob Oury. The last
20 comment, I don't like to criticize something without
21 coming up with a recommendation and my recommendation
22 would be referring to the previous speaker's comment
23 on the other proposal that's in here is that to
24 eliminate confusion we change the name of standard
25 application material lifts to something that

1 everybody, inspectors, permit application reviewers,
 2 homeowners, or not homeowners, end users, contractors,
 3 and architects will understand and let's call them WAC
 4 material lifts, and then you would -- that would
 5 differentiate them from the type A -- or type -- type
 6 A and type B material lifts as defined in ASME, but
 7 refer everybody to something that we have understood
 8 for the past 40 years and that is that material lifts
 9 have a code in the WAC and that's where they're
 10 defined. So, I would change part c1 minimum standards
 11 for standard application material lifts to say minimum
 12 standards for WAC material lifts and then everybody is
 13 going to know because its been what we've been doing
 14 historically for the past 35 or 40 years. Thank you.

15 MR. NAIPO: Thank you. There was a question
 16 in the chat from Jan. Duane, I'll call on you in just
 17 a second. Gerald, the State does not inspect VRCs,
 18 right? Gerald, if you -- That is correct. That is
 19 correct, we do not. Carl had proposed in response to
 20 a -- I think it was Gerald was responding to a comment
 21 that Cary had made when he was speaking trying to
 22 define the remote application requirements. Carl's
 23 response was it should say then remote control room,
 24 in my opinion. And Gerald said -- you know, it
 25 sounded like he was for that remote machine and

1 control rooms, rooms that do not share a common wall,
2 floor, or ceiling with the hoistway. And Jan just
3 posted, "Why have a definition for something that the
4 State does not inspect?"

5 So, first off, Gerald, are you asking that this
6 be a change to the way that one of these definitions
7 is written with your remote machine and control rooms,
8 rooms that do not share a common wall, floor, or
9 ceiling with the hoistway be edited, too?

10 MR. BROWN: Yeah, the definition that I used
11 was right out of the ASME. But if you go back and you
12 look at remote machine and control rooms, this is the
13 definition that the ASME gives. So, it includes both
14 remote machine and control rooms because it requires
15 different conditions inside the hoistway, like you had
16 to put a disconnect switch up there if it's a remote
17 machine room or control room. If you don't have --
18 basically share a common wall with wherever the
19 disconnect is located, you had to put an auxiliary
20 disconnect at the top of the hoistway, a very
21 expensive proposition. But there are people that
22 choose to put control rooms or control spaces away
23 from the hoistway and they need to understand that
24 because they made that decision they have to put a
25 disconnect up at the top of the hoistway so it's

1 within sight of the machine and controls. So, if
 2 you've got a doorjamb controller, let's say, that's
 3 built into the jamb, a lot of manufacturers will put
 4 disconnects on the back of those to satisfy that code
 5 or some manufacturers will actually have electricians
 6 install a safety switch at the top of the hoistway.
 7 It looks like a fuse disconnect, but it's basically,
 8 and I've used disconnect cord in 6-20-51c, so... But
 9 I was just trying to define the remote aspect because
 10 the contractor or building owner can be subject to
 11 additional cost associated with the remote
 12 machine/control room, so...

13 And thinking about the definition for something
 14 the State does not inspect, it was just to make a
 15 clear definition when people mark or write VRC on the
 16 permit applications that people understand what they
 17 are and what -- what inspection code they would be
 18 subject to. That was why I put the definition in
 19 there.

20 MR. NAIPO: Just so I can take and sort of
 21 input this change that you're making to remote machine
 22 and control rooms, rooms that do not a share a common
 23 wall, floor, or ceiling with the hoistway, I'm
 24 assuming it's this last part here, correct, of the
 25 definition that needs to change?

1 MR. BROWN: Correct. Well, it's machine or
2 control room that is not attached -- Oh, that did not
3 share a common wall, okay. All right. Well, like I
4 said, if -- Both of those are right out of the ASME.
5 It's just one phrased it one way and another one
6 phrased it the other way that they took exception to,
7 and perhaps we need to add this information to try to
8 harmonize it. How's that? I'm okay for that, that's
9 great.

10 MR. NAIPO: All right. I'm just going to
11 put this over in the notes because we still -- I think
12 we need to vote a couple different ways on these
13 definitions, so...

14 MR. BROWN: It's a shame I have to put them
15 in there at all. We already have it in the adopted
16 code, but the legal department didn't agree, so...

17 MR. NAIPO: Duane.

18 MR. LEOPARD: Yeah, scroll up to -- Oh,
19 Duane, city of Spokane. Can you scroll up so we can
20 see VRC a little better?

21 MR. NAIPO: Oh, sure.

22 MR. LEOPARD: You know, in recent years, you
23 know what Gerald says definition in the law, it's
24 getting to the point (audio distortion) don't
25 recognize their code as law. It's kind of weird,

1 but... Looking at this, if we take vertical
 2 reciprocating conveyors and specify that they are
 3 built to whatever their standard is -- how do I want
 4 to say this, it -- at that point if we say that that,
 5 you know, is built to these standards, which is --
 6 What is the standard? I can't think of it right
 7 now -- and get rid of the WAC definition, it's take
 8 and define where the vertical reciprocating conveyor
 9 is, and then another portion of the WAC saying, "We
 10 don't recognize those and we don't install them.
 11 They're not allowed in this state. Refer to WAC
 12 296-96-5000 for authorized units", and I think that
 13 would clear up a lot of what is or isn't, you know, a
 14 VRC versus the hydraulic material lift in the state.
 15 If actually defines the actual piece of equipment that
 16 is accepted and it defines the piece of equipment
 17 that's not accepted. As far as the rest of these
 18 definitions, yeah, I think we need something in there
 19 just for legal matters. I think it would cause -- it
 20 would cover the state and, of course, the cities, too,
 21 that are involved with it. Just the one approach.
 22 Even if it is cut and paste from A17.1, we've got to
 23 cover ourselves and I think is the best way to do it.
 24 Thank you.

25 MR. NAIPO: I'm making a quick note in here

1 regarding amending VRCs to better clarify whether
 2 they're allowed and, if so, what standard, as the
 3 current standard governing VRCs is not adopted in the
 4 state. Candace.

5 MS. LAU: Candace Lau. I'm going to try to
 6 explain this again. I don't -- I'm going to try to
 7 explain this again, and Bob might be able to explain
 8 it a little bit better, but I'm trying to address
 9 Jan's question that she's still confused, the State is
 10 not inspecting -- I think she meant to say VRCs.
 11 Again, there's no manufacturer out there that make --
 12 that -- that manufactures WAC material lifts. There's
 13 no such thing, okay. So, they are not going to --
 14 there's not a manufacturer out there that's just
 15 building stuff for our codes. What's there -- What's
 16 happening out there is there's a whole VRC industry.
 17 They build these vertical reciprocating conveyors
 18 and -- but in this state for as long as Bob has been
 19 around and maybe even before him, the State has always
 20 considered these VRCs. When they're installed in the
 21 application, they're installed, they have to meet the
 22 WAC code part 5000. So, there are lots of VRCs out
 23 there. Some of them are part of a conveyor system.
 24 We don't do those. What we're saying is in this
 25 state, if you put it under -- put it -- put these VRCs

1 in, they have to meet our WAC part 5000, but because
2 there's all this confusion all the time because people
3 are taking out permits for VRCs, they're not taking
4 out permits for VRCs, they're trying to take out
5 permits to install these WAC material lifts. And, as
6 Bob mentioned earlier, you have to do certain things
7 to these VRCs in order for these VRCs to meet our WAC
8 codes for standard application material lifts. So,
9 yes, we are inspecting these VRCs, but we don't call
10 them VRCs in this state, we call them material lifts.

11 That's -- I don't know if that clears up
12 anything or if that adds more confusion, but I'm just
13 trying to clear up why Gerald comes in and he's
14 reading all these codes, and he goes, "Where does it
15 say this, that, and the other stuff?" And as I -- I
16 re-- I've been here a long time; so, I've always just
17 assumed it's in the code. Well, when he starts
18 asking, "Where does it say that?", I go, "Yeah, I
19 guess it doesn't say that," you know, because it's
20 everything that I've always known it to be, and so
21 this is just trying to clear up and write into code,
22 into the WAC, everything that's not really spelled out
23 in words. We're not just -- We're not trying to
24 change the way we do business, we're just trying to
25 make it clearer, and apparently it's adding more

1 confusion.

2 So, I just wanted to address Jan's question. We
3 are inspecting VRCs, but in this state they are not
4 VRCs, they're WAC material -- they're -- There are WAC
5 material lifts. There's standard application material
6 lifts.

7 MR. NAIPO: Thank you. Mr. Oury.

8 MR. OURY: Bob Oury. I'd like to piggyback
9 on Candace's comments and maybe clarify a couple of
10 things. All of these manufacturers that manufacture
11 VRCs do not manufacture a standard product. They're
12 all custom designed to fit the application that
13 they're designed for. The only difference is these
14 manufacturers build to the standard in B20.1 for
15 vertical reciprocating conveyors. In the state of
16 Washington we do not install, nor do our manufactures
17 make, vertical reciprocating conveyors.

18 When I contact a manufacturer to provide a
19 product to a client of mine in the state of Washington
20 it is a material lift. I am driving that with the
21 codes of Washington and when it ships out here it's
22 not a modified vertical reciprocating conveyor, it is
23 a material lift that I designed based on the codes
24 here and the application that I'm doing it with, and
25 that's what it is. It's not a modified vertical

1 reciprocating conveyor.

2 If you tell manufacturers or elevator companies
 3 that they can sell and install material lifts in the
 4 state of Washington as long as they, quote, "modify
 5 them" that is incorrect information. They have to
 6 manufacture that product to the WAC code for WAC
 7 material lifts, which is very different and much more
 8 involved than -- than what manufacturers are building
 9 VRCs to. If you're going to accept that they can
 10 build and modify a VRC, I think you have to accept --
 11 you have to adopt the B20.1 code to start with to even
 12 acknowledge that that product exists, and we do not
 13 acknowledge that that product exists. And we don't
 14 manufacture to VRCs, we manufacture to WAC material
 15 lifts.

16 And I think that it was an attempt on Gerald's
 17 part to help explain this with the definition, but I
 18 think a better way to do it would be to not accept
 19 VRCs or define VRCs, but to change the name of
 20 standard application material lift to a WAC material
 21 lift, just capital A, capital W capital A Capital C
 22 material lift, and that says it all because that's
 23 historically what we have been installing in the state
 24 of Washington are WAC defined material lifts. Thank
 25 you.

1 MR. NAIPO: Thank you. So, we've had some
 2 pretty extensive conversations on two of the submitted
 3 definitions. So, its been suggested that, by Jan,
 4 that we remove the definition of VRCs and vote.
 5 Gerald replied or put in the chat, as well, this is
 6 why the last lines reads, "These adhere to the
 7 referenced standards for maintenance and installation
 8 referred to in WAC 296-96-5000."

9 So, what I propose is that we vote a couple
 10 different ways. We're going to vote on the
 11 definitions -- God, I hate this. Sorry. There we go.
 12 We're going to vote a couple different ways. We're
 13 going to vote three different ways. Oh, Mr. Brinkman,
 14 yes.

15 MR. BRINKMAN: Kevin Brinkman. I suggest if
 16 we're going to separate them out we separate out
 17 machine-room-less, as well, because I think Mr. Cary
 18 had a great point about that one not being quite what
 19 we need yet and it needs a little wordsmithing. Thank
 20 you.

21 MR. NAIPO: Thank you. And, then, that was
 22 going to be the vote. So, what we're going to do is
 23 we're going to vote three different ways. We're going
 24 to vote on machine-room-less or, I'm sorry, not
 25 machine room, but -- not MRL, but machine room and

1 control room, that paren (i), we're going to vote on
2 (i) and whether we're going to accept it or -- Yes,
3 Mr. Brinkman?

4 MR. BRINKMAN: I intended machine-room-less
5 is the one I wanted to trigger, pull out. Mr. --
6 Chief Brown explained it very well that the controller
7 and machine room remote were directly from ASME. I'm
8 okay with that. I have concern with machine-room-less
9 and the last line, as Mr. Cary pointed out.

10 MR. NAIPO: Got it. Is there editing
11 because there were submitted edits to this (i)
12 portion, as well, regarding the machine room and
13 control room remote elevator? That was a submission
14 that Gerald had put through. Is there a consensus
15 from people that that needs to be edited, as well?
16 Gerald said let's strike that last line. Are you
17 speaking of the last line in the MRL? Okay, so Gerald
18 is asking that it be okay to strike this last line
19 regarding this, and let's just put this in here, as
20 well as we vote separately on the VRCs. So, I suggest
21 we go with VRCs since that was the last conversation
22 that was had. So, the vote for this one is if you are
23 for this you're for it being edited. Yes, Mr. Carl.

24 MR. CARY: Sorry, Paoa, I know you're trying
25 to wrap up here. I still have some concerns about the

1 definition of the MRL. I still think it needs some
2 wordsmithing. You know, I don't want to throw the
3 baby out with the bath water, but I -- I still have
4 some concerns with that one.

5 MR. NAIPO: Okay. No, I appreciate that.
6 So, are you asking that we run some edits right now
7 and try to see if we can come to a consensus on what
8 we're okay with?

9 MR. CARY: Yeah, I'm comfortable with
10 whatever, I guess, we can do. I mean I don't know in
11 the confines of what we're doing if we can't do that,
12 you know, the friendly amendments and stuff like that,
13 but, if we can do it, then sure.

14 MR. NAIPO: We can do it. I was trying to
15 hold off friendly amendments until the last day as
16 much as possible just to help us get us through this
17 bulk of the work, as well as starting 18.1 and 17.1 or
18 maybe before start reviewing the 17.1 and 18.1 we can
19 do the friendly amendments then. The main vote I want
20 to have right now is whether people are okay with it
21 or if they feel it needs to be amended regarding the
22 machine rooms and regarding the MRLs, and then we'll
23 move forward after that, as well as with the VRCs are
24 they okay with it or does it need to be edited, and
25 that's sort of what I felt, if that's okay with

1 everyone.

2 MR. CARY: Carl Cary, Lerch Bates. It looks
3 like Gerald is okay striking the whole MRL in the
4 chat.

5 MR. NAIPO: Okay. So, removing that portion
6 right now?

7 UNIDENTIFIED SPEAKER: It looks like Gerald
8 says let's strike the whole MRL as okay.

9 MR. BROWN: Yeah, strike the whole MRL.
10 It's not really a definition. I was just trying to
11 put it in there so if people started marking plans, or
12 drawings, or permits as MRLs our staff would
13 understand what the heck an MRL was.

14 MR. CARY: Carl Cary, Lerch Bates. Gerald,
15 I'm certainly happy to write one or work with you. I
16 mean I think we're close and we vote on it at the
17 ESAC, like I said, I don't want to throw the baby out
18 with the bath water.

19 MR. BROWN: Well, let's strike it for now,
20 Carl. I'm okay with that. Let's just get this vote
21 done. Just strike the MRL and strike the VRC, and
22 we'll address it at a later time, and then we can just
23 vote on the remaining definitions and move on.

24 MR. NAIPO: Okay. So, what I'm going to do
25 is I'm going to propose that to everyone here if

1 they're okay with the proposal of removing VRCs and
2 MRLs from these definitions as it states now. So, if
3 you are for us removing at this time MRLs and VRCs, I
4 ask that you please vote yea now, if you are for us
5 removing those definitions from this proposal as it
6 stands now. If you are for removing those from this
7 proposal, I ask that you please vote yea now.

8 Melissa, I don't have you up on my screen there.
9 Very good.

10 MS. ERIKSEN: Yes.

11 MR. NAIPO: All right. Thank you.

12 All-righty. And it looks like we had a majority vote
13 on that; so, we're going to remove those two from this
14 next voting. So, now we will be voting on the
15 definitions that are left and as they stand for adding
16 these to the definitions of section 700, proposal 20,
17 removing machine-room-less and VRCs from the
18 definitions.

19 If you are for the definitions as they stand
20 now, please vote yea. If you are for the definitions
21 as they stand now, please vote yea.

22 Let me know when you're ready.

23 MS. ERIKSEN: Yes.

24 MR. NAIPO: Thank you. Please lower your
25 hands. If you are against these definitions that are

1 stated in this proposal, I ask that you please raise
2 your hand now and vote nay. If you are against these
3 proposals and how they stand now, I ask that you
4 please vote nay. Thank you.

5 For those who will vote to abstain, I ask that
6 you please vote now. If you vote to abstain, please
7 vote now. Thank you.

8 MS. ERIKSEN: Carl voted twice.

9 MR. NAIPO: Carl, did you vote to abstain or
10 were you saying nay or want a question?

11 MR. CARY: I said -- Well, point of
12 clarification. You keep saying "as it stands now" in
13 the chat related to machine room. Gerald said that he
14 was okay with remote machine room. That's not in
15 there as we -- as it stands right now; so, I was
16 wanting to know clarity on what exactly we were voting
17 on. So, I voted nay because I kept hearing you say,
18 "As it stands right now".

19 MR. NAIPO: I apologize. I did not carry
20 down the highlights. So, the point of clarification
21 that he was talking about I did not highlight this (i)
22 portion of the definitions, as that is part of MRLs,
23 and that was my mistake and I apologize.

24 MR. BROWN: That was just the definition of
25 a machine room in the ASME A17.1. That's just what

1 the ASME called a machine room and how they were
2 defining what a remote was, but we can strike that, if
3 you want. It's just, like I said, it was just out of
4 the book. There wasn't any free-wording in there,
5 so...

6 MR. CARY: Carl Cary, Lerch Bates. There's
7 been a vote. I remember in the live groups there's
8 been a vote. I will adhere to the vote. I mean it
9 can be -- I don't want to complicate this; so, I'm
10 willing to go with the will of the group.

11 MR. NAIPO: Okay.

12 MS. ERIKSEN: So, what -- are you voting
13 yes, no, or abstain, Carl?

14 MR. CARY: I voted nay on as it stands right
15 now.

16 MR. NAIPO: Okay. I apologize. So, we were
17 getting rid of MRLs and I accidentally highlighted
18 machine room because I thought that this was part of
19 the MRL portion of the definition. The machine room
20 is its own definition, okay, and that is supposed to
21 stay; is that correct? All right. So, yes, we were
22 just voting on removing machine-room-less and that
23 whole definition and VRCs. Yes. Okay. And that's
24 what we voted on. And, then, keeping the rest -- as
25 it states, keeping the rest of from "Authority Having

1 Jurisdiction" through "Machine Room", and all of
2 those, that's what you voted on, that you are okay
3 with those definition changes.

4 Melissa, will you please read the proposal 20
5 vote tallies.

6 MS. ERIKSEN: Yes. So there were 23 yeas, 1
7 nay, and 1 abstention.

8 MR. NAIPO: All right. Thank you. Okay.
9 We're now going to move on to another definition
10 adding for proposal 68, 0068, adding a definition for
11 Non-Occupiable/Non-Habitable Space -- Habitable space,
12 is that right? Primary circulation area (hallways,
13 lobbies) and building support areas (bathrooms,
14 mechanical closets). Habitable/Accessible Space: A
15 space designed for eating, living, sleeping, or
16 cooking.

17 These words are used in various code books and
18 are never defined. This has been left up to
19 individuals and there is rarely any consistency. It is
20 time to provide a definition as -- I'm not quite sure
21 what that means -- as worm lives matter, but not when
22 there is slab on ground and an owner is being required
23 to have counterweight safeties for the occupiable
24 space under the slab.

25 Any questions for clarification on this change?

1 Mr. Friesen.

2 MR. FRIESEN: Wade Friesen, Vertical
3 Options. The way I'm seeing it is if we're -- if
4 we're defining habitable/accessible space, it seems to
5 be confined to just what is on the list here. It
6 doesn't cover such as office space or anything else.
7 It looks -- it looks like we need more defined lists
8 of what these spaces are going to be if we're going to
9 adopt this. Thank you.

10 MR. NAIPO: Other questions. Mr. Brinkman.

11 MR. BRINKMAN: Kevin Brinkman. Just a
12 comment. I think the way he's -- this person has
13 defined it, they would eliminate hallways and lobbies
14 as non-occupiable spaces. I would disagree with that.
15 Certainly a lobby can have people in a waiting area.
16 There may be a receptionist there. To me that's
17 occupiable space. So, I think this actually creates
18 an issue by the way it's defined or the way the
19 language is written. Thank you.

20 MR. NAIPO: Candace.

21 MS. LAU: Candace Lau. I completely agree
22 with Kevin just now. So, this has to be -- has to
23 deal with counterweight safety. So, currently -- I
24 don't know the exact verbiage, but currently if you
25 have occupiable space below the hoistway, you have to

1 have counterweight safeties. But if we take this
2 definition as it stands about not-occupiable space, if
3 the space is a lobby, or a storage area, or a bathroom
4 that people can be in, you won't have counterweight
5 safeties. That's kind of what this is saying to me,
6 unless I'm wrong, and this would not be a good thing.
7 It would be not for safety.

8 MR. NAIPO: Thank you. Sergey.

9 MR. DOLGIKH: Sergey Dolgikh, Elevator
10 Inspector, L & I. I think putting this definition in
11 we are asking for trouble because not only -- not only
12 this occupiable/don't occupiable space we're defining
13 what can be safe for having counterweight safeties or
14 not, as a previous speaker spoke, but also there are
15 other aspects to this story. And sometimes being
16 residential installations the question was posted once
17 what can be considered as occupiable space if there's
18 a crawl space under the house and the counterweight is
19 above that space is it occupiable space or is it --
20 what is it? And, so, we're kind of asking for a lot
21 of confusion in that by placing this. I believe this
22 is part of IBC/RBC codes and what's -- what's
23 considered occupiable and non-occupiable, and I don't
24 think we should stepping on the toes of those people.
25 They have pretty clear definition what it means. So,

1 I'm against it for that reason. Thank you.

2 MS. ERIKSEN: Thank you. Candace and
3 Sergey, if you want to put your hands down. Carl.

4 MR. CARY: Yeah, I have just one additional.
5 We were defining what is considered
6 non-occupiable/non-habitable and then habitable, but
7 non-occupiable we're now calling accessible, and that
8 difference in definition I think leaves a lot of devil
9 in the details and specifically doesn't say "or else"
10 or "or..." anything. It clearly says what I'm
11 assuming accessible means now occupiable, only those
12 four things. So, for that I'm voting against it.

13 MR. NAIPO: Thank you. Are there any other
14 comments or questions needing before we cast a vote on
15 this? Any other questions? All-righty. I propose
16 that we vote on proposal 0068 regarding the adding the
17 definitions of non-occupiable/non-habitable space and
18 habitable/accessible space to the definitions.

19 If you are for this change, please raise your
20 hand and vote yea. If you are for adding these
21 chapter definitions, please raise your hand and vote
22 yea.

23 If you are opposed to this change, I'd ask that
24 you please raise your hand and vote nay. If you are
25 opposed to this, I ask that you please raise your hand

1 and vote nay to these chapter definitions being added.
2 Thank you. Please lower your hands. Please lower
3 your hands if you voted nay.

4 If you are voting to abstain, I ask that you
5 please raise your hand now. If you're voting to
6 abstain, please raise your hand now. Thank you.

7 MR. CARY: Carl Cary, Lerch Bates. I'm a
8 nay. I'm sorry, I thought my hand was up and it
9 wasn't.

10 MR. NAIPO: Thank you. Melissa, will you
11 please read the vote tally for proposal 0068.

12 MS. ERIKSEN: Yes. There were 0 yeas, 23
13 nays, and 2 abstentions.

14 MR. NAIPO: Thank you. All-righty. Moving
15 on to a new section of the WAC. This is proposal 00--

16 MS. ERIKSEN: Um --

17 MR. NAIPO: Oh, yes.

18 MS. ERIKSEN: Can we go ahead and take our
19 break now before we have another lengthy conversation?

20 MR. NAIPO: Yes. So, an executive decision
21 has been made by Melissa to take a five minute break
22 now, eight minutes, seven minutes early, which I'm
23 totally okay with; so, we'll see you guys back in five
24 minutes and then we'll get to the requirement for
25 primary points of contact. Thank you guys very much.

1 See you in a few.

2 (Recess taken)

3 MR. NAIPO: All right, everyone, so now
4 we're moving on to proposal 0028 that says, Adding a
5 new section to 905, Requirements for Primary Point of
6 Contact, part (1) Once the applicant has passed the
7 test, they will be responsible for:

8 (a) Will enroll in a distribution e-mail system
9 with the Elevator Program via website.

10 (b) Ensure that your contact information is
11 updated and correct so you may be able to be reached
12 during work hours.

13 (i) Actions of the company and/or mechanics.

14 (ii) Company licensing renewal.

15 (iii) Unpaid invoices prior to re-licensing.

16 (c) Stay informed and up to date on all RCWs,
17 WACs, codes, policies, and technical clarifications
18 adopted and used by the State.

19 (d) Responsible for educating and enforcing the
20 pricing for permits and understanding how to calculate
21 correctly for installation and/or alteration permits.

22 (e) Attend all Elevator Safety Advisory
23 Committee meetings held once a quarter.

24 (i) If the primary point is not able to attend,
25 they must assign a proctor in your place and they must

1 adhere to the same communication standards in (f).

2 (ii) If the primary point of contact is not
3 present at more than two of any four sequential
4 Elevator Safety Advisory Committee meetings the
5 contractor will have 90 days to apply for a new
6 primary point of contact.

7 (f) Disseminating information to impacted
8 employees of contractor, and customers received from:

9 (i) Elevator Safety Advisory Committee
10 meetings.

11 (ii) Any communication received via Elevator
12 Program e-mail service.

13 (2) If the Elevator Program finds one or more of
14 these requirements are not being fulfilled, the
15 Program may ask the contractor to start the process
16 for a new primary point of contact.

17 The rationale is to help understand what is the
18 rationale of the primary point of contact license, and
19 there are more things needed outside of needing for
20 the contractor, and create rules of accountability.

21 Any clarifying questions? Any comments? Mr.
22 Friesen.

23 MR. FRIESEN: Wade Friesen, Vertical
24 Options. I am the primary point of contact for our
25 company and I am responsible for making sure that

1 everything is up to date and that we are, you know,
2 aware of changes, licensing, and all this. I think
3 (i) under section -- I'm sorry?

4 MR. NAIPO: I think there was an echo
5 somewhere, someone --

6 MR. FRIESEN: I think that (i) under section
7 (b) takes this too far. It says, "Actions of the
8 company and/or mechanics." That means that I am
9 solely responsible for all the actions of my
10 mechanics, and while I certainly am involved and make
11 sure that they do things to the best of my ability, I
12 cannot control their every action, and, if I am going
13 to be responsible for my mechanics, then what is the
14 purpose of licensing by the Department of Labor and
15 Industries and the enforcement of that licensing? I
16 may as well have licensed my own mechanics if I'm the
17 one that's 100% responsible for them. So, I don't
18 agree with this section. This, to me, feels
19 burdensome and feels like overreach. Thank you.

20 MR. NAIPO: All right. Thank you. Mr.
21 Wohlschlager.

22 MR. WOHLSCHLAGER: Lyall Wohlschlager. A
23 couple of comments. One is on the first subparagraph
24 one it indicates, "Once the applicant has passed the
25 test they shall be responsible for:", they don't have

1 to necessarily pass a test. There is a grandfathering
2 if you've got five years experience, is there not?
3 Page section 904.

4 MR. NAIPO: The way that that is, the intent
5 for that is that has sunsetted by now because when the
6 licensing first came into place for contractors they
7 allowed for people who did have five years to be able
8 be grandfathered in, but that is not the process as it
9 is now. It is strictly someone who comes under the or
10 applies for the primary point of contract they do have
11 to sit for the test, and everybody that is new has to
12 sit for the test. There's --

13 MR. WOHLSCHLAGER: Okay. So, it's no longer
14 currently in 904. Okay, okay. And, then, secondly,
15 there's a requirement to attend meetings, but nowhere
16 in here does it allow the use of virtual meetings as
17 being an acceptable way to attend a meeting. That's
18 my only comments.

19 MR. NAIPO: Mr. Turner.

20 MR. TURNER: Dylan Turner, Greenbusch. I
21 guess the way I read part B is it's just saying your
22 contact information needs to be up to date so that you
23 could be reached about actions of your mechanics.
24 It's not saying you're solely responsible. At least
25 that's my interpretation.

1 The reason I raised my hand was not necessarily
2 commentary on any of the requirements in here, just a
3 couple friendly suggestions. If this passes there's
4 just some tenses and pronouns that are a little odd in
5 the way it's currently written. I think probably it's
6 important to vote on whether this passes or not, but I
7 would -- I would like to suggest a couple simple
8 grammatical changes should this pass. Thanks.

9 MR. NAIPO: Thank you. Mr. Leopard.

10 MR. LEOPARD: I have to agree with Mr. --
11 Oh, Duane Leopard, city of Spokane. I have to agree
12 with Wade Friesen that (i) is -- You know, asking Wade
13 or any responsible point of contact to take on the
14 actions and be responsible for the actions of the
15 company, that just doesn't work for me. If I was a
16 POC, I'd say, "No, I'm not going do that" because
17 there's a lot of people out there that just thumb
18 noses at the boss and then other people's in charge
19 instantly. They can't control that. But I would be
20 in favor of striking (i) Actions of the Company and/or
21 Mechanics.

22 MR. NAIPO: Thank you. Carl.

23 MR. CARY: Yeah, I -- Carl Cary, Lerch
24 Bates. I -- I really struggle with I guess that would
25 be (e) to -- You know, I struggle with, you know, I

1 guess what I take as, you know, threats with no --
 2 with no action or no really ability to, you know,
 3 enact what's being stated in regards of if they miss
 4 two of any four sequential meetings the contractor
 5 will have 90 days to apply for a new primary point of
 6 contact. Well, what if they don't? What if they're
 7 like, "Yeah, I'm not doing that"? And it's already
 8 challenging in this state to operate, and from a
 9 business standpoint I guess I just -- you know, I -- I
 10 know the intent of what we're trying to do, but
 11 there's a lot of, in my opinion, threatening language
 12 that I think could be wordsmithed and things removed
 13 to maybe make the intent of this come across better,
 14 in my opinion.

15 MR. NAIPO: Candace.

16 MS. LAU: Candace Lau. Yeah, I agree with
 17 Dylan in his assessment of what this code is actually
 18 saying in rebuttal to what Wade Friesen had said. If
 19 you read it, (b) says that it's to ensure that your
 20 contact information is updated and correct so you may
 21 be able to be reached during work hours, (i) Action of
 22 the company and/or mechanics, and maybe it's not
 23 written really well, as Dylan had said, but I think
 24 that's the intent here is that you can be reached for
 25 questions regarding what your company is doing or your

1 mechanics are doing, not that you're responsible for
 2 all the actions of your mechanic. I -- I -- I think
 3 Dylan is right on in his assessment, but that's my
 4 opinion.

5 MR. NAIPO: Thank you. Duane. I'm sorry,
 6 Duane, did you have another question? Mr. Leopard?
 7 Duane, you still have your hand raised. Did you have
 8 an additional question? Oh, all right. Thank you.
 9 So, it looks like we had some conversations regarding
 10 this. Some things were brought up, feels they were
 11 responsible, and burdensome, and overreach for that
 12 first (b)(i). And I'll just be honest with you, I'm
 13 the one who wrote this, and, I'll be honest with you,
 14 I'm not the best at writing, I'll be honest, and so if
 15 tenses are wrong, things need to be changed a little
 16 bit, I am totally for that. But, yes, the intent of
 17 that (b) and that first part one is just to be able so
 18 that we have a contact information if something arises
 19 and we need to contact someone, when our inspector is
 20 on a job site and they need to contact someone they
 21 know who they can follow that information to. It is
 22 not you being held responsible for the actions of the
 23 company or the mechanics, but you are the central
 24 point of contact for that contractor. We have small
 25 little mom and pop contractors and then we have some

1 that are nationwide and worldwide, as well, and we
2 still need one focal person that we can be able to
3 direct our commentary to, like, "Hey, this is an issue
4 that has come up", just so that you aware of it.

5 If it does pass, I do agree that it needs to be
6 edited. I do agree, as well, that there may be some
7 what can be perceived as threatening language and
8 needs to be edited further if it does pass. Mr.
9 Friesen.

10 MR. FRIESEN: Wade Friesen, Vertical
11 Options. I think the one thing that is clear to me
12 during this discussion is that there's -- that you're
13 right, the language is confusing and this isn't a
14 place where there needs to be any ambiguity or
15 interpretation. I mean it needs to be very concise.
16 Everybody needs to understand it and we can't be
17 having a discussion with it after it's applied in a
18 WAC code. So, I think if this is to be adopted, it
19 definitely needs to be reworded a little bit. Thank
20 you.

21 MR. NAIPO: Thank you. Mr. Turner.

22 MR. TURNER: Dylan Turner, Greenbusch.
23 Maybe I could just share my screen and show my edits.
24 This doesn't address Carl's issue or -- and maybe that
25 needs to be amended, as well, but at least for the

1 portions I was thinking of that might at least help
2 clarify what I was thinking.

3 MR. NAIPO: Okay.

4 MR. TURNER: So, the red is the text that I
5 edited; so, the -- I think what clarifies on section
6 (b) is essentially so that you can be contacted
7 regarding these items. I mean I think that makes it
8 pretty clear that it's not holding you specifically
9 responsible for someone else's actions, but as the
10 point of contact you need to be reachable.

11 MR. NAIPO: Thank you. So, if you could --
12 if you could keep that and if we're able to -- if this
13 does pass and we do do the edits that we use this as
14 the template for those edits and for any additional
15 edits that may need to be done, as well, if it passes.

16 Okay. All right. I'll pull that back up for
17 the spreadsheet. So, are there any additional
18 comments or questions? I see that there's some stuff
19 in the chat. I'll get to that in just a second. I'm
20 waiting for my thing to share, my spreadsheet. All
21 right. "Any idea what the turnover is in elevator
22 offices? A lot." That was put forth by Jan.

23 Candace, you know, confirmed she'd like the work
24 regarding... And I'm believing that's in reference to
25 some of what Dylan -- Dylan's edits; is that correct?

1 Okay. Thank you.

2 So, if there are -- I'd like to pose one more
3 time if there are any other questions or
4 clarifications people have before we put this to a
5 vote. And, again, if this does pass, we will move
6 with editing some of these sections to better clarify
7 so that people understand, like Wade had pointed to
8 and Dylan had addressed, the verbiage to make it
9 really clear cut and defined exactly what this means.
10 Yes, Melissa?

11 MS. ERIKSEN: Add Carl to your list of
12 clarifications that need to be made virtually with the
13 way that things are going. You know, absolutely it
14 can be an option.

15 MR. NAIPO: Yeah, I do have that in my
16 thing, are virtual meetings acceptable, and putting
17 that sort of verbiage in there regarding the ESAC
18 Committee meetings and not having to be in-person, but
19 what I mean in-person when I was reading that was
20 attending, you know, either virtually or how ever this
21 is done. So, Carl put forth that -- and he very
22 respectfully, and I appreciate that, "I struggle with
23 being asked to vote on something that I cannot see and
24 confirm I am agreeable with." So, what I am proposing
25 is that the intent -- again, I think this boils back

1 down to the conversation that I posed at the
 2 beginning, as well as, you know, what I've e-mailed
 3 you guys about the rationale being -- does the
 4 rationale make sense on why we're trying to do this.
 5 We can always edit the text if the rationale makes
 6 sense, knowing that if it passes, hey, we will edit
 7 it. I'm not asking you to pass it if we don't have
 8 those edits, but if you were passing this you can see
 9 the validity of what this change is trying to do. If
 10 this does pass and we are able to make those edits and
 11 make it so that, hey, the TAC does agree with these
 12 edits and it gets put forth to the ESAC, that is
 13 great. It's only if time permitting. If this does
 14 pass, this will go to the ESAC with the caveat that,
 15 hey, it was brought up. We will have the
 16 transcription, I'm assuming, by then, as well, that we
 17 can review, hey, these were concerns that were brought
 18 up by the TAC Committee. These edits need to be
 19 addressed before we pass the ESAC. And, then, again,
 20 it will also have to be okayed by Gerald, who is our
 21 chief of our program. Mr. Friesen.

22 MR. FRIESEN: Wade Friesen, Vertical
 23 Options. I feel like it's unreasonable to be asked to
 24 vote on something that's going to have substantial
 25 language change. I feel like this needs to be moved

1 to a discussion after tomorrow, if at all possible, so
2 that we have consensus on what that language change
3 is. Thank you.

4 MR. NAIPO: Okay. So, it sounds like you
5 want to hold off on voting on this until tomorrow to
6 where if we have time we can actually do some edits to
7 it; is that correct? Is that what you're -- Okay.

8 Gerald just put in that available virtual
9 options will be part of the attending portion in the
10 end product. I do agree with that that does need to
11 be defined, as well. So, I'm okay with that. I'm
12 okay with putting this forward so hopefully we can
13 have time to edit it. I would like -- I don't know
14 for sure if we'll have time to do this, that's the
15 thing. And, if it doesn't pass here, what will we do?
16 So, I just want to put that out there. If we can, we
17 will have to make time for this one, if we can, as
18 well as the others.

19 So, we will skip proposal and voting on that 28
20 for now, and we will put that off until either later
21 on this afternoon and possibly work on some of those
22 edits, maybe we can do it at the end of the day, or we
23 will work on edits sometime tomorrow afternoon. Thank
24 you very much for that. And we will move on to
25 proposal 108.

1 Proposal 108 is regarding adding a new paragraph
2 11 to WAC 296-96-00910 regarding elevator mechanic
3 license categories. We're adding, "The AHJ may
4 provide the ability for category licenses to apply for
5 an endorsement. This endorsement will give the
6 recipient the ability to do additional work outside of
7 their category license they already possess. There
8 may be an additional fee and additional education
9 requirements for this endorsement."

10 Rationale: With the limited scope of some of
11 the licenses, it can limit the ability for a work
12 horse -- work force to be licensed to perform the
13 installs, alterations, and maintenance on these
14 conveyances. These endorsements or the possibility of
15 them will give the stakeholders the ability to hire
16 someone possibly outside their category and give
17 additional education and work experience to be able to
18 perform the work.

19 This was something that I wrote again. This
20 comes from our education subcommittee. There are some
21 category licenses that that work force is dwindling.
22 It doesn't limit the importance of that work that
23 they're trying to complete; it's just they don't have
24 a work force educated and experienced enough to do
25 that work and to get a license. So, what they would

1 like to do is the program to be able to offer
2 endorsements to current license holders to be able to
3 do this additional work so we can help bolster their
4 work force. And, so, that's what the intent of this
5 change you're adding to the elevator mechanic license
6 categories is for.

7 Any questions for clarification at all? Yes,
8 Mr. Wohlschlager.

9 MR. WOHLSCHLAGER: Lyall Wohlschlager. Can
10 I safely assume, then, that they're going to have to
11 apply for that endorsement and show education and
12 experience related to the type of work they are hoping
13 to do under that endorsement?

14 MR. NAIPO: That is the intent. The how
15 it's going to be done, currently our system, our quick
16 cards, which is our licensing system, does have the
17 capability to do endorsements for other licenses that
18 L & I provides. So, the IT side of it, it is capable.
19 We do have that system in place, but we don't
20 currently have any business rules developed yet for
21 this. That's why they say, you know, there may be --
22 there may be an additional fee, there may be
23 additional educational requirements for this
24 endorsement, and those will have to be defined at a
25 later date if this passes, if this passes the TAC as

1 far as being allowed to offer endorsements because
2 that will be something that has to come down the
3 pipeline.

4 MR. WOHLSCHLAGER: Okay. Thank you.

5 MR. NAIPO: Any other questions or
6 clarifications? Mr. Friesen.

7 MR. FRIESEN: Wade Friesen, Vertical
8 Options. I guess my question is this: It seems like
9 this -- this WAC would give permission to the
10 Department to enact this, but the rules around it do
11 they need it to be written in the WAC, too, or how
12 does that work? I mean at what point -- How is -- How
13 do we make sure that we're following the rules to this
14 move forward or is that going to be added in a further
15 WAC once the educational committee has looked at this?
16 I'm just trying to kind of get my head wrapped around
17 how it's going to work. Thank you.

18 MR. NAIPO: No, I understand that. Again, I
19 try to limit the how because a lot of times we don't
20 really know how this is going to work. We're just
21 trying to define the what. But the premise is that,
22 yes, either it will be added to the WAC, which I'm
23 sort of against. I feel like it should be added to
24 our education policy because our education policy we
25 can change that on a more fluid basis, whereas if

1 we -- it it's in the WAC we have to open up rule-
 2 making. Then it has to go through TAC, ESAC. We have
 3 to file all those different paperwork. So, it's a
 4 little bit of a longer process. It doesn't mean that
 5 it can't be added to our education policy or to the
 6 WAC. So, again, how it gets done that would have to
 7 be defined by our AG and what she feels is, you know,
 8 able for us to do back when -- wherever it's a place,
 9 whether it's in policy, or whether it's in our WAC.
 10 Mr. Quiett.

11 MR. QUIETT: Jonathan Quiett. I have a
 12 little personal heartburn with this. We -- I've been
 13 experiencing a bunch of issues with interior companies
 14 using the, "Well, we don't have the level of license
 15 to actually do the work properly." They install an
 16 interior and they re-skin doors. They don't re-
 17 counterweight elevators, they don't re-set-up load
 18 weighers, they don't readjust hydraulic control valves
 19 after they do this work, they don't get -- reapply the
 20 door operator tag for the changed doorways, things
 21 like that that we've been running into, and I have a
 22 problem with leaving -- saying let's create a -- let's
 23 create a way for these companies to get people with a
 24 different level license when they're still not doing
 25 the work that needs to be done, and the elevator

1 contractor ends up having to go in and clean the mess
2 up after that type of work gets done anyway.

3 MR. NAIPO: Mr. Quiett, so I can address
4 that. So, where this is housed in the WAC you have
5 to -- it goes through -- you have to be a licensed
6 elevator mechanic. It goes through the different
7 categories and it just gives this is the premise that,
8 hey, you have to get this, you have to be one of these
9 categories to be able to get this. It's not, hey,
10 this is open to anybody. You have to be a licensed
11 elevator mechanic. And if that's verbiage that needs
12 to be added to this, I can whole-heartedly see that so
13 people understand the premise of this that you have to
14 be a licensed elevator mechanic, and if you want to be
15 able to do additional work that's outside that
16 category then you can apply for an endorsement. But,
17 yes, the intent is you initially have to have an
18 elevator mechanic's license before you can even apply
19 to get an endorsement of any kind.

20 MR. QUIETT: And I can understand and
21 respect that. I just have had too many of the
22 interior companies hide behind, "Well, we don't have a
23 license that covers that, so that's why we don't do
24 the work."

25 MR. NAIPO: All right. Thank you. Mr.

1 Leopard.

2 MR. LEOPARD: You know, I'm aware of the
3 background and everything that this comes from. I
4 like the intent. I'll probably throw a yes on it.
5 The only thing I'd like to see changed is the word
6 AHJ. The way AHJ is defined you can -- anybody can
7 come to Spokane or Seattle for the endorsement, and
8 they probably should put that in as Department. Thank
9 you.

10 MR. NAIPO: Thank you. Mr. Cleary.

11 MR. CLEARY: I'd like a little bit of
12 background. Where this came out of is our
13 subcommittee on curriculum and licensing, and this
14 really came out of for CPHs in Category 3 which gives
15 Category 4 the ability to do work which would also
16 include special purpose elevators and some other
17 things which they're not licensed for. So, allowing
18 Category 4 to do Category 3 work would only include
19 the endorsement for doing CPHs. So, it needs to be
20 worked on and refined, and we already had to shut down
21 our subcommittee, which I'm chairing for for
22 Curriculum and Licensing. Endorsements will allow
23 category -- license category. You've got to be
24 licensed. But the categories need to have the
25 specificity to work in some things that the WAC

1 already allows them to do in the rules. So, we just
2 want to use this so it makes sense like for CPHs
3 bringing them back in, but it's not to give them carte
4 blanche to work on anything. They have to be licensed
5 and have to be in the appropriate categories, and
6 these endorsements will allow them to work in some of
7 these categories which they're already allowed to do,
8 but not allow them to work in other parts of it which
9 they're not properly trained to do.

10 MR. NAIPO: Thank you. Mr. Leopard, did you
11 have another question?

12 MR. LEOPARD: No. I just forgot to lower my
13 hand.

14 MR. NAIPO: No worries, no worries. You're
15 good. There's something in the chat real quick. So,
16 there was a couple comments in the chat. Gerald
17 mentioned they will have to show competencies in the
18 endorsement application. Jan also put forth, "I agree
19 with John on 0040." I'm not quite sure what you mean
20 by that. Jan, could you expound on that?

21 MS. GOULD: Jan Gould. I had the wrong
22 number.

23 MR. NAIPO: Oh.

24 MS. GOULD: I'm looking and reviewing it
25 right now, excuse me.

1 MR. NAIPO: Thank you. Oh, I thought I saw
2 a hand up. Nope. All right. So, I'll ask one more
3 time, is there anybody else who has questions or
4 clarifications needed before we cast our vote?
5 All-righty.

6 So, we will be voting on proposal 0108 regarding
7 adding the ability for currently licensed elevator
8 mechanics to have the ability to get an endorsement.
9 Its been put forth that they feel we should change the
10 AHJ to the Department, and it was also brought up the
11 possibility or it was felt that, you know, it may give
12 the ability to other people to still use the, "Hey,
13 we're not licensed for that, so we can't do that
14 work."

15 So, with that, I ask that if you are for this
16 change of adding endorsements to the elevator mechanic
17 license categories I ask that you please vote yea now
18 and raise your hand. If you are for adding
19 endorsements to licensed elevator mechanics, I ask
20 that you please raise your hand now. Okay. All
21 right. Thank you for those that voted yea. Please
22 lower your hands.

23 If you're in opposition of this change, I ask
24 that you please vote nay now. If you are in
25 opposition of this change, I ask that you please vote

1 nay now. If you are in opposition of this, please
2 vote nay. Thank you. Please lower your hand if you
3 voted nay. Thank you.

4 If you vote to abstain, I ask that you please
5 raise your hand and vote now. If you vote to abstain,
6 I ask that you please raise your hand and vote now.
7 Thank you.

8 Melissa, will you please read the results that
9 were cast on proposal 108 -- 0108. Thank you.

10 MS. ERIKSEN: Yes. There were 12 yeas, 8
11 nays, and 6 abstentions.

12 MR. NAIPO: All-right. Moving on to
13 proposal 0040, this is regarding WAC 296-96-01030 Plan
14 Approval. In the plan approval there is an exception.
15 It reads currently, "Residential incline chairlifts
16 will not require plan review. Equipment shall be
17 listed and labeled by a product testing laboratory
18 which is accredited by the Department, and plans
19 supplied by the manufacturer shall be on-site. If the
20 equipment is not listed and labeled as per WAC
21 19-28-010, it shall be field evaluated or replaced
22 with equipment that is listed and labeled by a product
23 testing laboratory which is accredited by the
24 Department. The Department may request additional
25 information as deemed necessary to determine if lifts

1 comply with current codes and testing standards."

2 They are asking to remove what it currently
 3 says, "Governor overspeed safety testing shall be
 4 verified by a manufacturer's documentation (See A18.1
 5 requirement 9.9.3). The test results certified by a
 6 nationally recognized testing laboratory (NRTL)
 7 certification shall be provided at time of
 8 application." So, that whole piece was stricken, and
 9 adding, "If applicable, 9.9.3/9.9.2 certificate may be
 10 requested by the department. If 9.9.3/9.9.2 is not
 11 applicable, chair safeties shall be tested with rated
 12 load in accordance with ASME A18.1."

13 Justification: The justification for striking
 14 governor overspeed safety testing shall be verified
 15 by manufacturer's documentation (see A18.1 requirement
 16 9.9.3). This sentence indicates that 9.9.3
 17 documentation is required. Testing of 9.9.3 is
 18 optional in A18.1. If companies choose not to put
 19 their chair through the testing of 9.9.3, the
 20 overspeed shall be tested with rated load. The
 21 justification for striking governor overspeed testing
 22 shall be verified by manufacturer's documentation (see
 23 A18.1 requirement...)"

24 Okay, I accidentally must have duplicated that.
 25 I apologize.

1 The justification for striking the test results
2 certified by a nationally recognized testing
3 laboratory (NRTL). This requirement exists in A18.1.
4 Restating this is unneeded. The justification for
5 striking certification shall be provided at time of
6 application. This requires contractors to submit
7 hundreds of documents over time to the Department.
8 The justification for adding, "If applicable,
9 9.9.3/9.9.2 certificate may be requested by the
10 Department." This sentence shows that the
11 documentation is optional. Adding 9.9.2 is for the
12 reason that in ASME A18.1 2020 this test falls under
13 9.9.2. By stating that the certificate may be
14 requested by the Department eliminates unneeded
15 documents being submitted by contractors to the
16 Department while also allowing the Department to
17 request needed documentation. The justification for
18 adding, "If 9.9.3/9.9.2 is not applicable, chair
19 safeties shall be tested with rated load in accordance
20 with ASME A18.1." This sentence clarifies that
21 contractors who choose to install chairs with no
22 9.9.3/9.9.2 overspeed documentation must test their
23 safeties with rated load in accordance with A18.1.
24 Furthermore, it shows how 9.9.3/9.9.2 can be
25 applicable or not applicable. The justification for

1 striking governor overspeed safety testing shall be
2 verified by manufacturer's documentation (see A18.1
3 requirement 9.9.3).

4 Did I -- I apologize, I think I accidentally
5 copied and pasted twice. "...load in accordance
6 furthermore shows how that can be applicable or not
7 applicable."

8 UNIDENTIFIED SPEAKER: But you read it very
9 well.

10 MR. NAIPO: Man, that was my fault. I must
11 have hit Control V one too many times. I apologize
12 about that. I will open it up to questions for
13 clarification on this, amending the exception in plan
14 approval, again 1030. Any questions? Any comments
15 for clarification? Mr. Wohlschlager.

16 MR. WOHLSCHLAGER: I would recommend that in
17 the verbiage where it talks about 9.9.3 and 9.9.2 that
18 you clearly differentiate that 9.9.3 is 2017 code and
19 prior, and 9.9.2 is the 2020 code, otherwise somebody
20 could interpret this as they need to follow 9.9.3 in
21 the 2020 code, if we do adopt it. So, just adding
22 that clarification that one is old code and one is
23 new code, if adopted.

24 MR. NAIPO: Thank you, Lyall. Any other
25 questions or comments? Mr. Friesen.

1 MR. FRIESEN: Wade Friesen, Vertical
2 Options. I think this is intended to kind of
3 streamline the process a little bit and reduce the
4 paperwork burden on the Department during the
5 application process and I don't feel like this is a
6 deviation from the way that things are currently being
7 done. We're required to provide documentation for the
8 safeties to the inspector and/or test the chair with
9 full rated load as it is; so, this seems like a good
10 move that's going to streamline the process. Thank
11 you.

12 MR. NAIPO: Thank you. I'll give the
13 opportunity for anymore questions or comments before
14 we put this to a vote. All-righty. And with that I
15 ask that we please vote on proposal 0-- Oh, no, no,
16 no, proposal 0040 regarding the change to plan
17 approval exception located in WAC 296-96-01030.

18 If you are for this change and amendment, I'd
19 ask that you please vote yea now. If you for this
20 change, I ask that you please vote yea now. If you
21 are for this change, please vote yea now. All-righty.
22 Thank you for everyone who has voted. Please go ahead
23 and lower your hands. Thank you very much.

24 If you are against this change and this
25 amendment to this WAC, I ask that you please vote nay.

1 If you are against this change, I ask that you please
2 raise your hand and vote nay. Thank you. Lower your
3 hands if you voted nay.

4 If you are voting to abstain, I ask that you
5 please raise your hand now. If you're voting to
6 abstain, please raise your hand now. Thank you.

7 All right, Melissa, will you read the vote
8 tallies for proposal 0040?

9 MS. ERIKSEN: There were 24 yeas and 1 nay.

10 MR. NAIPO: Thank you. Okay, moving on to
11 propose 0031 regarding WAC 296-96-01055, Technical
12 Services and Consultations. As the section currently
13 reads, "A person, firm, corporation, or governmental
14 agency may request elevator field technical services
15 from the Department by paying a fee of \$84.30 per hour
16 or any portion thereof, including travel time, plus
17 the standard per diem and mileage allowance granted to
18 Department inspectors. These field technical services
19 may include code evaluation, code consultation, plan
20 examination, code interpretation, and clarification of
21 technical data relating to the application of the
22 Department's conveyance rules." Remove, "Field
23 technical services do not include inspections", but
24 add, "State inspectors may perform other required
25 inspections on this conveyance and other conveyances

1 at this location, but the required time and expense
2 involved for those other inspections won't be included
3 in the fees for the technical inspection, but may be
4 invoiced separately."

5 Rationale: This is to better clarify the
6 technical inspections can be performed at the same
7 time as other inspections and those inspections costs
8 will be invoiced if permitted separately.

9 Any questions for clarification on this change?
10 Any questions for clarification on this change? Mr.
11 Friesen.

12 MR. FRIESEN: Wade Friesen, Vertical
13 Options. I do have a question. I'm unclear about
14 this. It sounds to me like we're talking about a
15 voluntary consult. We call and ask the inspector to
16 come out and look at a building, and then it's saying
17 that they may perform other inspections then while
18 they're there and then bill the contractor and/or the
19 customer for it, and I'm not -- I don't think that's
20 the intention, but that's kind of the way this reads
21 to me and I would like some more information, please.
22 Thank you.

23 MR. NAIPO: So, the intent behind this,
24 because as it was stated before, it's that when field
25 technical services were done no other inspections were

1 going to be done at that time, and that wasn't the
 2 case because if you're on a -- if our inspectors go to
 3 let's say a big construction site and they're working
 4 on, you know, certain things, there are inspections
 5 that are maybe being done over here, but this one
 6 needs a technical inspection done at the same time
 7 that, hey, we're going to do a technical inspection,
 8 yes, but we can also do these other inspections, and
 9 if those other inspections incur some cost that is
 10 relegated, you know, already by the WAC codes or RCW
 11 that's in force, that we can invoice those separately
 12 if it is, you know, something that we can invoice you
 13 for. That's all it is is you're clearing it up that,
 14 hey, when you have a technical inspection we're there
 15 to do the technical inspection, yes, but if there are
 16 other inspections that we need to do on that job site
 17 and they may incur a cost that's a reinspection of
 18 something or something like that that we can invoice
 19 for those at that time, as well, just to clear the
 20 verbiage up, but, yes. Mr. Friesen.

21 MR. FRIESEN: Wade Friesen, Vertical
 22 Options. This, to me, kind of muddies the waters.
 23 So, let's for argument sake say there are other
 24 inspections going on and let's say it's out of the
 25 area, were the other inspections, the ones billed for

1 the travel time, was the technical consult billed for
2 the travel, who pays that? This just seems
3 problematic to me because it's not clear enough.
4 Thank you.

5 MR. NAIPO: Thank you. Any other questions?
6 All right. Anybody else have any other questions for
7 clarification on this change? All right. Mr.
8 Leopard.

9 MR. LEOPARD: I kind of like the definition
10 that's down there where it says -- oh, sorry, Duane,
11 city of Spokane -- where it says, "but may be invoiced
12 separately", I'd like to see the "may" change to "will
13 be invoiced separately". That might help Wade's
14 concerns about it.

15 MR. NAIPO: Thank you. Dylan.

16 MR. LATHE: Dylan Lathe, L & I. Yeah, I was
17 just wondering if they're doing another inspection on
18 a separate conveyance it wouldn't have anything to do
19 with this; so, would it need to be stated?

20 MR. NAIPO: I'm sorry, what was that again?

21 MR. LATHE: If the inspector shows up to do
22 this technical inspection and then they decide to do
23 an annual or another inspection on a separate
24 conveyance, would that need to be stated since it has
25 nothing to do with that technical inspection?

1 MR. NAIPO: Let's see what that --

2 MR. LATHE: Thank you.

3 MR. NAIPO: Duane, did you have another
4 question?

5 MR. LEOPARD: No. I just keep hitting the
6 button, but my hand doesn't lower. Sorry.

7 MR. NAIPO: No worries. Mr. Oury.

8 MR. OURY: Bob Oury. Yeah, so I'm a
9 little -- I'd like a little more clarification. You
10 know, it's my understanding if you call OSHA to come
11 look at something they come out and they can then do a
12 complete inspection on your entire facility and find
13 other issues. Is this just for if there are other
14 inspections, whether it's an annual or another test
15 inspection on a construction site where there's a
16 second conveyance or something, that if it's just
17 giving the inspector the ability to be efficient so
18 that he can take care of those other issues when they
19 needed to be taken care of anyway or is this allowing
20 him to, you know, look around and see if there's
21 anything else that, you know, he might want to inspect
22 that wasn't a planned inspection? Can someone explain
23 that a little better maybe? Thanks.

24 MR. NAIPO: Yes. The intent of that was
25 to -- the intent of this was to -- when an inspector

1 is on site doing this particular type of inspection if
 2 they have to do an annual or an alteration inspection
 3 that they can because the way that it was -- it
 4 sounded to other stakeholders regarding this is that,
 5 hey, when we perform a technical inspection and that's
 6 what we're there for, we do that, but, if we do these
 7 other inspections, that field technical services do
 8 not include inspections. Well, they can if we're
 9 there and we can perform that inspection. You know,
 10 we're there not just to do this one thing and possibly
 11 these other things, and if it's something that we need
 12 to be invoiced for we can't invoice for it. So, it
 13 was just better to, like you said, yes, to help them
 14 be more efficient if it is a planned inspection to be
 15 on site. Gerald.

16 MR. BROWN: Yeah, I just wanted to clarify,
 17 we've been trying to encourage people like if you're
 18 doing -- let's saying you're doing a mod, and in this
 19 machine room they've got this new steam pipe going to
 20 the room, or what am I going to do with this big
 21 obstruction that's, you know -- you know, they have
 22 questions about future work on that. We encourage
 23 people to call up and ask for a tech inspection. The
 24 code provides, you know, provisions for it's a
 25 separate charge to come out and do the technical

1 inspection, and so we can come out and review what's
 2 there, take some pictures, give you a report back of
 3 how to handle that situation, technical inspection
 4 done. While we're there those two cars also need
 5 their annuals done and we're going to go ahead and
 6 take care of those annuals while we're there for the
 7 building owner, but we're not going to charge you time
 8 and mileage to this effect so you think we're doing
 9 the annual inspection on your nickel because you
 10 called as a contractor to have us come out and settle
 11 these issues or look at these, you know, things that
 12 are going to come up, but we just didn't want you to
 13 think that you were also paying -- you know, you were
 14 being billed for the time it took to do the annuals.
 15 That would be unfair. And, so, basically, this was
 16 just a clarification of saying while I've got the guy
 17 out there and he's doing this tech inspection I really
 18 want him to knock out the rest of the elevators on
 19 their annual so I don't have to send him back to this
 20 same location, you know, a week later, or a month
 21 later, or two months later, whatever.

22 I'm just trying to make sure that you, as the
 23 customer that called for the tech inspection, don't
 24 feel like you're paying for the time my guy took to do
 25 the annuals. They're going to break that out, you

1 know, "Hey, I finished my tech inspection, you know,
2 at noon or whatever, and I was there for, you know,
3 three or four more hours doing the other units in the
4 building."

5 I just wanted to make real sure by encouraging
6 people to do technical inspections that you don't feel
7 like we're double dipping and you're paying for us to
8 do the annual, too, and the building owner is going to
9 pay a regular annual fee as if we didn't have a tech
10 inspection.

11 MR. NAIPO: Thank you for that. Sergey.

12 MR. DOLGIKH: Yes, Sergey Dolgikh, Elevator
13 Inspector, L & I. I want to throw a suggestion into
14 this. It seems like this creates a lot of -- Well,
15 not a lot, but some kind of confusion as to what's
16 going to be charged and what's not going to be
17 charged. Why don't we just keep it isolated from the
18 code and make it our interdepartmental policy or
19 our -- you know, within our operational needs to
20 address this subject and say, "Hey, if you're going on
21 a technical inspection", just like we do with
22 alterations, "if you're going on a technical
23 inspection, go ahead and inspect annual what's in the
24 area or in that building." So, this way we are not
25 making this particular rule. We're just keeping it

1 specific to technical services and consultations as it
2 stands and is written, and just keep it
3 interdepartmental policy or operational step that we
4 would be able -- if we were to go on technical
5 inspection, let's do an annual as a benefit to that
6 driving, distance, and time. Thank you.

7 MR. NAIPO: Mr. Carini.

8 MR. CARINI: Yes, John Carini, Sound
9 Transit. Just to clarify, does L & I already practice
10 this currently? So, currently when they go on a
11 technical inspection are they already trying to do
12 annual inspections at that location currently?

13 MR. NAIPO: Any -- any type of inspection or
14 like I know a big thing is when an inspector goes out
15 and does an alteration inspection part of their job
16 that they're directed to do is if there are multiple
17 conveyances in that building if those conveyances are
18 needing an annual inspection that, hey, when you're
19 out there and you schedule the time for that
20 alteration that you go and tackle these annuals, as
21 well, so that you're not going back out there at
22 another time. And so is it during a technical
23 inspection? I'll be honest with you, we don't do many
24 technical inspections. We do a very, very low number
25 of them. It's just in the event that we do that they

1 are able to do these other things and to let the
2 person know who is being invoiced that you're not
3 being invoiced for these other things with this
4 technical inspection, that if there are fees because
5 of these other inspections that are going to be done
6 those are invoiced separately.

7 UNIDENTIFIED SPEAKER: So, just to clarify
8 that, so if you were out there for an alteration
9 inspection, you will look at other pieces of equipment
10 that may need an annual, that's the current practice
11 right now, correct?

12 MR. NAIPO: Yes.

13 THE COURT REPORTER: And who just made that
14 comment?

15 MR. NAIPO: That was John Carini.

16 THE COURT REPORTER: Thank you.

17 MR. NAIPO: Mr. Oury.

18 MR. OURY: I guess my comment is, now that I
19 think I understand this better, is it seems strange
20 that you have to write a code just to be smart with
21 your business and be efficient. I don't understand
22 why anyone would have to create a document for it,
23 just be smart, and if anyone asks you about it say,
24 "Yeah, I'm not going to bill you for this. This is
25 extra stuff." I mean that's the way most businesses

1 run. Thanks.

2 MR. NAIPO: Thank you. I love how you
3 assume that state government is run like a business.
4 I'll say that and it's on record now, but, oh, well.
5 So, if there are -- Oh, Mr. Leopard, yes.

6 MR. LEOPARD: I've got to respond to that
7 last comment. You know, the better and the more that
8 we put in the WAC makes it easier and better to
9 understand for a lot of people and it's kind of
10 setting stuff in stone. You know, I do a lot of
11 technical visits and right now since I'm so far behind
12 an elevator that needs an inspection down the hall I'm
13 going to do the annual inspection for it and I'm not
14 going to bill anybody. But I think, you know, we just
15 need to go ahead and clarify this at this point.
16 Thank you.

17 MR. NAIPO: Thank you. Any other questions
18 for clarifications, anybody? So, as a point of
19 reference just so that people know, these comments
20 that I'm making over in column E these are for
21 reference that when we go back and we look at all of
22 the things that have passed that these were comments
23 of concern for those things, and like if they weren't
24 addressed in the conversation that we had like we did
25 with definitions and how we removed two of the

1 definitions and so forth, there were portions of, hey,
 2 we need to make sure that we review these things more,
 3 and if we had time that's what we're going to tackle
 4 at the end of this. So, we're going to -- at the end
 5 of the day I will or the end of this whole TAC process
 6 you will know what has passed, and if we have time
 7 we'll be able to address or, you know, talk about,
 8 hey, these are concerns that were brought up, so just
 9 to let you know what this process is that I'm sort of
 10 doing as you guys are speaking. I hope you guys feel
 11 like you're being heard for these concerns before we
 12 put to it to a vote.

13 So, again, I'm going to ask one more time if
 14 there's any other questions or clarification
 15 statements that need to be made before we cast a vote,
 16 cast a vote on this, anybody? All-righty.

17 So, I propose that we take a vote on proposal
 18 0031 regarding WAC 296-96-01055 and where we're adding
 19 and just trying to better clarify that state
 20 inspectors when doing a technical services or
 21 consultation may perform other inspections while on
 22 site, but if those other inspections that are being
 23 done outside of the technical services and
 24 consultation inspection is being done that those other
 25 inspections, if a fee is assessed for that, it will be

1 invoiced separately and not on the technical services
2 invoice.

3 So, if you are for that change, I ask that you
4 please vote yea now. If you are for that change of
5 amending the WAC regarding technical services and
6 consultations I ask that you please vote yea now. If
7 you are for this change, please vote yea now by
8 raising your hand. Thank you. All-righty, thank you.
9 For those who have voted, please lower your hands.

10 For those who want to vote in opposition --
11 Perry and James, if you could, please lower your
12 hands. If you are voting in opposition of this, I ask
13 that you please raise your hand now. If you are
14 voting in opposition of this, please raise your hand
15 now. If you are voting in opposition of this, I ask
16 that you please raise your hand now. Thank you.

17 If you're voting to abstain, I ask that you
18 please raise your hand now. If you are voting to
19 abstain, please raise your hand now. Thank you.
20 Thank you for those.

21 Melissa, with that, will you please read the
22 results of voting on proposal 0031.

23 MS. ERIKSEN: There were 21 yeas, 1 nay, and
24 4 abstentions.

25 MR. NAIPO: Thank you. So, I know we've got

1 three minutes until lunch. I think this one will be a
 2 pretty easy one to go over real quick; so, I ask that
 3 we just push through on this last one, discussion,
 4 vote, and then we'll take our half hour lunch.

5 We're going to be going over proposal 0074
 6 Accident Investigations. Currently it reads, "The
 7 Department shall investigate an injury related
 8 accident reported by the owner or owner's duly
 9 authorized agent. The Department may charge at a rate
 10 of \$84.30 per hour or portion thereof, including
 11 travel time, plus the standard per diem and mileage
 12 allowance granted to Department inspectors.", adding
 13 this new verbiage, "Any conveyance involved in a
 14 injury or accident shall be removed from service
 15 immediately and shall remain out of service until the
 16 cause of the injury or accident is investigated by an
 17 inspector from the Department. The conveyance shall
 18 remain out of service until written permission is
 19 granted from the Department releasing the conveyance
 20 for normal operation."

21 Rationale: There's currently nothing in the
 22 RCWs or WACs that prevents an owner or their owner's
 23 duly authorized agent from placing a conveyance back
 24 in normal operation after an injury or accident unless
 25 they believe the equipment has failed, has destruction

1 of any part of the construction or the operating
2 mechanism of a conveyance. Without mandating that the
3 equipment is to be removed from service upon any
4 injury or accident, someone with no knowledge of the
5 equipment and has no idea what to look for can just
6 turn it back on. This has the potential to injure or
7 kill everyone -- anyone else that comes into contact
8 with the equipment.

9 And I open it up for any questions of
10 clarification? Mr. Carini.

11 MR. CARINI: John Carini, Sound Transit.
12 So, I -- I'm in favor of this particular change. The
13 only thing I disagree with is the wording in regards
14 to that the unit will stay out of service until
15 written permission is granted because this just
16 extends the time period from when the inspector
17 approves the conveyance to go back into service to
18 when we're able to actually turn it back on.

19 MR. NAIPO: Mr. Barnhart.

20 MR. BARNHART: Paul Barnhart from UL and I
21 just have a really dumb question. How do we define
22 injury or accident? If I step in to an elevator and I
23 slip and fall that's an injury or accident. Certainly
24 I don't need to take the elevator out of service just
25 because I'm clumsy. But if it's a problem with the

1 elevator, then, yeah, I understand it. So, I'm just
2 curious if this could be misread.

3 MR. NAIPO: So, as it's sort of stated now,
4 we don't go out on an accident investigation until a
5 person seeks medical -- medical attention, whether or
6 not it's their fault. If they are -- they slip and
7 they hurt themselves in the elevator and it is their
8 fault, the elevator is shut off because they're
9 seeking medical attention, the elevator needs to be
10 shut off. So, the -- the crux is seeking medical,
11 medical attention, yes, unless they require medical
12 attention or need to be transported. There we go.
13 Thank you, Mr. Carini. Mr. Madison.

14 MR. MADISON: Yeah, Jon Madison. Over the
15 years working in a place like Seatac and a lot of the
16 major malls in the area, what ends up happening to the
17 owner is if this person falls, doesn't report it,
18 seeks medial attention, and then turns around and sues
19 the owner. This -- this inspection and written
20 authorization to return the unit to service is to
21 protect the owner and the service company. The unit
22 is removed from service so that a lawyer can't say,
23 well, you know what, it was broken, and then later
24 these other things happened and they may or may not be
25 related to the accident. So, this seems to an

1 elevator constructor and a licensed mechanic in the
 2 state of Washington just a very obvious addition to
 3 the code, but if someone thinks otherwise, I would
 4 love to hear the reasoning behind it. If it's just
 5 returning the unit to service quickly, I would caution
 6 that over, you know, possible lawsuits from injuries,
 7 that's all.

8 MR. NAIPO: Thank you, Mr. Madison. Sergey.

9 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
 10 Inspector, L & I. There is a couple of things that --
 11 that I'm seeing here in addition to this, to accident
 12 investigation, and, I don't know, maybe it's the
 13 wording, but what I'm going to -- I'm going to allude
 14 to is when we go to the accident investigation and the
 15 conveyance actually either being in some ways turned
 16 on or the evidence that we collect for properly
 17 identifying the cause, a root cause analysis of the
 18 accident or incident, for that matter, which we treat
 19 as an accident on those stages, a lot of times all
 20 those details may be removed just by simply, you know,
 21 people not knowing what they're doing or the owner's
 22 hurrying up. In my -- in my -- in personal experience
 23 I've had people reporting an accident five days after
 24 it happened, and in duration of those five days I have
 25 no idea what took place, and -- and -- and for me to

1 come in and assess and investigate properly and
 2 accurately to an actual event that took place. So, I
 3 think we need to make something in the verbiage
 4 something very specific that none of the items shall
 5 be removed from the scene, or I don't know what kind
 6 of verbiage to use, but we need to pinpoint that
 7 specifically for the owners to know that this shall
 8 not be done, and so on and so forth.

9 So, anyway, I hope it make sense, but for us
 10 it's easier to establish the root cause analysis of
 11 the accident by having all the detail present at the
 12 time that we are investigating it and we are being
 13 called; so, there shall be some kind of restrictive
 14 phrase that says, "Don't do this, don't turn it on"
 15 or, you know, "Don't remove anything off of the scene
 16 of the accident" and things like that. Sometimes it's
 17 just the security video, video clips that we
 18 investigate just by looking and observing it, and
 19 things like that.

20 So, anyway, I know it's kind of a cumbersome
 21 comment, but I would like for that sentence to be a
 22 little bit more specific to non-removal of the
 23 evidence of what took place. Thank you.

24 MR. NAIPO: Mr. Brinkman.

25 MR. BRINKMAN: Yeah, Kevin Brinkman. I

1 think Jan may have just answered my question in the
2 chat. I was wondering if there was a definition
3 anywhere of what the requirements were and it looks
4 like she put that in the chat. So, thank you.

5 MR. NAIPO: I'll look at the chat and let's
6 see what she put in there. Okay. So, what Jan put in
7 there is RCW 70.87.190, "...A person requiring the
8 service of a physician or resulting in a disability
9 exceeding one day..."

10 MS. GOULD: Jan Gould. And I misspelled.
11 It says, "...and any parts [sic], changes, or
12 alterations have been made..." -- "...have been..." --
13 "...have been approved by the department." So, I
14 misspelled.

15 MR. NAIPO: Candace.

16 MS. LAU: Candace Lau. This came up
17 recently, and in our WAC, current WAC 01070, it's
18 under Operating a Conveyance Without an Operating
19 Permit, and it's just about all the fines, the fees,
20 and things like that. In that section it does have
21 some verbiage that says, "Failure to notify the
22 Department of each accident to a person requiring the
23 services of a physician or resulting in disability
24 exceeding one day may result in a \$500.00 penalty per
25 day. The conveyance shall be removed from service

1 until the Department authorizes the operation of the
2 conveyance. This may require an inspection and the
3 applicable fees will be applied. Failure to remove
4 the conveyance from service may result in an
5 additional \$500.00 penalty per day."

6 So, it's in there as a penalty, but it is not in
7 there as a code, which this person is addressing that
8 issue, I guess, is that they looked all over for it in
9 the code, couldn't find it in the code, and they added
10 it to it, which I think is good because it shouldn't
11 just be in the penalty portion or the -- of the -- of
12 the code. So, that's what I think this person is
13 trying to address is to add it in the body of the code
14 what the requirement is so that when we do the
15 penalties it's -- it's, you know, in concert with each
16 other. That's my comment.

17 MR. NAIPO: Thank you. Mr. Carini.

18 MR. CARINI: Just one final comment from me.
19 John Carini, Sound Transit. I agree with Jonathan
20 Madison's comment regarding the written permission is
21 necessary from a legal standpoint, but I think that
22 should be something that the inspectors should be
23 providing anyway. My only crux with this is nothing
24 can get done or turned back to service so that the --
25 the use already approved from the inspector, it's

1 safe, deemed safe, it's the time in between that
2 approval to actually getting that written response,
3 which could be whenever they get back to their desk or
4 whenever that is, the next day, or how ever it is, is
5 where my issue with the written permission
6 specifically is.

7 MR. NAIPO: Thank you for that. Mr. Quiett.

8 MR. QUIETT: Jonathan Quiett. When we have
9 any permits, any alterations, anything that's being
10 done where there's -- it's specified that you have to
11 get written permission, written permission can be a
12 text message, an e-mail, something that is a copy that
13 you are allowed to put a unit back in service. I
14 don't see why this would need to be any different than
15 that. If an inspection, an injury inspection is being
16 done by an inspector, a simple message back and forth
17 showing that that was completed and the unit is safe
18 to return to service should suffice for written
19 permission since that's what we seem to be allowing
20 for other things.

21 MR. NAIPO: Thank you. Mr. Leopard.

22 MR. LEOPARD: Duane, city of Spokane. I
23 don't know which way we're leaning of the vote, but
24 I -- I gotta say we need this here. Short scenario,
25 an accident under a local airport, supposedly a kid

1 got his finger cut off in the combplate of an
2 escalator. I ordered it shut down until they got
3 there. The good news is it was just cut a little bit
4 and it was just a bandaid, yeah. After the
5 investigation and I turned it back over I was met by
6 the airport's attorney and the director of the airport
7 asking me what authority I had to order this shut
8 down. They had kind of a point. I had a discussion
9 with (audio garbled) about this issue. I know it's
10 their policy, but without a WAC code at least to say
11 shut it down, you know, we've got the penalties like
12 was mentioned earlier, but there is nothing that says
13 leave it shut down, for us, for the inspectors. I
14 really think this is needed. We can work the verbiage
15 and everything else, but I'm glad to see this came
16 about when I was reviewing this stuff later on. This
17 is really needed to give us some meat to grab a hold
18 of and say, no, it says here you will leave it shut
19 down, period. Thank you.

20 MR. NAIPO: Thank you, Duane. So, with
21 that, I'll give one more opportunity for anyone who
22 has any additional questions or comments before we
23 move on to voting. Mr. Wilson.

24 MR. WILSON: Yeah, Mike Wilson here. In
25 this WAC rule why don't they put the reference into

1 RCW 70.87.190? Just a question.

2 MR. NAIPO: The question being because that
3 takes an act of legislation and unfortunately program
4 driven legislation is really frowned upon right now in
5 the last two legislation cycles. So, if this was a
6 change that wanted to be had and put into an RCW, most
7 of that has to come from stakeholder driven changes to
8 our RCW. So, that's why --

9 UNIDENTIFIED SPEAKER: Not meaning to change
10 to the RCW, I'm meaning putting the RCW reference into
11 this WAC rule because -- and in regards to Duane's
12 question, they have a law and the law is the RCW and
13 that gave them the authority to do what they wanted to
14 do. But by having it in reference in the WAC, at
15 least now you have a place for a driver to get you
16 into the RCW without it, if you're not familiar with
17 the RCW. That is just a point.

18 MR. NAIPO: So, there's a couple things that
19 were put into the chat and so I'm going to read them
20 real quick. 70.87.190, Accident Reports and
21 Investigations, cessation of use, removal of damaged
22 part, so this is the whole 70.87. What Jan had
23 provided before was just a little snippet of it, but
24 this is the whole 70.87.190 and what it states, "The
25 ower or the owner's duly authorized agent shall

1 promptly notify the Department of each accident to a
 2 person requiring the service of a physician or
 3 resulting in a disability exceeding one day, and shall
 4 afford the Department every facility for investigating
 5 and inspecting the accident. The Department shall
 6 without delay, after being notified, make an
 7 inspection and shall place on file a full and complete
 8 report of the accident. The report shall give in
 9 detail all material facts and information available
 10 and the cause or causes, so far as they can be
 11 determined. The report shall be open to public
 12 inspection at all reasonable hours. When an accident
 13 involves the failure or destruction of any part or the
 14 construction or the operating mechanism of a
 15 conveyance, the use of the conveyance is forbidden
 16 until it has been made safe; it has been inspect --
 17 reinspected, and any repairs, changes, or alterations
 18 have been approved by the department; and a permit has
 19 been issued by the Department. The removal of any
 20 part of the damaged construction or operating
 21 mechanism from the premises is forbidden until the
 22 Department grants permission to do so."

23 With that, I ask for a comment from Duane or
 24 Jonathan, does this verbiage give you the teeth you
 25 feel to be able to take care of that, what you were

1 talking about, and, if it doesn't, do you still feel
2 like the WAC change is a better avenue? And, so, I'll
3 take Duane's comment.

4 MR. LEOPARD: To answer your question, no.
5 It you look at that carefully, there's the process
6 that, one, you have to report the accident. Number
7 two, it goes and there's broken parts and everything
8 else, obviously it's going to be shut down, but what
9 if its not got broken parts. Three, you can
10 investigate an accident without shutting down the
11 equipment. There's nothing in that WAC or the RCW, to
12 me, that says the equipment will be shut down until
13 it's investigated. And this is the key issue with it.
14 It's got all the steps around it, but it doesn't say
15 the equipment will be shut down. And, yeah, I've
16 looked through that, that portion of it really
17 carefully.

18 MR. NAIPO: All right. Thank you. Thank
19 you, Duane. So, if there aren't any additional
20 comments or questions, I ask that we please put this
21 to a vote. So, if there are no more comments or
22 questions, we will vote on proposal 0074 WAC
23 296-96-01057 regarding accident investigations, and
24 just better clarifying what the owner is responsible
25 for doing as far as removing that elevator or

1 conveyance from service until written permission is
2 granted from the Department releasing the conveyance
3 for normal operation.

4 If you are for that change, I'd ask that you
5 please raise your hand now and vote yea. If you are
6 for that change I ask that you please raise your hand
7 and vote yea now.

8 Melissa, I can't see you, but when you're good
9 let me know.

10 If you're voting yea, please raise your hand
11 now.

12 MS. ERIKSEN: I'm good.

13 MR. NAIPO: All right. Thank you. Thank
14 you for those who have voted. You can go ahead and
15 lower your hands. Thank you very much.

16 For those who are in opposition of this change,
17 I ask that you please raise your hand and vote nay
18 now. If you're in opposition of this, I ask that you
19 please raise your hand and vote nay now. If you're in
20 opposition, please vote nay now. Thank you.

21 For those wish to vote to abstain, I ask that
22 you please raise your hand now. If you vote to
23 abstain, I ask that you please raise your hand now.
24 Thank you very much.

25 Melissa, if you will please read the vote tally

1 for proposal 0074.

2 MS. ERIKSEN: 25 yeas, 0 nays, and 1
3 abstention.

4 MR. NAIPO: Thank you very much.
5 All-righty. Okay, I apologize, that got a lot deeper
6 than I thought it would, I apologize, but I really
7 appreciate the conversations that were had. Duane and
8 Mr. Madison, I really thank you guys for your comments
9 regarding this, period. As well, I want to make sure
10 that we further define it so that people understand
11 what written permission means, and it seems to be
12 that's a little bit of a contention; so, I want to
13 make sure that if we have time permitting we're able
14 to edit that so that people are comfortable with what
15 it is, but for right now this sounds like it's going
16 to pass. And, with that, we're going take our lunch;
17 so, we will see you guys back in 30 minutes.

18 (Lunch recess taken at 12:19 p.m.)

19 MR. NAIPO: All-righty, so we'll pick back
20 up with proposal 0024. Thank you guys for all the
21 lunch updates. I appreciate it. This is regarding
22 WAC 296-96-01065, which is the list of all of our
23 fees, and we're asking to strike each auto parking
24 elevator and the fee of one hundred dollars and
25 seven-- or \$117.00, the rationale being, "The ASME

1 code that was originally referenced for these have
2 sunsetted, as well there are no current conveyances of
3 this type registered in the state of Washington.
4 There are some in the city of Seattle jurisdiction,
5 but they, as well, do not inspect these either.

6 (Inaudible conversation)

7 UNIDENTIFIED SPEAKER: But you read it so
8 nicely.

9 MR. NAIPO: I need a little checklist before
10 I start talking on these type of things when we come
11 back from breaks, my apologies. So, here we are. So,
12 we're asking to strike auto parking elevators and the
13 fee associated with this, as this WAC is where all of
14 our fees are housed for conveyances, and the reason
15 being again, "The ASME code that was originally
16 referenced for these have sunsetted, as well there are
17 no current conveyances of this type registered in the
18 state of Washington", in our database. "There are
19 some in the city of Seattle jurisdiction, but they as
20 well do not inspect these either."

21 So, I'll open it up for comments, questions,
22 concerns. Mr. Leopard.

23 MR. LEOPARD: I think we should just go
24 ahead and vote.

25 MR. NAIPO: If there are -- Mr. Carl Cary

1 was also like, "Let's vote"; so, I will take that as a
2 consensus that people are ready to vote. So, if you
3 are voting for us to remove at least this fee for
4 right now, I ask that you please raise your hand and
5 vote yea. Please vote yea if you are voting to remove
6 this fee from our list, please raise your hand. All-
7 righty. Thank you everyone who has voted for that.

8 Oops. It was 24. That was the last one before
9 I started talking.

10 MS. ERIKSEN: Well, it was 24 when Scott put
11 his hand up.

12 MR. NAIPO: Okay.

13 MS. ERIKSEN: So, Scott Rudder, did you --
14 were you voting yes?

15 MR. RUDDER: Yeah, I just thought it was a
16 vote, but it wasn't.

17 MR. NAIPO: All right. Thank you. So, go
18 ahead, those who have voted yea, please go ahead and
19 lower your hands.

20 If you are voting in opposition of us removing
21 this fee, just for those who understand as well this
22 is going to be addressed, the actual auto parking part
23 of the WAC will be addressed later on, but right now
24 we're doing the fee. If you are against us removing
25 this flea -- this fee, please raise your hand and vote

1 nay. If you are against us removing this fee, please
2 your hand and vote nay. Thank you for that.

3 If you are voting to abstain, I ask that you
4 please raise your hand now. If you are voting to
5 abstain, please raise your hand now. All right.
6 Thank you with that.

7 And, with that, Melissa will you please read the
8 vote tally for proposal 0024.

9 MS. ERIKSEN: 24 yeas, 0 nays, 0
10 abstentions.

11 MR. NAIPO: Okay. So, these next few
12 regarding 01075 I believe are things that maybe should
13 be put in 675; so, I'm going to save these for us to
14 review a little bit later. So, we're going to skip
15 these 01075s and we will go on to those that are after
16 it. Oops, there we go.

17 Okay, so we will start our next review of 0029,
18 proposal 0029 regarding WAC 296-96-02400 -- 75 --
19 0029 -- 163. All-righty. So, this is regarding WAC
20 number -- WAC 296-96-02400, Request for Acceptance
21 Inspections, this is adding to part one. Part one
22 reads, "The person or firm installing, relocating, or
23 altering a conveyance shall notify the department in
24 writing at least seven days before requesting any
25 inspection of the work and shall subject the new,

1 moved, or altered portions of the conveyance to the
2 acceptance tests." We are asking to add part (a), "If
3 the scheduled acceptance inspection is not ready, the
4 contractor must cancel the inspection in writing
5 within 24 hours with the scheduled inspector or a
6 reinspection fee may be charged."

7 The rationale for this: Within the permit
8 application fee is calculated the inspection time for
9 the new installation or alteration. This inspection
10 time is calculated for a one-time inspection fee, and
11 that if the inspection fails, or conveyance is not
12 ready you for the inspection, the next inspection that
13 is done will be charged reinspection fees. We have
14 had contractors take advantage of both residential and
15 commercial conveyances for both new installs and
16 alterations, and we need this put into our WAC to make
17 sure everyone understands this process.

18 So, I will open it up for questions for
19 clarification. Any questions for clarification on
20 this change for acceptance inspections? And just so
21 everyone knows, acceptance inspections are both for
22 new turn-ons and alterations. Yes, Mr. Wohlschlager.

23 MR. WOHLSCHLAGER: Lyall Wohlschlager. In
24 your proposed addition there you said within 24 hours
25 with the scheduled inspector. Should that -- Is the

1 intent to have a full 24 hours and not something short
2 of 24 hours?

3 MR. NAIPO: You are correct, yes. It is to
4 be --

5 MR. WOHLSCHLAGER: Okay. We might want to
6 change the word within to say at least 24 hours prior
7 to. And is there any --- is there any thought that
8 possibly just saying cancellation the day prior to
9 scheduled inspection might be acceptable so you can
10 cancel at, you know, three o'clock in the afternoon
11 for a 9:00 a.m. inspection the next day? Does that
12 still give you the same ability to not send an
13 inspector on a wild goose chase?

14 MR. NAIPO: That's a fair question. If
15 there are any inspectors who would like to speak to
16 that that are on the call? Carl, do you not have a
17 question any further?

18 MR. CARY: I changed my mind because I feel
19 like -- Carl, Lerch Bates -- I feel like I'm not going
20 to say anything wildly different from what the person
21 before said; so, I'm trying to move the conversation
22 along. But I just want to say, since you got me
23 talking, I agree with Lyall. I -- I -- I would love
24 to see that change, the day prior, 24 hours having
25 such a static thing is challenging to do, it could be

1 challenging to do, and I think that is reasonable.

2 MR. NAIPO: Candace.

3 MS. LAU: Candace Lau. I haven't been out
4 in the field in a while, so I don't know the
5 challenges today; however, I do know when I was out in
6 the field that the day before could mean -- I agree it
7 needs to be cleaned up a little bit because the day
8 before does not mean five o'clock in the afternoon,
9 even three o'clock in the afternoon is it -- it could
10 be problematic because we have to reschedule our whole
11 day and sometimes that could be a challenge. So, we
12 have marching orders, as well, and when you don't give
13 us enough time to reschedule our -- reschedule things,
14 it could be become problematic. But I'm not -- I
15 haven't been an inspector out in the field in a while,
16 but that's just my thought that that should be taken
17 into consideration because sometimes it's very
18 difficult to reschedule things even with two hours
19 notice. If you gave us -- If the inspection was at
20 eight o'clock the next morning and you cancel at three
21 o'clock, that gives me a small window of time between
22 3:00 and whatever time I get off, some people get off
23 at 3:30, some people at 4:00, some people at 5:00, so
24 that gives you a small window of time to reschedule
25 something in there. But that's -- that's just my

1 experience in the past with my marching orders when I
2 was out there, but its been five or six years. I
3 don't know what the marching orders are today for the
4 inspectors out there and how to handle that.

5 MR. NAIPO: Thank you, Candace. Sergey.
6 Sergey?

7 MR. DOLGIKH: Okay, my microphone -- my
8 mouse was stuck. So, I want to make a couple of
9 comments on this. One, is I agree that within 24
10 hours is a really broad range of scheduling, you know,
11 to -- or for scheduling changes. So, we -- we should
12 give a minimum 24 hours cancellation, that type of
13 verbiage, but also we don't specify here minimum 24
14 hours from which point, okay. We're just saying with
15 the scheduled inspector, but from which point, the 24
16 hours will be calculated from. Is it from the point
17 that the inspection was scheduled on that day on that
18 time, so 24 hours prior to that scheduled inspection
19 or is it within 24 hours from a beginning of business
20 day? We don't -- So, kind of there's no specificity
21 to this and I think that's important, that way we get
22 enough time to reschedule things if we have to, we
23 must.

24 The second portion to that -- to that comment
25 would be that within the constraints of IVIPs and we

1 already have that, working as basically a unique unit
2 of -- of applying it to stair chairs and such with a
3 residential area, because of liquidity of the -- the
4 installation protocols and things like that, those
5 types of inspections sometimes are changing within a
6 very quick time, so like within 15, 20 minute time
7 spans in my experience. So, what I'm looking at is
8 the second paragraph that says the Department may
9 grant exception to this notice or requirement. Now,
10 that -- that second sentence does it -- is it
11 something we could use for those IVIP inspections for
12 stair chairs or interactive visual process
13 inspections, or do we need to write in a specific
14 sentence for that particular type of inspections that
15 we do?

16 So, those two comments, I don't know if they are
17 confusing, but that's my input. Thank you.

18 MR. NAIPO: Elena.

19 MS. CAMPBELL: Hi. I think this is the
20 first time I'm speaking.

21 MR. NAIPO: Welcome.

22 MS. CAMPBELL: I help -- Elena Campbell,
23 sorry. I help schedule the city inspectors with their
24 inspections and I see what they go through when a
25 cancellation comes in at the last minute because

1 sometimes they have to -- they move around their jobs
 2 to accommodate the customer, and so when you get a
 3 cancellation at the last minute now you have a gap in
 4 your schedule or, you know, so on and so forth. And I
 5 do realize that in the city of Seattle our inspectors
 6 don't travel as far as the state inspectors, but I
 7 don't -- honestly, I don't think 24 hour is
 8 unreasonable to ask. Okay, I'm done. Thanks.

9 MR. NAIPO: Thank you. Mr. McKenzie.

10 MR. MCKENZIE: I'm just going to say that
 11 I -- Perry McKenzie, elevator inspector supervisor,
 12 region two, L & I. I tell my guys to -- the
 13 inspectors that I have under my jurisdiction to
 14 schedule these things out at least a week in advance,
 15 try to have two weeks worth of work scheduled out, but
 16 a minimum of seven days. If you're calling for an
 17 inspection, it's going to be seven days from now
 18 because we've got so many things that we're supposed
 19 to be getting done, and guys can try to fill in some
 20 annuals wherever possible, but if we're going to be
 21 calling the customer to make sure it's okay to come to
 22 their building, blah, blah, blah, blah, it takes
 23 them some time to do it, so a courtesy call well in
 24 advance would be nice. If you're going out the day
 25 before to do your pre-checks because all elevator

1 companies pre-check their elevators before they call
2 us, if you're doing it and you run across a problem,
3 it's a little late, you know, hey, we ran across
4 problem here or there, and this stuff does happen, but
5 when it becomes a norm versus, you know, an occasional
6 thing, that's a little different. So, guys are
7 scrambling and I know some of my guys still will kind
8 of fill guys in in a couple days. I don't like that.
9 I tell them not to do it. But I want people,
10 companies, to give in the habit of calling ahead. If
11 you're work on a last second schedule every day, you
12 don't know where you're going to send your guys. A
13 little more organization is going to have to happen
14 because, like I said, things happen where you have to
15 make adjustments, but that's the rare occasion. It
16 should not be the rule that that's how you fly and do
17 it because we have to schedule things out, and they're
18 suppose to have them scheduled out at least 7 to 14
19 days. So, I think -- I don't think 24 hours is too
20 much to ask, and the guys will try to accommodate,
21 but... And if you call and cancel three different
22 times on the same job, we're going to start saying,
23 "Don't bother calling until you're absolutely sure
24 you've got everything done." We get out to the jobs,
25 they don't have their contractor checklist filled out,

1 they don't have this, they don't have that, and we're
 2 going, "You know what is expected of you. Why are you
 3 wasting our time?" Some of that has to do -- falls
 4 back on the inspector because we get pretty lax
 5 sometimes and we let things go. That's why certain
 6 things perpetuate because we don't step on it right at
 7 the very beginning. So, I would say 24 hours is not
 8 necessarily unreasonable. We'd love to have a little
 9 bit more time, but, you know, that's fine, 24 is fine.

10 MR. NAIPO: Thank you, Perry. Mr. Friesen.

11 MR. FRIESEN: Wade Friesen, Vertical
 12 Options. I think is a great discussion and I'm glad
 13 we're having it because there are some -- there are
 14 some points speaking to this from the contractor's
 15 side, it is excessively difficult for us to balance
 16 what the customer wants, the pressure that we're
 17 getting from the customers to get their equipment
 18 inspected and turned over and what the Department
 19 needs. What I'm -- what I'm seeing here I don't
 20 consider to be unreasonable. I think if something
 21 happens that 24 hours is a reasonable notification.
 22 If we don't know at least 24 hours ahead that we're
 23 having problems, then I think it's reasonable that we
 24 do get to charge for an inspection. And I like the
 25 modifier down below, it says the department may grant

1 exceptions to this; so, that gives the Department the
 2 freedom to say, hey, you know, you didn't cancel this
 3 inspection until, you know, one o'clock in the
 4 afternoon and it was scheduled for nine o'clock the
 5 next morning, but, hey, we've got something that we
 6 can do in lieu of it and we're not going to charge you
 7 for it. So, that gives them the option to do that.
 8 However, to Sergey's point, I do feel like there needs
 9 to be a full separate rule written in here for the
 10 virtual inspections. It is a different environment
 11 and we're dealing with very quick changes to that type
 12 of equipment, the equipment that those folks inspect
 13 in the IVIP, our virtual inspections for residential
 14 chairs and residential VPLs, and we need to get those
 15 inspected as soon as possible; so, it puts us under an
 16 extreme amount of pressure and trying to get these
 17 things done within a 24 hour cancellation window is
 18 much tougher to do, so maybe we could come up with a
 19 more reasonable rule for those that are IVIP
 20 inspections, that might be helpful. Thank you.

21 MR. NAIPO: Thank you. Dylan Lathe.

22 MR. LATHE: Dylan Lathe, L & I. I'd like to
 23 address what Wade just asked, and I actually read this
 24 one and I'm comfortable with it for the reason that in
 25 the highlighted blue it says, "within 24 hours with the

1 scheduled inspector, or a reinspection fee may be
2 charged." So, even -- even in the -- even in the now
3 print, not even going down to number two, it says,
4 "may be charged." Me, as an IVIP inspector, I'm not
5 going to charge for an inspection being canceled like
6 that. It's just -- it's not realistic because these
7 stair chairs and these VPLs are in a different
8 situation and we're doing them virtually, and if
9 someone can't get it installed in time, can't finish
10 it by the three o'clock scheduled time, and they call
11 up and say, "This one's not going to happen today", we
12 don't -- we don't charge them for it. We just say,
13 "Okay, schedule it when you do it or, you know,
14 whenever you can get it in", and then we just cancel
15 it, and we never apply every inspection fee. So, I
16 figure that "may" gives us -- gives us the option
17 right there. Thank you.

18 MR. NAIPO: Thank you. Does anybody else
19 have questions? All right. So, just to clarify a
20 couple things with what Dylan said, and what Sergey
21 brought, too, and Wade alluded to, as well, that was
22 why I put in there "may", "may be charged" because it
23 is definitely a discretionary thing. Our inspectors
24 are given a lot of discretionary things when they're
25 out in the field. And this is also something, hey,

1 like you said, if this is something in a case to where
 2 this hasn't been done, you know, this isn't their
 3 M.O., they don't do this all the time and it was just
 4 an accident, maybe someone didn't call, that the
 5 inspector can make the decision, "Hey, we're not going
 6 to charge you for that. I'll just reschedule it", and
 7 so on and so forth. But if you decide to see that,
 8 hey, this is a repeating thing that's happening with
 9 this contractor or this mechanic that's going on, they
 10 may charge for that reinspection fee. So, yes, it is
 11 not something that the Program shall do, will do.
 12 It's the inspector may do that, and this gives them
 13 the authority to do that.

14 I do understand that there's a lot of
 15 conversation on the time frame, the hours, the
 16 beginning and the ending. We can definitely, if this
 17 passes, go over something like that, and further feel
 18 like if we need to develop IVIP, an IVIP process for
 19 this, from the contractor's side it sounds like, you
 20 know, they feel it would be nice to have something in
 21 there for them, but from the -- one of the IVIP
 22 inspectors we do have stating that, hey, they
 23 understand, they do know that this is the -- this type
 24 of working and the time frame that they have, they
 25 don't do that, that's not part of their process

1 because they understand the intent of this is more for
 2 field inspections, not really virtual inspections,
 3 so... Sergey.

4 MR. DOLGIKH: Yeah, Sergey Dolgikh,
 5 Elevator Inspection. Well, since the inception of --
 6 Excuse me, pardon me. I was at the beginning of
 7 inception of IVIP and I was participating as a
 8 participant of development of IVIP and training the
 9 inspectors that are currently working in IVIP; so, I
 10 have a -- I have a -- kind of a broader platform view
 11 at which I'm suggesting what I'm suggesting, and the
 12 issue is not necessarily that the IVIP inspection can
 13 be scheduled on a whim or changed on a whim as it's
 14 needed by the customer or the installer, the problem
 15 arises not from them. The problem arises when the
 16 IVIPs are solely based on the network and on the wifi
 17 capabilities at the time of -- at the -- at the
 18 location of that IVIP and all of a sudden becomes
 19 prominent that this particular inspections cannot be
 20 done via remote location; therefore, it falls either
 21 on the shoulders of the inspector to go physically to
 22 the location of that inspection and get that scheduled
 23 or, in instance of eastern Washington, we have the
 24 existing intent, and currently on this side of the
 25 water we -- the IVIP inspectors do perform that type

1 of inspections and accommodate for that. However, on
 2 the eastern side of the mountains this sort latitude
 3 is not available at this time moment to my knowledge,
 4 and so that will put a strain on the inspector who
 5 would be called in on a whim and say, "Hey, this IVIP
 6 is not available today via wifi. I need to be
 7 inspected right away." And so that's where -- that's
 8 where we need to kind of put the -- sort of a gradient
 9 on this and identify that specific item that poses a
 10 problem. I must talk to different inspectors there
 11 that would say, "Hey, somebody just called me. They
 12 want an inspection within an hour, or within three
 13 hours, or next day, and they are already scheduled
 14 out. And the distances on the eastern side of
 15 mountains they are very long, I mean just for driving
 16 time. So, anyway, this is the reason why I brought it
 17 in, but that's my 10 cents into this.

18 MR. NAIPO: James.

19 MR. ALEXANDER: Yeah, just to go off what
 20 (audio distortion) was saying, I appreciate him
 21 bringing that up, but I feel that as IVIPs we work
 22 pretty fluid with all of our installers and the amount
 23 of installations that can't be completed via IVIPs due
 24 to wifi or connectivity issues is so minimal, so
 25 small. We've done a really good job either taking

1 care of it ourselves or our elevator two guys being
 2 able to handle it. I just don't think we need to,
 3 like I said, make this a big deal with IVIPs. We're
 4 very, very -- Oh, sorry, James Alexander, IVIPs
 5 Elevator, L & I. I just don't feel we need to
 6 convolute it anymore with IVIPs. Like I said, we work
 7 pretty fluid with all of our installers. And, yeah,
 8 that's about all I've got.

9 MR. NAIPO: Thank you, James. Yeah, so,
 10 please make sure that when you begin to speak, please
 11 state your name, and, you know, Melissa put in the
 12 chat, "Just because I call on you, that doesn't
 13 count." Candace just put in the chat, "Can we change
 14 it to 'if the scheduled on-site inspection, acceptance
 15 inspection?"; so, she's adding -- wanting to add the
 16 verbiage for on-site. All right. So, again, these
 17 are edits that we can have made. If time permitting,
 18 we will tackle these edits at the end of this process.
 19 But as it stands now, so the things I've been putting
 20 in the -- that I've noted down is that instead of
 21 within 24 hours change to maybe 24 -- changed to day
 22 prior; could be a challenge to do within 24 hours of
 23 scheduled inspection; minimum 24 hours from which time
 24 frame, beginning of the day or scheduled inspection
 25 time, i.e. inspection to be done at 3:00 p.m. needs to

1 be cancelled the prior day at 3:00 p.m. The IVIP
 2 inspector said, you know, the IVIP process does cover
 3 that, as well. The comment was made, "excessively
 4 hard as a contractor to balance expectations of owner
 5 and the state, i.e. the Program", 24 hours, though,
 6 they felt is a reasonable expectation. There was also
 7 additional comments, feel new verbiage for IVIPS needs
 8 drafted. And the last comment being, if the scheduled
 9 on-site inspection -- acceptance and inspection is an
 10 edit to this. So, those are things, if this passes,
 11 that we will go through, and vet, and change those if
 12 we have time permitting. But right now if there are
 13 no additional questions, so I'm asking if you have
 14 additional questions for clarification or any comments
 15 for clarification, I ask that you please raise your
 16 hand now and state those questions or comments. And
 17 with there not be any hand raised, I ask that we put
 18 this proposal to a vote. So, we will be voting on
 19 proposal 0029, adding the verbiage of putting a 24
 20 hour scheduled acceptance inspection time frame in
 21 there. Jan, do you have a question.

22 MS. GOULD: Jan Gould. No, just ready to
 23 vote.

24 MR. NAIPO: So, yes, if are for this change,
 25 I ask that you please raise your hand and vote yea.

1 Please raise your hand and vote yea if you are for
2 this change. All right. Thank you. Thank you for
3 those who have voted. Please lower your hands if you
4 voted yea.

5 If you are in opposition of this vote or voting
6 for this change, I'd ask that you please vote nay now.
7 Mr. Hawks, if you could, please lower your hand if you
8 already voted for yea. If you are wanting to vote nay
9 on this change, please raise our hand. If you're vote
10 nay please raise your hand. Thank you.

11 If you are voting to abstain please raise your
12 hand now. If you are voting to abstain please raise
13 your hand now. Thank you.

14 Melissa, will you please read the vote tally for
15 proposal 0029.

16 MS. ERIKSEN: 25 yeas, 0 nays, and 1
17 abstention.

18 MR. NAIPO: Thank you. Moving on to
19 proposal 0034 regarding alterations. It looks like we
20 are amending one part of it and adding another section
21 seven. So, this is regarding alterations. We are
22 editing what is currently in part three. It currently
23 reads, "Where a new jack assembly or hydraulic pump
24 unit is installed, a seismic overspeed valve shall be
25 installed according to ASME A17.1 section 8.4.11.

1 We're asking that to be changed to, "Where a new jack
 2 assembly is installed, all new hydraulic piping must
 3 be provided. When a new hydraulic pump unit is
 4 installed, new oil must be provided and a seismic
 5 overspeed valve shall be installed according to ASME
 6 A17.1. Also adding part seven, "Upon discovery its
 7 been determined that the building NFPA fire code
 8 standards NFPA 13, 'Installation of sprinkler
 9 systems', and NFPA 72 'National fire alarm and
 10 signaling code' fire alarm panel have been altered.
 11 Requirements 8.7.2.8 and 8.7.3.8 shall comply, and if
 12 the conveyance is not provided with fire fighters'
 13 emergency operation, it shall be updated to the code
 14 year of the time the building was altered at a
 15 minimum."

16 The rationale for the new piping, if a jack is
 17 replaced it is due to the fact these pipes have been
 18 exposed to the same pressures, corrosion that has
 19 debris in the system, jack wall flaking, electrolysis
 20 that have affected the jack so it is required
 21 replacement. The rationale on why we replace the oil
 22 on a pumping unit replacement is similar to the
 23 nature -- in nature to piping replacement. Typically
 24 the fines that wore down the impellers, the fins --
 25 typically the fins that wore down the impellers on the

1 pumping unit, debris in the tank and lines are
 2 suspended in the oil. All can be introduced into the
 3 closed hydraulic system and ruin the new pumping union
 4 and valve.

5 The rationale for paragraph seven dealing with
 6 the fire code rating of the building to be different
 7 from its rating at time of construction. When
 8 provisions for fire ratings such as the presence of
 9 sprinklers or an enhanced fire alarm panel that would
 10 prevent an elevator from running during a fire, this
 11 changes the life safety rating for the passengers.
 12 The elevator program should enforce the new fire
 13 rating as it concerns elevator operation.

14 So, I will open this up to questions for
 15 clarification. Carl.

16 MR. CARY: Yeah, Carl Cary, Lerch Bates. I
 17 would ask that we vote no on this amendment. I don't
 18 disagree that in theory that if you're replacing a
 19 hydraulic cylinder that you should certainly replace
 20 the hydraulic piping, but this is -- there are
 21 sometimes it's just not feasible to be able to do
 22 that. I personally have seen hydraulic jack
 23 replacements cost \$30,000.00 and I've seen hydraulic
 24 jack replacements cost \$300,000.00 based on how
 25 difficult it was to pull that jack, and in the

1 interest of safety it's in everyone's best interest to
 2 replace single bottom jacks as quickly as possible by
 3 requiring replacing the piping, too. We're getting to
 4 a point where it's just not financially feasible for
 5 someone and they may opt to not, to just roll the dice
 6 and continue going or install something that's less
 7 safe like a jack ripper or something along those
 8 lines. Let's leave the determination up to the owner
 9 on if they -- if it is feasible to replace that piping
 10 as part of that jack replacement. Thank you.

11 MR. NAIPO: Sergey.

12 MR. DOLGIKH: Yeah, Sergey Dolgikh,
 13 Elevator Inspector, L & I. So, I would tend to
 14 disagree with the previous speaker on this and the
 15 reason being is I have seen an immense amount of rouge
 16 rusted piping, that this doesn't -- I mean it's just
 17 unsafe to even look at it, as far as you can write it
 18 up all you want, but, that being considered, kind of
 19 put it on the back burner. And I actually yesterday
 20 was walking my boy, meaning a dog, and so I -- I
 21 walked by a house that there was an Otis van and I
 22 actually asked the guy, "Hey, are you working for
 23 Otis?" and it turns out he does, and it turns out he's
 24 the guy who would be placing or putting suggestions
 25 for replacing those single bottom jacks, and -- and --

1 and I know this is not to this conversation, but I'm
 2 speaking to the point of rusting and to the point of
 3 damages that take place, and he goes, "You know, you
 4 can go look at the jack and it could be the surface
 5 just fine, but you can spoke the screwdriver through
 6 it and it blows the hole right into it. So, what I'm
 7 saying is this is the crucial part, a new piping shall
 8 and should be replaced. And I also see a lot of times
 9 with the new oil must be provided, I've had instances
 10 when bad oil was put in a tank and it was ruining the
 11 system also. So, I agree with this -- with this 0074
 12 for those reasons. Thank you.

13 MR. NAIPO: Mr. Quiett.

14 MR. QUIETT: Jonathan Quiett. First, I
 15 think we need to address two separate issues because
 16 one of them has to do with hydraulic installation and
 17 one of them has to do with three separate NFPA
 18 standards and how they're applied. So, I --
 19 Specifically what I'm talking about, the piping, while
 20 I agree that the piping can be damaged and have
 21 issues, there's also instances where you have non-
 22 compromised buried underground feed lines to remote
 23 machine rooms that can make re-piping extremely
 24 difficult. I personally have been involved in this in
 25 a hospital where an underground feed line ruptured and

1 we had to end up going overhead through the existing
 2 areas both of the clean print sterile supply area of
 3 the building. The short version of it is we had a
 4 feed line that ended up having 2390s and 445s in it to
 5 get around, and it was a very, very expensive feed
 6 line to go do, and that's -- we replaced it because it
 7 ruptured. So, if we're installing a new jack and
 8 we're putting in proper OSV on it, if we have an
 9 underground feed line and it fails or a feed line in
 10 general that fails later, then if the OSV is correctly
 11 adjusted and doing it's job we shouldn't have a
 12 situation of uncontrolled car movement at that point.

13 Just to speak on the -- to speak on the -- what
 14 our practice is, our company practice is if we're
 15 doing a new jack or a power unit and we run into
 16 schedule 40 piping that has cut metallic grooves in
 17 it, we replace that. That's what we specifically do
 18 with our company. It's not something that we're
 19 necessarily putting on to the customer; it's just
 20 we're doing it because it's the right thing to do.

21 MR. NAIPO: Thank you. Any additional
 22 comments or questions? Mr. Friesen.

23 MR. FRIESEN: Wade Friesen, Vertical
 24 Options. Yeah, I agree with a lot of the comments
 25 being said here, and as a company practice if we're

1 replacing a power unit we are putting oil in it, new
 2 oil in it. That's -- that's my company procedure, but
 3 it's also my belief that it should be my company's
 4 decision on what I want to do with that, whether I
 5 want to put old oil in it or new oil in it. I think
 6 it's beyond the Department's purview to require that
 7 new oil be installed. Furthermore, with section seven
 8 down here with the NFPA rules, it says upon discovery,
 9 upon discovery by whom? If we go and do a repair of
 10 this nature with a customer and we call for an
 11 inspection, they feel like they have encompassed all
 12 of their expenses that they're going to be
 13 experiencing to get this repair done and the inspector
 14 shows up and says, "Oh, by the way, you're going to
 15 have to add fire service to this", the customer is
 16 going to be in a really tough spot. So, I don't -- I
 17 don't agree with this at all. I think the entire
 18 section seven needs to be struck. Thank you.

19 MR. NAIPO: Thank you. Mr. Leopard.

20 MR. LEOPARD: Hi, Duane Leopard, city of
 21 Spokane. I agree with Wade on line seven, strike it,
 22 get rid of it, but also we're changing the intent and
 23 language of number three where the jack assembly is
 24 installed, hydraulic fluid is provided, stop, and then
 25 when a new hydraulic pump unit is installed the oil

1 must be provided in a seismic overspeed valve. The
2 original code's intent, you know, by striking the "or"
3 it took away the seismic valve requirement for the new
4 jack assembly. The original one wanted a jack
5 assembly and the hydraulic pump unit. If either one
6 was changed, the seismic overreed -- overspeed valve
7 would be required.

8 MR. NAIPO: Thank you for that, Duane. Mr.
9 Brinkman.

10 MR. BRINKMAN: Thank you. Kevin Brinkman.
11 I also believe that the language in part seven has
12 some issues. You know, it says shall be updated to
13 the code year at the time the building was altered;
14 so, are we now tying elevator change to building
15 alterations? I think that's a concern. Also, when
16 you get into some older control systems and stuff on
17 elevators it's very difficult to add the fire service.
18 I do think adding fire service is a good thing, but
19 it's not always feasible if you're -- Just because you
20 updated the fire panel, you may not be altering the
21 rest of the controller and it may not be realistic to
22 do that. Thank you.

23 MR. NAIPO: Thank you. Mr. Friesen.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. One other thing, it says that when a new

1 jack assembly is installed that all new hydraulic
2 piping must be provided, and, while that may be, you
3 know, a debatable good idea for underground buried
4 piping, why would we do that on non-buried piping?
5 It's just it's too vague, in my opinion. It would
6 require us to put all new piping in when there may be
7 nothing wrong with the existing piping that's there if
8 it's all above ground. Thanks.

9 MR. NAIPO: Thank you. So, with that, are
10 there any additional questions or comments from the
11 committee? All-righty. Well, I move that we vote on
12 this as a whole because it sounds like -- I don't
13 think it needs to be done in two parts. I think
14 it's -- it's a pretty good understanding on people's
15 views on these items, so, even though it's in one
16 proposal. So, we'll pose this vote. Yes, Candace.

17 MS. LAU: Sorry, last -- last minute.
18 Candace Lau. I think they should be treated separate,
19 but, you know, because the hydraulic piping is one
20 thing, the oil is another thing, and then this other
21 number seven is talking about these are all different
22 things, and what I was going to ask about in number
23 seven is it is written unclear, but I don't think it
24 should thrown out just because it's unclear in that
25 there's some good stuff in here. So, what I'm reading

1 on number seven is that if sprinklers -- basically if
2 we show -- if the inspector shows up on an annual
3 inspection and somebody installed sprinklers in the
4 machine room or the hoistway, that's kind of what this
5 is addressing that -- that you're going to have to
6 supply shunt trip, but, if you supply shunt trip, you
7 have to also supply the fire recall stuff, which may
8 not be present on some controllers. It's a safety
9 issue. There's safety issues involved in this, that's
10 all I'm saying; so, that's one thing. And, then, but
11 the way it's worded it basically says "and the fire
12 alarm panel has been altered." That actually should
13 say "or" I think. They're separate issues here. If
14 we find sprinklers, then something needs to be done.
15 If we find fire alarm panels have been altered
16 something else has to be done. I don't think it
17 should have -- It should have been an "and". I don't
18 know if it was meant to be an "and" because they're
19 separate issues. All of these -- these four issues
20 are four separate issues in my mind, and but there's
21 some good information here. There's some good intent
22 here. I just-- I agree that maybe it's not written
23 exactly the way we want it to be written, but
24 something has to be something -- something has to be
25 addressed because we do, we find these things every

1 day, all day every day. I find fire alarm panels that
 2 are not hooked up that are -- People call me about
 3 this all the time. There's a lot of fire alarm panels
 4 being replaced and they're not hooked up to the
 5 elevator. That is a serious hazard. It needs to be
 6 addressed, and -- and throwing that part of it out
 7 because it's linked in with that sprinkler and linked
 8 in the piping and linked in with the oil is not the
 9 right way to do to it.

10 MR. NAIPO: Thank you. Mr. Montgomery.

11 MR. MONTGOMERY: Dylan Montgomery, State
 12 Fire Marshall's Office, I wanted to kind of chime in
 13 on this one because I almost 100% agree with what
 14 Candace just said and I think it's really important to
 15 have this in here, but it's worded just poorly and so
 16 it gets very, very confusing on what exactly is being
 17 asked of it because the way I interpret it is that,
 18 "if upon discovery it's determined that the building
 19 fire code standard...", yada, yada, yada, yada, if
 20 that gets changed -- You know, most things are, if you
 21 change it, it has to brought up to code, plain and
 22 simple. It just has to be brought up to code. If
 23 there's a significant change, it has to be brought up
 24 to the current standard. But the way I read this is
 25 that if something happens with the fire alarm panel

1 and/or -- and, like Candace said, and the sprinkler
 2 system, then the elevator has to be brought up to the
 3 current standards also, which doesn't really jive
 4 with -- I mean I'm all for it because I like things
 5 being up to the current standard, but just doesn't
 6 seem feasible for that type of thing. But I think
 7 it's important to have that in there, but it needs to
 8 be reworded at the end of it all.

9 MR. NAIPO: All right. Thank you, Dylan,
 10 for your comment, you, as well, Candace. And with
 11 that I concede, yes, we should address these as two
 12 separate things that we will vote on; so, that's what
 13 we will do. We will vote on first the hydraulic
 14 piping and new oil as it's own separate change and
 15 then we will vote on the portion number seven with
 16 people's notes about this, just, you know, they like
 17 it, but it just needs to be edited.

18 So, all right, so we will cast our vote on,
 19 first, proposal 0034, part one, which is regarding
 20 where a new jack assembly is installed all new
 21 hydraulic piping must be provided; when a new
 22 hydraulic pump unit is installed, new oil must be
 23 provided and the seismic overspeed valve shall be
 24 installed according to ASME A17.1, section 8.4.11.

25 If you are for that change, I'd ask that you

1 please raise your hand now. When someone -- Okay.

2 All right. I ask that you please raise your hand now
3 and vote yea if you are for that change. If you are
4 for that change, please raise your hand and vote yea.

5 Dylan, if you were for that change, I just want
6 to make sure -- Okay, thank you.

7 If you are for that change, please your hand and
8 vote yea. Thank you for those.

9 All right, if you are in opposition of the
10 change to this part three, I ask that you please raise
11 your hand and vote nay now. If you are in opposition
12 of this new verbiage regarding new hydraulic piping
13 and new oil, please vote nay now. All right. Thank
14 you for those who voted. Please make sure to put your
15 hands down if you have voted nay.

16 And I ask for anyone who wishes to abstain, if
17 you vote to abstain, I'd ask that you please raise
18 your hand now. Thank you.

19 Okay, after we vote for the second part of part
20 seven that's when we'll read the tally for both of
21 these two things that we're voting on.

22 If you are for the changes and the intent of
23 what number seven is trying to attain with the edits
24 and addressing some of the current concerns that have
25 been talked of before, and edits that can be applied

1 to this, if you are for the intent of this change
2 regarding the fire code, installation of sprinkler
3 systems, and the like, I'd ask that you please vote
4 yea. If you are for this change, and if it passes we
5 will address the concerns that have been posed
6 already. If you are for this change, I'd ask that you
7 please vote yea. Thank you. Thank you for those who
8 voted. Please put your hands down.

9 And if you are voting in opposition of this
10 paragraph seven and the changes it want to implement,
11 we ask that you please vote nay. Please raise your
12 hand and vote nay if you are against this change. If
13 you are against this change, please raise your hand
14 and vote nay. Thank you. Thank you for those who
15 voted. Please lower your hands.

16 For those who wish to vote to abstain, please
17 raise your hand now. If you are voting to abstain,
18 please raise your hand now. Thank you.

19 Melissa, you please read the vote tallies for
20 proposal 0034 broken up into the two parts that we had
21 discussed and were voted on.

22 MS. ERIKSEN: Yeah. So, the first part
23 there were -- there was 1 yea, 21 nays, and 3
24 abstentions. For number seven there were 9 yeas, 15
25 nays -- I'm sorry, 9 yeas, 15 nays, and 2 abstentions.

1 MR. NAIPO: Thank you. All-righty. With
2 that, we're moving on to proposal 0042 WAC
3 296-96-02452, Access to machines, overhead sheaves,
4 shackles, and hitch supports. When a machine space is
5 provided inside the hoistway, maintainable items on
6 the machine, overhead sheaves, shackle, and hitch
7 supports shall not be located more than 78 inches from
8 the horizontal plane of the car top. It is proposed
9 to add this new verbiage. The measurement shall be
10 taken in the hoistway when the elevator is traveling
11 in the up direction past the upper most landing sill
12 and stopping at the normal directional limit switch
13 preventing the elevator to move in the up direction
14 while operating a car top inspection station.

15 Rationale: To add detailed instruction on
16 locating a reference point in the hoistway for the
17 measurement to be taken from.

18 Any questions of clarification from the TAC?
19 Questions for clarification. Mr. Brinkman.

20 MR. BRINKMAN: Kevin Brinkman. I don't--
21 I'm not opposed to having some language to clarify
22 where it has to be taken, but how do you take a
23 measurement while you're traveling in the up direction
24 and also stopping while stopping at the normal
25 directional limit. So, the language is really broken,

1 you know, so I can't support this the way it's
2 written. Thank you.

3 MR. NAIPO: Sergey.

4 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
5 Inspector. To Mr. Brinkman's point, I'm the one who
6 wrote that definition and I tried to the best of --
7 I'm sorry, I tried the best of ways to describe the
8 location in the hoistway from which to take the --
9 measure -- the measurement needs to be taken from and
10 if this something that can be wordsmithed into a more
11 concise and clearer definition, I'm open to
12 suggestions. I -- I definitely think that's important
13 when it's which point it's going to be measured from
14 and that distance is important. How are we going to
15 put it in place, I'm not particularly set in or
16 against this particular way the sentence describes it,
17 but like I did -- I did my best to put it in logical
18 sequence of elevator operation and how to get to that
19 point, which is from the car top station. So, putting
20 those two together, that felt like a feasible way of
21 putting it together. But it's open for discussion.
22 Wordsmithing is fine, as long as it's being addressed.
23 Thank you.

24 MR. NAIPO: Mr. Brinkman, did you have
25 another question? Candace.

1 MS. LAU: Hi. Candace Lau. So, in the
 2 previous WAC it had similar verbiage so that everybody
 3 new where you're taking that measurement from, from
 4 the last WAC revision, that that part of the verbiage
 5 was taken out of the code and without that
 6 everybody -- it's just up for interpretation where you
 7 take that measurement, and so people have been arguing
 8 that they should be able to take that measurement
 9 after you've buffered out the counterweight, and
 10 you've run it past the final limits, and all this
 11 stuff just to get it to that machine for maintenance
 12 and inspection. And these are typically you're
 13 dealing with the machines at the top of the hoistway
 14 and that was not really the intent of this code.

15 This code is to allow for examination of the --
 16 of the machine, and the brakes, and whatever else is
 17 up there that you need to get to, that you are at the
 18 location when you're on the car top to be able to see
 19 the equipment, and so that 78 inches was supposed to
 20 be -- in the beginning when this whole thing was
 21 created it was supposed to be for when you're on the
 22 car top and you -- just like Sergey had explained,
 23 when you're on the car top and you run it, run it on
 24 inspection using the inspection station, and you're
 25 the mechanic and you can run it all the way up to

1 where the directional limit stops and that's where you
 2 take your six foot six, the 78 inches. But since that
 3 part of it was taken out, it has been argued that we
 4 can take that measurement after we've buffered out the
 5 counterweight and run past all this stuff, so, which
 6 is not even -- it's something that no mechanic is
 7 going to do. When they are out there doing it by
 8 themselves, going up there, they're not going to do
 9 that. So, this is an opportunity to bring that
 10 measure-- where to measure this, where to begin to
 11 measure, take that measurement in the hoistway. Where
 12 are you at the top when you're standing at the top of
 13 the hoistway when you're taking that measurement is
 14 what this is attempting to do.

15 MR. NAIPO: Thank you. Mr. Quiett.

16 MR. QUIETT: Jonathan Quiett. The -- From
 17 what I understand from this, I mean, yeah, we can --
 18 we can wordsmith it up and fix it. As somebody who
 19 has to do repairs, maintenance on this type of
 20 equipment, the -- working in the hoistway, to
 21 Candace's point, you're not going to go do this by
 22 yourself. You're not going to go jump circuitry out
 23 to be able to access a machine in the overhead and
 24 safely work from it. So, what happens is when we
 25 don't have a defined distance that we are using and a

1 way to, you know, measure it from a certain point at a
2 certain location, it does leave it up to
3 interpretation. So, what will end up happening and
4 has happened is people are -- are standing on the
5 crosshead in a car top handrail trying to access the
6 brake on a machine to make adjustments to it, and that
7 just creates an absolutely unsafe condition that we
8 shouldn't be having to do.

9 MR. NAIPO: Thank you. Mr. Friesen.

10 MR. FRIESEN: Wade Friesen, Vertical
11 Options. So, the only -- My understanding is that
12 this is to access any equipment that's in the
13 overhead, particularly in the - in the case of MRLs,
14 so shouldn't -- shouldn't the MRL be sitting on its
15 logging blocks at this point where this thing is being
16 taken because that's when you're supposed to be
17 working on a car and working on the car safely to
18 access the equipment from the top, and would that
19 point be different than where the car has stopped on
20 the -- on the normal.

21 MR. NAIPO: Yes, Candace?

22 MS. LAU: Candace Lau. I guess I can -- I
23 can talk about it a little bit. The blocking bar that
24 you're referring to is something completely different.
25 It is a requirement for certain applications. It's

1 typically at where -- if you had a -- if we had full
 2 blown MRLs where the controllers are in the hoistway,
 3 the blocking bars are required to be there and so
 4 forth. So, that's an example. I'm not going to go
 5 into all the details of where that blocking bar is,
 6 but this is a completely different scenario. This is
 7 for if you had -- if you're trying to get to the brake
 8 to examine it or even look at it, or maybe have a shiv
 9 up there where you have to grease the shiv, or look at
 10 it, or whatever the case may be, okay. You're not
 11 going to -- It's not something that you're using the
 12 blocking bar for. It's to just to get up there,
 13 and -- and where -- where can you place that machine
 14 in the hoistway where you can safely access it without
 15 standing on the car top handrails or without standing
 16 on the crosshead because this is what's happening out
 17 there. People are stand on crossheads and they're
 18 standing on car top handrails just to get to where
 19 they need to get to to do their work, and that's not
 20 right, and that's what this is an attempt to prevent
 21 from happening.

22 MR. NAIPO: Mr. Madison.

23 MR. MADISON: Jon Madison. In the writing
 24 of this, and a couple of questions of how it was
 25 worded -- Sergey, I understand where you're trying to

1 go with this -- could we just make a friendly
2 amendment, if you will, "The measurement shall be
3 taken in the hoistway from the car top with the car in
4 contact with the normal stopping limit" or "normal
5 directional limit"? Something that simple would
6 eliminate in motion and everything else.

7 UNIDENTIFIED SPEAKER: I'll go with that,
8 John.

9 MR. NAIPO: John, can you please repeat that
10 one more time? I was trying to get it, started
11 typing, and it was the wrong --

12 MR. MADISON: John Madison, "The measurement
13 shall be taken in the hoistway", comma, "from the car
14 top," comma, "while the car is in contact with the
15 normal direction limit."

16 THE COURT REPORTER: And this is the court
17 reporter. After you had read that, someone said,
18 "I'll go with that", but he didn't identify himself,
19 so I'm not sure who --

20 MR. DOLGIKH: I'm sorry, I just clicked my
21 microphone to do that. I didn't want to talk over
22 Jonathan there. This is Sergey Dolgikh, Elevator
23 Inspector.

24 THE COURT REPORTER: Thank you.

25 MR. DOLGIKH: And to Jonathan's point, now

1 you understand I went through about 5,000 different
2 ways to put it together and it's just like, yeah,
3 okay. Thank you.

4 MR. NAIPO: Thank you everyone. Is there
5 any additional questions or comments before we put
6 this to a vote? Any additional -- So, hold on. So,
7 there was a couple -- a couple different comments in
8 the chat, "Stopping on the limit..." this is from
9 Gerald, "Stopping on the limit and not on the
10 compressed counterweight buffer by jumping limits
11 out." Ricky, Jon added, "Top to the direction limit,
12 so it would be normal or top normal direction limit."

13 MS. LAU: This is Candace. Yeah, I think
14 that's what Ricky is trying to say.

15 MR. NAIPO: All right

16 MS. LAU: The top directional limit is what
17 Ricky is trying to say.

18 MR. NAIPO: Oh, top directional or top
19 direction?

20 MS. LAU: Directional limit.

21 MR. NAIPO: Directional limit.

22 MS. LAU: The top directional limit.

23 What -- What -- When Jon said directional, I don't
24 remember what John said, but I think he -- he --

25 There's two -- There's a top directional limit and a

1 bottom directional limit and this referring to the
2 top.

3 MR. NAIPO: Okay. It's good how it is right
4 now? All right. Okay. So, again, I didn't put that
5 edit in there, the reason being is we have it noted
6 off to the right. We know that this is something that
7 we're going to come back to once we vote on, hey,
8 these are thing we're going to address if this passes;
9 so, I just wanted to put that out there.

10 All right. So, if there is no one else with any
11 additional comments or questions, I propose we put
12 this to a vote, but not before we talk to Mr. Quiett.

13 MR. QUIETT: Jonathan Quiett. Just so it
14 matches with code, should we really call it the top
15 normal terminal stopping device?

16 MR. NAIPO: Top -- What was that, one more
17 time, Mr. Quiett?

18 UNIDENTIFIED SPEAKER: Sergey's loving this.

19 MR. NAIPO: Mr. Quiett, what was that one
20 more time, top normal...

21 MR. QUIETT: Top normal terminal stopping
22 device.

23 MR. NAIPO: And that would get rid of
24 directional limit; is that correct?

25 MR. QUIETT: Yes, it would.

1 MR. NAIPO: Okay. Thank you for that.
2 There again, I hope this is a good comment you're
3 placing to help us get to a better understanding of
4 whether this -- we should vote yea or nay on this.
5 I'm just putting out there right now. Sergey.

6 MR. DOLGIKH: Sergey Dolgikh, Elevator
7 Inspector L & I. I really appreciate the minds and
8 professional experience behind this, and I'm being
9 humbled and I'm learning a lot, and I'm -- just
10 because I'm talking doesn't mean I'm not listening,
11 but I really appreciate you guys, and this a wealth of
12 experience and knowledge, and I'm just being humbled.
13 So, thank you. And now you understand how and why I
14 went through this pain of writing this. But anyway,
15 thanks.

16 MR. NAIPO: How did you guys work him? We
17 love him. But, yeah, we got it now. All right.
18 Thank you for that, guys. All right. So, we'll be
19 moving on to a vote for 0042. If it does pass, we
20 will address the amendments to this, as was stated
21 before, but, with that, if you are for this change
22 with the edited stuff we will make or will be passed
23 on to the ESAC to make, time permitting we will
24 address them, if you are for this change I ask that
25 you please raise your hand and vote yea. If you are

1 for this change, I'd ask that you please raise your
2 hand and vote yea. What you are voting for is a more
3 defined way to measure what is stated here. If you're
4 for that, please raise your hand and vote yea.

5 Are we good, Melissa? All right. Thank you
6 everyone. Please go ahead and feel free to lower your
7 hands. Thank you again for voting.

8 With that, if you are in opposition of this
9 change -- Mr. Mills, your hand is still raised. If
10 you are in opposition of this change, I ask that you
11 please raise your hand and vote nay on this. If you
12 are in opposition of this change, please raise your
13 hand and vote nay. Thank you very much.

14 If you are wishing to vote to abstain, I ask
15 that you please raise your hand now and vote to
16 abstain. If you are wishing to abstain, please raise
17 your hand now. Thank you.

18 Melissa, will you please read the results of
19 voting on 0042.

20 MS. ERIKSEN: 4 yeas, 0 nays and 2
21 abstentions. And now it's break time.

22 MR. NAIPO: Thank you for that. All right.
23 A five minute break, guys. We'll see you guys back
24 here in five minutes. Thank you very much. Take
25 care.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

(Recess taken)

MR. NAIPO: What's going on everybody.

Thank you for coming back from break. I'm sorry if you're looking at a dumbfounded face of mine. Yeah (audio difficulty) conversation possibly on this next one, but I won't stir any pot until it possibly comes up. So, this is regarding proposal 0023. It's regarding a change to WAC code 296-96-02460. What is weird about that, though, if you don't mind me saying, is we've got two 2460s in our WAC. Let me show you real quick. So, we have right here WAC 296-96-02460 in section four for machines placed in hoistways, but we also have one here for main line disconnects and shunt trip breakers. I done know how or why. So, we'll just go over the changes and if it becomes an issue we will address them at that time. So, I apologize. It sort of just threw me off a little bit and I'm not quite sure what to make of that.

So, this first 2460 regarding Location is there's an edit in part one, four, and the note 1(b) in note four. Part one, The mainline disconnect shall be located per NFPA 70, Article 620.51(c); and (a) Inside the machine room on the strike side of the machine room, or control room, or control room door; (b) not more than 24 inches from the door to the

1 operating handle (as allowed...) and this is the new
 2 verbiage (as allowed by size of disconnect or close
 3 proximity, see note 1b); and (c) Be at a height not
 4 less than 36 inches nor more than 66 inches above the
 5 finish floor as measured center line to the disconnect
 6 handle."

7 I'll just read two and three, as well. For --
 8 (2) For multicar machine rooms, the switches shall be
 9 grouped together as close as possible to that
 10 location. (3) For machine rooms with double swinging
 11 doors, the doors shall swing out and the switch --
 12 switches shall be located on the wall adjacent to the
 13 hinge side of the active door panel. (4) Shunt trip
 14 breakers, where provided shall be located in the
 15 elevator machine room or control room. What they did
 16 is they removed "or control room" and added "or
 17 alternate location dictated by elevator manufacturer
 18 conveyance design, i.e. control space, hallway
 19 entrance doorjamb, etc., See note four.

20 So, skipping down to Note 1b and Note 4, but
 21 before that I want to make sure that everyone
 22 understands that this -- that there is an exception in
 23 this, which reads, "Special purpose, residential
 24 elevators, and residential incline elevators are
 25 exempt from this section." So, that means this does

1 not pertain to special purpose elevators, residential
2 elevators, or residential incline elevators. "For
3 LULAs, the main disconnect and car light disconnect
4 shall be located adjacent to the controller when not
5 located in a dedicated machine room when a machine
6 room is provided, which shall comply with this
7 section."

8 So, the added Note 1b: 208 disconnects can be
9 quite large as lower voltage requires additional cubic
10 inches inside the disconnect. Electrical disconnects
11 made for the elevator industry can be 36 inches wide.
12 Note 4, this is a note, I apologize, it's in red. It
13 was just to show the contrast between the two.

14 Note 4: The new machine roomless MRL elevators
15 have access doors in the door jamb that contain the
16 110 lighting disconnect and the high voltage three
17 phase disconnect breakers that may or may not be of
18 the -- may not be of the shunt trip style.

19 The Rationale is: To allow for different
20 configurations within machine room/control space
21 pertaining to size of disconnect as this falls more in
22 line with manufacturers equipment provided.

23 And I'll open it up to comments or questions for
24 clarification and/or comments on these changes. Any
25 questions? Any comments to clarify? Sergey.

1 MR. DOLGIKH: Yes. Hi. Sergey Dolgikh,
 2 Elevator Inspector L & I. Just by listening to you
 3 read and how it basically methodically went, "For
 4 LULAs, the main disconnect and car light
 5 disconnect...", blah, blah, blah, and then it goes,
 6 "When a machine room is provided, it shall comply with
 7 this section." It kind of like rolled right into it.
 8 But the way that it -- the way I'm looking at it, it
 9 almost kind of bundles it up. So, if we are providing
 10 an exceptions, right, as such, just an exception, for
 11 special purpose, residential elevators, and
 12 residential incline elevators are exempt on this
 13 section, that has to be a separate exception, okay, in
 14 my view once again. So, that way it signifies, hey,
 15 those types are out of here because the way that one
 16 may read this and interpret this within that paragraph
 17 it's a little skewed, in my view. Now, as far as you
 18 can continue the language and not just have an
 19 exception. You don't have to have it as part of
 20 exception. So, let's say if you go with paragraph
 21 five and go, "Where shunt trip breakers are also being
 22 used as a main line disconnect, they shall comply with
 23 subsections one through three, okay. Then you go,
 24 "For LULAs, the main line disconnect, the main
 25 disconnect and car light disconnect shall be located

1 adjacent to controller when it's not located. When it
 2 is located, they shall comply with this section.
 3 And, then, at the end, you put exception, special
 4 purpose, residential are out of here, and that will
 5 make it separate. So, that would be my suggestion.
 6 Thank you very much.

7 MR. NAIPO: Thank you for your suggestion.
 8 That exception is actually something that's written in
 9 the code as it stands now. That wasn't put forth as
 10 change. That would be another submittal that we put
 11 forth; so, that's something that needs to come from
 12 the Program that can be, you know, reviewed at the
 13 ESAC. We could possibly do that. But this is more in
 14 line with just, hey, the other things that are in
 15 underlined blue and, you know, struck through in red,
 16 that's what we want to make sure that we're trying to
 17 concentrate on. But thank you for that. Candace.

18 MS. LAU: Candace Lau. So, I think that
 19 this thing was written to attempt to taking -- take
 20 into account MRLs, at least number four is, and but
 21 it's really not clear, and so I think it needs -- it
 22 can be a little bit clearer. I think it's trying to
 23 take into account MRLs; so, if that's the case, it
 24 should really say that for that, for MRLs you can do
 25 these other configurations. But a typical -- you

1 know, in general, a typical machine room it has to be
 2 in the room. It has to be in the elevator room. It
 3 needs to be clear that it says that because right now
 4 as I read it I don't know if I'm really clear on that.
 5 That's the first thing. And, then, the second thing
 6 is on number one where it says as allowed by size of
 7 disconnects, I think it already says that somewhere
 8 else, I don't know if it's here that -- yeah, for
 9 multi machine rooms they need to be grouped together
 10 as close as possible. So, I think that, again, this
 11 is an attempt to make it so that if you have huge
 12 disconnects that you just group them as close to that
 13 24 inches as possible, but I don't know if it's
 14 necessary, but that's my opinion.

15 MR. NAIPO: Mr. Turner.

16 MR. TURNER: Dylan Turner, Greenbusch. I
 17 think the point one is not just addressing
 18 multi-banks. I think, you know, if you have a 36 inch
 19 wide disconnect with a center handle getting that 24
 20 inches to the center line of the handle is going to be
 21 pretty hard because it's already 18 inches on center.
 22 So, unless you have it perfectly up against the jamb
 23 of the door you're not going to meet that 24 inches.
 24 So, I think that's what it's allowing an allowance
 25 for.

1 MR. NAIPO: Thank you. Any additional
2 questions for clarification or comments? Mr. Quiett.

3 MR. QUIETT: Jonathan Quiett. The reasoning
4 behind putting a disconnect there is so in an
5 emergency situation you don't have to enter the room
6 and expose yourself to the danger and still be able to
7 get to the disconnect. With what Dylan was just
8 saying, some of these disconnects now that have the
9 shunt trip power self-derived from inside the
10 disconnect are extremely wide and they could have a
11 rotary handle that's on the opposite side as is easily
12 accessible from the door. So, I kind of am following
13 with what he says of where, you know, why you could
14 have a wire disconnect and it would cause an issue
15 with getting it to that 24 inches. As someone who
16 works on it, I would much rather have access to the
17 light switch and not have to hunt for the light switch
18 because I'm trying to feel around a disconnect that's
19 mounted right up against the doorjamb and then have
20 the disconnect right next to it.

21 MR. NAIPO: Thank you. Any additional
22 comments or questions? So, a couple notes I have on
23 this so far is: Not really clear on whether this is
24 just for -- for just MRLs or can be applied to other
25 conveyance types; intent to just group bigger

1 disconnects as close to the required -- uh, required
2 measurement. Is there any other comments, if this
3 passes, that feels needs to be stated to help make
4 this verbiage a little more clear?

5 All-righty. With that, I will take that as no
6 and we will vote on proposal 0023 regarding the
7 allowance for bigger disconnects, and the
8 measurements, and the like.

9 If you are for this change, I ask that you
10 please raise your hand and vote yea if you are for
11 this change for allowing of the bigger disconnect and
12 a little more leeway to get that to fit properly in
13 these machine or control rooms. If you are for that
14 change, please raise your hand now and vote yea. Yay.
15 Go ahead and lower your hands. Thank you for your
16 votes. I appreciate that. Just go ahead and lower
17 your hands. Thank you again.

18 If you are against this change I ask that you
19 please raise your hand and vote nay. If you are
20 against this change, please raise your hand and vote
21 nay. Mr. Larson, I just wanted to make sure, are you
22 voting nay for this? All right. If you are -- If
23 there's any votes for nay, please raise your hand now.
24 Thank you.

25 If you are voting to abstain, I ask that you

1 please raise your hand now. If you are voting to
2 abstain, please raise your hand now. Thank you.

3 Melissa, will you please read the tally for
4 votes on proposal 0023.

5 MS. ERIKSEN: 22 yeas, 0 nays, 3
6 abstentions.

7 MR. NAIPO: Thank you. Proposal 0004 for
8 WAC 296-96-02460, this is regarding inclined
9 commercial stairway chair lifts, and, actually, the
10 inspector who submitted this sent us, "This is the
11 incorrect WAC code. It should be 2640." So, this is
12 regarding 2640. Dylan Lathe, is that correct on this
13 one? Is this that one that we were talking about or
14 you referenced that needed to be changed. Dylan
15 Lathe.

16 MR. LATHE: Dylan Lathe. Yeah, I -- I
17 noticed this when I was reading that this one is the
18 incorrect WAC code, but I'm not the submittal. I
19 didn't submit this one.

20 MR. NAIPO: All right. Okay. Thank you.
21 All right. Okay, so we will address this one and then
22 move on to the additional 2460 that we have below.
23 So, again, this is regarding proposal 0004 and this is
24 regarding an edit to that WAC number change. It is
25 WAC 296-96-02640. It is 2640. And this is regarding

1 inclined commercial stairway chair lifts. Governor r
 2 overspeed safety testing shall be verified by
 3 manufacturer submitted documentation at time of permit
 4 (See A18 2017 and earlier editions...), that's what
 5 it's asking to be added, (...Requirement 9.9.3, as
 6 well as adding; See A18.1-2020 and later editions,
 7 Requirement 9.9.9.2). Safeties shall be manually
 8 tripped at rated speed with no load on the chair (See
 9 A18. 1 section 10. 4).

10 The Rationale is: To update the reference to
 11 9.9.3 which was renumbered in the 2020 edition to
 12 9.9.2.

13 I will just quickly one time ask if there are
 14 any questions for clarifications to quickly raise your
 15 hand or statements. We'll do this once because it
 16 seems like this is a pretty easy change. Mr. Lathe.

17 MR. LATHE: Dylan Lathe, L & I. This one
 18 there -- there's going to be another submittal for
 19 the same WAC code that we should probably review also.
 20 In addition to that, this one I'm going note nay on it
 21 because it says A18.1 section 10.4, that four is not
 22 in the 2020 18.1; so it updates the 9.9.2 for the
 23 2020, but then it leaves the 10.4, which is non-
 24 existent in 2020. So, this one would need work.
 25 Thank you.

1 MR. NAIPO: So, with that, thank you for
 2 that. And we are going to stick with that 2640. All-
 3 righty, here they are. So, it looks like we have
 4 three different ones regarding these changes; so, we
 5 will address all three of them, okay. The first one
 6 being this one.

7 There was another one submitted to remove
 8 inclined commercial stairway chair lifts, the whole
 9 2640 verbiage, governor overspeed testing shall be
 10 verified by manufacturer submitted documentation at
 11 time of permit, see A18.1 requirement 9.9.3, safeties
 12 shall be manually tripped at rated speed with no load
 13 on the chair, see section A18.1 section 10.4. That is
 14 proposal 51.

15 Proposal 46 is Inclined Commercial Stairway
 16 Chair Lifts. It is asked to remove, "Governor
 17 overspeed safety testing shall be verified by
 18 manufacturer's submitted documentation at time of
 19 permit. Safeties shall be manually tripped at rated
 20 speed with no load on the chair (see A18.1 section
 21 10.4)" But adding verbiage, "If applicable, governor
 22 overspeed documentation (see A18.1 9.9.3/9.9.2) shall
 23 be provided on site at time of acceptance inspection.
 24 If 9.9.3/9.9.2 is not applicable or provided at time
 25 of inspection, chair safeties shall be tested with

1 rated load in accordance with ASME A18.1. The
 2 justification is: Justification for striking over --
 3 "governor overspeed safety testing shall be verified
 4 by manufacturer's submitted documentation at time of
 5 permit (see A18.1 requirement 9.9.3)" This sentence
 6 indicates that stairway chairlifts must have 9.9.3
 7 overspeed documentation. A18.1, 9.9.3, is an optional
 8 test. Furthermore, it requires documentation to be
 9 submitted to the department at time of permit.
 10 Providing overspeed documentation on-site at time of
 11 install would be an effective way to show the
 12 inspector what type of overspeed test to witness. The
 13 justification for striking, "safeties shall be
 14 manually tripped at a rated speed with no load on the
 15 chair (see A18.1 section 10.4)", this sentence
 16 indicates that no load safety test is the only test
 17 for chairs. If 9.9.3 is applicable to the chair, then
 18 a no load overspeed test will be completed. If 9.9.3
 19 is not applicable to the chair, a rated load overspeed
 20 test will be completed.

21 Regarding proposal 51 and that justification,
 22 "Delete requirement here as is proposed to include
 23 this content in WAC 296-96-02605 as revised under
 24 another proposal."

25 So, with this, I ask that we start with this

1 first one, 0004. Are there any questions for
 2 clarifications? Sergey.

3 MR. DOLGIKH: Yeah. Sergey Dolgikh,
 4 Elevator Inspector, L & I. There are a couple of -- a
 5 couple of points I would like to make. We are
 6 fighting over which to put 9.9.3 versus 9.9.2 versus
 7 this code versus that code. Why don't we just
 8 completely remove it. I was the one who suggested --
 9 who was proposing to remove it entirely. This is the
 10 only paragraph that would have current WAC, okay,
 11 that's definitely is governed in 18. 1. Why are we
 12 duplicating things in a WAC to say, well, we got to do
 13 this. It's already stated in 18.1-2017 WAC 9.9.3. It
 14 will be stated in 2020 in 9.9.2. So, every time we
 15 put those designations in the WAC we have to go back
 16 and we have to revise it somehow because it's
 17 happened -- it happened with chapter 11 that was
 18 listed in WAC for 18.1 equipment, and then all of a
 19 sudden -- oops, I'm sorry, that was my phone just went
 20 off -- but all of a sudden, you know, inspectors are
 21 applying chapter 11 to equipment that wasn't even
 22 installed under that, that code. So, we need to be --
 23 And on a word of caution, we need to be very careful
 24 how we're going to -- how we're going to put a
 25 codified language already in a different code and then

1 try to enforce it in a WAC under those nomenclatures.
2 Well, three years from now nomenclatures are going to
3 change and now we're looking at another, you know,
4 clarification or -- Why not just let -- just
5 completely remove it. It doesn't state anything
6 specific that we already don't know from 18.1 for
7 commercial stair chairs, period. That's -- That's
8 just my suggestion. Thank you.

9 MR. NAIPO: Mr. Wilson.

10 MR. WILSON: Yeah, Mike Wilson here.

11 Thanks. I just want to make a couple points. One is
12 we did a vote on a proposal 0040 which talked about
13 the Department may request the certificate and these
14 proposals are requiring at time of permitting.
15 There's a little bit of conflict there. And another
16 thing I want to make is that inclined stairway or
17 commercial stair chairs and residential stair chairs
18 no longer have a difference when it comes down to the
19 overspeed governor as they're both -- they're required
20 on all installations now. And Lyall had -- Lyall
21 Wohlschlager had made a point on some of the
22 referencing for the 9.9.3 and 9.9.2 being 2019 and
23 earlier, and then the 2020 or 2017 and 2020 codes.
24 That's all I had. Thanks.

25 MR. NAIPO: Thank you. Mr. Brinkman.

1 MR. BRINKMAN: Kevin Brinkman. I think it
2 was Dylan made a comment about section 10.4 not being
3 included in A18 2020. I just wanted to let everyone
4 know that if we go through with this change in 004 we
5 probably should update that, as well, because in
6 section -- in 2020 it's section 10.3; so, we might
7 have to do the same split we have in the blue in that
8 one for section 10, as well, if we want to -- if we
9 decide to go through with that change. Thank you.

10 MR. NAIPO: Thank you. So, I think we
11 should tackle this group of three in two different
12 votes. Mike, do you have another question? Your hand
13 raised. All right. Mr. Lathe.

14 MR. LATHE: Dylan Lathe, L & I. Mike, to
15 answer your question, the submittal from earlier it
16 was talking about documentation may be requested by
17 the Department. That was for residential. The
18 reason -- I wrote this one, as well. The reason
19 why -- I wrote 0046 and the reason why I did so is
20 because I wanted to make it extremely easy for the
21 inspector on site to make sure to understand what test
22 they're witnessing because if it's virtual we can have
23 it on file on our computers, but when the inspector is
24 out in the field this just makes it easier for the
25 inspector on site to know if they're doing a full load

1 test or if they're not doing a full load test. And
2 the second point you made about Lyall requesting for
3 the 9.9.3 to say ASME 2017 after it and 9.9.2 to say
4 ASME 2020, I'm okay with that also in both of those
5 codes or rules as submitted. Thank you.

6 MR. NAIPO: Mr. Cleary.

7 MR. CLEARY: I just want to make it very
8 clear so everybody understands, 9.9.3 in '17 and 9.9.2
9 in '20 are type testing which allows the manufacturer
10 to do 12 different types of tests so it doesn't have
11 to be done in the field. You don't have to have that
12 at the time of permitting or at the time of
13 installation. That just means that you have to do a
14 full load, full weight test in the field to prove that
15 you don't do damage to anything. So, I don't want
16 to -- I want to make sure that we understand that
17 9.9.3 and 9.9.2 in the newer version isn't part of
18 section 10. It's if you don't have that certificate
19 then you just need to prove it in the field.

20 MR. NAIPO: Thank you. Any additional
21 questions or clarifications needed for these? Mr.
22 Wohlschlager.

23 MR. WOHLSCHLAGER: Lyall Wohlschlager. On
24 this particular proposal it's still listed as inclined
25 commercial stairway chairlifts. This is applicable to

1 both residential and commercial; so, should we not
2 also remove the word commercial from the title?

3 MR. NAIPO: All-righty. Any additional
4 comments or questions before we break these down into
5 the votes? All right. So, what we have are three
6 different submissions. 51 is submitted as a complete
7 strike-through. And there are two other -- And that
8 is crazy when I hear an echo of myself. And then
9 there are two other submissions, 46 and 004, which
10 amend those two and not a delete.

11 So, what we will do is we will take a vote on
12 the striking of the whole part of WAC 296-96-02460,
13 which is proposal 0051. If you are for striking that
14 verbiage from the WAC code, I ask that you please vote
15 yea now. The rationale for this is because there is a
16 proposed change on 2605, as well. If you are for this
17 change, please vote yea now. All right. Thank you
18 for those votes. Please lower your hands.

19 If you are in opposition of this change to
20 strike 2640 from the WAC code, I ask that you please
21 raise your hand and vote nay. If you are in
22 opposition of the changes submitted to 2640 I ask that
23 you please raise your hand and vote nay now. Thank
24 you.

25 If you wish to vote to abstain, I ask that you

1 please raise your hand and vote now. If you vote to
2 abstain, please raise your hand and vote now. Thank
3 you.

4 Melissa, will you please read the vote tallies
5 for 51.

6 MS. ERIKSEN: There were 22 yeas, 0 nays,
7 and 3 abstentions.

8 MR. NAIPO: So, since that passed with a
9 huge majority, I will pose it to you on the TAC on
10 whether we really need to vote on 46 and 004, okay.
11 If you feel we need to continue since we just voted
12 and we struck 2640, if you feel we do not need to vote
13 on 004 and 0046, please raise your hand now. If you
14 feel we do not need to vote on 0046 and 004, please
15 raise your hand and vote, yes, we do not have to vote
16 on those because of the majority vote from proposal
17 0051. If you are for not reviewing and voting on 0046
18 and 0004, I ask that you please raise your hand now.
19 All-righty. And with, that is a majority vote that I
20 can see and so thank you for your votes and we will
21 bypass these two submissions.

22 And with that, I'm going to move that we go to
23 0073, proposal 0073, which is WAC 296-96-02650. This
24 is in reference to the proposal and rationale for why
25 we voted to strike the verbiage that was proposed in

1 0051. Candace, do you have a question? Oh, nope,
2 okay. So, that proposal is Additional Required
3 On-site Documentation, 4(a)(i) platform, removing
4 lifts, and put in (chair), on (K) control valves,
5 remove the "and" and add (M) Numbering of equipment,
6 (N) Disconnecting Means; and (O) Controller.

7 Rational is to, "Edit to incorporate a couple of
8 items that should have been on the list and to clean
9 up a couple of errors."

10 Any questions of clarification on these changes?
11 Mr. Wohlschlager.

12 MR. WOHLSCHLAGER: Which proposal number are
13 we working on?

14 MR. NAIPO: 0073, this is regarding proposal
15 0073. Just so everyone knows, we will address 0054.
16 It was just too long to actually type in here; so, I
17 have -- I will actually bring up that actual proposal
18 so you can see the correct indenting and how it will
19 look. But for right now we're looking over 73 and the
20 edits to that. Mr. Brinkman.

21 MR. BRINKMAN: Thank you. Kevin Brinkman.
22 Numbering of equipment is already covered under (E),
23 is it not, of 2650?

24 MR. NAIPO: So, yeah, I'm -- I'm going to
25 just -- I'm going to show that right now. Okay. Give

1 me just a second. We're going to go like this. 2650.
 2 So, as you guys can see, all this is is a big long
 3 list. There's no indenting to help determine where
 4 certain pieces need to go and how it's supposed to be
 5 actually formatted. It's just a long laundry list and
 6 unless someone knows that, hey, under (4) they have a
 7 subparagraph (a) stair chair lifts, and then a part
 8 (i) for platform lifts, and then everything under the
 9 platform lifts are the operating control devices and
 10 blah, blah, blah. So, what I'm going to do is I'm
 11 going to show you what the proposed change was. That
 12 number, I apologize, 0054. Nope, not this, sorry.
 13 So, this is what it's fixing, it's fixing all of the
 14 indenting. So, we start with wiring diagrams, a log
 15 identifying applicable tests, manufacturer's
 16 operational instructions that include..., and then
 17 indenting all of those different things so people
 18 understand where these letters, this information for
 19 the machine this is what you need; for the runway this
 20 is what you need; inclined platform lifts, the
 21 platform, this is all the information you need
 22 regarding the platform; the machine. I hope that
 23 makes it a little bit more sense. I apologize, I
 24 wasn't able to actually input this into the
 25 spreadsheet. It would have been a long -- It would

1 have been a little too long. So, this is how it
2 should look in the WAC rule.

3 If anyone wants to, before we go back and
4 actually vote on this one in particular I can send you
5 a copy of this so that way you guys can review it and
6 then we can come back tomorrow and vote on that at
7 that time. If you are okay with how it stands now,
8 then we can forward. But hopefully, Kevin, that
9 answers your question. Thank you.

10 Any additional questions regarding adding this
11 additional information? Anybody? All-righty. So,
12 without any other question or clarifications, I'd ask
13 that we please pass a vote on 0073, unless someone has
14 a question. Dylan.

15 MR. LATHER: Dylan Lathe. Sorry to come in
16 late. I'm still confused on what this is replacing
17 because it says (4)(a)(i) Platform, and lifts is being
18 struck, and chair is put in place of it.

19 MR. NAIPO: Oh, let's see.

20 MR. LATHE: I'm not understanding how this
21 is written.

22 MR. NAIPO: So, let's go to (4)(a)(i). So,
23 they are asking to change this from lifts to chair,
24 control valves, and I'm assuming they're adding it
25 under control valves, the numbering of equipment,

1 disconnecting means, and controller under machine of a
2 vertical platform lift because I'm not finding another
3 (K) that has control valves on it and no other (M),
4 (N), (O). So, it looks like they're adding after
5 control valves, striking this "and", and then after
6 this (L) for hydraulic cylinders and supply piping
7 they each provide I think this is documentation for
8 the numbering of equipment, disconnecting means, and
9 controller.

10 Any other questions or clarifications on that?
11 Mr. Friesen.

12 MR. FRIESEN: Yeah, clarification. Is
13 this -- Is this for commercial only or is this for
14 commercial and residential? I'm just unclear on that.

15 MR. NAIPO: 2650. 2650 falls under new
16 installation of accessibility equipment.

17 MR. FRIESEN: So, I'm seeing that listed
18 there as private residence elevators. I can see a
19 fair amount of objections from private residence
20 customers for us spray painting giant numbers on their
21 equipment to identify their equipment when it is
22 likely the only number of equipment in the building.
23 The chance of having multiple pieces of mobility
24 equipment in somebody's home seems very unusual to me,
25 yet this is -- this is requiring us to number the

1 equipment. This -- this proposal was saying we need
2 to add numbering of the equipment.

3 MR. NAIPO: So, what this is is so 2650 is
4 additional required on-site documentation. So, this
5 is just requiring the documentation of wiring
6 diagrams, a log identifying applicable tests,
7 manufacturer's operational instructions that include
8 the operation of the manual lowering device.
9 Maintenance logs shall include the following tasks,
10 and then underneath that, if you have a stair chair
11 and it's -- you need to provide the information for
12 the platform lift, the machine, the runway. So, it's
13 just on-site documentation is all it is.

14 MR. FRIESEN: But it appears that on the
15 proposal we're looking to add numbering of the
16 equipment; is that correct?

17 MR. NAIPO: I think you're right, yes. Mr.
18 Lathe.

19 MR. LATHE: Dylan Lathe. I was just going
20 to say it wouldn't be -- you might go back to that
21 spreadsheet you just had of the actual list. This is
22 kind of minuscule, but would it be stair chair lifts
23 the correct terminology would be stairway chairlifts,
24 stairway one word, chairlifts one word. Thank you.

25 MR. NAIPO: All right. Thank you. Candace.

1 MS. LAU: Candace Lau. So, is that option
 2 still on the table for us to review this and go back
 3 to it tomorrow because there's a lot of stuff
 4 that's -- there's a lot of stuff here that's not quite
 5 making sense to me. So, I guess that's the question
 6 because I think we're mixing commercial with
 7 residential and then there's stuff here on platform
 8 lifts, and, you know, all equipment, but it's kind of
 9 written a little bit confusing to me.

10 MR. NAIPO: So, remember that all this is is
 11 indenting what 2650 says now. 2650 now is just this
 12 laundry list, strict laundry list with no indents, so
 13 it's hard to understand what part of the machine
 14 you're supplying what documentation to. So, in the
 15 indenting portion of this, which is on this document
 16 that I'm showing you guys, this is what's been in
 17 there for at least since this last WAC rule change
 18 that we just submitted or just went into effect. This
 19 is what it is. We're just cleaning up the indenting.
 20 So, all of these things are things that have been in
 21 place before and have been asked for, if that make
 22 sense. Whether or not the information is connect that
 23 would be something I think that would need to be an
 24 additional proposal outside of just indenting. So,
 25 Mr. Wilson.

1 MR. WILSON: Mike Wilson here. So, to
 2 answer a couple of questions, is 18.1 maintenance
 3 requirements does not differentiate between
 4 residential and commercial; so, this would be required
 5 on both. And as far as what Mr. Fresinger [sic] with
 6 Vertical Options said, the numbering of equipment, the
 7 RCW already requires that the conveyance number be
 8 painted on the -- on the controller. That's what the
 9 numbering of equipment would be related to. I think
 10 that's all I had. Thanks.

11 MR. NAIPO: Thank you. Mike, don't forget
 12 to please put your hand down if you're already done
 13 with your statement and question. Thank you. Sergey.

14 MR. DOLGIKH: Yes. Hi. Sergey Dolgikh
 15 again, Elevator Inspector. You know, Paoa, I'm
 16 looking at this and there are several different
 17 thoughts come to mind. If we're indenting certain
 18 things in the existing additional required on-site
 19 documentation, I think we should make sure that
 20 whatever we are indenting actually makes logical sense
 21 because in (4)(a)(i) it crosses over lifts, but it
 22 puts in chairs; so, now we're talking about platform
 23 chairs. I've written technical manuals before in my
 24 previous life and I know that it has to be consistent
 25 with the language and nomenclatures being used. So,

1 it's kind of a little bit confusing just like a couple
2 of speakers said here prior to me.

3 The other part of this story is that here we are
4 we're debating back at the beginning of the day
5 yesterday whether we should be giving out to the
6 owners proprietary documentation versus the
7 documentation of how tests must be performed versus
8 this versus that, but here we're putting in -- we're
9 putting in indenting in WAC, you know, information
10 about stair chair lifts and such like that that is
11 required to be now on-site. So, this seems to be a
12 little contradictory because we're starting to mix the
13 residential and the commercial, and in this particular
14 indent I don't think there is a distinction between
15 the two. It just kind of bundles it up together and,
16 I get it, it was in a previous WAC, but I guess this
17 is the purpose of us being together here today to
18 actually go through it and make sure that there is no
19 discrepancies like that. This would my 10 cents, and
20 thank you.

21 MS. ERIKSEN: Thank you. I just want to
22 state for the record -- This is Melissa. I just want
23 to state for the record that indenting as Paoa showed
24 it was correct. That's how you would indent this, so,
25 and it's all existing language. So, that's really

1 all we're talking about, are you guys okay with the
2 indenting. Dylan.

3 MR. LATHE: Dylan Lathe. I'm wondering if
4 this entire WAC code of vote 2650 is necessary or if
5 we could just strike the whole thing because we have
6 23701 which seems to cover most of this, most of this
7 laundry list, but it's a lot more simple because it
8 just points you to chapter 11 of 18.1 and then it says
9 documentation of tests, examinations, and maintenance
10 shall be readily accessible on-site. So, I'm
11 wondering -- Yeah, go ahead.

12 MR. NAIPO: So, the reason for that, this is
13 regarding new installations. 23, is it twenty-three
14 hundred, is for existing conveyances, and so that's
15 for anything that's passed final inspection you need
16 to make sure that this stuff is done, but at time of
17 acceptance these documents need to be on-site per
18 2650. That's what the difference is between the two.
19 But thank you. I hope that answers your question.

20 So, back to proposal 0073 and adding -- you
21 know, changing platform list to platform chair,
22 removing the "and" from part (K) of control valves,
23 and adding numbering of equipment, disconnecting
24 means, and controller, are there any additional
25 questions regarding that proposal? And I'll take that

1 as a no. So, what I suggest we do is we take a vote
2 on those changes, and strictly those changes, and if
3 you are okay with them and you accept them that you
4 please raise your hand and vote yea now. If you are
5 for those changes, changing platform lifts to chair,
6 removing the "and" on part (K) after control valves,
7 and adding numbering of equipment, disconnecting
8 means, and controller to it, that you please raise
9 your hand and vote yea if you for that change. All
10 right. Thank you for those that voted yea on that.
11 Put your hands down. Thank you again for your votes.

12 If you are in opposition of that change, I ask
13 that you please raise your hand and vote nay at this
14 time. Please vote nay if you're in opposition to that
15 change. If you are not in favor of that change,
16 please raise your hand and vote nay at this time.
17 Thank you.

18 If you wish to vote and abstain, please raise
19 your hand now. If you vote to abstain, please raise
20 your hand and vote now. Thank you. Thank you.

21 Melissa, will you please read the tally for
22 voting on proposal 0073.

23 MS. ERIKSEN: There were 18 yeas, 1 nay, and
24 5 abstentions.

25 MR. NAIPO: All-righty. Thank you. And

1 with that, I ask that we just move to a quick vote on
2 the indenting, again just indenting this as it should
3 have been done when it was initially written. If you
4 are for this change to add this indenting to the WAC
5 rule, I'd ask that you please vote yea now, if you are
6 for this change. If you are for this change, I ask
7 that you please vote yea now. All right. Thank you
8 everyone. Go ahead and put your hands down. Thank
9 you.

10 If you are in opposition of this change --
11 Please make sure to lower your hands if you have
12 already voted yea. If you are in opposition of this
13 vote, I'd ask that you please raise your hand and vote
14 nay. Please raise your hand and vote nay if you are
15 in opposition of this indenting. If you need to wish
16 to vote to abstain, I ask that you please raise your
17 hand and vote -- raise your hand and vote now. If you
18 are wishing to abstain, please raise your hand and
19 vote now. Thank you.

20 Melissa, will you please read the vote tally for
21 proposal 0054.

22 MS. ERIKSEN: There are 23 yeas, 0 nays, and
23 2 abstentions.

24 MR. NAIPO: Thank you. All right. So, we
25 are on to proposal 0010, proposal 0010. This is

1 regarding WAC 296-96-02460 (b) and (c). I'm going to
 2 do this real quickly, make this a little easier to
 3 read. And I (audio distortion), if anybody works in
 4 Excel spreadsheets and you need to know how to
 5 paragraph something, Alt Enter is your friend. I'm
 6 sorry, I just found this out when I was working on
 7 this. I didn't know that. So, I figured I'd share
 8 the knowledge. All right. So, 2460, the change on
 9 this (1) The mainline disconnect shall be located per
 10 NFPA 70 Article 620.51(c) and: (a) inside the machine
 11 room door on the strike side of the machine or control
 12 room door; (b) not more than 24 millimeters, (24
 13 inches) from the door to the operating handle; and (c)
 14 be at a height not less than 900 millimeters (35
 15 inches) nor more than a hundred and sixty -- or 1675
 16 millimeters (66 inches) above the finish floor as
 17 measured center line to the disconnect handle.

18 This is to update dimensions to include metric
 19 dimensions and to identify with the format used in
 20 A17.1/B44.

21 I will ask once if there is any questions or
 22 clarifications. If there are not, after a few seconds
 23 we will move to a vote. All this is doing is it's
 24 updating the dimensions and falling in line with
 25 A17.1. Mr. Quiett.

1 MR. QUIETT: Jonathan Quiett. Yeah, the
2 metric distance is wrong. 2400 millimeters is not 24
3 inches.

4 MR. NAIPO: Thank you for that. Does
5 anybody know what the correct distance should be and
6 what those millimeters should be?

7 UNIDENTIFIED SPEAKER: Yeah. It should be
8 right around 600 millimeters.

9 UNIDENTIFIED SPEAKER: 600, roughly.

10 UNIDENTIFIED SPEAKER: 610, by the way. Oh,
11 Carl Cary, Lerch Bates.

12 MR. NAIPO: All right. So, with that
13 possible edit adding to it, changing it from 2400
14 millimeters to 610 millimeters, are there any other
15 questions -- Oh, Mr. Friesen, sorry.

16 MR. FRIESEN: Wade Friesen, Vertical
17 Options. Aside from fact checking the dimensions
18 here, I move that we vote on all of these that are
19 just dimensional change all at once. Thank you.

20 MR. NAIPO: All right. Thank you. Dylan.

21 MR. TURNER: Dylan Turner, Greenbusch. I
22 agree with Wade. The only other comment, with the 24
23 inches this probably just needs to be harmonized with
24 the other code change that allowed for as close to 24
25 inches as possible to the handle because if we're

1 stating it must be twenty-- no more than 24 in one
2 location and as close as possible to 24 in another, I
3 just -- I think those need to be harmonized.

4 MR. NAIPO: So, it looks like it was sort of
5 brought up on this one that the lighting -- I want to
6 make sure that, Gerald, I'm approaching this
7 correctly, do you mean to talk about what Dylan is
8 talking about is covered under 0002.

9 MR. BROWN: No, I just looked down at the
10 next one you were going to vote on and 24 inches
11 turned out to be 1200 millimeters instead of 2400
12 millimeters; so, apparently we're 24 inch challenged
13 on our -- on our millimeters. So, just looking
14 ahead.

15 MR. NAIPO: Got it. Thank you. And I'm
16 putting up -- I'm picking up what you're putting down,
17 appreciate it. I agree with that, that the dimensions
18 and the formatting we can vote for all of those at
19 once, if there is a way that I can do that. Let me
20 see if I can pull all those together real quick. Give
21 me just a second. All-righty. So, fact checking will
22 be done on all of these to make sure that the
23 dimensions are correct, but there are currently one,
24 two, three -- one, two, three, four, five, six,
25 seven, eight, nine, ten, ten different submissions

1 regarding updating the dimensions to include metric
2 dimensions and to identify with the format used in
3 A17.1. Its been proposed that we put this to a total
4 vote. Before we do that, Mr. Wohlschlager.

5 MR. WOHLSCHLAGER: Lyall Wohlschlager. Also
6 on the proposal it says 35 inches and that conflicts
7 with the proposal we just briefly talked about, 36
8 inches; so, we should correct that, as well, and get
9 the correct millimeter conversion in there. That was
10 proposal 23 that showed 36 inches and 66 inches.

11 MR. NAIPO: What was that proposal number
12 again?

13 MR. WOHLSCHLAGER: Yeah, it was 23. So, is
14 it 35 or is it 36, and one of the two is wrong or
15 inconsistent.

16 MR. NAIPO: Thank you.

17 MR. WOHLSCHLAGER: And additionally, yes,
18 fact check all those meter conversions because just in
19 that quick glance I saw several other ones that were
20 wrong in those other proposals.

21 MR. NAIPO: I want to make sure that people
22 understand I did not edit or review these. I just cut
23 and pasted what was submitted and that is why you guys
24 are the subject matter experts and I'm just here to
25 guide this conversation. So, thank you very much.

1 Mr. Brinkman.

2 MR. BRINKMAN: Thank you. Could you just
3 read out the ten proposal numbers. I can't see them
4 all on the screen because only part of them show up at
5 once; so, I just couldn't keep a record what we're
6 voting on.

7 MR. NAIPO: So, this is regarding -- if
8 everyone is okay, we are going to pass a vote on all
9 of these dimension changes to fall in line with ASME
10 nomenclature. This will be a vote cast on proposal
11 0010, 0002, 0013, I'm shading these so I know they're
12 done, 0014, 0015, 0009, 0008, 0007, 0006, and 005.
13 So, now we will pass a vote on all of those to update
14 the changes. Mr. Friesen, did you have another
15 question or comment?

16 MR. FRIESEN: Yes. Wade Friesen, Vertical
17 Options. To Mr. Turner's point, I feel like it would
18 be helpful to at least add a note section for the ESAC
19 committee about the consistency with the 24 inches
20 within the strike side of the door. The ESAC
21 committee can look at that see whether or not they
22 would like to alter that language.

23 MR. NAIPO: I'm sorry, can you state that
24 one more time, make sure that ESAC --

25 MR FRIESEN: Make sure that they review the

1 language that says as close to 24 inches as possible
2 to the strike side of the door or something to that
3 effect.

4 MR. NAIPO: Thank you. Mr. Brinkman, did
5 you have another question? No worries, no worries. I
6 just want to make sure we don't skip you. I don't
7 want to assume anything. So, with that, we will be
8 casting a vote on all of these proposals and updating
9 the dimensions to fall in line with the A17.1/B44. If
10 you are for this change, I ask that you please raise
11 your hand and vote yea. I ask that you please raise
12 your hand and vote yea if you are for the updating of
13 these nomenclatures. All-righty. And it looks like
14 we have a total of all voting members voted yea on
15 this at 26. So, thank you very much for that, and
16 there will be no need for us to vote nay or abstain.
17 So, thank you very much for all of your votes on this.
18 And, with that, I suggest we take our last five minute
19 break just so I can get this spreadsheet sort of
20 cleared up and exactly where we need to be so when we
21 reconvene we'll be able to move forward a little bit
22 more clearly and concise, and I'm not sitting here
23 trying to fumble with this too much. Mr. Leopard has
24 a comment or question.

25 MR. LEOPARD: I had change my audio on the

1 mic. Can you hear me okay?

2 MR. NAIPO: Yeah. I can hear you great.

3 MR. LEOPARD: Score. Thanks.

4 MR. NAIPO: You're good. All right. So,
5 everybody, we'll see you back here in five minutes.
6 Thank you again very much.

7 (Recess taken)

8 MR. NAIPO: So, here we go, last push, you
9 guys. Just to give a quick update of where we're at,
10 we have roughly about 44 to 45 WAC submissions that we
11 still need to review and vote on, depending on where
12 we end at today. I don't ever want to skip any WAC
13 submittal because those are things that are proposed
14 by you guys to change. What may be put on the back
15 burner and not be able to be completed by this TAC
16 Committee is the adoption of or the codifying of 17.1
17 and the changes associated with that, and 18.1. I'm
18 going to speak to Alicia Curry, who is our rule making
19 and legislation person, to see when her take is on
20 this. I don't want to ask you guys to sit for another
21 day by any means because that again pushes out the
22 time line for us to be able to adopt these if have to
23 add more time for you guys to review things, but at
24 the same time I don't want to negate your guys'
25 opinion on some of these change that are happening

1 between ASME A17 2016 to 2019, as well as ASME A18.1
 2 2017 to 2020. I understand there are a lot of you who
 3 may not be affected by the changes in 18.1, which is
 4 totally okay, but at the same time just because of the
 5 market size or people affected by that represented in
 6 this TAC Committee doesn't negate the importance of
 7 people reviewing that. Now, whether or not, like I
 8 said again, I don't want to ask you guys to review
 9 those things and we're not going to get it done, I
 10 don't believe, by the end of tomorrow. So, hopefully,
 11 by tomorrow I will have a little bit more of an
 12 understanding of actions that we can take, one of
 13 those suggestions being that we provide you a list of
 14 your ESAC stakeholder representatives and with
 15 concerns that you may have vetted yourself. You
 16 provide those to your stakeholder member that is on
 17 the ESAC Committee and, therefore, they can address
 18 those at the ESAC level. But, again, and in all
 19 honesty, I don't know if we're going to be able to get
 20 through 40+ of these, and then the changes in 17.1 and
 21 18.1. So, I just wanted to let you guys know where
 22 we're at and what we have left still to do.

23 So, with that, Mr. Carl.

24 MR. CARY: Yeah, Carl Cary, Lerch Bates.
 25 Boy, is it possible that we could like whatever we

1 don't get done WAC-wise we can vote on it on a
 2 spreadsheet just ourselves? At least that way the
 3 vote of each member here is known and then those can
 4 be tallied how ever they're tallied, but at least that
 5 way we get a voice in that, and that way we can hit
 6 tomorrow running on that other A17 stuff and A18
 7 stuff. Just my thought. Maybe everyone's not into
 8 it, but, you know, I came here to do a job and I'm
 9 going to do it fully.

10 MR. NAIPO: No, I understand that. But at
 11 the same time, I want to make sure that -- I know
 12 there's a lot of good information, not to mean that's
 13 changed anybody's perspective or changed their vote,
 14 but I know a lot of these conversations are really
 15 good, and in-person a lot of these conversations I
 16 know are had at side-board conversations during the
 17 break, during lunch, and so when we come back and
 18 convene we can hit the ground running, but in this
 19 avenue unfortunately it's hard to do this work. So,
 20 if that's a possibility, anything is possible,
 21 anything is possible, but expect an e-mail later on
 22 this afternoon after we convene. I don't think that
 23 I'll be able to give you that answer before we
 24 convene, but we will have something for you, okay.
 25 Thank you very much for that.

1 Are there any other concerns from any other TAC
 2 members with the status of where we're at and with the
 3 load that we still have to do? Does anybody have any
 4 concerns or -- No? Anybody? All right. Well, with
 5 that, we'll continue to press through. And like I
 6 said again, be on the lookout for an e-mail later on
 7 this afternoon, hopefully after we convene, sooner
 8 rather than later, to just give sort of an idea of
 9 what we can do between tonight and tomorrow morning
 10 when we reconvene on the last day. So, thank you very
 11 much for that, Carl. Appreciate that.

12 Okay. So, with that, we are going to go to
 13 proposal 998 or 0098, proposal 0098, WAC 296-96-01075.
 14 Oh, wait, no, we're skipping these. That's right, I
 15 was skipping these ones for now because this is stuff
 16 that I think is 675 and so we will move past those.
 17 Here we go.

18 Okay. So, now, I'm sorry, we are on proposal
 19 0055, proposal 0055 regarding WAC 296-96-02550. This
 20 is Guard Between Adjacent Pits. They are asking to
 21 add that guards shall be provided between adjacent
 22 pits. The guards shall be of non-combustible
 23 material. The guard, if of open work material, shall
 24 reject a ball of 25 millimeters (1 inch) in diameter
 25 and made from material equal to or stronger than -- I

1 believe he means 1.110 millimeters or (0.0437 inches)
 2 diameter wire. The guard shall be supported such that
 3 when subjected to a force of 450 Newton or (100 pounds
 4 of force) applied over an area of 100 millimeters by
 5 100 millimeters or (4 inch by 4 inch) at any location,
 6 the deflection shall not reduce the clearance between
 7 the guard and the adjacent pit below 25 millimeters or
 8 (1 inch). Guards shall extend not less than 2000
 9 millimeters or (79 inches) above the level of a higher
 10 pit floor. Where a ladder is installed adjacent to a
 11 guard, the guard shall extend not less than 2000
 12 millimeters (79 inches) above the top rung or rungs
 13 use hand grips. A single horizontal structural
 14 element at the top of a pit ladder used to stabilize
 15 the vertical side rails is not considered a rung or
 16 handgrip.

17 (2) Where access to pits of elevators in a
 18 multiple hoistway is by means of a separate pit access
 19 door (see 2.2.4.5) and not by a pit access ladder,
 20 adjacent pits shall:

21 (a) be guarded as required by 2.2.3.1;

22 (b) the guards may be omitted if the clearance
 23 between the bottom of the car (including any equipment
 24 attached thereto) while resting on a fully compressed
 25 buffer and the bottom of the pit is not less than

1 two -- 2130 millimeters (84 inches).

2 Rationale: To provide elevator personnel equal
3 protection from adjacent elevators similar to that of
4 an adjacent counterweight as required by ASME A17.1,
5 2.3.2.3. To provide protection from adjacent
6 elevators whether access is by means of the lowest
7 hoistway door or by means of a separate pit access
8 door. This proposal, when implemented, has been
9 proven to provide protection of life and limb.

10 I just want people to know where this is being
11 asked to be placed. It's regarding new installations.
12 This is not regarding -- This is not being placed in
13 part D; so, this will not be enforce on existing
14 elevators, unless someone wants to bring that up and
15 have that be part of the vote that, hey, this needs to
16 be added to part D, as well. So, again, this would be
17 just for new installations after this goes into
18 effect.

19 And now let's see if we can address anybody's
20 questions of concern. Are there any questions? Mr.
21 Brinkman.

22 MR. BRINKMAN: Yes, thank you. Kevin
23 Brinkman. There is a proposal currently being looked
24 at by the A17 Hoistway Committee that is similar to
25 this. In fact, this may have been an earlier version

1 that somebody decided to pick up and submit. There's
2 been some changes since then as this has gone through
3 the balloting process and vetting process. There's
4 some things in here that, you know, might create a
5 problem or are not necessarily necessary, I guess, and
6 some things here that we moved out of the proposal to
7 be considered. So, while I'm not opposed to pit
8 guarding, in fact I think it's a good idea, I think
9 this proposal has got some things that need to be
10 corrected and I don't know if we can wait. You know,
11 unfortunately, we'd have to wait until another cycle
12 to get to the requirements of A17.1, but some of the
13 things I see here are I don't understand the need for
14 a one inch diameter ball as far as rejecting. It
15 seems pretty extreme when you're just trying to
16 prevent somebody from walking from one pit to the
17 other. Some of the stuff about sump pit access doors
18 we identified, there's some issues with that; so, we
19 had removed some of that language. I think there was
20 almost deflection. Rather than one inch, we just said
21 it can't reduce the clearances below what's allowed.
22 So, there's just a few things that will come out
23 differently when it comes out in A17, I anticipate,
24 and maybe this is a little premature is all I can say.
25 Thank you.

1 MR. NAIPO: Mr. Brinkman, thank you very
 2 much for that, that comment. I do want to say that
 3 the person who submitted this actually e-mailed me I
 4 think it was yesterday or the day before stating
 5 exactly what you had just said, that, hey, there is an
 6 amendment to this. And I'll be honest with you, I
 7 didn't feel comfortable trying to submit that into
 8 this or change that because this was, hey, the TAC had
 9 closed already. So, if -- if you want to put this on
 10 the back burner, so 0055 be put on the back burner, I
 11 can provide you -- or, Mr. Brinkman, if you feel it
 12 would be okay to provide what has been or was being
 13 looked at by the ASME Committee to maybe use that as
 14 an edit for this or we can go through and try to edit
 15 it as much as possible because, you know, from your
 16 statement, you do agree that there has to be something
 17 or you feel that, you know, there should be something
 18 that's in there, just how it's done still needs to be
 19 identified, I'd like to pose that. Do you know
 20 whether that would be okay moving forward?

21 MR. BRINKMAN: Normally, you know, from an
 22 ASME policy standpoint, they don't like to put
 23 language out there until it's finalized. However, if
 24 somebody else has submitted a proposal that may have
 25 identified some of the things I suggested, I'll

1 certainly leave that up to you whether or not you put
2 that out there. I just don't want to be the person
3 putting out ASME stuff before it's --

4 MR. NAIPO: I understand.

5 MR. BRINKMAN: -- time. Thank you.

6 (Talking at the same time)

7 MR. NAIPO: What I will do is I will go
8 back through my e-mail and find -- I didn't really
9 look at it. I just saw their e-mail and it was like,
10 hey, there has been some changes. I don't know if
11 there was an attachment to that. So, what I will ask
12 is, Melissa, if you can maybe put this on hold and
13 we'll address this possibly tomorrow. Jan.

14 MS. GOULD: The latest A17.1 is out for
15 public comment now, right? That's what -- Yeah, 2022,
16 so...

17 MR. NAIPO: Mr. Brinkman.

18 MR. BRINKMAN: Yeah, this is Kevin Brinkman.
19 You're correct, it is. Unfortunately, this change did
20 not make that edition. It's still being developed.
21 So, it would not be out until the next edition, which
22 is 2025.

23 MR. NAIPO: Thank you for that
24 clarification.

25 MS. GOULD: Jan Gould. Thank you.

1 MR. NAIPO: Mr. Cary.

2 MR. CARY: Yes. So, a lot of this language
3 mirrors the general requirements in the state of
4 California, but even more so. For example, in
5 California it requires a rejection of a two inch ball.
6 This language is referring it to a one inch. So,
7 it's -- it's -- it's even more oppressive than what
8 they are requiring currently in California, just as
9 some background.

10 MR. NAIPO: So, what I suggest is that we
11 put this one on hold. Jan, did you have an additional
12 question or comment?

13 MS. GOULD: No. Sorry.

14 MR. NAIPO: It's all right. So, what I
15 propose is that we put this on hold and allow me to go
16 and see if there is an attachment with that, and I can
17 provide that to you guys tomorrow as an amendment to
18 what's been submitted and that's what we can vet
19 tomorrow. If everyone is okay with that, if you will
20 please raise your hand and vote yea, and we'll move on
21 from this one. If you guys want to tackle this one,
22 then we will. But if you're okay with putting this
23 off until tomorrow, I ask that you please raise your
24 hand and vote yea. All-righty. It look like we got a
25 majority vote. Thank you for that. And so what we

1 will do is we will put this on hold until tomorrow.
2 Give me a second. Sorry about that. So, 0055 will be
3 put on hold. I will forward you any information, if
4 there's anything in the attached e-mail from the
5 person who submitted this originally, and you will
6 have that with a copy of the agenda for tomorrow, as
7 well.

8 So, with that, we will move on to proposal 0019,
9 Location of equipment in hoistway. It's regarding WAC
10 296-96-2552. Elevator equipment shall be permitted to
11 be location within the hoistway subject to the
12 requirements in ASEM A17.1/CSA B44 and the following:
13 Where an elevator -- (1) Where an elevator cannot be
14 prevented from movement electrically and mechanically
15 prior to entering the pit area motor controllers,
16 motion controllers, drives, hydraulic control valves,
17 hydraulic reservoirs (tank), hydraulic pump motors and
18 driving machines shall not be located in the pit.

19 (2) Where a means is used to secure the
20 elevator electrically and mechanically entering the
21 pit, the means shall be designed such that the
22 activation can be performed without full body -- full
23 bodily entry into the pit.

24 We're looking to add:

25 (3) Washington State requires states that there

1 is a sump pump in the hoistway per conveyance.

2 (a) rated at 50 gallons per minute per
3 conveyance

4 (b) Cord and plug by design for easy removal
5 only.

6 (c) shall be attached to a single non-GFCI
7 outlet.

8 (d) no control boxes, junction boxes, or alarms
9 may be mounted in the pit hoistway or machine room,
10 i.e. high water alarm.

11 (e) shall have a steel grated lid, flush with
12 the floor and secured.

13 (f) shall not be directly connect to the sewer
14 system, as per plumbing code.

15 (g) piping shall be steel, cooper, or cast iron
16 and start with a union adjacent to the sump lid, with
17 a check valve and a shut off valve.

18 The rationale is to help clarify the 2018
19 requirement to add sump pumps to elevator pits.

20 Additional notes that were given was ASME A17.1
21 2019 2.2.2.5., and elevators provided with fire
22 fighters and emergency operation, a drain or sump pump
23 shall be provided. The sump pump/drain be required to
24 remove a minimum of 11.4 -- I don't know what M3/H
25 stands for, but it equates to 3,000 gallons per hour

1 per removing single hoistway or multiple hoistway
2 elevator. So, this would be per elevator. This is
3 for a reference to exempt during code review because
4 of WAC changes above.

5 So, with that, are there any clarifying
6 questions that are needed? Mr. Friesen.

7 MR. FRIESEN: Wade Friesen, Vertical
8 Options. To me, this requirement for the sump
9 information to me it feels like it should be its own
10 WAC. It's kind of clunky where it's getting put at.
11 It makes it kind of hard to fine within the code. So,
12 I'm just throwing out there that I have no issue with
13 putting the requirements in there, I think that's
14 great information, but it seems to like it should be
15 its own entity. Thank you.

16 MR. NAIPO: Thank you. Mr. Turner.

17 MR. TURNER: Dylan Turner, Greenbusch.
18 First, I agree with that. I feel like the WAC that's
19 being referenced, location of equipment is referring
20 to elevator equipment, not non-elevator equipment. I
21 guess just stating my objection to the change here of
22 50 gpm per conveyance. The 2019 version of A17.1 was
23 specifically edited to be per hoistway because its
24 been determined that 50 gpm per conveyance is excess.
25 So, I don't know why we would change it back to that

1 when we're look to adopt the 2019 version, which has
2 identified this an excessive requirement.

3 MR. NAIPO: Thank you, Mr. Turner. Mr.
4 Brinkman.

5 MR. BRINKMAN: This is Kevin Brinkman. He
6 said what I was going to say, that the 2019 code has
7 changed that. Thank you.

8 MR. NAIPO: All right. Thank you.
9 Candace.

10 MS. LAU: Hi. Candace Lau. My -- I'm not
11 a -- I'm not saying one way or the other. I'm just
12 saying that if this were proposed to be changed, I
13 believe that the part that talks about the per
14 hoistway it should be on the -- in 00675 as an
15 amendment to the A17.1 2.2.2.5 instead of in this --
16 It needs to be amended in the 00675, if this is the
17 route we're going. That's my only point.

18 MR. NAIPO: Mr. Wohlschlager.

19 MR. WOHLSCHLAGER: Lyall Wohlschlager. Does
20 WAC 02552 exempt this requirement from residential
21 elevators? I don't see it in the verbiage here.

22 MR. NAIPO: 02552, 02552, 02552, there is no
23 exemption for this, not -- not -- not in 2552, no,
24 there is not an exemption for that. Mr. Brinkman.
25 Yeah, Kevin Brinkman, just two things. I want to -- I

1 don't think there's a need to change the per
2 conveyance to per hoistway in 0675 because the 2019
3 made that change. I think that was the point that I
4 believe it was Dylan made. So, I think if we had --
5 we leave that at per hoistway we don't have to change
6 that.

7 To the question about private residence
8 elevators, the way requirement 2.2.2.5 is written in
9 A17.1 it's only -- you're only required to have a sump
10 pump if you have fire fighters emergency operation
11 phase two, you know, and the idea behind this is to be
12 able to remove water from the pit that may come in
13 from stray sprinklers, or hoses, or something so that
14 the fire fighters can continue to use equipment for
15 phase two. So, I don't -- If we follow A17.1, it
16 wouldn't apply to residence elevators or LULA
17 elevators because they're not (audio garbled) phase
18 two.

19 MR. NAIPO: Thank you. Candace.

20 MS. LAU: I want to clarify what I just
21 said. What I was trying to -- My point is that if we
22 voted to pass this number three on the revised, what
23 is being proposed is that it's not going to be per
24 hoistway, it's going to be per conveyance is what this
25 proposal is asking for. So, my point is that if this

1 if this passes, it should be put into 00675 instead of
2 this -- in addition to this or -- or instead of this
3 because the correct place to put amendments would be
4 in 00675. That's my only point. I'm not saying let's
5 do it. I'm saying if this passes, it needs to be done
6 in 00675.

7 MR. NAIPO: Thank you. Any additional
8 questions or comments on this one? Mr. Turner.

9 MR. TURNER: Dylan Turner, Greenbusch. I
10 guess my suggestion would be a friendly amendment and
11 not including the per conveyance, but leaving it per
12 hoistway. I can't vote on yes this because I disagree
13 with that one part, but I don't take exception to the
14 rest of it.

15 MR. NAIPO: Thank you. Mr. Wohlschlager.

16 MR. WOHLSCHLAGER: Lyall Wohlschlager. So,
17 unless -- I can't support this unless some place in
18 02552 it exempts residential elevators because we
19 don't reference any of the ASME standards in this
20 proposed amendment that limits it to those with fire
21 emergency operations. So, as it's written right now,
22 I don't see how I could exclude it with residential
23 elevators.

24 MR. NAIPO: So, it looks like there's a
25 couple questions or clarifications. I think the other

1 one was regarding the last thing we were talking
2 about. But Gerald just put in sump pumps are a fire
3 fighting water removal pump. Fire hoses are rated at
4 over 150 gallons per minute. 50 gallons per minute
5 per car is too small.

6 A comment from Carl is it also is not clear if
7 it will apply to major alterations or modernizations
8 where it currently is placed in the WAC numerically.
9 This is regarding just new installs, as well. Mr.
10 Wohlschlager. No? Okay, you're good? All right.
11 Mr. Quiett, I'm sorry.

12 MR. QUIETT: Jonathan Quiett. So, what is
13 proposed here, we're talking about making a friendly
14 amendment to it. The very first line, "Washington
15 State requires..." -- "Washington State requires
16 states that there is a sump pump in the hoistway per
17 conveyance", can we add something on new installations
18 with phase two fire service? And, then, for the issue
19 that some of the people have with the 50 gallons per
20 minute per conveyance, line out the per conveyance and
21 put in per hoistway?

22 MR. NAIPO: Mr. Quiett, one more time, can
23 you give me that. I apologize. I wasn't in the right
24 spot ready to take down your comments real quick. I
25 apologize about that.

1 MR. QUIETT: Yeah. Jonathan Quiett. So,
2 the first line where it says, "Washington state
3 requires states there is a sump pump in the hoistway
4 per conveyance", if we can change that to per
5 conveyance with phase two fire service operation.

6 MR. NAIPO: All right.

7 MR. QUIETT: And then the (a) where it says
8 rated at 50 gpm per conveyance, change that to per
9 hoistway.

10 MR. NAIPO: Thank you. Carl.

11 MR. CARY: Paoa, hi. I don't know if I've
12 ever done this before or will again, but I
13 respectfully disagree to your statement that this
14 being in part (c) will only apply to new elevators.
15 It says part (c) regulations for new and altered
16 elevators and lifting devices.

17 MR. NAIPO: Oh, my gosh, I am sorry. So,
18 don't ever be sorry for calling me out on something
19 that I'm wrong for because that's -- I should have --
20 I should have checked before I spoke, and I apologize
21 about that.

22 MR. CARY: So, if we're discussing -- Carl,
23 Lerch Bates. So, if we're discussing friendly
24 amendments, I would like your verification that this
25 is just for -- the addition of this is just for new

1 elevators.

2 MR. NAIPO: So, it looks like this needs a
3 lot of editorial work. It doesn't seem like there's a
4 lot of opposition to it, but it just needs to be
5 wordsmithed a little. Mr. Leopard.

6 MR. LEOPARD: Duane Leopard, city of
7 Spokane. This is, to me, a redundant of A17.1,
8 looking at everything, or building code, or plumbing
9 code. My question is: Why are we repeating it here
10 in WAC? The code is already set and if we adopt them
11 as they read, then we don't need this.

12 MR. NAIPO: Thank you. Mr. Turner.

13 MR. TURNER: Dylan Turner, Greenbusch. I
14 think the part that isn't explicitly codified in A17.1
15 is the no control boxes, conjunction boxes. I know
16 that's how it's enforced in Washington, but in other
17 states, you know, it's not exactly done that way and
18 you might see the alarm located in the machine room.
19 I think that's the intent of what was submitted here.
20 I can't read the mind of who submitted it, but that's
21 my guess.

22 MR. NAIPO: Thank you. Candace.

23 MS. LAU: Candace Lau. There were other
24 things in this such as the piping having to be steel,
25 copper, or cast iron. That's a huge difference

1 because right now that's not what it's in. There --
2 there's some different language in here, that's all
3 I'm saying. And as far as alterations go, alterations
4 have their own separate requirement; so, depending on
5 what you do, it triggers certain things. So, it's just
6 not that simple to say on alterations you're not
7 required to do this. You just have to follow the
8 eight seven on that.

9 MR. NAIPO: Thank you. Mr. Wohlschlager.

10 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
11 didn't catch it whether or not you added a note over
12 in the friendly amendments to make sure that
13 residential elevators are excluded.

14 MR. NAIPO: Uh, yes, that was actually one
15 of the first things I wrote in here.

16 MR. WOHLSCHLAGER: I appreciate that.

17 MR. NAIPO: Please tell me I put it in here.
18 Oh, there it is, okay. Currently there is no
19 exemption for residential elevators. So, yeah, I do
20 have that in there. I apologize. Candace, did you
21 have another question or statement?

22 MS. LAU: I did, yeah. This is Candace.
23 So, Lyall, with the -- with respect to the new part
24 that's being added that would not be something that is
25 currently enforced for residential because there's

1 no -- it's not provided with fire service, and that's
2 kind of -- I was trying to look at the 2019 code to
3 see if it changed the wording, but with 2016 code the
4 sump pump requirement is based on the elevator being
5 provided with fire service, if that helps.

6 MR. NAIPO: Thank you. Jan.

7 MS. GOULD: It still is, but it does say per
8 hoistway or multiple hoistway.

9 MR. NAIPO: Thank you. Lyall.

10 MS. GOULD: Jan Gould. I'm so sorry.

11 MR. NAIPO: Lyall, did you not have an
12 additional question or comment?

13 MR. WOHLSCHLAGER: No. I -- I understand
14 that 17.1 won't kick us into having a need for a sump
15 pump, but if one reads this WAC, it doesn't tell us to
16 go to 17.1, it just says you have to have a sum pump
17 in every hoistway. That was my concern. So, even
18 though I don't have to do it under 17.1, under this
19 WAC the way it's written I would still have to do the
20 sump pump under 2552. That was my concern.

21 MR. NAIPO: Thank you. There's a couple of
22 comments in the chat, one from Gerald:
23 Interpretations already exempt alterations. PVC
24 isn't fire rated for pits. Mr. Brinkman put in: The
25 2019 requirement and shown in column E minus the

1 strike-out.

2 So, are there any additional questions outside
3 or statements outside of if this passes the amendments
4 that will need to be looked at? Mr. Brinkman.

5 MR. BRINKMAN: A simple amendment might be,
6 if the ESAC is looking at this, just to say -- Kevin
7 Brinkman, sorry. A simple amendment might be to say
8 that sump pumps shall be provided per ASME A17.1 2019
9 requirement 2.2.2.5, except -- with in addition to the
10 things noted below, and then you can add the stuff
11 about, you know, the alarm and stuff like that, if you
12 wanted to. It would be another way of doing it. So,
13 just another thought to consider.

14 MR. NAIPO: I'll give a final ask for any
15 additional questions or clarifications before we put
16 this to a vote? And, again, remember that you're
17 voting not just for how it stands now, but the
18 consideration, time permitting, if we have the ability
19 to, we will try to go through and review this
20 verbiage. If not, this is stuff that would be passed
21 on with the transcription so that people understand
22 exactly when we're talking about these or what these
23 edits mean if my meager notes aren't enough for them.

24 So, I ask, since there are no questions or
25 statement clarifications, or clarification statements,

1 I ask that we please put to a vote proposal 0019.

2 If you are for this change and the sump pump
3 verbiage with the editorials that we have discussed,
4 if you are for that change we ask that you please
5 raise your hand and vote yea. If you for these
6 changes again with editorial changes that we have made
7 note of, I ask that you please raise your hand and
8 vote yea. Thank you.

9 I ask for those that are in opposition of this
10 change to please raise your hand and vote nay. If you
11 are in opposition of this change, I ask that you
12 please raise your hand and vote nay.

13 Melissa, I can't see you; so, when you're ready,
14 can you give me a thumbs up or a yes.

15 MS. ERIKSEN: I'm just making sure that the
16 numbers are going to stop.

17 MR. NAIPO: I appreciate that. I
18 understand.

19 MS. ERIKSEN Yeah, we're good.

20 MR. NAIPO: All right. Thank you. Go ahead
21 and lower your hand if you voted nay. And we will now
22 go to vote for allow those who wish to vote to abstain
23 please raise your hand. If you are voting to abstain,
24 please raise your hand now. All right. Thank you.

25 Melissa, will you please read the vote tally for

1 proposal 0019.

2 MS. ERIKSEN: There was 1 yea, 21 nays, and
3 3 abstentions.

4 MR. NAIPO: Thank you. Moving on to
5 proposal 0003 regarding WAC 296-96-02605, it looks
6 like on number two of this, governor overspeed testing
7 shall be verified by manufacturer's documentation (see
8 ASME...) or (See A18.1 2017 and earlier editions),
9 2017 and earlier editions is what's been added,
10 requirement 9.9.3, and adds A18.1-2020 and later
11 editions, requirement 9.9.2. Safeties shall be
12 manually tripped at rated speed with no load on the
13 chair (see A18.1 section 10. 4) New added verbiage of
14 a free passage of not less than 430 millimeters (17
15 inches) shall be provided between the chair lift and
16 the opposite side of the stairway. This measurement
17 shall be taken when the chair is folded against the
18 wall.

19 Rationale: To update the reference to 9.9.3,
20 which was renumbered in the 2020 edition to 9.9.2,
21 also to reinstate the distance between the chair and
22 opposite side of the stairway. There is no
23 requirement -- no such requirement in the IRC for
24 residential installations, nor is there one in A18.1.
25 An installation could be installed that blocks the

1 entire width of the stairway and the inspector would
 2 not be able to remedy this situation with a code
 3 violation.

4 And there was a note this one. This is only
 5 relevant if we adopt the ASME A18.1-2020 edition.

6 There is another change to 2605 that I
 7 believe -- Well, there's actually -- 2605 has quite a
 8 few different changes. All-righty.

9 So, if we go through this, since there are four
 10 pretty substantial changes and all of the changes are
 11 really different, what I suggest we do is if you have
 12 already made a preliminary decision on each of these
 13 separately, what I ask is that we take that vote and
 14 from there the ones that have passed. If two of these
 15 have passed, then we will look at condensing those
 16 into one big change. But it looks like proposal 0003,
 17 0044, 0050, and 0057 all have to do with roughly the
 18 same WAC, and changes within them are -- some of them
 19 are the same, not the same, but some of them are
 20 reflecting the same spots that need to be edited,
 21 others are totally different. So, again, what I would
 22 suggest is that if you already have these, a vote for
 23 those ones placed or thought of, I ask that we please
 24 vote for all of these four separately, and any that
 25 have passed we look to merge them together into one,

1 one proposal. Is there any opposition to that?

2 Sergey.

3 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
4 Inspector. So, there is one thing to bring up in
5 light of the recent developments and everybody voting
6 to strike out 2640, right? So, because we removed
7 commercial out per the votes that passed and for the
8 fact that the language in the other suggested to
9 private residence only, and we kind of talked about
10 that there is no distinct difference between private
11 residence and commercial anymore in concurrent code
12 and further forward, I suggest that we look into this
13 a little bit differently and not just bundle them up I
14 guess is what I'm saying because bundling it up is
15 kind of opening up another confusion. This 2605 was
16 confusing code to begin with. There are very
17 important points to be made. And those separate --
18 separate proposals they contain pieces, bits and
19 pieces for, you know, for specific items that should
20 be looked at. So, I am against bundling it up and I
21 think we should look at them as they stand. Thank
22 you.

23 MR. NAIPO: Mr. Friesen.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. Sergey said exactly what I was thinking. I

1 think these need to be all looked at individually
2 because there do seem to be little nuances that need
3 to be discussed separately. Thank you.

4 MR. NAIPO: All right. Thank you. Mr.
5 Wohlschlager.

6 MR. WOHLSCHLAGER: Lyall Wohlschlager. Yeah,
7 I've been actively involved and looked at all four of
8 these, and, in the benefit of time, I would be willing
9 to synopsise these for tomorrow morning so that we
10 don't have to go through each one, and just, you know,
11 lay out what's -- what's different among the four, if
12 that would be helpful; otherwise, we can go through
13 them now.

14 MR. NAIPO: So, it's been put for that,
15 Lyall, it sounds like you're wanting to take the lead
16 on this and that you will sort of condense these four
17 into one big proposal on everything that's been
18 submitted; is that correct?

19 MR. WOHLSCHLAGER: Yeah, or at least tell
20 people what's the difference between number 3, number
21 44, number 50 so that they don't have to decipher it.
22 There's really only four different points, I think,
23 being presented among these four different proposals,
24 but it's hard to decipher when they're so lengthy.

25 MR. NAIPO: Okay. I will put that -- Mr.

1 Friesen.

2 MR. FRIESEN: Wade Friesen, Vertical
3 Options. You know, in just -- just reviewing this, I
4 am opposed to that idea because that condenses
5 everything down to where you're voting or putting one
6 vote in for several different changes here. You know,
7 just looking at the way that I preliminarily voted on
8 these, I've got some that are yeses and some that are
9 no, depending on the specific verbiage that's used in
10 each one of these sections. I don't feel like them
11 being together is appropriate. Thank you.

12 MR. NAIPO: All right. Thank you. I will
13 put that task and that vote to the TAC Committee. So,
14 its been proposed that Lyall has volunteered to put
15 these four together and try to help disseminate the
16 information out, the differences between all four, and
17 present that to us tomorrow. It has also been
18 presented to us that, you know, they would feel more
19 comfortable -- two committee members have said that,
20 you know, we feel like we should go through these one
21 at a time. So, I'm going to place that vote to the
22 TAC Committee now. If you vote yea, you are voting
23 for we'll bypass these four right now and present
24 Lyall with the opportunity to give us this information
25 in a little bit more of a concise format tomorrow to

1 be voted on as one big singular change. If you vote
 2 nay, then that means that you would rather go through
 3 each of these and their nuances and vote accordingly,
 4 which is okay, as well.

5 So, again, I pose this vote to you. If you vote
 6 yea, I ask that you please raise your hand now, and,
 7 if you are voting yea, you are voting for us to be
 8 able to review a concise compilation of all four of
 9 these tomorrow morning. So, if you are for that
 10 change or for us doing that tomorrow, I ask that you
 11 please raise your hand and vote yea. If you are for
 12 us reviewing all four of these tomorrow in one concise
 13 compiled proposal, please raise your hand and vote
 14 yea. Thank you.

15 If you are opposed to that and you would rather
 16 vote on or, excuse me, review each of these singularly
 17 as they stand, and then after that vote we will --
 18 what's left over we can compile into one, I ask that
 19 you please raise your hand and vote nay, and this will
 20 determine that, hey, we are going to look at each one
 21 of these individually and vote accordingly.

22 So, the nays have it. Thank you very much for
 23 that. So, we will review each of these individually
 24 and whatever passes. So, like I'm saying, we're
 25 review each of these as it stands alone and anything

1 that passes of these four it will be passed on to the
2 ESAC or, time permitting us as the TAC, we will go
3 through and merge those into one big proposal and
4 anything that does pass as we vote on them singularly.

5 All right. So, with that, proposal 003. I
6 think I already reviewed this stuff. So, regarding
7 proposal 003, are there any questions for
8 clarification on this or any statements of
9 clarification on this one in particular, 003? Mr.
10 Wilson.

11 MR. WILSON: Mike Wilson here. I just have
12 a question. It's why is there a free passage
13 requirement for a private residence when it's not --
14 there is no free passage requirement in 18.1?

15 MR. NAIPO: All right. Thank you for that.
16 Hopefully someone will be able to answer that
17 I do have it marked on here. So, if it's not, I will
18 pose that question again and hope that someone will be
19 able to answer that for you. Mr. Friesen.

20 MR. FRIESEN: Wade Friesen, Vertical
21 Options. I'm not going to address that. I think that
22 Sergey or Kevin are probably better apt to answer that
23 question. But I am in opposition to it. If we put a
24 minimum passage requirement in this in a private
25 residence, it is going to limit where we can put this

1 equipment and there are safety concerns where folks
 2 are trying to get up a set of stairs that maybe an
 3 older home where the minimum is under 17 inches and I
 4 feel like we were putting those folks at risk by
 5 saying, no, you can't have a chair in your home
 6 because it's under the 17 inch requirement when it
 7 might be safer for them to have it so that they don't
 8 fall down their stairs and get hurt. So, I am in
 9 opposition to this minimum requirement. Thank you.

10 MR. NAIPO: Thank you. Sergey.

11 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
 12 Inspector, L & I. So, this is exactly why I wrote
 13 0044 without the requirement for passage because, for
 14 one, if you're strike-- if we're striking 2460 out,
 15 fully out of WAC, no pun intended, it is basically we
 16 are saying commercial residential all the same. So,
 17 if we're going to be keeping this passage requirement,
 18 commercial installations have entirely different
 19 passage requirements, entirely different ICC code
 20 requirements for the unobstructed space approach and
 21 such like that. So, this is exactly the rationale
 22 behind the proposition 44. It says with this
 23 potential change we need to strike WAC 296-96-02640,
 24 and at the bottom of that it says if accepted we need
 25 to strike WAC 296-96-02460, which we did today it

1 sounds like by majority of the vote. So, this is why
 2 this particular proposition is very specific to not
 3 putting the dimensional requirement for free passage
 4 as part of this 2605 WAC, as paragraph two was
 5 indicating. So, you are absolutely correct, the
 6 requirement of passage was taken out of 18.1 a while
 7 ago, to my knowledge, and the reason why this passage
 8 requirement was brought in was in as an historical
 9 adjustment to -- and -- and, frankly, I don't
 10 understand the 17 inches really because it's just in
 11 the number that's been taken away, you know, taken
 12 from thin air and put as 17 inches.

13 So, anyway, this is rationale for what I
 14 proposed in 44, proposal 44, and this is why the
 15 requirement is not there because we're taking out
 16 private residence elevators out of the equation and
 17 they're just inclined stairway chairlifts, that's it,
 18 with the new code, okay. So, that's my rationale
 19 behind it and I hope that explained the question.

20 MS. ERIKSEN: Thank you. Kevin.

21 MR. BRINKMAN: Yeah, thank you. Kevin
 22 Brinkman. To answer Mike's question of the reason
 23 there is not a free passage distance in A17, or,
 24 excuse me, A18.1 is because that's really a building
 25 code issue. You know, we're dealing with building

1 egress, fire egress. While having clear passage is
2 important, it was not really in the realm of A17.1,
3 A18.1, which is more of a design standard, so it
4 really belongs in the building code. That's why it
5 was removed or why it's not there.

6 MS. ERIKSEN: Jan.

7 MS. GOULD: Jan Gould. A two part. Because
8 when we were getting ready to adopt our latest ASME
9 back in 3/15/2021, the WAC rule had the 17 inch rule
10 for private residence. It now resides in chapter
11 three. But if it goes away, I'm amenable to removing
12 it in the next code cycle. And, then, regarding free
13 passage for commercial buildings, there is a submittal
14 to WABO by the Seattle Fire Department to have clear
15 access, and I can't remember the distance, and I will
16 try to find that for tomorrow for commercial
17 buildings.

18 MS. ERIKSEN: Thank you. Dylan.

19 MR. LATHE: Dylan Lathe. Yes, I'd like to
20 agree with Sergey and Wade. I don't think that the 17
21 inches is a necessary rule, and I do see hundreds of
22 these a year, and I agree with Wade when he said that
23 it's actually safer for these customers to have their
24 chair even if the passageway is a bit tight because
25 they are more than likely going to fall down those

1 stairs if they don't have that chair. So, I don't
2 think the 17 inch rule is a good idea. Thank you.

3 MS. ERIKSEN: Thank you. Mike.

4 MR. WILSON: Yeah, Mike Wilson here. Yeah,
5 with that all that being said, I think with this
6 proposal it should be a no vote.

7 MS. ERIKSEN: Thank you. Wade. Oh, I'm
8 sorry.

9 MR. NAIPO: No, you're fine.

10 MR. FRIESEN: Wade Friesen, Vertical
11 Options. Just one quick edition. I just want to
12 admit that the current permitting rules say that if
13 we're going to install a commercial chair we have to
14 have that passed off by the local jurisdiction. So,
15 the local jurisdiction can say, you know, based on
16 their interpretation of the building code that applies
17 to them, what it is that they want for commercial
18 application. I think this is more of a discussion for
19 residential. Thank you.

20 MR. NAIPO: Mr. Wilson, did you have an
21 additional question? All right. Thank you. If there
22 are no additional questions or clarifications needed,
23 I'll give everybody a couple seconds to see if there
24 are, I ask that we put this to a vote on proposal
25 0003. If you are for this change, the main intent of

1 this is to have not less than 17 inches of free
2 passage. If you are for this change, I ask that you
3 please vote yea now. If you are for this change,
4 please vote yea now. Raise your hand. If you for
5 adding this free passage, please raise your hand now
6 and vote yea. Thank you.

7 If you are voting to not have this requirement
8 added to the WAC, I ask that you please vote nay now
9 by raising your hand. If you are against this free
10 passage requirement, I ask that you please raise your
11 hand now. All right. Thank you. Thank you for those
12 votes. If you can, please place your hands down.

13 If you wish to abstain wish to abstain -- Mr.
14 Strafer, if you could, please lower your hand. If you
15 wish to abstain, thank you, I ask that you please
16 raise your hand now. Thank you.

17 Melissa, will you please read the vote tally for
18 proposal 0003.

19 MS. ERIKSEN: Yeah, as soon as I find it.
20 There were 0 yeas, 21 nays, and 4 abstentions.

21 MR. NAIPO: Thank you. With that, we'll
22 move on to proposal 0044, 0044. It was stated that
23 with this potential change we will need to strike WAC
24 296-96-02640, which I believe did pass with a vote
25 earlier today, and with that they asked to strike

1 private residence and change it to inclined stairway
 2 chairlifts. (1) Battery operated, remove private
 3 residence, inclined stairway chairlifts are not
 4 required to be permanently wired or installed on an
 5 individual branch circuit as required by NFPA 70
 6 620.51(A) Exception 2. These conveyances shall be
 7 permitted to use a cord and plug. Adding verbiage:
 8 The cord and plug shall be plugged directly into
 9 source of power, i.e. receptacle. Removing, that will
 10 act as the equipment disconnecting means, remove that
 11 verbiage. The circuit which is used for the equipment
 12 shall have overcurrent protection that will protect
 13 the circuit and the equipment. The circuit shall have
 14 sufficient capacity to support the additional load of
 15 the stairway chairlift. Units that are operated by
 16 line voltage shall comply with NEC 620.51(A) and
 17 remove Exception 2. Adding, the disconnecting means
 18 shall be an enclosed externally operable fused motor
 19 circuit switch or circuit breaker that is lockable
 20 open in accordance with 110.25. The disconnecting
 21 means shall be a listed device. Remove (2} which
 22 states, Governor overspeed safety testing shall be
 23 verified by manufacturer's documentation (see A18.1
 24 requirement 9.9.3) Safeties shall be manually tripped
 25 at rated speed with no load on the car (see A18.1

1 section 10.4).

2 The rationale: 1. Redundant language originated
3 from NFPA 70 NEC 620.51 and 620.51(A) is creating
4 ambiguity, which in turn creates confusion and
5 multiple interpretations of the code's intent.
6 2. There will be no need in WAC 296-96-02640 redundant
7 language originated in ASME A18.1.

8 Now, I'll open it to the TAC for any
9 clarification, clarifying questions needed. Mr.
10 Friesen.

11 MR. FRIESEN: Wade Friesen, Vertical
12 Options. I'm afraid that some of the ambiguity kind
13 of is in the change. So, I'm a little confused to
14 this. It says the cord and plug shall not be or shall
15 be plugged directly in the source of power that will
16 not act as the equipment disconnecting means, and I
17 think that's appropriate in the respect of battery
18 powered equipment that you are just unplugging the
19 charger, you're not actually disconnecting the power.
20 So, that -- I think that was the intent there.

21 Now, the other section I guess, I'm not sure who
22 submitted this, but this is the part that confuses me,
23 it says the disconnecting means shall be an enclosed
24 externally operated fused motor circuit control switch
25 or circuit breaker. Is that intended strictly to be

1 for line voltage operated lifts because that does make
 2 sense to me? If it is intended for all lifts,
 3 including battery powered ones, that does not make any
 4 sense to me. So, I would really appreciate some
 5 clarification. Thank you.

6 MR. NAIPO: Sergey, are you raising your
 7 hand twice to state that you have an answer to that
 8 question? I'm assuming yes.

9 MR. DOLGIKH: Sergey Dolgikh, Elevator
 10 Inspector, and, yes, I am. Wade, I was the one who
 11 put this one together, as I already admittedly said
 12 that. So, there is a couple of caveats to the whole
 13 thing. If we read 620.51(A), it is simply stated.
 14 Now, mind you, we are not only applying this to
 15 residential now. According to this, we're applying
 16 this to all stairway chair lifts, commercial included.
 17 So, what it basically states is this: If, in fact,
 18 the cord and plug are not -- are not equipment
 19 disconnecting means based on the previous statement,
 20 then there shall be a disconnecting means in case of
 21 battery operated, like you said, battery operated
 22 stair chair or stairway chairlifts. There shall be a
 23 disconnecting means to remove power from the motor
 24 based on the criteria that 620.51 states in 620.51.
 25 So, with that said, not all chairlifts come with a

1 rocker switch, to my knowledge, and I don't know,
 2 correct me if I'm wrong, the ones that I've seen so
 3 far through my career do, but there are new chairs
 4 coming in all the time, and to my knowledge this
 5 question was dated back in the day in times of
 6 previous chief and times of previous technical
 7 specialists. In certain companies when they brought
 8 in first stair chairs they didn't have a rocker switch
 9 on it. Due to that communication, the Department
 10 enforced them to install those rocker switches. And,
 11 then, when speak of rocker switches, it's the one that
 12 removes power from the battery operate, okay, battery
 13 operated. Now, if we're excluding the battery --
 14 and -- and plus in addition to this, Exception 2 was
 15 written to AC motors back in the day, to my knowledge,
 16 okay. That's when -- that's when the disconnect
 17 happened because, here we are, we are moving forward
 18 to battery operated stair chair lifts; however, the
 19 Exception 2 in 620.51(A) was written -- technically
 20 was written to clarify, hey, if you have AC motors
 21 then you are doing this, but, if you don't, then
 22 you're doing that.

23 So, with all of this kind of hodge-podged
 24 together, if you look up in 110.25, it actually
 25 specifies that the disconnecting means shall be

1 lockable open. And this is actually a quotation from
 2 the actual body of code. That particular sentence
 3 came from NEC.

4 So, what I'm trying to do is I'm trying to do
 5 this: Number one, I'm trying to eliminate two
 6 different stair chair entities because -- in the WAC
 7 specifically because the rest of it is governed in
 8 18.1. What I'm trying to do with this is say, hey,
 9 there is no distinct difference anymore between the
 10 residential and the way we test on acceptance
 11 inspections residential and commercial, okay. So,
 12 with that change specific to cord and plug, the
 13 receptacle with the battery operated stair chairs is
 14 not disconnecting means. It does not remove. It
 15 removes the charging power from the motor from the
 16 battery, but it does not remove power in a
 17 conventional way from the motor in order to maintain
 18 their service. That's the whole concept behind it,
 19 right? You should be able to remove power from the
 20 motor to service, and maintain, and repair, and that
 21 per the 620.51 shall be a lockable item. Per 110.25
 22 it shall be lockable item, right? So, that's why this
 23 sentence is there. I don't know if this made more
 24 confusion than explanation, but that was my rationale
 25 behind it. Thank you.

1 MS. ERIKSEN: Duane.

2 MR. LEOPARD: This is Duane, city of
3 Spokane. I think the previous speaker said a lot of
4 what I think. Thanks.

5 MS. ERIKSEN: Dylan.

6 MR. LATHE: Dylan Lathe, L & I. I have a
7 few things to say. So, I think we're going to run
8 into a problem if we say that the -- so, the -- these
9 battery operated chairs, the cord and plug is still a
10 disconnecting means because it's disconnecting the
11 power from the building to the chair, but in NFPA 70
12 under 620.52 power from more than one source (a)
13 single car and multi car installations. On single car
14 and multi car installations, equipment receiving
15 electrical power from more than one source shall be
16 provided with a disconnecting means for each source of
17 electrical power, period. The disconnecting means
18 shall be within sight of the equipment served. So,
19 your cord and plug still has to have a disconnecting
20 means. That still is -- unplugging it is still the
21 disconnecting means. In addition to that, you're
22 still required -- since you have two sources of power,
23 you're still required to have an additional -- sorry,
24 an additional disconnect. So, that's one. And, then,
25 two, if we say that the disconnecting means shall be

1 in an enclosed externally operable fused motor circuit
 2 switch -- Okay, I'm sorry, I'm going to back up on
 3 that one. I didn't read that one clear enough. But I
 4 hope I made myself clear; if not, please ask a
 5 question. Thanks.

6 MS. ERIKSEN: Sergey.

7 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
 8 Inspector, L & I. Dylan, to answer you or to kind of
 9 put my point of view into this, there are times when
 10 cord and plug are plugged in not in direct sight view
 11 of the motor. It could be plugged in, and, you know,
 12 that they plug it around the wall, they plug in,
 13 sometimes there are -- there are hinges that are
 14 automated hinges and they put those around in an
 15 adjacent closet, things like that. So, if you're
 16 approaching this by definition of disconnecting means,
 17 then those installations are illegal because it has to
 18 be within line of sight of the motor, okay, and it's
 19 not. So, the thing of it is, is disconnecting means
 20 as defined in NEC, which that sentence says at the
 21 bottom in blue, the disconnecting means shall be blah,
 22 blah, blah, those are clearly defined what they shall
 23 be in NEC and that chapter 110.25, and so by
 24 description then, by definition, disconnecting means
 25 remove power from the motor, whereas if you are using

1 cord and plug and you are unplugging it, you're not
 2 removing power from the motor, you're removing power
 3 from the battery, and battery internally feeds the
 4 motor, but that's -- that's where kind of the
 5 confusion is a little bit sometimes, in my opinion.
 6 But even if following the logic that you're
 7 presenting, then the disconnecting means that if you
 8 consider cord and plug as disconnecting means and it's
 9 not within the line of sight then half of these chairs
 10 should be failed. That's all I have to say. Thank
 11 you.

12 MR. NAIPO: Mr. Wohlschlager.

13 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
 14 think one of the important things to recognize in the
 15 proposal here is that they want disconnecting means
 16 for externally operable fused circuit switch or
 17 circuit breaker if it's being operated on line
 18 voltage. Well, the NEC 620.51 clearly and
 19 unequivocally under Exception 2 allows stair lifts,
 20 whether they're battery operated or line voltage
 21 operated to be cord and plug connected, period.
 22 There's no discussion if that's ambiguous or not. So,
 23 Exception 2 in the NEC clearly allows a cord and
 24 plugged battery operated or AC operated stair lift
 25 commercial or residential to exist, and that's why I

1 oppose this requirement to require a fused motor
2 disconnect.

3 MR. NAIPO: Mr. Barnhart.

4 MR. BARNHART: Yeah, I'm extremely confused
5 by the intent of this proposal. As was just stated,
6 the NEC is quite clear, a cord and plug connected
7 device plugs into a single circuit, and the cord and
8 plug is considered the disconnect. Now it appears
9 that we're requiring an additional disconnect, even if
10 it's cord and plug connected, which makes no sense to
11 me. Furthermore, it doesn't make a lot of sense to
12 have a cord and plug device in a -- plugged into a
13 disconnect. You'd have to have a disconnect to a
14 receptacle, then a cord and plug device, and the
15 way -- and that's the way I see this because it is
16 powered -- it's operated by line voltage or it's
17 connected to line voltage and the code is going to
18 require you to have either a disconnect or the cord
19 and plug. And Exception 2 is perfect. We don't need
20 any of this. Exception 2 of 620.51(A) takes care of
21 all this. Thank you.

22 MR. NAIPO: Thank you. Candace.

23 MS. LAU: Candace Lau. I just want to say
24 that 620.51 is in different sections. 620.51 first
25 tells you that you have to have a single means of

1 disconnecting all power, basically I'm paraphrasing,
2 all power to the motor so that you can't run it. If
3 you unplug the cord and plug, you can still run it.
4 That exception is under the type, okay. So, first, it
5 tells you what you need to have, then it tells you
6 what type you can have. And (a) under the type tells
7 you, yes, you can have the cord and plug, but if you
8 have a cord and plug for a line voltage, yes, it does
9 the trick, you unplug it, it doesn't work anymore,
10 okay. If you have a battery and you unplug it, it
11 still works. So, it does not meet the very premise of
12 a disconnecting means because it doesn't disconnect
13 power to the motor. So, that's the first thing I want
14 to say.

15 The second thing I want to say is that the
16 intent of 2605 as it was written in the code before
17 this proposal was to allow residential stair chairs
18 because the exception says that where an individual
19 branch circuit supplies a stairway chair lift then it
20 can be permitted to be cord and plug. And what that
21 2605 meant to do previously is to allow for
22 residential to not be on an individual branch circuit
23 because when you have a house and it's a battery
24 (audio distortion) plugged into there it was
25 determined or decided that you should be able to plug

1 in more than one thing into that outlet. You can have
2 a vacuum cleaner, you can have whatever, a lamp, it
3 didn't have to be an individual branch circuit, and
4 that's why -- that's the attempt. 2605 was to attempt
5 to allow homeowners to have more things plugged into
6 their outlet besides that cord and plug. That's the
7 attempt. But the way it was written it suggested that
8 you can just unplug it, the battery charger, and
9 that's okay, we're going to use that as the
10 disconnecting means, and that is wrong because it does
11 not disconnect power to the motor. So, I think that
12 this proposal was written to try to rectify what was
13 said previously, and the whole intent of this whole
14 code to begin with is to allow for the homeowner, I'm
15 going to say it again, for the homeowner to plug in
16 more than just the battery charger to the outlet.
17 That's the whole intent of this whole code, and
18 because of that we've ran into all kinds of issues
19 with just have -- they're allowed to just unplug it
20 and not have an actual disconnect that disconnects it
21 from the motor. So, if we got rid of this in its
22 entirety, this whole 2605, and just went with the NEC
23 that would probably be a better way to go because then
24 we're going with exactly what the NEC says, which is
25 you have to have a disconnecting means to disconnect

1 from the motor, and you're allowed to have a cord and
2 plug if it does all that stuff. So, that's my
3 background on this 2605.

4 MR. NAIPO: Thank you. Mr. Leopard.

5 MR. LEOPARD: You know, I think by striking
6 out part of the residence and adding this other stuff,
7 this could lead to the requirement of an externally
8 operable fused motor circuit for a battery powered
9 stair chair. And the way we're doing it right now I
10 think is fine and this kind of adds some ambiguity to
11 everything. I just want to -- And on a commercial
12 lift, you know, I'd want the switch there, but on a
13 residential this is going to add a lot of money to
14 them. I'm going to vote this down because I'm not in
15 favor of adding more costs to some poor guy that or
16 gal that needs to use their stair climbers or stair
17 lift. I don't know, I just -- I just like the way the
18 original setup, the WAC code, the 20-- the 2605 was
19 written and let's just leave it that way.

20 MR. NAIPO: Thank you. Mr. Wohlschlager.

21 MR. WOHLSCHLAGER: Lyall Wohlschlager.
22 To address Candace's point, yes, the 2605 did allow
23 plug-in cords for residential in a branch circuit
24 that was not an individual branch circuit, and that's
25 an important point that I believe should be retained.

1 And the subtle difference is that if it's an AC
 2 operated unit and you're using a plug-in cord you
 3 would have to plug it in to an individual branch
 4 circuit so that that lift is not being shut off by
 5 other loads on the circuit. So, I think proposal 50,
 6 the next one we're going to look at, addresses that
 7 exact thing where it calls for an individual branch
 8 circuit for line voltage if you're using plug and
 9 cord, and still allows the non-individual branch
 10 circuit to be used or residential applications using a
 11 battery charger.

12 MR. NAIPO: Thank you, Lyall. Mr. Friesen.

13 MR. FRIESEN: Wade Friesen, Vertical
 14 Options. I also wanted to speak to Candace's point a
 15 little bit. We install a lot of different equipment
 16 of this type and the most -- the highest draw of any
 17 of the chargers that we use is 1.1 amps, which means I
 18 can plug 15 stair lifts into one outlet if I can
 19 somehow figure out how to do it without overloading
 20 the circuit. So, I think that having an individual
 21 branch circuit is silly when it has such a low -- a
 22 low power draw. And, you know, to speak to the other
 23 point about disconnecting means, I have yet to see a
 24 lift, and I'm not saying they're not out there, but I
 25 have yet to see one that does not have an on/off

1 switch, whether keyed or a rocker switch of some sort
2 to disconnect the batteries on them. So, I kind of
3 feel like we're beating a dead horse. Thank you.

4 MR. NAIPO: Thank you. So, I'll ask for --
5 one last time if there are any additional questions
6 for clarification or any comments for clarification
7 before we put this to a vote? All-righty. With that,
8 I ask that we please vote on proposal 0044, the
9 discussions that have been made, if you feel like you
10 are for this change, I ask that you please vote yea at
11 this time by raising your hand. If you are for these
12 changes proposed in 0044, I ask that you please raise
13 your hand and vote yea now. Thank you.

14 If you are in opposition of these changes
15 proposed in proposal 0044, I ask that you please raise
16 your hand in opposition and vote nay. If you are in
17 opposition of these changes, I ask that you please
18 raise your hand and vote nay at this time. Are we
19 good? All right. Thank you for that. Please lower
20 your hands.

21 If you would wish to vote to abstain, I ask that
22 you please raise your hand now. If you vote to
23 abstain, please raise your hand now. Thank you for
24 that. Go ahead and lower your hands.

25 Melissa, will you please read the vote tally for

1 proposal 0044.

2 MS. ERIKSEN: Yeah. There were 0 yeas, 15
3 nays, and 10 abstentions.

4 MR. NAIPO: All-righty. Thank you. So,
5 there are still two more proposals regarding 2605.
6 Eric, did you have an additional question? Your hand
7 is up, that's why I'm asking. Mr. Mills? Jan, did
8 you have an additional question or statement? Your
9 hand is up, as well.

10 MS. GOULD: No. Sorry. Jan.

11 MR. NAIPO: No, that's okay. That's all
12 right. So, with that, it is 4:40. There are two more
13 proposals regarding 2605. What I suggest is that
14 tonight, if you could, just please come back tomorrow
15 with any additional questions for clarification that
16 you feel you may need to make an educated vote on both
17 of these two and we'll hit the ground running with
18 these two. As well, later on this evening, not this
19 evening, but later on this afternoon when you receive
20 the new agenda, Alicia Curry is in this meeting with
21 me now and I will be meeting with her directly after
22 this to go over some of the options that we may have
23 and put forth what those are or what that plan may be
24 in that e-mail to you guys tonight.

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Adjourn

MR. NAIPO: With that, are there any additional questions, comments, or anything at all, or any statements that anyone wants to make about the work that we've done so far or that we still have on the table to do tomorrow? Anybody at all? All right.

With that, I will say that we will convene this meeting at 4:43 on Day 2. I appreciate your guys' time and commitment to getting into this work, and thank you very much. I want to also make sure that you guys know if there are any -- is there anything that you feel would help in this process to please e-mail both me and Melissa so that we can make sure that this is implemented, whether we can do that tomorrow or in the future, it would be greatly appreciated. So, thank you very much. Everyone have a safe and restful night, and we'll see you guys tomorrow morning at 8:30. Thank you very much. Take care.

(Adjourned at 4:43 p.m.)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

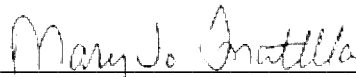
I, Mary Jo Fratella, a Certified Court Reporter in
and for the State of Washington, do hereby certify:

That the foregoing proceedings occurred before me at
the time and place stated therein and that the proceedings
were by me stenographically reported and later transcribed
by means of computer-aided transcription;

That the foregoing transcript is complete and
accurate insofar as the proceedings were audible, clear,
and intelligible;

I do further certify that I am in no way related to
any party in the matter, nor do I have a financial
interest in this matter or the outcome thereof;

IN WITNESS WHEREOF, I have hereunto set my hand this
28th day of February, 2022.





Mary Jo Fratella, CCR, RPR
Certified Court Reporter, CCR No. 2083

A				
a.m 289:3 424:11	304:14 370:11	532:13,15 546:21	292:25 325:19	actual 306:14 312:9
A10.4 333:6	373:2 380:4,6,11	546:23	366:7,11 469:12	312:10 333:25
A117 300:25	380:15 385:15	abstention 308:11	489:10	334:2 341:6,8
A17 337:23 341:17	387:7,8,12 397:17	308:12 363:7	accident 406:6,8,14	351:15 410:2
341:19 499:1	424:12 519:18	419:3 438:17	406:16,24 407:4	421:22 481:17
500:6 503:24	able 297:13 301:21	abstentions 324:19	407:22,23 408:4	485:21 537:2
504:23 529:23	302:5,6,7,21	324:24 331:6	408:25 409:11,14	543:20
A17.1 289:23	304:1,17 306:3,5	367:13 388:11	409:18,19,23	actuating 333:16
291:23 294:15	313:3 336:3 352:7	405:24 422:10	410:11,16 411:22	333:22
298:9 300:11,24	368:11,24 371:7	451:24,25 462:21	413:25 415:20	ACUM 318:18
311:9 312:9 314:5	373:21 374:17	471:6 480:7	416:1,5,8,12	add 296:6,8,10
337:19 338:4,24	375:2 376:12	490:24 491:23	417:6,10,23 433:4	314:5 336:1,13
344:19,22 345:2	378:10 380:17	521:3 532:20	accidentally 362:17	339:25 340:2,9
351:22 361:25	381:1,2 383:8	547:3	389:24 391:4	345:22,24 350:7
438:25 439:6	384:9,15 401:4	abuse 295:19	accommodate	377:11 393:24
449:24 492:25	402:1 404:7	AC 536:15,20	428:2 429:20	412:13 423:2
495:3 503:4	407:18 416:25	540:24 545:1	435:1	436:15 444:15
504:12 506:14	419:13 436:2	accept 343:15	account 467:20,23	445:17 452:9,15
509:20 510:22	440:21 454:8,18	355:9,10,18 357:2	accountability	481:5 485:2,15
511:15 512:9,15	455:23 469:6	490:3	369:20	491:4 496:18
516:7,14 519:8	482:24 497:21	acceptable 371:17	accounted 388:18	498:23 501:21
530:2	498:15,22 499:19	377:16 424:9	388:23	508:24 509:19
A17.1/B44 492:20	500:23 512:12	acceptance 422:20	accurate 549:11	514:17 519:10
497:9	522:2 526:8	423:2,3,20,21	accurately 410:2	544:13
A17.1/CSA 508:12	527:16,19 537:19	436:14 437:9,20	acknowledge 336:9	added 311:2 320:23
A17.2 323:5	542:25	473:23 489:17	342:25 343:22	320:25 339:6
A18 472:4,9 477:3	absolutely 344:13	537:10	355:12,13	342:20 367:1
500:6	377:13 429:23	accepted 321:20	acknowledged	382:14,22,23
A18.1 389:4,12,15	456:7 529:5	342:23 351:16,17	335:18	383:5 384:12
389:18,23 390:3	abstain 307:11,12	528:24	acquiring 291:22	412:9 459:11
390:12,20,23	308:6,6 324:4,6,7	accepting 343:24	act 415:3 533:10	464:16 465:8
391:2 472:21	330:25 331:1	access 289:25 293:1	534:16	472:5 503:16
473:11,13,20,22	361:5,6,9 362:13	293:4,5 294:11	action 370:12 373:2	517:11,24 521:9
474:1,5,7,15	367:4,6 388:4,5	325:16 329:3	373:21	521:13 532:8
499:1 521:8,13,24	393:4,6 405:17,19	452:3 455:23	actions 368:13	adding 289:23
529:24 530:3	418:21,23 422:3,5	456:5,12,18	370:7,9 371:23	290:4,25 291:23
533:23,25 534:7	438:11,12 450:16	457:14 465:15	372:14,14,20	296:20,21 301:9
A18.1-2020 472:6	450:17 451:16,17	469:16 502:17,18	374:2,22 376:9	304:2 307:23
521:10 522:5	462:14,16,16	502:19 503:6,7	499:12	321:5,6 323:12
ABC 325:10	470:25 471:2	504:17 530:15	activated 335:2	325:16 332:4
ABC' 325:17,23	479:25 480:2	accessability	activation 508:22	336:12 345:20
ability 292:5	490:18,19 491:16	484:16	active 464:13	353:25 360:15
297:23 303:2,19	491:18 497:16	accessed 292:21	actively 524:7	363:10,10 366:16
	520:22,23 532:13	accessible 291:18	activities 327:4	366:20 368:4

380:1,3 381:5 387:7,16,18 389:9 390:8,11,18 391:21 404:18 406:12 422:21 436:15 437:19 438:20 439:6 445:18 472:6 473:21 483:10,24 484:4 489:20,23 490:7 493:13 532:5 533:7,17 544:6,15 addition 298:14,20 300:6 409:2,11 423:24 472:20 513:2 515:25 519:9 536:14 538:21 additional 299:5 302:10 317:4 320:11 322:21 328:18 330:8 340:9,24 346:10 349:11 366:4 374:8 376:14,17 380:6,8,8,17 381:3,22,23 384:15 388:24 412:5 414:22 417:19 437:7,13 437:14 443:21 446:10 459:5,6 460:11 465:9 469:1,21 471:22 478:20 479:3 481:2 483:10,11 485:4 486:24 487:18 489:24 507:11 509:20 513:7 518:12 519:2,15 531:21 531:22 533:14 538:23,24 541:9	546:5 547:6,8,15 548:6 additionally 327:11 327:23 495:17 additions 335:9 address 299:12 301:19 302:9,20 312:2 317:19 318:4 321:23 326:20 328:14,23 352:8 354:2 359:22 375:24 384:3 400:20 404:7 412:13 431:23 442:15 449:11 451:5 460:8 461:20,24 463:16 471:21 473:5 481:15 499:17 503:19 506:13 527:21 544:22 addressed 321:19 377:8 378:19 403:24 421:22,23 447:25 448:6 453:22 addresses 339:10 545:6 addressing 298:9 412:7 447:5 450:24 468:17 adds 346:10 353:12 521:10 544:10 adhere 335:4 356:6 362:8 369:1 adjacent 341:12,24 342:2,8 464:12 465:4 467:1 501:20,21 502:7 502:10,20 503:3,4 503:5 509:16 539:15 Adjourn 288:8	548:1 Adjourned 548:24 adjust 306:3 adjusted 443:11 adjustment 529:9 adjustments 429:15 456:6 admin@capitolp... 287:24 admit 531:12 admittedly 535:11 adopt 309:9 310:22 336:2 344:7 355:11 364:9 391:21 498:22 511:1 516:10 522:5 530:8 adopted 338:24 339:4 344:19,21 345:1,4 350:15 352:3 368:18 375:18 391:23 adoption 498:16 advance 428:14,24 advanced 297:22 advantage 309:13 423:14 advent 326:13 Advisory 287:4 289:2,6 368:22 369:4,9 affect 308:20 afford 416:4 affords 328:11 afraid 534:12 afternoon 313:4 379:21,23 424:10 425:8,9 431:4 500:22 501:7 547:19 AG 383:7 agency 393:14 agenda 288:4 508:6 547:20	agent 406:9,23 415:25 ago 303:13 529:7 agree 336:24 342:3 350:16 364:21 370:18 372:10,11 373:16 375:5,6 378:11 379:10 386:18 412:19 424:23 425:6 426:9 442:11,20 443:24 444:17,21 447:22 448:13 493:22 494:17 505:16 510:18 530:20,22 agreeable 377:24 ahead 367:18 392:22 399:5 400:23 403:15 418:14 420:24 421:18,18 429:10 430:22 462:6 470:15,16 489:11 491:8 494:14 520:20 546:24 AHJ 321:20 332:5 380:3 385:6,6 387:10 air 529:12 airport 413:25 414:6 airport's 414:6 alarm 328:4 439:9 439:10 440:9 447:12,15 448:1,3 448:25 509:10 516:18 519:11 alarms 509:8 Alexander 435:19 436:4 Alicia 498:18 547:20 All- 307:21 421:6	473:2 All-right 388:12 All-righty 307:11 308:3,13 313:16 323:10 324:2 360:12 366:15 367:14 387:5 392:14,21 404:16 405:8 419:5,19 422:19 446:11 452:1 470:5 479:3 480:19 483:11 490:25 494:21 497:13 507:24 522:8 546:7 547:4 allocated 337:3 allow 295:1 301:1 305:8 336:5 338:10 343:17 371:16 385:22 386:6,8 454:15 465:19 507:15 520:22 542:17,21 543:5,14 544:22 allowance 307:9 393:17 406:12 468:24 470:7 allowed 290:8 351:11 352:2 371:7 382:1 386:7 413:13 464:1,2 468:6 493:24 504:21 543:19 544:1 allowing 307:5 385:17 390:16 397:19 413:19 468:24 470:11 allows 386:1 478:9 540:19,23 545:9 allude 409:13 alluded 432:21 alluding 319:18 Alt 492:5
--	---	--	---	--

alter 496:22	358:19 461:20	403:14,18 404:16	393:21 423:8	328:16 363:12
alteration 332:10	513:3 515:24	432:18 483:11	531:18	364:15 365:3
333:2 337:9,11,15	517:12 519:3	492:3 493:5 501:3	applications	395:25 400:24
368:21 398:2	American 333:6	501:4 548:9	343:21 345:11	408:16 427:3
401:15,20 402:8	amount 431:16	anybody's 301:14	349:16 456:25	443:2 502:4
423:9	435:22 441:15	500:13 503:19	545:10	508:15
alterations 337:9	484:19	anymore 392:13	applied 375:17	areas 328:25
380:13 400:22	amps 545:17	436:6 523:11	412:3 442:18	363:13 443:2
411:12 413:9	analysis 299:24	537:9 542:9	450:25 469:24	argued 455:3
416:17 423:16,22	409:17 410:10	anyway 311:20	502:4	arguing 454:7
438:19,21 445:15	and/or 292:14,15	322:19 384:2	applies 371:10	argument 395:23
514:7 517:3,3,6	292:15 295:11,14	397:19 410:9,20	531:16	arises 374:18
518:23	333:19 368:13,21	412:23 435:16	apply 369:5 373:5	434:15,15
altered 423:1	370:8 372:20	461:14 529:13	380:4 381:11	Article 463:22
439:10,14 445:13	373:22 392:8	anyways 331:19	384:16,18 432:15	492:10
447:12,15 515:15	394:18 449:1	apologies 420:11	512:16 514:7	ascending 314:8,12
altering 422:23	465:24	apologize 332:21	515:14	317:7 318:16,23
445:20	annual 396:23	334:10,16 339:10	applying 343:14	319:6 320:15,18
alternate 464:17	397:14 398:2	361:19,23 362:16	427:2 475:21	ASEM 508:12
Amazon 339:21	399:9,19 400:8,9	389:25 391:4,11	535:14,15	Aside 493:17
343:13	400:23 401:5,12	419:5,6 463:17	appreciate 358:5	asked 305:16 310:3
ambiguity 375:14	401:18 402:10	465:12 482:12,23	377:22 419:7,21	345:17 377:23
534:4,12 544:10	403:13 447:2	514:23,25 515:20	435:20 461:7,11	378:23 431:23
ambiguous 540:22	annuals 321:18	517:20	470:16 494:17	441:22 448:17
amenable 530:11	399:5,6,14,25	apparatus 333:13	501:11 517:16	473:16 486:21
amend 314:5 325:8	401:20 428:20	apparently 353:25	520:17 535:4	503:11 532:25
479:10	ANSI 333:6 335:22	494:12	548:11	asking 318:23
amended 289:24	336:3	appears 341:13	appreciated 548:19	319:4 343:20
291:23 294:15	answer 302:24	485:14 541:8	approach 351:21	348:5 353:18
296:19 358:21	304:17 315:17	applicable 389:9,11	528:20	357:18 358:6
375:25 511:16	417:4 477:15	390:8,18,25,25	approaching 494:6	365:11,20 372:12
amending 296:20	487:2 500:23	391:6,7 412:3	539:16	378:7 389:2 414:7
312:9 352:1	527:16,19,22	473:21,24 474:17	appropriate 386:5	419:23 420:12
391:13 405:5	529:22 535:7	474:19 478:25	525:11 534:17	423:2 437:13
438:20	539:8	482:15 485:6	approval 388:14,14	439:1 472:5
amendment 311:21	answered 335:13	applicant 368:6	391:14 392:17	483:23 501:20
337:6,13 392:18	411:1	370:24	413:2	512:25 547:7
392:25 440:17	answering 304:22	application 342:24	approve 345:25	asks 402:23
458:2 505:6	answers 483:9	344:17,25 346:25	approved 411:13	ASME 289:23
507:17 511:15	489:19	347:1,11,22	412:25 416:18	294:15 299:10,17
513:10,20 514:14	anticipate 504:23	352:21 353:8	approves 407:17	300:24,24 305:20
519:5,7	anybody 302:17,19	354:5,12,24	apt 527:22	309:7,14 347:6
amendments	304:16 384:10	355:20 386:18	architects 347:3	348:11,13 350:4
337:22 358:12,15	385:6 387:3 396:6	389:8 390:6 392:5	area 327:2,4,6	357:7 361:25

362:1 389:12	507:16	avenue 417:2	483:3,6 485:20	bathrooms 363:13
390:12,20 419:25	attain 450:23	500:19	486:2 488:4	batteries 546:2
420:15 438:25	attempt 345:15	average 328:7	489:20 498:5,14	battery 533:2
439:5 449:24	355:16 457:20	aware 300:15	500:17 505:10,10	534:17 535:3,21
474:1 478:3,4	467:19 468:11	302:16 313:14	506:8 510:25	535:21 536:12,12
496:9 499:1,1	543:4,4,7	346:15 370:2	530:9 536:5,15	536:13,18 537:13
503:4 505:13,22	attempting 455:14	375:4 385:2	539:2 547:14	537:16 538:9
506:3 509:20	attempts 329:2	awful 339:4	background 385:3	540:3,3,20,24
513:19 519:8	attend 368:22,24		385:12 507:9	542:10,23 543:8
521:8 522:5 530:8	371:15,17		544:3	543:16 544:8
534:7	attending 377:20		backgrounds	545:11
aspect 349:9	379:9		299:19	beating 546:3
aspects 365:15	attention 311:14	B	bad 310:14 318:11	becoming 297:22
assemblies 325:23	408:5,9,11,12,18	b 290:13 291:8	442:10	began 326:3
assembly 290:3,23	attorney 338:21	292:20 308:11	balance 430:15	beginning 378:2
292:14 293:10	414:6	314:13 320:19,25	437:4	426:19 430:7
325:21 326:1	audible 549:11	344:19,21 346:12	ball 501:24 504:14	433:16 434:6
438:23 439:2	audio 313:21,22	347:6 368:10	507:5	436:24 454:20
444:23 445:4,5	350:24 414:9	370:7 371:21	balloting 504:3	488:4
446:1 449:20	435:20 463:5	373:19 374:12,17	bandaid 414:4	begins 338:18
assess 410:1	492:3 497:25	376:6 463:25	bar 456:23 457:5	belief 444:3
assessed 404:25	512:17 542:24	492:1,12 502:22	457:12	believe 297:3 316:8
assessment 373:17	author 338:14	509:4	Barnhart 407:19	320:2 336:25
374:3	authority 332:4,8,9	B20.1 335:22 336:2	407:20,20 541:3,4	338:2 365:21
assign 368:25	362:25 414:7	343:1,11 344:7	bars 457:3	406:25 422:12
assist 335:11	415:13 433:13	354:14 355:11	based 299:20	445:11 499:10
Assistant 338:21	authorization	B21 339:13	354:23 434:16	502:1 511:13
associated 291:25	408:20	B44 508:12	440:24 518:4	512:4 522:7
295:11 326:20	authorized 351:12	baby 358:3 359:17	531:15 535:19,24	532:24 544:25
328:24 349:11	406:9,23 415:25	back 303:21 312:2	basically 339:16	believing 376:24
420:13 498:17	authorizes 412:1	318:16 319:14	346:11 348:18	belongs 530:4
assume 381:10	auto 419:23 420:12	331:11 334:17	349:7 399:15	belts 339:11
403:3 497:7	421:22	335:19 337:3	427:1 447:1,11	benefit 401:5 524:8
assumed 332:22	automated 316:16	339:8 340:2,15	466:3 528:15	best 351:23 370:11
353:17	316:17,21 336:11	344:12 348:11	535:17 542:1	374:14 441:1
assuming 349:24	539:14	349:4 367:23	basis 382:25	453:6,7,17
366:11 378:16	automatically	376:16 377:25	Bates 342:12 359:2	better 316:3,4
483:24 535:8	293:20	383:8 386:3 399:2	359:14 362:6	332:2,22 334:23
attached 294:6	Autoquip 339:15	399:19 401:21	367:7 372:24	350:20 352:1,8
334:7,20 341:22	343:4 344:2	403:21 406:23	424:19 440:16	355:18 373:13
341:25 342:16	auxiliary 348:19	407:6,17,18	493:11 499:24	377:6 394:5
350:2 502:24	available 291:18	412:24 413:3,13	515:23	397:23 398:13
508:4 509:6	379:8 416:9 435:3	413:16 414:5	bath 358:3 359:18	402:19 403:7,8
attachment 506:11	435:6	419:17,19 420:11	bathroom 365:3	404:19 417:2,24
		430:4 441:19		
		460:7 462:23		
		463:3 475:15		

461:3 527:22 543:23 beyond 290:6 343:12 444:6 big 300:13 306:8 395:3 398:20 401:14 436:3 482:2 522:16 524:17 526:1 527:3 bigger 469:25 470:7,11 bill 394:18 402:24 403:14 billed 395:25 396:1 399:14 bit 299:9 352:8 374:16 375:19 383:4 385:11 392:3 410:22 414:3 419:12 422:14 425:7 430:9 456:23 463:17 467:22 476:15 486:9 488:1 497:21 499:11 523:13 525:25 530:24 540:5 545:15 bits 523:18 blah 428:22,22,22 428:22,22 466:5,5 466:5 482:10,10 482:10 539:21,22 539:22 blanche 386:4 block 293:11 327:23 blocking 456:23 457:3,5,12 blocks 456:15 521:25 blown 457:2 blows 442:6	blue 431:25 467:15 477:7 539:21 bluetooth 298:3 board 297:5 315:23 318:18 Bob 335:14,14,15 342:18,19 344:8 344:12 345:22 346:5,19 352:7,18 353:6 354:8 397:8 bodies 326:2 bodily 325:13 508:23 body 322:4,7 412:13 508:22 537:2 boils 377:25 bold 293:7 bolster 381:3 book 297:20 362:4 books 363:17 boss 372:18 bother 429:23 bottom 314:17 320:23 441:2,25 460:1 502:23,25 528:24 539:21 boxes 509:8,8 516:15,15 boy 441:20 499:25 brake 314:7,8,10 314:13,15,18 317:7,7,8 320:14 320:14,17,19,21 321:2 322:10 323:13,14 456:6 457:7 brakes 317:18 454:16 branch 533:5 542:19,22 543:3 544:23,24 545:3,7 545:9,21 brand 339:15	break 331:8,9,16 367:19,21 399:25 462:21,23 463:3 479:4 497:19 500:17 breaker 533:19 534:25 540:17 breakers 463:14 464:14 465:17 466:21 breaks 420:11 briefly 495:7 bring 311:14 337:1 339:17 455:9 481:17 503:14 523:4 bringing 386:3 435:21 Brinkman 299:6,7 299:8 305:5,6,6 305:18 312:20,21 313:9 317:14,15 317:15 337:16,17 337:17 356:13,15 356:15 357:3,4 364:10,11,11 410:24,25,25 445:9,10,10 452:19,20,20 453:24 476:25 477:1,1 481:20,21 481:21 496:1,2 497:4 503:21,22 503:23 505:1,11 505:21 506:5,17 506:18,18 511:4,5 511:5,24,25 518:24 519:4,5,7 529:21,22 Brinkman's 309:6 453:5 Bristol 287:18 broad 329:25 426:10	broader 434:10 broken 408:23 417:7,9 451:20 452:25 brought 374:10 378:15,17 387:10 404:8 432:21 435:16 448:21,22 448:23 449:2 494:5 529:8 536:7 Brown 338:12 341:1 348:10 350:1,14 357:6 359:9,19 361:24 398:16 494:9 buffer 459:10 502:25 buffered 454:9 455:4 build 297:5 352:17 354:14 355:10 building 290:6 292:23 293:3 295:11,21,23 304:15 310:7 326:7,17 349:10 352:15 355:8 363:13 394:16 399:7 400:4,8,24 401:17 428:22 439:7,14 440:6 443:3 445:13,14 448:18 484:22 516:8 529:24,25 530:4 531:16 538:11 buildings 292:6 329:8 333:1 530:13,17 built 349:3 351:3,5 bulk 358:17 bunch 383:13 bundle 523:13 bundles 466:9	488:15 bundling 523:14,20 burden 392:4 burdensome 370:19 374:11 buried 442:22 446:3 burn 310:17 burned 310:13 burner 441:19 498:15 505:10,10 burning 310:17 business 353:24 373:9 381:20 402:21 403:3 426:19 businesses 402:25 button 298:3 397:6 buttons 328:17 bypass 480:21 525:23 bypassing 292:18 315:4 317:10,12
C				
c 289:14 291:12 293:6 336:14 355:21 368:16 464:3 492:1,13 509:6 515:14,15 549:1,1 C-103 287:18 c1 327:18 347:10 cabinets 339:1 calculate 368:20 calculated 423:8,10 426:16 California 507:4,5 507:8 call 303:14 340:25 343:7 347:3,16 353:9,10 394:15 397:10 398:23 424:16 428:23				

429:1,21 432:10 433:4 436:12 444:10 448:2 460:14 called 344:17 362:1 399:10,23 410:13 435:5,11 calling 366:7 428:16,21 429:10 429:23 515:18 calls 297:6 545:7 Campbell 427:19 427:22,22 cancel 423:4 424:10 425:20 429:21 431:2 432:14 canceled 432:5 cancellation 424:8 426:12 427:25 428:3 431:17 cancelled 437:1 Candace 319:9,10 344:10,11 346:7 352:4,5 364:20,21 366:2 373:15,16 376:23 411:15,16 425:2,3 426:5 436:13 446:16,18 448:14 449:1,10 453:25 454:1 456:21,22 459:13 467:17,18 481:1 485:25 486:1 511:9,10 512:19 516:22,23 517:20 517:22 541:22,23 Candace's 354:9 455:21 544:22 545:14 capabilities 301:20 301:25 307:6,24 312:15 313:11 434:17	capability 302:4 306:5,16,20,24 307:6,17 381:17 capable 290:14,17 290:22,25 293:16 381:18 capacity 533:14 capital 355:21,21 355:21,21 CAPITOL 287:16 caps 293:7 car 314:8,12,13,14 314:17,18,20,22 314:23,25 316:2,5 316:5 317:7,9 318:5,16,19,24 319:7 320:15,18 320:20,20 321:1,2 321:3,9,11,17 322:10,11,12 323:13,15,16 443:12 452:8,14 453:19 454:18,22 454:23 456:5,17 456:17,19 457:15 457:18 458:3,3,13 458:14 465:3 466:4,25 502:23 514:5 533:25 538:13,13,13,14 cards 381:16 care 397:18,19 399:6 416:25 436:1 462:25 541:20 548:22 career 536:3 careful 475:23 carefully 417:5,17 Carini 401:7,8,8 402:15 407:10,11 407:11 408:13 412:17,18,19 Carl 332:20 341:2 342:5,12 347:19	357:23 359:2,14 359:20 361:8,9 362:6,13 366:3 367:7 372:22,23 377:11,21 420:25 424:16,19 440:15 440:16 493:11 499:23,24 501:11 514:6 515:10,22 Carl's 347:22 375:24 carriage 336:11 carry 339:12 361:19 cars 318:25 320:9 399:4 cart 300:5 carte 386:3 Cary 341:3 342:12 342:12,16 347:21 356:17 357:9,24 358:9 359:2,2,14 359:14 361:11 362:6,6,14 366:4 367:7,7 372:23,23 420:25 424:18 440:16,16 493:11 499:24,24 507:1,2 515:11,22 case 296:3 395:2 433:1 456:13 457:10 467:23 535:20 cases 326:4 cast 307:15,19 366:14 387:4 388:9 404:15,16 449:18 496:10 509:15 516:25 casting 497:8 catch 313:25 517:11 categories 380:3 381:6 384:7,9	385:24 386:5,7 387:17 category 380:4,7,16 380:21 384:16 385:14,15,18,18 385:23,23 caught 295:16 cause 351:19 406:16 409:17,17 410:10 416:10 469:14 causes 416:10 caution 409:5 475:23 caveat 378:14 caveats 535:12 CCR 287:15 549:19,20 ceiling 334:9,22 348:2,9 349:23 ceilings 341:23 center 325:20 464:5 468:19,20 468:21 492:17 central 374:23 centralized 304:3 cents 435:17 488:19 certain 303:15 306:3 330:12 353:6 395:4 430:5 456:1,2,25 482:4 487:17 517:5 536:7 certainly 359:15 364:15 370:10 407:23 440:19 506:1 certificate 389:9 390:9,13 476:13 478:18 certification 389:7 390:5 certified 289:5	389:5 390:2 549:4 549:20 certify 549:5,13 cessation 415:21 CFR 327:9 328:1 chair 389:11,19 390:18 392:8 471:9 472:1,8 473:8,13,16,20,25 474:15,17,19 481:4 482:7 483:18,23 485:10 485:22 488:10 489:21 490:5 521:13,15,17,21 528:5 530:24 531:1,13 535:16 535:22 536:18 537:6 538:11 542:19 544:9 chairing 385:21 chairlift 533:15 chairlifts 388:15 474:6 478:25 485:23,24 529:17 533:2,3 535:22,25 chairs 390:21 427:2 427:12 431:14 432:7 474:17 476:7,17,17 487:22,23 536:3,8 537:13 538:9 540:9 542:17 challenge 338:17 425:11 436:22 challenged 494:12 challenges 425:5 challenging 373:8 424:25 425:1 chance 313:1 484:23 change 290:1 300:12 301:21 302:6 306:14,19
---	--	--	--	--

306:22,23,25	512:5 515:4,8	539:23	534:24,25 539:1	484:10 492:22
307:7,8 308:20	520:2,4,10,11	charge 372:18	540:16,17 541:7	513:25 519:15,25
309:4 310:1	522:6,16 526:1,10	398:25 399:7	542:19,22 543:3	531:22
315:12 316:13	528:23 531:25	406:9 430:24	544:8,23,24 545:4	clarifies 346:16
317:14,24 322:3	532:2,3,23 533:1	431:6 432:5,12	545:5,8,10,20,21	376:5 390:20
323:18,20,21,24	534:13 537:12	433:6,10	circuitry 455:22	clarify 310:3 316:9
324:1 327:16	546:10	charged 400:16,17	circulation 363:12	322:14,22 337:11
330:10,15,17,20	changed 305:9	423:6,13 432:2,4	cities 351:20	352:1 354:9 376:2
330:22 332:2	306:13,21 344:23	432:22	city 301:6 304:21	377:6 394:5
346:24 347:10	344:24 374:15	charger 534:19	309:2,12 310:4	398:16 401:9
348:6 349:21,25	383:20 385:5	543:8,16 545:11	312:16 313:11	402:7 403:15
353:24 355:19	424:18 434:13	chargers 545:17	321:19 350:19	404:19 432:19
363:25 366:19,23	436:21 439:1	charging 537:15	372:11 396:11	452:21 465:25
378:9,25 379:2	445:6 448:20	chase 424:13	413:22 420:4,19	509:18 512:20
381:5 382:25	471:14 500:13,13	chat 313:14 320:7	427:23 428:5	536:20
387:9,16,23,25	511:7,12 518:3	336:17 347:16	444:20 516:6	clarifying 316:12
392:16,18,20,21	changes 294:17	356:5 359:4	538:2	317:9 335:13
392:24 393:1	295:18 303:7,9	361:13 376:19	clarification 299:5	369:21 417:24
394:9,10 396:7,12	304:19 309:21	386:15,16 411:2,4	305:24 311:8	510:5 534:9
405:3,4,7 407:12	310:8 311:13	411:5 415:19	315:7,17 322:4	clarity 332:3
415:6,9 417:2	338:7 363:3 370:2	436:12,13 459:8	327:14,15,15	361:16
418:4,6,16 423:20	372:8 411:11	518:22	330:8,9 335:7	class 325:10,17,23
424:6,24 436:13	415:7 416:17	check 495:18	361:12,20 363:25	classifications
436:21 437:11,24	426:11 431:11	509:17	381:7 391:13,15	344:16
438:2,6,9 445:14	440:11 450:22	checked 515:20	391:22 393:20	classify 339:19
448:21,23 449:14	451:10 463:15	checking 493:17	394:9,10 396:7	clean 384:1 443:2
449:25 450:3,4,5	465:24 473:4	494:21	397:9 399:16	481:8
450:7,10 451:1,4	479:22 481:10	checklist 420:9	404:14 407:10	clean-up 316:10
451:6,12,13	490:2,2,5 496:9	429:25	423:19,19 437:14	cleaned 425:7
461:21,24 462:1,9	496:14 498:17	chief 336:20 338:10	437:15 440:15	cleaner 543:2
462:10,12 463:8	499:3,20 504:2	357:6 378:21	452:18,19 465:24	cleaning 486:19
467:10 470:9,11	506:10 510:4	536:6	469:2 476:4	clear 338:22 349:15
470:14,18,20	520:6,6 522:8,10	chime 448:12	481:10 484:12	351:13 353:13,21
471:24 472:16	522:10,18 525:6	chip 310:13,17	506:24 519:25	365:25 375:11
476:3 477:4,9	546:12,14,17	chips 310:13	527:8,9 534:9	376:8 377:9
479:16,17,19	changing 290:4	choose 348:22	535:5 546:6,6	395:19 396:3
482:11 483:23	291:1 302:17	389:18 390:21	547:15	467:21 468:3,4
486:17 490:9,12	306:11 317:6	chose 335:20	clarifications	469:23 470:4
490:15,15 491:4,6	427:5 444:22	chosen 328:2,9	295:24 315:7	478:8 514:6 530:1
491:6,10 492:8	489:21 490:5	CHP 332:18	335:12 368:17	530:14 539:3,4
493:19,24 497:10	493:13	chunk 331:25	377:4,12 382:6	541:6 549:11
497:25 498:14,25	chapter 366:21	circuit 292:15	387:4 403:18	clearance 326:23
505:8 506:19	367:1 475:17,21	293:24 533:5,11	472:14 475:2	502:6,22
510:21,25 512:1,3	489:8 530:10	533:13,13,19,19	478:21 483:12	clearances 326:22

327:2 328:1 340:10 504:21 cleared 497:20 clearer 353:25 453:11 467:22 clearing 395:13 clearly 366:10 391:18 497:22 539:22 540:18,23 clears 353:11 Cleary 385:10,11 478:6,7 clicked 458:20 client 354:19 climbers 544:16 clips 410:17 close 304:22 359:16 464:2,9 468:10,12 470:1 493:24 494:2 497:1 closed 292:10 293:14,23 315:1 316:21 318:10,20 319:1,20 321:11 322:16 440:3 505:9 closet 539:15 closets 363:14 clumsy 407:25 clunky 510:10 code 289:25 290:9 296:8,9,10,22 298:9,12,19 301:9 301:11 307:5,10 308:17 310:7,19 311:11,16 312:9 319:4,11,23 320:3 320:11,13 321:22 322:4,7,14,20,21 322:22 325:9 326:2 327:12,24 332:6,7 335:21,21 335:23 336:3,14 338:25 339:4	340:5,12,15 346:6 347:9 349:4,17 350:16,25 352:22 353:17,21 355:6 355:11 363:17 373:17 375:18 391:18,19,21,22 391:23 393:19,19 393:20 398:24 400:18 402:20 409:3 412:7,9,9 412:12,13 414:10 420:1,15 439:7,13 440:6 445:13 448:19,21,22 451:2 454:5,14,15 460:14 463:8 467:9 471:11,18 472:19 475:7,7,22 475:25 479:14,20 489:4 493:24 509:14 510:3,11 511:6 516:8,9,10 518:2,3 522:2 523:11,16 528:19 529:18,25 530:4 530:12 531:16 537:2 541:17 542:16 543:14,17 544:18 code' 439:10 code's 445:2 534:5 codes 327:11,23 344:19,22,23 345:2,4,17 352:15 353:8,14 354:21 354:23 365:22 368:17 389:1 395:10 476:23 478:5 codified 475:25 516:14 codifying 498:16 collect 409:16	column 403:20 518:25 combplate 414:1 come 304:22 317:16 340:19 358:7 373:13 375:4 382:2 385:7 394:16 397:10,11 398:25 399:1,10 399:12 410:1 415:7 420:10 428:21 431:18 460:7 467:11 483:6,15 487:17 500:17 504:22 512:12 535:25 547:14 comes 340:15 353:13 371:9 380:20 385:3 407:7 427:25 463:6 476:18 504:23 comfortable 312:25 358:9 419:14 431:24 505:7 525:19 coming 309:14 346:21 463:3 536:4 comma 458:13,14 comment 300:22 300:25 309:8 320:10 321:12 322:25 336:16,20 337:18 338:1 346:20,22 347:20 364:12 402:14,18 403:7 410:21 412:16,18,20 416:23 417:3 426:24 437:3,8 449:10 461:2 477:2 493:22	496:15 497:24 505:2 506:15 507:12 514:6 518:12 commentary 372:2 375:3 commented 299:9 comments 298:8 305:16 315:17 317:4 327:15,16 339:9 342:20 354:9 366:14 369:21 370:23 371:18 376:18 386:16 391:14,25 392:13 403:19,22 414:22 417:20,21 419:8 420:21 426:9 427:16 437:7,14,16 443:22,24 446:10 459:5,7 460:11 465:23,24,25 469:2,22 470:2 479:4 513:8 514:24 518:22 546:6 548:6 commercial 423:15 471:9 472:1 473:8 473:15 476:7,17 478:25 479:1,2 484:13,14 486:6 487:4 488:13 523:7,11 528:16 528:18 530:13,16 531:13,17 535:16 537:11 540:25 544:11 commitment 548:12 committee 287:4 289:2,6 298:9,12 305:1 309:14 312:19 313:18	340:25 368:23 369:4,9 377:18 378:18 382:15 446:11 496:19,21 498:16 499:6,17 503:24 505:13 525:13,19,22 committees 300:24 common 316:23,24 348:1,8,18 349:22 350:3 communication 295:5 369:1,11 536:9 communications 295:2 298:18 companies 303:2 304:18,23 319:14 320:1 355:2 383:13,23 384:22 389:18 429:1,10 536:7 company 293:5 302:17 321:21 343:1 368:13,14 369:25 370:8 372:15,20 373:22 373:25 374:23 408:21 443:14,18 443:25 444:2 company's 444:3 compared 328:6 competencies 386:17 compilation 526:8 compile 526:18 compiled 526:13 complete 380:23 397:12 416:7 479:6 549:10 completed 413:17 435:23 474:18,20 498:15 completely 292:17
--	---	--	---	---

364:21 456:24 457:6 475:8 476:5 compliance 314:11 315:3 320:17 332:7 compliant 310:19 315:6 complicate 362:9 comply 292:8 346:5 389:1 439:11 465:6 466:6,22 467:2 533:16 complying 315:2 component 290:2 290:23 compressed 459:10 502:24 comprise 295:2 comprising 333:15 333:18,22 compromised 442:22 computer 290:20 307:17 computer-aided 549:9 computers 294:25 295:3 297:12 477:23 concede 449:11 concentrate 467:17 concept 537:18 concern 295:13 317:19 326:7 341:11 357:8 403:23 445:15 503:20 518:17,20 concerns 295:19 299:12,24 357:25 358:4 378:17 396:14 404:8,11 420:22 440:13 450:24 451:5 499:15 501:1,4	528:1 concert 412:15 concise 375:15 453:11 497:22 525:25 526:8,12 concurrence 310:21 concurrent 523:11 condense 524:16 condenses 525:4 condensing 522:15 condition 323:8 456:7 conditions 329:8 348:15 conductors 332:14 configuration 326:13 330:12 configurations 294:4 326:12 329:18,19 465:20 467:25 configured 291:7 291:10 confined 364:5 confines 358:11 confirm 377:24 confirmed 376:23 conflict 476:15 conflicts 495:6 confused 318:1 341:3 345:5 352:9 483:16 534:13 541:4 confuses 534:22 confusing 375:13 427:17 448:16 486:9 488:1 523:16 confusion 336:1,14 337:1,2 345:1,13 345:19,23 346:24 353:2,12 354:1 365:21 400:15	523:15 534:4 537:24 540:5 conjunction 516:15 connect 486:22 509:13 connected 290:3,9 290:16,18,24 291:24 292:1,3,7 292:14 294:2,13 295:8,12 297:14 300:9 301:20,25 304:6 307:18 333:4,13 540:21 541:6,10,17 connection 290:8 290:11 292:4,13 294:4,13 304:10 304:12,13 306:4 306:21,25 307:6 connections 294:5 295:15 312:14 connectivity 435:24 connector 298:3 consensus 357:14 358:7 379:2 421:2 consider 339:13,14 339:22,24 430:20 519:13 540:8 consideration 305:7 425:17 519:18 considered 290:11 294:7 332:17 352:20 365:17,23 366:5 441:18 502:15 504:7 541:8 considering 298:12 337:2 consistency 363:19 496:19 consistent 328:2 329:5 487:24	consists 337:11 conspicuously 325:18,24 constraints 426:25 construction 332:11,18,24,25 333:2,8 395:3 397:15 407:1 416:14,20 440:7 constructor 409:1 consult 394:15 396:1 consultation 393:19 404:21,24 consultations 393:12 401:1 405:6 consumes 326:25 contact 292:9 354:18 367:25 368:6,10 369:2,6 369:16,18,24 371:22 372:13 373:6,20 374:18 374:19,20,24 376:10 407:7 458:4,14 contacted 376:6 contain 293:4 465:15 523:18 containing 292:23 293:2 contains 333:25 341:6 content 474:23 contention 419:12 continue 295:21 441:6 466:18 480:11 501:5 512:14 contract 295:19 371:10 contractor 332:16 349:10 369:5,8,15	369:20 373:4 374:24 384:1 394:18 399:10 423:4 429:25 433:9 437:4 contractor's 430:14 433:19 contractors 315:3 347:2 371:6 374:25 390:6,15 390:21 423:14 contradictory 488:12 contrary 298:19 contrast 465:13 control 290:1,10 293:24 303:7 325:12,12,14 333:12,18,23 334:5,7,18,20 337:20 339:1 341:12,21,24 342:8 347:23 348:1,7,12,14,17 348:22,22 349:22 350:2 357:1,13 370:12 372:19 383:18 391:11 445:16 463:24,24 464:15,16,18 470:13 481:4 482:9 483:24,25 484:3,5 489:22 490:6 492:11 508:16 509:8 516:15 534:24 controlled 337:4 controller 297:18 303:20 315:21 316:25 318:19 329:22 332:15 333:9,11,14,17,21 337:18,19,20 338:14 349:2
---	--	--	--	--

357:6 445:21	469:25 487:7	376:25 379:7	313:23,24 314:3	475:10 531:12
465:4 467:1 481:6	509:1,3 510:22,24	402:11 424:3	325:1,4 402:13,16	currently 294:24
484:1,9 487:8	512:2,24 513:11	460:24 471:12	458:16,16,24	295:22 300:23
489:24 490:8	514:17,20,20	481:18 485:16,23	549:4,20	304:19 307:5
controllers 329:20	515:4,5,8	488:24 493:5	courtesy 428:23	315:11,13 319:18
338:23 447:8	conveyances	494:23 495:8,9	cover 351:20,23	325:9 326:10
457:2 508:15,16	291:24 295:15	506:19 513:3	364:6 437:2 489:6	336:17 340:13
controls 304:8	308:19 335:24	524:18 529:5	covered 333:6	364:23,24 371:14
308:21 333:25	339:10,14 380:14	536:2	336:18 340:18	372:5 381:15,20
334:2 341:7,8,13	393:25 401:17,17	corrected 504:10	481:22 494:8	387:7 388:15
342:8 349:1	420:2,14,17	correctly 342:6	covers 384:23	389:2 392:6
convene 313:10,17	423:15 489:14	368:21 443:10	CPH 333:1	393:12 401:10,10
500:18,22,24	533:6	494:7	CPHs 385:14,19	401:12 406:6,21
501:7 548:10	conveyor 336:8,10	corridor 327:12,25	386:2	434:9,24 438:22
convenient 325:16	336:12 342:21	corroded 310:16	crawl 365:18	438:22 494:23
conventional	351:8 352:23	corrosion 439:18	crazy 479:8	503:23 507:8
537:17	354:22 355:1	cost 328:8 349:11	create 369:20	514:8 517:18,25
conversation	conveyors 334:23	395:9,17 440:23	383:22,23 402:22	curriculum 385:13
357:21 367:19	335:16,18,23	440:24	504:4	385:22
378:1 403:24	336:25 339:12	costs 394:7 544:15	created 295:7	Curry 498:18
420:6 424:21	343:23 351:2	Coucher 345:10	454:21	547:20
433:15 442:1	352:17 354:15,17	count 436:13	creates 364:17	custom 343:4 344:3
463:5 495:25	convolute 436:6	counterweight	400:14 456:7	354:12
conversations	cooking 363:16	363:23 364:23	534:4	customer 304:11
356:2 374:9 419:7	cooper 509:15	365:1,4,13,18	creating 534:3	340:15 394:19
500:14,15,16	copied 342:6 391:5	383:17 454:9	criteria 535:24	399:23 428:2,21
conversion 333:19	copper 516:25	455:5 459:10	criticize 346:20	430:16 434:14
495:9	copy 296:12 413:12	503:4	cross 324:24	443:19 444:10,15
conversions 333:19	483:5 508:6	couple 298:8	crosses 487:21	customers 369:8
495:18	cord 349:8 509:4	350:12 354:9	crosshead 456:5	430:17 484:20
conveyance 289:25	533:7,8 534:14	356:9,12 370:23	457:16	530:23
290:7,9,16 291:15	535:18 537:12	372:3,7 386:16	crossheads 457:17	cut 301:14 351:22
291:17,19,25	538:9,19 539:10	409:10 415:18	crucial 442:7	377:9 414:1,3
292:3 295:12	540:1,8,21,23	426:8 429:8	crux 408:10 412:23	443:16 495:22
332:10,12,17	541:6,7,10,12,14	432:20 457:24	cubic 465:9	cyber 298:9 299:22
338:15,17,23	541:18 542:3,7,8	459:7,7 469:22	cumbersome	cycle 504:11 530:12
339:7 393:22,25	542:20 543:6	475:4,5 476:11	410:20	cycles 308:17 415:5
396:18,24 397:16	544:1 545:2,9	481:7,9 487:2	curious 338:5	cylinder 440:19
406:13,17,19,23	cords 544:23	488:1 513:25	408:2	cylinders 484:6
407:2,17 409:15	corporation 393:13	518:21 531:23	current 352:3	
411:18,25 412:2,4	correct 342:10	535:12	381:2 389:1	<hr/>
416:15,15 418:1,2	347:18,19 349:24	course 334:9	402:10 411:17	d 288:1 289:14
422:23 423:1,11	350:1 362:21	351:20	420:2,17 448:24	291:16 368:19
439:12 464:18	368:11 373:20	court 287:18 289:5	449:3,5 450:24	503:13,16 509:8

da 291:23,23,23,23 291:23	debating 488:4	345:25 346:3,14	411:13,22 412:1	detection 314:12
damage 327:10	debris 439:19	348:3,10,13	416:1,4,5,18,19	318:24 320:19
478:15	440:1	349:13,15,18,25	416:22 418:2	321:8
damaged 415:21	decades 300:14	350:23 351:7	422:23 427:8	detector 330:5
416:20 442:20	decide 396:22	355:17 356:4	430:18,25 431:1	determination
damages 442:3	433:7 477:9	358:1 359:10	474:9 476:13	441:8
danger 327:10	decided 504:1	361:24 362:19,20	477:17 530:14	determine 292:7
469:6	542:25	362:23 363:3,9,10	536:9	388:25 482:3
dangerous 329:8	decipher 524:21,24	363:20 365:2,10	Department's	526:20
dangers 295:23	decision 348:24	365:25 366:8	393:22 444:6	determined 416:11
data 290:21 393:21	367:20 433:5	396:9 411:2 453:6	depending 315:20	439:7 448:18
database 420:18	444:4 522:12	453:11 539:16,24	498:11 517:4	510:24 542:25
date 291:5 293:4	dedicated 465:5	definitions 331:24	525:9	develop 299:11
368:16 370:1	deemed 388:25	335:8,17 336:1	derived 295:5	433:18
371:22 381:25	413:1	337:18,19 338:14	describe 453:7	developed 299:16
dated 297:8 536:5	deep 326:23	340:22 341:4	described 290:1,9	326:2 381:20
day 287:8 289:1	deeper 419:5	342:21 344:7	291:25 315:11	506:20
291:6,7 337:4	define 345:15	348:6 350:13	319:21 328:19	development 434:8
358:15 379:22	347:22 349:9	351:18 356:3,11	describes 453:16	developments
404:5 411:9,24,25	351:8 355:19	359:23 360:2,5,15	description 291:13	523:5
412:5 413:4 416:3	382:21 407:21	360:16,18,19,20	338:3 539:24	deviation 392:6
424:8,11,24 425:6	419:10	360:25 361:22	descriptions 335:8	device 290:2,16,22
425:7,11 426:17	defined 294:23	366:17,18,21	design 294:18	291:21 292:14
426:20 428:24	338:4 343:11	367:1 403:25	326:16 336:25	293:22,24 308:20
429:11 435:13	347:6,10 355:24	404:1	464:18 509:4	333:11,15,22
436:21,24 437:1	363:18 364:7,13	deflection 502:6	530:3	460:15,22 485:8
448:1,1,1 488:4	364:18 377:9	504:20	designated 332:15	533:21 541:7,12
498:21 501:10	379:11 381:24	delay 416:6	designations	541:14
505:4 536:5,15	383:7 385:6	479:10	475:15	devices 290:20
548:11 549:17	455:25 462:3	delete 474:22	designed 328:10	328:4 333:11,15
days 369:5 373:5	539:20,22	479:10	334:24 340:13	333:18,22 482:9
409:23,24 422:24	defines 351:15,16	deleting 290:4,25	354:12,13,23	515:16
428:16,17 429:8	defining 338:15	demarcation	363:15 508:21	devil 366:8
429:19	362:2 364:4	332:13,16	desk 413:3	diagrams 482:14
dead 546:3	365:12 366:5	demolition 333:2,8	Despite 326:15	485:6
deal 336:17 364:23	definitely 375:19	denial 340:14	destruction 406:25	diameter 501:24
436:3	432:23 433:16	department 287:1	416:13	502:2 504:14
dealing 338:18	453:12 475:11	345:24 346:1	detail 410:11 416:9	dice 441:5
339:25 345:18	definition 332:4	350:16 370:14	detailed 299:25	dictated 464:17
431:11 440:5	337:5,9,14 338:22	382:10 385:8	452:15	died 326:8 329:13
454:13 529:25	339:3 341:5,13,16	387:10 388:18,24	details 366:9	diem 393:17 406:11
deals 299:22	341:17,18,20	388:24 389:10	409:20 457:5	difference 337:25
debatable 446:3	342:4,20 344:23	390:7,10,14,16,16	detect 321:8	354:13 366:8
	344:25 345:14,20	392:4 393:15,18	detected 314:23	476:18 489:18
		406:7,9,12,17,19		

516:25 523:10	dipping 400:7	348:16,19,20,25	375:17 379:1	303:9,24 304:18
524:20 537:9	direct 302:23	349:7,8 463:21	406:3 414:8	316:13 317:1,11
545:1	308:22 375:3	464:2,5 465:3,3	430:12 453:21	317:11 319:7,13
differences 525:16	539:10	465:10,16,17,21	531:18 540:22	345:2,4 347:13
different 296:21	directed 401:16	466:4,5,22,24,25	discussions 546:9	354:24 358:11
299:18 306:2	direction 314:16,19	466:25 468:19	dismantling 332:11	373:7,25 374:1
335:10 338:6	314:24 315:3	469:4,7,10,14,18	disseminate 525:15	383:24 385:19
348:15 350:12	317:21 320:22	469:20 470:11	Disseminating	396:17 398:1,18
355:7 356:10,12	321:2,9 322:11	492:9,17 536:16	369:7	398:18 399:8,17
356:13,23 383:3	323:15 338:7	538:24 541:2,8,9	distance 328:6	400:3 404:10,20
383:24 384:6	344:1 452:11,13	541:13,13,18	330:4,13 401:6	409:21 417:25
413:14 424:20	452:23 458:15	542:12 543:11,20	453:14 455:25	421:24 429:2
429:6,21 431:10	459:11,12,19	543:25 546:2	493:2,5 521:21	432:8 443:11,15
432:7 435:10	directional 452:12	disconnecting	529:23 530:15	443:20 455:7
440:6 446:21	452:25 455:1	292:3 481:6 484:1	distances 330:13	477:25 478:1
456:19,24 457:6	458:5 459:16,18	484:8 489:23	435:14	492:23 519:12
459:1,7 465:19	459:20,21,22,23	490:7 533:10,17	distinct 523:10	526:10 536:21,22
473:4 475:25	459:25 460:1,24	533:20 534:16,19	537:9	544:9
477:11 478:10	directions 317:21	534:23 535:19,20	distinction 488:14	Dolgikh 296:5,14
479:6 482:17	directly 296:8	535:23 536:25	distortion 350:24	296:17,25 322:1,1
487:16 494:25	300:10 302:20	537:14 538:10,10	435:20 492:3	336:21,21 365:9,9
517:2 522:8,11,21	308:20 357:7	538:16,17,19,21	542:24	400:12,12 409:9,9
524:11,22,23	509:13 533:8	538:25 539:16,19	distributed 291:16	426:7 434:4,4
525:6 528:18,19	534:15 547:21	539:21,24 540:7,8	291:16	441:12,12 453:4,4
537:6 541:24	director 414:6	540:15 542:1,12	distribution 368:8	458:20,22,25
545:15	disability 411:8,23	543:10,25 545:23	do,it 517:5	461:6,6 466:1,1
differentiate 347:5	416:3	disconnects 302:3	document 402:22	475:3,3 487:14,14
391:18 487:3	disable 298:18	349:4 463:13	486:15	523:3,3 528:11,11
differently 504:23	304:1	465:8,10 468:7,12	documentation	535:9,9 539:7,7
523:13	disabling 292:18	469:8 470:1,7	311:12 389:4,15	dollars 419:24
difficult 425:18	disagree 341:15	543:20	389:17,22 390:11	don't-- 452:20
430:15 440:25	364:14 407:13	discovery 439:6	390:17,22 391:2	door 314:25 315:1
442:24 445:17	440:18 441:14	444:8,9 448:18	392:7 472:3	316:6,7,24 317:1
difficulty 313:21	513:12 515:13	discreet 295:4	473:10,18,22	317:24 318:8,10
313:22 463:5	disconnect 292:2,2	discrepancies	474:4,7,8,10	318:18 319:23
dimension 496:9	292:4,9,19,20,24	488:19	477:16 481:3	321:10 322:6,15
dimensional	293:2,6,7,9,13,15	discretionary	484:7 485:4,5,13	323:8 325:16
493:19 529:3	293:19,22,23,25	432:23,24	486:14 487:19	383:20 463:24,25
dimensionally	294:3,9,12,14	discussed 337:8	488:6,7 489:9	464:13 465:15
328:6	297:25 298:17	451:21 520:3	521:7 533:23	468:23 469:12
dimensions 492:18	301:23 304:2,4,12	524:3	documents 390:7	492:11,12,13
492:19,24 493:17	306:6,10 307:16	discussing 346:13	390:15 489:17	496:20 497:2
494:17,23 495:1,2	307:19,21,24	515:22,23	dog 441:20	502:19 503:7,8
497:9	308:1 318:8,14	discussion 375:12	doing 298:10 302:1	doorjamb 349:2

464:19 469:19	538:2	e-mail 313:4 368:8	editorial 516:3	electrically 508:14
doors 303:7 314:20	Duane's 415:11	369:12 413:12	520:6	508:20
315:5,23,23,25	417:3	500:21 501:6	editorials 520:3	electricians 349:5
316:20,21 317:25	due 295:17 327:25	506:8,9 508:4	edits 357:11 358:6	electrocution
318:6,10,19,21	328:8,9,17,18,24	547:24 548:16	375:23 376:13,14	295:17
319:1,3,7,13,15	435:23 439:17	e-mailed 378:2	376:15,25 378:8	electrolysis 439:19
319:17,19,21	536:9	505:3	378:10,12,18	electromagnetic
320:4 321:4,11	duly 406:8,23	e-mails 345:13	379:6,22,23	295:6
322:12,15,16,18	415:25	earlier 353:6	436:17,18 450:23	electromechanical
323:16 330:13	dumb 334:6,19	414:12 472:4	450:25 481:20	326:16
383:16 464:11,11	407:21	476:23 477:15	519:23	electromechanic...
465:15 504:17	dumbfounded	503:25 521:8,9	educated 380:24	335:1
doorways 383:20	463:4	532:25	547:16	electronic 295:1
double 400:7	duplicated 389:24	early 335:20	educating 368:19	element 502:14
464:10	duplicating 475:12	367:22	education 345:3	Elena 427:18,22
downloaded	duration 409:24	easier 403:8 410:10	380:8,17,20	elevation 334:25
302:25	dwindling 380:21	477:24 492:2	381:11 382:24,24	elevator 287:4
downloading	Dylan 313:13 324:9	easily 469:11	383:5	289:1 291:19
290:15	324:12 346:8,18	eastern 434:23	educational 381:23	294:9,13 297:5
draft 311:4,25	371:20 373:17,23	435:2,14	382:15	298:18,25 300:7
312:18	374:3 375:22	easy 406:2 472:16	effect 399:8 486:18	301:1,22 302:18
drafted 310:24	376:25 377:8	477:20 509:4	497:3 503:18	303:16,21 304:5
313:18,19 437:8	396:15,16 431:21	eating 363:15	effective 474:11	306:4,20 307:1,17
drafting 312:3	431:22 432:20	echo 370:4 479:8	efficient 397:17	307:25 308:23
drain 509:22	448:11 449:9	edit 378:5,6 379:13	398:14 402:21	309:9,11,25
drastically 306:2	450:5 468:16	419:14 437:10	egress 327:8 329:11	318:12 322:1
draw 545:16,22	469:7 471:12,14	460:5 463:20	530:1,1	325:11,20,21,23
drawings 359:12	471:16 472:17	471:24 481:7	eight 367:22 425:20	326:10,11 327:5
drive 333:20	477:2,14 483:14	493:13 495:22	494:25 517:8	328:3,5,7,17,19
driven 415:4,7	483:15 485:19	505:14,14	eighties 335:20	328:21 329:10,24
driver 415:15	489:2,3 493:20,21	edited 348:9 357:15	either 313:18	332:15,15,17
drives 508:16	494:7 510:17	357:23 358:24	314:24 321:9	334:6,19 336:21
driving 354:20	512:4 513:9	375:6,8 376:5	337:22 342:4	339:16 340:8
401:6 435:15	516:13 530:18,19	449:17 461:22	377:20 379:20	341:4 343:1,18
508:18	538:5,6 539:8	510:23 522:20	382:22 409:15	355:2 357:13
Duane 301:6	Dylan's 376:25	editing 357:10	420:5,20 434:20	365:9 368:9,22
304:21 312:12		377:6 438:22	435:25 445:5	369:4,9,11,13
347:16 350:17,19	E	edition 300:2 305:8	541:18	376:21 380:2
372:11 374:5,6,7	e 288:1 289:14,14	305:16 311:9	electric 333:20	381:5 383:25
396:10 397:3	291:18 293:15	472:11 506:20,21	334:1 341:7	384:6,11,14,18
413:22 414:20	368:22 372:25	521:20 522:5	electrical 325:12	387:7,16,19
416:23 417:19	403:20 481:22	531:11	326:21 328:14,18	393:14 400:12
419:7 444:20	509:11 518:25	editions 472:4,6	339:1 465:10	403:12 407:22,24
445:8 516:6 538:1	549:1,1	521:8,9,11	538:15,17	408:1,7,8,9 409:1

409:9 417:25	314:13,15,18	enforce 440:12	292:7 293:8,21	471:5 480:6
419:24 428:11,25	316:6 317:7,7,8	476:1 503:13	294:1,10,11,11,14	488:21 490:23
434:5 436:1,5	320:14,14,16,19	enforced 516:16	294:17,18 295:7,7	491:22 520:15,19
440:10,12,13	320:21 321:2	517:25 536:10	305:11 326:14,17	521:2 529:20
441:13 445:14	322:10 323:13,14	enforcement 332:6	326:21,21,24	530:6,18 531:3,7
448:5 449:2	326:19 329:12	370:15	328:14 329:11	532:19 538:1,5
452:10,13 453:4	439:13 469:5	enforcing 325:10	332:15 333:19	539:6 547:2
453:18 458:22	509:22 512:10	368:19	335:3,7 339:25	errors 481:9
461:6 464:15,17	513:21	enhanced 440:9	341:14 351:15,16	ESAC 311:1,1
465:11 466:2	employed 294:10	enroll 368:8	388:16,20,22	312:20 313:19
468:2 475:4	employee 333:7	ensure 315:3	402:9 406:25	337:13 359:17
487:15 503:2	employees 326:18	368:10 373:19	407:3,5,8 417:11	377:17 378:12,14
508:10,13,13,20	327:10 329:1	ensuring 315:5	417:12,15 430:17	378:19 383:2
509:19 510:2,2,20	369:8	enter 335:25 469:5	431:12,12 454:19	461:23 467:13
518:4 523:3	empty 314:18	492:5	455:20 456:12,18	496:18,20,24
528:11 535:9	321:2,17 322:11	entering 508:15,20	465:22 475:18,21	499:14,17,18
539:7	323:14	entire 296:7 397:12	481:5,22 483:25	519:6 527:2
elevators 297:11,13	enabling 292:17	444:17 489:4	484:8,16,21,21,22	escalator 414:2
299:25 300:12,16	enact 373:3 382:10	522:1	484:24 485:1,2,16	escalators 325:15
304:6 308:19	enclosed 533:18	entirely 475:9	486:8 487:6,9	especially 318:11
314:9,10 320:16	534:23 539:1	528:18,19	489:23 490:7	336:5
320:16 326:13,16	encompassed	entirety 543:22	502:23 508:9,10	essentially 326:25
328:25 333:8	444:11	entities 306:8 537:6	510:19,20,20	376:6
334:1,3 339:23	encourage 398:17	entitled 301:10	512:14 528:1	establish 329:4
341:8,9 383:17	398:22	entity 290:3,6,13	533:10,11,13	410:10
385:16 399:18	encouraging 400:5	290:23 292:17	534:16,18 535:18	established 326:4
420:12 429:1	encroach 327:2	294:8 295:12	538:14,18 545:15	establishes 290:10
445:17 464:24,24	encroached 327:13	510:15	equipped 292:1	327:1
465:1,2,2,14	327:25	entrance 325:21,23	erection 332:11	establishing 328:3
466:11,12 484:18	encroaches 327:8	325:25 330:5	Eric 297:1,2 310:12	ethernet 292:12
502:17 503:3,6,14	endangering	464:19	547:6	304:7
509:21 511:21	303:10	entrances 340:1,11	Eriksen 289:7	Europe 303:19
512:8,16,17	ended 443:4	entry 325:14	308:10 324:18,21	evaluated 388:21
513:18,23 515:14	endorsement 380:5	508:23	325:3 331:5	evaluation 393:19
515:16 516:1	380:5,9 381:11,13	environment	334:11,14 360:10	evening 547:18,19
517:13,19 529:16	381:24 384:16,19	431:10	360:23 361:8	event 291:7,10
eliminate 319:16	385:7,19 386:18	environmets	362:12 363:6	325:22 401:25
346:24 364:13	387:8	328:10	366:2 367:12,16	410:2
458:6 537:5	endorsements	EPDs 300:9	367:18 377:11	everybody 319:12
eliminates 326:14	380:14 381:2,17	equal 501:25 503:2	388:10 393:9	345:5 347:1,7,12
390:14	382:1 385:22	equates 509:25	405:23 418:12	371:11 375:16
else's 376:9	386:6 387:16,19	equation 529:16	419:2 421:10,13	454:2,6 463:2
emergency 298:18	ends 338:18 384:1	equipment 290:4,8	422:9 438:16	478:8 498:5 523:5
304:9 314:7,8,10	408:16	290:18,24 291:25	451:22 462:20	531:23

everyone's 441:1 500:7	excluded 517:13	experiencing 383:13 444:13	facility 397:12 416:4	445:19 449:6 453:20
evidence 409:16 410:23	excluding 536:13	experts 300:4 495:24	fact 439:17 493:17 494:21 495:18	February 287:7 289:4 549:17
exact 296:18 364:24 545:7	exclusion 313:11	explain 344:14 352:6,7,7 355:17	503:25 504:8 523:8 535:17	fee 380:8 381:22 393:15 400:9
exactly 301:17 320:24 345:4	excuse 386:25 434:6 526:16	explain-- 344:14	facts 416:9	404:25 419:24 420:13 421:3,6,21
361:16 377:9	529:24	explained 357:6 454:22 529:19	failed 308:16 406:25 540:10	421:24,25 422:1
447:23 448:16	executable 311:13	explanation 327:22 537:24	fails 423:11 443:9 443:10	423:6,8,10 432:1
497:20 505:5	execution 312:8	explicitly 516:14	failure 411:21 412:3 416:13	432:15 433:10
516:17 519:22	executive 367:20	explosion 329:7	fair 340:19 424:14 484:19	feed 298:25 442:22 442:25 443:4,5,9
523:25 528:12,21	exempt 464:25 466:12 510:3	expose 469:6	fairly 338:18	443:9
543:24	511:20 518:23	exposed 439:18	fall 309:12 312:15 407:23 496:9	feeds 540:3
examination 393:20 454:15	exemption 511:23 511:24 517:19	exposing 329:1	497:9 528:8 530:25	feel 302:2 309:8,11 311:22 312:21,24
examinations 489:9	exempts 513:18	expound 386:20	falling 310:4 492:24	358:21 378:23,25
examine 457:8	exist 295:23 540:25	extend 502:8,11	falls 295:17 390:12 408:17 430:3	382:23 387:9
example 298:23 318:7 457:4 507:4	existent 327:4 472:24	extends 407:16	434:20 465:21 484:15	392:5 399:24
exceeding 411:9,24 416:3	existing 294:1 299:21 329:8	extensive 356:2	false 303:20	400:6 404:10
Excel 492:4	434:24 443:1	external 294:8	familiar 415:16	416:25 417:1
exception 294:9 350:6 388:14	446:7 487:18	externally 533:18 534:24 539:1	far 303:20 343:12 344:2 351:17	424:18,19 431:8
391:13 392:17	488:25 489:14	540:16 544:7	370:7 382:1 403:11 416:10	433:17,20 435:21
427:9 464:22	503:13	extinguisher 326:5 328:13,21,22	417:25 428:6 441:17 466:17	436:5 437:7
466:10,13,19,20	exists 355:12,13 390:3	329:4	469:23 487:5 504:14 517:3	444:11 462:6
467:3,8 513:13	exit 336:11	extinguishers 325:9,11,18,24	536:3 548:8	469:18 480:11,12
533:6,17 536:14	expect 311:2 500:21	329:18 330:11	fault 391:10 408:6 408:8	480:14 496:17
536:19 540:19,23	expectation 339:17 340:6 437:6	339:25 402:25	favor 307:20 372:20 407:12	505:7,11,17
541:19,20 542:4	expectations 437:4	extreme 431:16 504:15	490:15 544:15 440:21 441:4,9	510:18 525:10,18
542:18	expected 430:2	469:10 477:20		525:20 528:4
exceptions 431:1 466:10	expecting 340:21	541:4		546:3,9 547:16
excess 510:24	expense 394:1	extremely 442:23 469:10 477:20		548:15
excessive 511:2	expenses 444:12	541:4		feeling 331:20
excessively 430:15 437:3	expensive 348:21 443:5			feels 370:18,19 374:10 383:7
exchange 290:19 291:5,8,12 295:1	experience 371:2 380:17 381:12	F		470:3 510:9
exchanges 291:3	409:22 426:1	f 293:19 369:1,7 509:13 549:1		fees 394:3 402:4 411:19 412:3
exclude 513:22	427:7 461:8,12	face 463:4		419:23 420:14
	experienced 380:24	facilitators 289:7		423:13
				feet 325:20 328:2
				felt 332:1 336:8 358:25 387:11

437:6 453:20	finish 432:9 464:5 492:16	fix 455:18	formatted 482:5	Fresinger 487:5
female 313:24	finished 305:19 400:1	fixing 482:13,13	formatting 494:18	friend 492:5
fiction 297:21	fire 325:9,11,18,23 326:5,6,8,8 327:12,24 328:4 328:21 329:3,7,13 329:13,17 330:11 439:7,9,10,12 440:6,8,9,10,12 444:15 445:17,18 445:20 447:7,11 447:15 448:1,3,12 448:19,25 451:2 509:21 512:10,14 513:20 514:2,3,18 515:5 518:1,5,24 530:1,14	flaking 439:19	forth 301:24 310:25 328:1 376:22 377:21 378:12 386:18 387:9 404:1 410:8 413:16 428:4 433:7 457:4 467:9 467:11 547:23	friendly 311:21 337:6,12 358:12 358:15,19 372:3 458:1 513:10 514:13 515:23 517:12
field 297:2 300:4 310:12 388:21 393:14,18,22 394:24 398:7 425:4,6,15 432:25 434:2 477:24 478:11,14,19	fire 325:9,11,18,23 326:5,6,8,8 327:12,24 328:4 328:21 329:3,7,13 329:13,17 330:11 439:7,9,10,12 440:6,8,9,10,12 444:15 445:17,18 445:20 447:7,11 447:15 448:1,3,12 448:19,25 451:2 509:21 512:10,14 513:20 514:2,3,18 515:5 518:1,5,24 530:1,14	flea 421:25	413:16 428:4 433:7 457:4 467:9 467:11 547:23	Friesen 302:21,22 302:22 315:8,9,9 364:1,2,2 369:22 369:23,23 370:6 372:12 373:18 375:9,10,10 378:21,22,22 382:6,7,7 391:25 392:1,1 394:11,12 394:12 395:20,21 395:21 430:10,11 430:11 443:22,23 443:23 445:23,24 445:24 456:9,10 456:10 484:11,12 484:17 485:14 493:15,16,16 496:14,16,16,25 510:6,7,7 523:23 523:24,24 525:1,2 525:2 527:19,20 527:20 531:10,10 534:10,11,11 545:12,13,13
fighters 509:22 512:10,14	firewalls 297:15	flip 318:9	forward 312:3 358:23 379:12 382:14 483:8 497:21 505:20 508:3 523:12 536:17	Friesen's 315:18
fighters' 439:12	firm 393:13 422:22	fluid 382:25 435:22 436:7 444:24	found 308:19 338:12,13 339:13 492:6	front 326:24
fighting 475:6 514:3	firmware 290:2,15	flush 509:11	four 299:11 326:7 329:12 366:12 369:3 373:4 400:3 447:19,20 463:12 463:20,21 464:19 467:20 472:21 494:24 522:9,24 524:7,11,16,22,23 525:15,16,23 526:8,12 527:1	frowned 415:4
figure 432:16 545:19	first 306:13 319:11 319:12,24 331:8 331:25 332:4,14 342:13 348:5 370:23 371:6 374:12,17 427:20 442:14 449:13,19 451:22 463:19 468:5 473:5 475:1 510:18 514:14 515:2 517:15 536:8 541:24 542:4,13	fly 429:16	494:24 522:9,24 524:7,11,16,22,23 525:15,16,23 526:8,12 527:1	fulfilled 369:14
figured 301:15 492:7	fit 354:12 470:12	focal 375:2	frame 433:15,24 436:24 437:20	full 325:13 392:9 416:7 424:1 431:9 457:1 477:25 478:1,14,14 508:22,22
file 383:3 416:7 477:23	five 321:17 331:9 331:11 367:21,23 371:2,7 409:23,24 425:8 426:2 462:23,24 466:21 494:24 497:18 498:5	folded 521:17	free 287:18 462:6 521:14 527:12,14 529:3,23 530:12 532:1,5,9	fully 500:9 502:24 528:15
filed 340:3		folks 313:14 431:12 528:1,4	free-wording 362:4	fumble 497:23
files 295:1		follow 299:8 319:4 374:21 391:20 512:15 517:7	freedom 431:2	
fill 428:19 429:8		following 291:24 321:21 382:13 469:12 485:9 508:12 540:6	freight 314:9 320:16 339:16 340:8	
filled 429:25		follows 289:24 294:16 296:19 314:6 325:8		
final 412:18 454:10 489:15 519:14		foot 455:2		
finalized 505:23		forbidden 416:15 416:21		
financial 295:20 549:14		force 380:12,21,24 381:4 395:11 502:3,4		
financially 441:4		foregoing 549:6,10		
find 316:4 341:16 397:12 412:9 447:14,15,25 448:1 506:8 530:16 532:19		forget 487:11		
finding 484:2		forgot 332:23 386:12		
finds 369:13		form 295:20 328:3 329:3		
fine 318:2 430:9,9 442:5 453:22 510:11 531:9 544:10		format 291:6,9 492:19 495:2 525:25		
finer 411:19 439:24				
finger 414:1				

function 300:11 303:20 335:4	348:5 350:23 353:13 356:5	311:6 321:6 323:9 325:7 331:17,21	503:17 530:11	482:1,10,11 485:19 492:1
functional 304:14	357:14,16,17	332:3,21 334:17	going 289:21 298:2	494:10 496:8
functionality 303:16 304:5,9	359:3,7,14 361:13 378:20 379:8	343:2,8 348:11 353:18 356:11	299:10,10 300:12	498:18 499:9,19
functioning 304:15	386:16 398:15	357:21 362:10	309:7,22 315:11	500:9 501:12
functions 290:19 310:1	459:9 494:6 514:2 518:22	367:18 378:14 383:2 384:1	317:5 319:25	511:6,17 512:23
further 327:20 375:8 382:14	Gerald's 342:20 355:16	392:22 395:2 399:5 400:23	323:6 331:8,8	512:24 520:16
419:10 424:17	getting 297:12 350:24 362:17	401:4,10,20	336:1,5,13 338:10	525:21 526:20
433:17 523:12	413:2 428:19	403:15,21 406:2	340:19 343:25	527:21,25 528:17
549:13	430:17 441:3	407:17 408:4,12	344:4,7,11 345:16	530:25 531:13
furthermore 390:24 391:6	468:19 469:15	409:14 418:14	345:21,24,25	538:7 539:2
444:7 474:8	510:10 530:8	420:23 421:17,18	347:13 350:10	541:17 543:9,15
541:11	548:12	422:15,16 427:24	352:5,6,13 355:9	543:24 544:13,14
fuse 349:7	giant 484:20	430:5 433:17	356:10,12,13,16	545:6
fused 533:18 534:24 539:1	give 297:6,24 380:5 380:15,16 382:9	434:21 435:19	357:1,2 359:24,25	good 298:7 301:4
540:16 541:1	386:3 387:11	437:11 442:4	360:13 363:9	303:12 307:2
544:8	392:12 399:2	443:6 444:9	364:8,8 370:12	311:7 323:22
future 337:13 398:22 548:18	414:17,21 416:8	455:21,22 457:4	372:16 377:13	329:5,16 331:15
	416:24 424:12	458:1,7,18 462:6	378:24 381:10,15	339:5 360:9 365:6
	425:12 426:12	463:15 466:20,21	382:14,17,20	386:15 392:9
	429:10 481:25	466:23 470:15,16	392:10 395:1,7,24	412:10 414:3
	494:20 498:9	475:15 477:4,9	398:19,20 399:5,7	418:8,12 435:25
G	500:23 501:8	480:22 482:1,4	399:12,25 400:8	445:18 446:3,14
g 288:1 289:14	508:2 514:23	483:3,22 485:20	400:16,16,20,22	446:25 447:21,21
293:22,22 509:15	519:14 520:14	486:2 488:18	401:21 402:5,24	460:3 461:2 462:5
gal 544:16	525:24 531:23	489:11 491:8	403:13,14 404:3,4	498:4 500:12,15
gallons 509:2,25 514:4,4,19		498:8 501:12,17	404:13 406:5,5	504:8 514:10
game 309:22	given 432:24 509:20	505:14 506:7	409:13,13 415:19	520:19 531:2
gap 428:3	gives 304:14 348:13 384:7 385:14	507:15 517:3	417:8 419:15,16	546:19
garbled 414:9 512:17	425:21,24 431:1,7	518:16 519:19	421:22 422:13,14	goose 424:13
gate 315:1 321:11	432:16,16 433:12	520:20,22 522:9	424:19 428:10,17	gosh 327:21 332:18
gates 318:14 340:1	giving 343:9 397:17 488:5	524:10,12 525:20	428:20,24 429:12	515:17
general 299:22 321:20 338:21	glad 414:15 430:12	526:2 527:2	429:13,22 430:2	gotta 413:24
345:6 443:10	glance 495:19	543:23 546:24	431:6 432:3,5,11	Gould 300:22
468:1 507:3	glossary 291:13	547:22	433:5,9 441:6	301:3 302:12
Gerald 320:13 338:10 340:23	go 296:18 301:17 301:24 310:13	goal 309:22	443:1 444:12,14	308:16,16 310:6,6
347:17,18,20,24		God 356:11	444:16 446:22	311:19,19 313:6,7
		goes 318:16 327:20 331:12 353:14	447:5 453:13,14	321:7,7 323:1
		384:5,6 401:14	455:7,8,8,21,22	324:9,9 330:3,3
		417:7 442:3 466:5	457:4,11 460:7,8	386:21,21,24
			463:2 468:20,23	411:10,10 437:22
			472:18,20 473:2	437:22 506:14,25
			475:24,24 476:2	506:25 507:13
			480:22 481:24,25	518:7,10,10 530:7

530:7 547:10	ground 363:22	548:14,20	450:1,2,4,7,11,18	432:11
govern 342:25	446:8 500:18	guys' 498:24	451:12,13,17,18	happened 408:24
343:12	547:17	548:11	461:25 462:2,4,9	409:24 456:4
governed 475:11	group 300:3 304:8		462:11,13,15,17	475:17,17 536:17
537:7	333:11,15,22	H	470:10,14,19,20	happening 295:21
governing 352:3	362:10 468:12	h 293:25	470:23 471:1,2	297:10 298:2
government 403:3	469:25 477:11	habit 429:10	472:15 477:12	352:16 408:16
governmental	group's 311:14	habitable 363:11	479:21,23 480:1,2	433:8 456:3
393:13	grouped 464:9	366:6	480:13,15,18	457:16,21 498:25
governor 318:15	468:9	habitable/accessi...	487:12 490:4,9,13	happens 322:3
389:3,14,21 391:1	groups 362:7	363:14 364:4	490:16,19,20	430:21 448:25
472:1 473:9,16,21	guard 501:20,23	366:18	491:13,14,17,17	455:24
474:3 476:19	502:2,7,11,11	hack 297:4,17	491:18 497:11,12	happy 359:15
521:6 533:22	guarded 502:21	hacked 297:12,13	502:13 507:20,24	hard 437:4 468:21
gpm 510:22,24	guarding 504:8	hacking 297:23	520:5,7,10,12,21	486:13 500:19
515:8	guards 501:21,22	300:18	520:23,24 526:6	510:11 524:24
grab 331:10 414:17	502:8,22	half 293:12 406:4	526:11,13,19	harmonize 350:8
grade 297:16	guess 319:17 338:5	540:9	532:4,5,9,11,14	harmonized 493:23
gradient 435:8	341:19 342:3	hall 297:6 315:20	532:16 535:7	494:3
grammatical 372:8	346:4 353:19	328:17 403:12	546:11,13,16,18	hate 356:11
grandfathered	358:10 371:21	hallway 326:17,24	546:22,23 547:6,9	Hawks 438:7
371:8	372:24 373:1,9	327:1 464:18	549:16	hazard 299:24
grandfathering	382:8 402:18	hallways 363:12	handgrip 502:16	327:7 329:19
371:1	412:8 456:22	364:13	handle 399:3 426:4	330:1 448:5
grant 427:9 430:25	486:5 488:16	hand 306:23 307:7	436:2 464:1,6	hazards 295:11,15
granted 393:17	504:5 510:21	307:12,13,25	468:19,20 469:11	295:22 326:20
406:12,19 407:15	513:10 516:21	308:7 309:15	492:13,17 493:25	328:19,24 329:7
418:2	523:14 534:21	323:19,20,21,25	handling 343:18	head 382:16
grants 416:22	guide 323:7 495:25	324:2,5,6,8,10	handrail 456:5	hear 409:4 479:8
grapevine 303:1	guy 399:16,24	330:16,21,22	handrails 457:15	498:1,2
grated 509:11	441:22,24 544:15	331:1,2 337:8	457:18	heard 300:17
grease 457:9	guys 331:11,12,19	361:2 366:20,21	hands 308:4 323:23	302:16 303:1
great 350:9 356:18	331:20 367:23,25	366:24,25 367:5,6	330:19,24 360:25	304:23 313:2
378:13 430:12	378:3 404:10,10	367:8 372:1 374:7	366:3 367:2,3	338:2 404:11
498:2 510:14	419:8,17,20	386:13 387:2,18	387:22 392:23	hearing 336:23
greatly 548:18	428:12,19 429:6,7	387:20 388:2,5,6	393:3 405:9,12	361:17
Greenbusch	429:8,12,20 436:1	393:2,5,6 397:6	418:15 421:19	heartburn 383:12
313:13 346:8	461:11,16,18	405:8,13,14,16,18	438:3 450:15	heavy 305:2
371:20 375:22	462:23,23 482:2	405:19 418:5,6,10	451:8,15 462:7	heck 359:13
468:16 493:21	483:5 486:16	418:17,19,22,23	470:15,17 479:18	height 293:12
510:17 513:9	489:1 495:23	421:4,6,11,25	490:11 491:8,11	464:3 492:14
516:13	498:9,14,20,23	422:2,4,5 437:16	532:12 546:20,24	held 289:2 368:23
grips 502:13	499:8,21 507:17	437:17,25 438:1,7	happen 340:10	374:22
grooves 443:16	507:21 547:24	438:9,10,12,13	429:4,13,14	help 299:5 303:6

355:17 358:16 369:17 376:1 381:3 396:13 398:13 427:22,23 461:3 470:3 482:3 509:18 525:15 548:15	hinges 539:13,14 hire 380:15 historical 529:8 historically 347:14 355:23 hit 391:11 500:5,18 547:17 hitch 452:4,6 hitting 397:5 hodge-podged 536:23 Hoist 332:18,24,25 hoists 333:5,7 hoistway 314:20,25 316:1 318:6,18 321:3,10 322:12 322:16 323:16 325:13,20 326:8 326:10 328:19,22 329:13 330:12 334:3,22 341:10 341:15 348:2,9,15 348:20,23,25 349:6,23 364:25 447:4 452:5,10,16 453:8 454:13 455:11,13,20 457:2,14 458:3,13 502:18 503:7,24 508:9,11 509:1,9 510:1,1,23 511:14 512:2,5,24 513:12 514:16,21 515:3,9 518:8,8,17	homeowner 543:14 543:15 homeowners 347:2 347:2 543:5 homework 343:16 honest 301:12 331:24 374:12,13 374:14 401:23 505:6 honestly 428:7 honesty 499:19 hooked 448:2,4 hoops 340:21 hope 331:15 404:10 410:9 461:2 482:22 489:19 527:18 529:19 539:4 hopefully 298:1 331:17 332:21 379:12 483:8 499:10 501:7 527:16 hoping 381:12 horizontal 452:8 502:13 horse 300:5 380:12 546:3 hoses 512:13 514:3 hospital 442:25 hour 291:9 393:15 406:4,10 428:7 431:17 435:12 437:20 509:25 hours 291:10 368:12 373:21 400:3 416:12 423:5,24 424:1,2 424:6,24 425:18 426:10,12,14,16 426:18,19 429:19 430:7,21,22 431:25 433:15 435:13 436:21,22	436:23 437:5 house 365:18 441:21 542:23 housed 384:4 420:14 How's 350:8 huge 327:22 468:11 480:9 516:25 humbled 461:9,12 hundred 419:24 489:14 492:15 hundreds 390:7 530:21 hunt 469:17 hurrying 409:22 hurt 408:7 528:8 hydraulic 334:2 341:9 351:14 383:18 438:23 439:2,3 440:3,19 440:20,22,23 442:16 444:24,25 445:5 446:1,19 449:13,21,22 450:12 484:6 508:16,17,17 hydraulically 335:1	identified 328:20 330:1 504:18 505:19,25 511:2 Identifier 311:10 identifies 329:17 identify 435:9 458:18 484:21 492:19 495:2 identifying 335:12 409:17 482:15 485:6 IEC 299:22 ii 333:14 368:14 369:2,11 iii 333:17 368:15 illegal 539:17 imbed 337:14 immediately 406:15 immense 441:15 impacted 369:7 impellers 439:24 439:25 implement 451:10 implemented 298:24 304:25 503:8 548:17 importance 380:22 499:6 important 346:14 372:6 426:21 448:14 449:7 453:12,14 523:17 530:2 540:14 544:25 improper 295:17 in-fedded 336:11 in-person 377:18 377:19 500:15 Inaudible 420:6 inception 434:5,7 inch 293:12 468:18 494:12 501:24 502:5,5,8 504:14
helpful 431:20 496:18 524:12 helps 518:5 Henderson 320:8 hereunto 549:16 hey 301:24 302:2 306:8 311:25 319:14 339:4 340:3 375:3 378:6 378:11,15,17 384:8,9 387:12 395:7,14 398:5 400:1,20 401:18 404:1,8 429:3 431:2,5 432:25 433:5,8,22 435:5 435:11 441:22 460:7 466:14 467:14 482:6 503:15 505:5,8 506:10 526:20 536:20 537:8 hi 338:12 427:19 444:20 454:1 466:1 487:14 511:10 515:11 hide 384:22 high 304:15 465:16 509:10 higher 339:17 344:2 502:9 highest 545:16 highlight 361:21 highlighted 362:17 431:25 highlights 361:20 hinge 464:13	hoistways 463:12 hold 358:15 379:5 414:17 459:6 506:12 507:11,15 508:1,3 holders 381:2 holding 376:8 hole 442:6 home 484:24 528:3 528:5	hope 331:15 404:10 410:9 461:2 482:22 489:19 527:18 529:19 539:4 hoping 381:12 horizontal 452:8 502:13 horse 300:5 380:12 546:3 hoses 512:13 514:3 hospital 442:25 hour 291:9 393:15 406:4,10 428:7 431:17 435:12 437:20 509:25 hours 291:10 368:12 373:21 400:3 416:12 423:5,24 424:1,2 424:6,24 425:18 426:10,12,14,16 426:18,19 429:19 430:7,21,22 431:25 433:15 435:13 436:21,22	idea 310:13 312:7 345:12 376:21 407:5 409:25 446:3 501:8 504:8 512:11 525:4 531:2 ideas 298:13 identification 293:8	I i.e 436:25 437:5 464:18 509:10 533:9 IBC/RBC 365:22 ICC 528:19 idea 310:13 312:7 345:12 376:21 407:5 409:25 446:3 501:8 504:8 512:11 525:4 531:2 ideas 298:13 identification 293:8

504:20 507:5,6 528:6 530:9 531:2 inches 452:7 454:19 455:2 463:25 464:4,4 465:10,11 468:13 468:20,21,23 469:15 492:13,15 492:16 493:3,23 493:25 494:10 495:6,8,10,10 496:19 497:1 502:1,9,12 503:1 521:15 528:3 529:10,12 530:21 532:1 incident 409:18 incline 388:15 464:24 465:2 466:12 inclined 471:8 472:1 473:8,15 476:16 478:24 482:20 529:17 533:1,3 include 295:16 333:9 385:16,18 393:19,23 398:8 474:22 482:16 485:7,9 492:18 495:1 included 394:2 477:3 535:16 includes 348:13 including 290:18 294:5 393:16 406:10 502:23 513:11 535:3 inclusive 290:4 inconsistent 495:15 inconsistently 328:11 incorporate 481:7 incorporated	311:16 incorrect 300:13 301:16 355:5 471:11,18 incorrectly 295:18 increased 295:13 295:13 incur 395:9,17 indent 488:14,24 indenting 481:18 482:3,14,17 486:11,15,19,24 487:17,20 488:9 488:23 489:2 491:2,2,4,15 indents 486:12 indicate 291:5,8,12 293:14 indicates 370:24 389:16 474:6,16 indicating 529:5 indirectly 290:11 individual 321:22 332:6 533:5 542:18,22 543:3 544:24 545:3,7,20 individually 524:1 526:21,23 individuals 363:19 Industrial 343:4 344:3 Industries 287:1 370:15 industry 294:24 299:23 309:18 326:10 343:18,19 344:14 352:16 465:11 information 290:17 302:24 309:6 350:7 355:5 368:10 369:7 371:22 373:20 374:18,21 388:25	394:21 416:9 447:21 482:18,21 483:11 485:11 486:22 488:9 500:12 508:3 510:9,14 525:16 525:24 informed 368:16 initial 316:3 337:7 initially 384:17 491:3 initiating 328:4 injure 407:6 injuries 409:6 injury 406:7,14,16 406:24 407:4,22 407:23 413:15 input 349:21 427:17 482:24 insert 293:8 inside 292:21 333:1 334:3 341:9,15 348:15 452:5 463:23 465:10 469:9 492:10 insofar 549:11 inspect 344:15,16 347:17 348:4 349:14 397:21 400:23 416:16 420:5,20 431:12 inspected 430:18 431:15 435:7 inspecting 352:10 353:9 354:3 416:5 inspection 318:25 329:20,22 349:17 394:3 395:6,7,14 395:15 396:17,22 396:23,25 397:12 397:15,22 398:1,2 398:5,9,14,23 399:1,3,9,17,23 400:1,10,21,23	401:5,11,13,15,18 401:23 402:4,9 403:12,13 404:24 408:19 412:2 413:15,15 416:7 416:12 422:25 423:3,4,8,9,10,11 423:12,12 424:9 424:11 425:19 426:17,18 428:17 430:24 431:3 432:5,15 434:5,12 434:22 435:12 436:14,23,24,25 437:9,9,20 444:11 447:3 452:14 454:12,24,24 473:23,25 489:15 inspection' 436:15 inspections 393:23 393:25 394:2,6,7 394:7,17,25 395:4 395:8,9,16,24,25 397:14 398:7,8 400:6 401:12,24 402:5 404:21,22 404:25 422:21 423:20,21 427:5 427:11,13,14,24 431:10,13,20 434:2,2,19 435:1 537:11 inspector 322:2 336:22 365:10 374:19 392:8 394:15 396:21 397:17,25 400:13 401:14 406:17 407:16 409:10 412:25 413:16 423:5,25 424:13 425:15 426:15 428:11 430:4 432:1,4 433:5,12	434:21 435:4 437:2 441:13 444:13 447:2 453:5 458:23 461:7 466:2 471:10 474:12 475:4 477:21,23 477:25 487:15 522:1 523:4 528:12 535:10 539:8 inspectors 347:1 393:18,24 395:2 404:20 406:12 412:22 414:13 424:15 426:4 427:23 428:5,6,13 432:23 433:22 434:9,25 435:10 475:20 install 336:6 339:18 339:21 340:7 349:6 351:10 353:5 354:16 355:3 383:15 390:21 441:6 474:11 531:13 536:10 545:15 installation 293:25 332:11 335:5 356:7 368:21 423:9 427:4 439:8 442:16 451:2 478:13 484:16 521:25 installations 325:17 365:16 435:23 476:20 489:13 503:11,17 514:17 521:24 528:18 538:13,14 539:17 installed 290:3,7,23 293:18 294:4
---	--	---	---	---

298:16 326:17 333:1 346:12,16 352:20,21 432:9 438:24,25 439:2,4 439:5 444:7,24,25 446:1 447:3 449:20,22,24 475:22 502:10 521:25 533:4 installer 434:14 installers 435:22 436:7 installing 355:23 422:22 443:7 installs 326:11 380:13 423:15 514:9 instance 434:23 instances 442:9,21 instantly 372:19 instruction 452:15 instructions 482:16 485:7 intelligible 549:12 intended 325:13 357:4 392:2 528:15 534:25 535:2 intent 294:16 298:19 301:7 303:4 310:3 311:24 316:10 322:14,22 345:23 346:1,2 371:4 373:10,13,24 374:16 377:25 381:4,14 384:17 385:4 394:23 397:24,25 424:1 434:1,24 444:22 445:2 447:21 450:22 451:1 454:14 469:25 516:19 531:25	534:5,20 541:5 542:16 543:13,17 intention 297:3 394:20 inter-- 304:13 interact 294:10 295:14 Interaction 298:11 interactive 427:12 interconnected 306:1 interdepartmental 400:18 401:3 interest 441:1,1 549:15 intergroup 304:9 interior 383:13,16 384:22 internal 304:13,13 internally 540:3 international 299:20 327:12,24 internet 295:3 297:25 298:4 304:7 interpret 391:20 448:17 466:16 interpretation 371:25 375:15 393:20 454:6 456:3 531:16 interpretations 518:23 534:5 interpretations/o... 335:10 intranet 295:3 304:13 introduced 440:2 invented 335:19 investigate 406:7 410:1,18 417:10 investigated 406:16 417:13 investigating	410:12 416:4 investigation 408:4 409:12,14 414:5 investigations 406:6 415:21 417:23 invoice 395:11,12 395:18 398:12 405:2 invoiced 394:4,8 396:11,13 398:12 402:2,3,6 405:1 invoices 368:15 involved 299:17,18 299:24 351:21 355:8 370:10 394:2 406:13 442:24 447:9 524:7 involves 416:13 IRC 521:23 iron 509:15 516:25 isolate 293:20 isolated 400:17 isolation 292:6 issue 300:19 338:19 342:9 364:18 375:3,24 412:8 413:5 414:9 417:13 434:12 447:9 463:16 469:14 510:12 514:18 529:25 issued 416:19 issues 300:17 383:13 397:13,18 399:11 435:24 442:15,21 445:12 447:9,13,19,19,20 504:18 543:18 it'll 316:20 item 435:9 537:21 537:22 items 288:4 340:9	376:7 410:4 446:15 452:5 481:8 523:19 iv 333:21 IVIP 427:11 431:13 431:19 432:4 433:18,18,21 434:7,8,9,12,18 434:25 435:5 437:1,2 IVIPs 426:25 434:16 435:21,23 436:3,4,6 437:7 <hr/> J <hr/> j 294:6 jack 438:23 439:1 439:16,19,20 440:22,24,25 441:7,10 442:4 443:7,15 444:23 445:4,4 446:1 449:20 jacks 441:2,25 jamb 349:3 465:15 468:22 James 405:11 435:18 436:4,9 Jan 300:21 301:3,4 302:10 308:14,16 310:2,6 311:4,18 311:19 313:3,7 320:10 321:6,7 322:24 324:9 330:2,3 347:16 348:2 356:3 376:22 386:18,20 386:21 411:1,6,10 415:22 437:21,22 506:13,25 507:11 518:6,10 530:6,7 547:7,10 Jan's 352:9 354:2 jive 449:3	Jo 287:15 289:4 549:4,19 job 301:4 310:19 374:20 395:16 401:15 429:22 435:25 443:11 500:8 jobs 428:1 429:24 John 386:19 401:8 402:15 407:11 412:19 458:8,9,12 459:24 Jon 302:21 310:11 318:3,7,7 319:11 319:18 320:2 321:15 408:14 457:23 459:11,23 Jonathan 303:12 309:16,17 316:16 323:3 327:17 383:11 412:19 413:8 416:24 442:14 455:16 458:22 460:13 469:3 493:1 514:12 515:1 Jonathan's 458:25 jump 340:21 455:22 jumping 299:13 300:2 459:10 junction 509:8 jurisdiction 328:13 332:5,9 363:1 420:4,19 428:13 531:14,15 jurisdictions 325:10 just-- 447:22 justification 294:22 326:2 389:13,13 389:21 390:1,4,8 390:17,25 474:2,2 474:13,21
---	--	--	---	---

K

K 481:4 484:3
 489:22 490:6
keep 300:6 304:14
 311:11 322:8
 325:6 339:7
 361:12 376:12
 397:5 400:17
 401:2 496:5
keeping 362:24,25
 400:25 528:17
keeps 304:4
kept 291:14 292:24
 338:21 361:17
Kevin 299:7 305:6
 309:5 317:15
 318:4 337:17
 356:15 364:11,22
 410:25 445:10
 452:20 477:1
 481:21 483:8
 503:22 506:18
 511:5,25 519:6
 527:22 529:20,21
key 328:17 417:13
keyed 546:1
keys 292:21,23
kick 518:14
kid 413:25
kill 407:7
kind 300:4 303:13
 312:6 321:23
 323:4 338:16,20
 350:25 365:5,20
 382:16 384:19
 392:2 394:20
 395:22 396:9
 400:15 403:9
 410:5,13,20 414:8
 426:20 429:7
 434:10 435:8
 441:18 447:4
 448:12 466:7,9
 469:12 485:22

486:8 488:1,15
 510:10,11 518:2
 523:9,15 534:12
 536:23 539:8
 540:4 544:10
 546:2
kinds 543:18
knock 399:18
know 296:2 297:10
 297:23 298:9,18
 298:23,23,25
 299:10,13,17,23
 300:1,6,12,15
 303:3,17,17,21,25
 304:7,24,25 305:1
 305:2,7 306:11
 312:6,8 317:13
 322:14 323:8
 329:17 336:12
 340:13 343:14,16
 345:14,18,20,21
 346:6 347:13,24
 350:22,23 351:5
 351:13 353:11,19
 357:24 358:2,10
 358:12 360:22
 361:16 364:24
 370:1 372:12,25
 372:25 373:1,2,9
 373:10 374:21
 376:23 377:13,20
 378:2 379:13
 381:21 382:20
 383:7 385:2
 387:11 395:4,10
 395:12 397:10,20
 397:21 398:9,21
 398:21,24 399:11
 399:13,20 400:1,1
 400:2,19 401:14
 402:2 403:7,10,14
 403:19 404:6,7,9
 405:25 408:23
 409:6,12,20 410:5

410:7,15,20
 412:15 413:23
 414:9,11 418:9
 424:10 425:4,5
 426:3,10 427:16
 428:4 429:3,5,7
 429:12 430:2,9,22
 431:2,3 432:13
 433:2,20,23
 436:11 437:2
 442:1,3 445:2,12
 446:3,19 447:18
 448:20 449:16
 453:1 456:1 460:6
 463:14 467:12,15
 468:1,4,8,13,18
 469:13 475:20
 476:3,6 477:4,25
 486:8 487:15,24
 488:9 489:21
 492:4,7 493:5
 496:11 499:19,21
 500:8,11,14,16
 503:10 504:4,10
 504:10 505:15,17
 505:19,21 506:10
 509:24 510:25
 512:11 515:11
 516:15,17 519:11
 523:19 524:10
 525:3,6,18,20
 529:11,25 531:15
 536:1 537:23
 539:11 544:5,12
 544:17 545:22
 548:14
knowing 378:6
 409:21
knowledge 309:22
 407:4 435:3
 461:12 492:8
 529:7 536:1,4,15
knowledgeable
 344:4

known 326:12,14
 334:23 353:20
 500:3
knows 423:21
 481:15 482:6
Kone's 318:13

L

L 322:2 336:22
 365:10 381:18
 396:16 400:13
 401:9 409:10
 428:12 431:22
 436:5 441:13
 461:7 466:2
 472:17 475:4
 477:14 484:6
 528:12 538:6
 539:8
labeled 388:17,20
 388:22
Labor 287:1
 370:14
laboratory 388:17
 388:23 389:6
 390:3
lack 339:11
ladder 502:10,14
 502:19
lamp 543:2
landing 314:16,17
 314:24 320:22,23
 321:9 325:22
 328:22 329:23
 341:24 342:2
 452:11
landings 330:12
language 299:12
 301:1 304:3 312:4
 312:18,23,25
 320:12 321:8
 322:7 326:3
 346:10 364:19
 373:11 375:7,13

378:25 379:2
 444:23 445:11
 452:21,25 466:18
 475:25 487:25
 488:25 496:22
 497:1 504:19
 505:23 507:2,6
 517:2 523:8 534:2
 534:7
laptops 294:7
large 465:9
larger 299:14 300:3
Larson 298:6,7,8
 311:6,7,8 329:15
 329:16,16 470:21
Lastly 327:3
latch 322:19
late 317:16 429:3
 483:16
latest 506:14 530:8
Lathe 396:16,16,21
 397:2 431:21,22
 431:22 471:12,15
 471:16,16 472:16
 472:17,17 477:13
 477:14,14 483:15
 483:20 485:18,19
 485:19 489:3,3
 530:19,19 538:6,6
LATHER 483:15
latitude 435:2
Lau 319:10,10
 344:11,11 352:5,5
 364:21,21 373:16
 373:16 411:16,16
 425:3,3 446:17,18
 454:1,1 456:22,22
 459:13,16,20,22
 467:18,18 486:1,1
 511:10,10 512:20
 516:23,23 517:22
 541:23,23
laundry 482:5
 486:12,12 489:7

law 350:23,25 415:12,12	367:7 372:23 424:19 440:16	340:4,12,15 343:10 344:21	333:10 380:10	352:8 356:19
lawsuits 409:6	493:11 499:24	346:13 351:14	limiting 306:19	372:4 374:15,25
lawyer 408:22	515:23	354:20,23 355:20	limits 454:10	375:19 383:4,12
lax 430:4	let's 312:10 321:6	355:21,22 484:2	459:10 513:20	385:11 392:3
lay 524:11	347:3 349:2	485:12 521:15	line 303:15 309:12	397:9,9,23 410:22
lazy 323:1	357:16,19 359:8	540:24 542:19	310:5 312:15	414:3 415:23
lead 524:15 544:7	359:19,20 383:22	544:12,17 545:4	316:17 320:23	419:12 420:9
leaning 413:23	383:22 395:3,23	545:24	325:21,22 328:9	422:14 425:7
learning 461:9	395:24 397:1	lifting 334:1 341:7	328:11 330:14	429:3,6,13 430:8
leave 414:13,18	398:18 401:5	515:16	342:10 357:9,16	456:23 463:17
441:8 456:2 506:1	411:5 421:1 441:8	lifts 335:21 336:18	357:17,18 442:25	466:17 467:22
512:5 544:19	466:20 483:19,22	337:3 339:8,19,23	443:4,6,9,9	470:4,12 476:15
leaves 366:8 472:23	503:19 513:4	339:24 342:22	444:21 463:13	482:23 483:1
leaving 304:12	544:19	343:13,22 344:18	464:5 465:22	486:9 488:1,12
309:10 319:23	letters 293:10	344:18,20,21,24	466:22,24 467:14	492:2 497:21
383:22 513:11	482:18	344:25 345:6	468:20 492:17,24	499:11 504:24
leeway 470:12	level 303:23 312:20	346:25 347:4,6,8	496:9 497:9	516:5 523:13
left 295:22 360:15	313:20 329:6,10	347:11,12 352:12	498:22 514:14,20	524:2 525:25
363:18 499:22	339:17 383:14,24	353:5,8,10 354:5	515:2 533:16	534:13 540:5
526:18	499:18 502:9	354:6 355:3,7,15	535:1 539:18	545:15
legacy 326:14	liberal 328:6	355:24 388:25	540:9,17,20	live 362:7
legal 297:11 338:16	license 369:18	471:9 472:1 473:8	541:16,17 542:8	lives 363:21
338:25 339:5	380:3,7,25 381:2	473:16 481:4	545:8	living 363:15
350:16 351:19	381:5 383:14,24	482:7,8,9,20	lines 321:6 356:6	load 314:16 320:22
412:21	384:18,23 385:23	483:17,23 485:22	440:1 441:8	332:13 339:12
legislation 332:8	387:17	486:8 487:21	442:22	383:17 389:12,20
415:3,4,5 498:19	licensed 308:23	488:10 490:5	linked 294:25	390:19,23 391:5
lengthy 367:19	370:16 380:12	535:1,2,16 536:18	295:4 448:7,7,8	392:9 472:8
524:24	384:5,10,14	540:19 545:18	liquidity 427:3	473:12,20 474:1
Leopard 301:4,5,6	385:17,24 386:4	light 465:3 466:4	list 364:5 377:11	474:14,16,18,19
304:20,21,21	387:7,13,19 409:1	466:25 469:17,17	419:22 421:6	477:25 478:1,14
312:5,6 350:18,22	licenses 380:4,11	523:5	481:8 482:3,5	501:3 521:12
372:9,10,11 374:6	380:21 381:17	lighting 465:16	485:21 486:12,12	533:14,25
385:1,2 386:10,12	licensing 368:14	494:5	489:7,21 499:13	loads 545:5
396:8,9 397:5	370:2,14,15 371:6	limb 503:9	listed 388:17,20,22	lobbies 363:13
403:5,6 413:21,22	381:16 385:13,22	limit 380:11,22	475:18 478:24	364:13
417:4 420:22,23	lid 509:11,16	382:19 452:12,25	484:17 533:21	lobby 328:3,5
444:19,20,20	lieu 431:6	455:1 458:4,5,15	listener 323:1	330:5 364:15
497:23,25 498:3	life 291:14 300:18	459:8,9,11,12,16	listening 461:10	365:3
516:5,6,6 538:2	300:19 329:6	459:20,21,22,25	466:2	local 413:25 531:14
544:4,5	336:24 440:11	460:1,24 527:25	lists 364:7	531:15
Lerch 342:12 359:2	487:24 503:9	limited 295:16	literally 296:11	located 290:6
359:14 362:6	lift 334:6,19 336:14	311:20 329:21	little 299:9 306:12	292:21 325:15,18
			312:21 350:20	325:24 334:3

341:9,14,15	476:18	lot 318:8 319:19	466:4,24	machine-room-less
348:19 392:17	look 298:5 299:24	331:17 336:5	lunch 406:1,4	325:17 326:12,15
452:7 463:22	301:2 313:1 339:8	337:1,8 345:1,7	419:16,18,21	327:5 328:24
464:12,14 465:4,5	345:8 348:12	349:3 351:13	500:17	341:4 356:17,24
466:25 467:1,2	394:16 397:11,20	365:20 366:8	Lyll 370:22 381:9	357:4,8 360:17
492:9 508:18	399:11 402:9	372:17 373:11	391:24 423:23	362:22
516:18	403:21 407:5	376:22 382:19	424:23 476:20,20	machine/control
locating 452:16	411:5 417:5	400:14,15 403:9	478:2,23 495:5	349:12
location 292:25	441:17 442:4	403:10 408:15	511:19 513:16	machine/tank
308:21 329:21	457:8,9 481:19	409:19 419:5	517:10,23 518:9	334:2 341:8
394:1 399:20	483:2 496:21	432:24 433:14	518:11 524:6,15	machinery 325:14
401:12 434:18,20	506:9 507:24	442:8 443:24	525:14,24 540:13	machines 452:3
434:22 453:8	511:1 518:2	448:3 461:9 486:3	544:21 545:12	454:13 463:12
454:18 456:2	522:15,25 523:12	486:4 489:7 499:2		508:18
463:19 464:10,17	523:21 526:20	500:12,14,15	M	Madison 318:2,3,3
494:2 502:5 508:9	536:24 545:6	507:2 516:3,4	M 481:5 484:3	321:14,15,15
508:11 510:19	looked 323:5	538:3 541:11	M.O 433:3	408:13,14,14
locations 339:22	382:15 412:8	544:13 545:15	M3/H 509:24	409:8 419:8
lock 292:22 293:18	417:16 494:9	lots 298:13,13	machine 325:12	457:22,23,23
317:1,25 318:18	503:23 505:13	352:22	326:15 327:3	458:12,12
322:19	519:4 523:20	love 403:2 409:4	328:7,10,15	Madison's 412:20
lockable 533:19	524:1,7	424:23 430:8	329:18 333:24,25	main 358:19
537:1,21,22	looking 301:5,7,23	461:17	334:1,5,5,7,18,20	463:13 465:3
locked 293:16	303:23 317:22	loving 460:18	338:1,4 341:6,7	466:4,22,24,24
314:25 321:10	322:2 337:24	low 401:24 545:21	341:18,21 342:6	531:25
322:15	351:1 386:24	545:22	347:25 348:7,12	mainline 332:13
locking 293:17	410:18 427:7	lower 308:4 318:4	348:14,17 349:1	463:21 492:9
locks 316:6,7,24	463:4 466:8 476:3	323:23 324:5	349:21 350:1	maintain 537:17,20
322:15	481:19 485:15	330:18,24 333:3	356:25,25 357:7	maintainable 452:5
log 293:1,3 311:12	487:16 494:13	334:24 360:24	357:12 358:22	maintained 293:3
482:14 485:6	508:24 516:8	367:2,2 386:12	361:13,14,25	maintenance
log-in 304:10	519:6 525:7	387:22 388:2	362:1,18,19 363:1	332:12 335:5
logging 456:15	lookout 501:6	392:23 393:2	398:19 442:23	356:7 380:13
logic 540:6	looks 296:4 321:24	397:6 405:9,11	447:4 452:4,6	454:11 455:19
logical 453:17	327:17 349:7	418:15 421:19	454:11,16 455:23	485:9 487:2 489:9
487:20	359:2,7 360:12	438:3,7 451:15	456:6 457:13	major 297:14 337:9
logs 315:20 485:9	364:7,7 374:9	462:6 465:9	463:23,24 464:8	337:11,15 408:16
long 352:18 353:16	411:3 438:19	470:15,16 479:18	464:10,15 465:5,5	514:7
355:4 435:15	473:3 484:4 494:4	491:11 520:21	465:14,20 466:6	majority 360:12
453:22 481:16	497:13 513:24	532:14 546:19,24	468:1,9 470:13	480:9,16,19
482:2,5,25 483:1	516:2 521:5	lowering 485:8	482:19,22 484:1	507:25 529:1
long-winded 312:8	522:16	lowest 342:2 503:6	485:12 486:13	making 303:6
longer 327:3 328:8	loss 295:20	LULA 512:16	492:10,11 509:9	309:21 326:2
371:13 383:4	lost 338:16	LULAs 465:3	516:18	349:21 351:25

369:25 383:2	marking 293:9	435:15 441:16	470:8	480:4 488:22
400:25 403:20	359:11	449:4 455:17	meat 414:17	490:21 491:20
486:5 498:18	markings 293:14	461:10 494:7	mechanic 297:2	506:12 520:13,25
514:13 520:15	Marshall's 448:12	500:12 519:23	305:9,11 308:23	532:17 546:25
malls 408:16	Mary 287:15 289:4	meaning 333:9	310:8,12 374:2	548:16
Man 391:10	549:4,19	415:9,10 441:20	380:2 381:5 384:6	member 333:16
mandate 342:25	match 329:25	means 304:1,11	384:11,14 387:16	499:16 500:3
mandated 332:7	matches 460:14	314:12 318:24	409:1 433:9	members 311:1
mandating 407:2	material 334:6,19	320:19 327:8	454:25 455:6	326:18 497:14
manner 333:12	335:21 336:14,17	328:20 332:10	mechanic's 384:18	501:2 525:19
manual 485:8	337:3 339:8,19,23	333:24 341:25	mechanical 363:14	mention 308:17
manually 292:11	339:24 340:4,12	363:21 365:25	mechanically	mentioned 337:5
472:7 473:12,19	340:15 342:22	366:11 370:8	508:14,20	353:6 386:17
474:14 521:12	343:10,18,22	377:9 419:11	mechanics 368:13	414:12
533:24	344:17,18,19,20	464:25 478:13	370:8,10,13,16	merge 522:25
manuals 487:23	344:21,24,25	481:6 484:1,8	371:23 372:21	527:3
manufacture	345:6 346:13,25	489:24 490:8	373:22 374:1,23	mess 384:1
354:10,11 355:6	347:4,6,8,11,12	498:21 502:1,18	387:8,19	message 413:12,16
355:14,14	351:14 352:12	503:6,7 508:19,21	mechanism 407:2	met 326:4 414:5
manufacturer	353:5,8,10 354:4	526:2 533:10,17	416:14,21	metallic 443:16
343:3 352:11,14	354:5,5,20,23	533:21 534:16,23	medial 408:18	meter 495:18
354:18 388:19	355:3,7,14,20,20	535:19,20,23	medical 408:5,5,9	methodically 466:3
464:17 472:3	355:22,24 416:9	536:25 537:14	408:10,11,11	metric 492:18
473:10 478:9	501:23,23,25	538:10,16,17,20	meet 294:17 340:14	493:2 495:1
manufacturer's	materials 334:25	538:21,25 539:16	346:12,16 352:21	mic 314:1 498:1
389:4,15,22 391:2	math 314:22	539:19,21,24	353:1,7 468:23	microphone 426:7
473:18 474:4	matter 363:21	540:7,8,15 541:25	542:11	458:21
482:15 485:7	409:18 495:24	542:12 543:10,25	meeting 287:4	microprocessor
521:7 533:23	549:14,15	545:17,23 549:9	289:2 371:17	294:24
manufacturers	matters 351:19	meant 352:10	547:20,21 548:11	Microsoft 289:3
295:7 297:15	max 303:18	447:18 542:21	meetings 368:23	middle 316:1
315:19 319:2	MCE 297:18	measure 453:9	369:4,10 371:15	342:10
326:3 343:5 349:3	McKenzie 325:3,4	455:10,11 456:1	371:16 373:4	Mike 302:15
349:5 354:10,14	325:5,6 428:9,10	462:3	377:16,18	414:24 476:10
355:2,8 465:22	428:11	measure-- 455:10	Melissa 289:7	477:12,14 487:1
manufactures	meager 519:23	measured 453:13	308:8 324:16	487:11 527:11
326:11 343:17	mean 296:11 300:8	464:5 492:17	331:3 334:11	531:3,4
352:12 354:16	300:17 324:23	measurement	360:8 363:4	Mike's 529:22
marching 425:12	336:18 358:10	452:9,17,23 453:9	367:10,21 377:10	mileage 393:17
426:1,3	359:16 362:8	454:3,7,8 455:4	388:8 393:7	399:8 406:11
mark 349:15	375:15 376:7	455:11,13 458:2	405:21 418:8,25	millimeter 495:9
marked 293:7	377:19 382:12	458:12 470:2	422:7 436:11	millimeters 293:11
527:17	383:4 386:19	521:16	438:14 451:19	492:12,14,16
market 499:5	402:25 425:6,8	measurements	462:5,18 471:3	493:2,6,8,14,14

494:11,12,13 501:24 502:1,4,5 502:7,9,12 503:1 521:14 Mills 297:1,2,2 310:10,11,12 315:18,19 317:20 462:9 547:7 mind 300:6 424:18 447:20 463:9 487:17 516:20 535:14 mindful 323:9 minds 461:7 mine 354:19 463:4 minimal 336:4 435:24 minimize 327:10 minimum 326:23 326:25 327:9,12 327:24 329:4 336:15 347:10,11 426:12,13 428:16 436:23 439:15 509:24 527:24 528:3,9 minus 518:25 minuscule 485:22 minute 291:9 331:9 367:21 427:6,25 428:3 446:17 462:23 497:18 509:2 514:4,4,20 minutes 291:11 331:12 367:22,22 367:24 406:1 419:17 462:24 498:5 mirrors 507:3 misread 408:2 missing 317:25 misspelled 411:10 411:14 mistake 361:23	mistaken 338:3 mitigation 326:6 328:23 329:2 mix 488:12 mixing 486:6 mobility 484:23 mod 337:10,15 398:18 model 327:11,23 modern 297:12 modernization 337:10 modernizations 514:7 modified 354:22,25 modifier 430:25 modify 303:2 355:4 355:10 mom 374:25 moment 435:3 money 544:13 monitor 295:14 monitored 290:21 298:1 monitoring 290:13 297:9 300:14,23 303:18 308:18 Montgomery 448:10,11,11 month 291:6,7 312:20 313:20 399:20 monthly 291:16,17 months 399:21 morning 298:7 303:12 311:7 329:16 425:20 431:5 501:9 524:9 526:9 548:21 motion 303:7 318:22 319:8 333:14,18,23 337:20 458:6 508:16	motor 333:17,20 337:20 508:15 533:18 534:24 535:23 537:15,17 537:20 539:1,11 539:18,25 540:2,4 541:1 542:2,13 543:11,21 544:1,8 motors 508:17 536:15,20 mountains 435:2 435:15 mounted 335:2 469:19 509:9 mouse 426:8 mouth 325:6 move 308:14 311:22 312:3 317:4 358:23 359:23 363:9 377:5 379:24 382:14 392:10 414:23 424:21 428:1 446:11 452:13 471:22 480:22 491:1 492:23 493:18 497:21 501:16 507:20 508:8 532:22 moved 378:25 423:1 504:6 movement 314:13 314:14,17,22,23 317:9 320:20,21 321:1,9 322:10 323:14 443:12 508:14 moves 316:2 moving 314:4 325:15 333:16 367:14 368:4 388:12 393:10 438:18 452:2	461:19 505:20 521:4 536:17 MRL 325:17 326:3 328:10 329:18 333:24 341:4,11 341:11,14 356:25 357:17 358:1 359:3,8,9,13,21 362:19 456:14 465:14 MRLs 318:12 326:3 330:10 358:22 359:12 360:2,3 361:22 362:17 456:13 457:2 467:20,23 467:24 469:24 muddies 395:22 multi 468:9 538:13 538:14 multi-banks 468:18 multicar 464:8 multiple 401:16 484:23 502:18 510:1 518:8 534:5 muster 338:25 muted 295:25 335:14	316:11,14 317:3 318:2 319:9 320:6 321:13,25 322:24 323:2,10 324:11 324:15,20,22 325:7 327:19,21 330:2,6 331:7,15 334:13,15 336:16 337:16 338:9 340:23 341:2 342:5,15,18 344:8 344:10 346:7,18 347:15 349:20 350:10,17,21 351:25 354:7 356:1,21 357:10 358:5,14 359:5,24 360:11,24 361:9 361:19 362:11,16 363:8 364:10,20 365:8 366:13 367:10,14,17,20 368:3 370:4,20 371:4,19 372:9,22 373:15 374:5 375:21 376:3,11 377:15 379:4 381:14 382:5,18 384:3,25 385:10 386:10,14,23 387:1 388:12 391:10,24 392:12 393:10 394:23 396:5,15,20 397:1 397:3,7,24 400:11 401:7,13 402:12 402:15,17 403:2 403:17 405:25 407:19 408:3 409:8 410:24 411:5,15 412:17 413:7,21 414:20 415:2,18 417:18 418:13 419:4,19
N				
N 288:1 289:14 481:6 484:4 Naipo 289:8,21 296:3,13,16,24 297:1 298:6 299:3 300:21 301:4,12 302:13,19 303:11 304:16 305:4,14 305:23 308:13 309:1 310:2,9,23 311:18,23 312:11 313:2,8,15 314:1 314:4 315:16				

420:9,25 421:12	523:23 524:4,14	419:2 422:9	454:17 457:19	505:18 511:16
421:17 422:11	524:25 525:12	438:16 451:23,25	468:9 472:24	513:5 516:2,4
424:3,14 425:2	527:15 528:10	451:25 462:20	475:22,23 478:19	544:16
426:5 427:18,21	531:9,20 532:21	471:5 480:6	480:10,11,12,14	negate 498:24
428:9 430:10	535:6 540:12	491:22 521:2	482:4,19,20,21	499:6
431:21 432:18	541:3,22 544:4,20	526:22 532:20	485:1,11 486:23	negating 306:20
435:18 436:9	545:12 546:4	547:3	489:15,17 491:15	network 289:24
437:24 438:18	547:4,11 548:5	NBCC 325:10	492:4 494:3	290:20 291:24
441:11 442:13	name 293:4,4	NEC 533:16 534:3	497:16,20 498:11	292:1,2,3,4,4,7,9
443:21 444:19	294:18 346:24	537:3 539:20,23	504:9,13 512:1	292:18,20,24
445:8,23 446:9	355:19 436:11	540:18,23 541:6	516:11 518:14	293:2,6,7,9,13,15
448:10 449:9	names 339:15	543:22,24	519:4 522:20	293:19,21,22,23
452:1 453:3,24	National 333:6	necessarily 322:17	524:1,2 528:23,24	293:25 294:2,3,4
455:15 456:9,21	439:9	342:3 371:1 372:1	532:23 534:6	294:8,12,14,22,23
457:22 458:9	nationally 329:5	430:8 434:12	541:19 542:5	295:2,2,3,12,15
459:4,15,18,21	343:6 389:6 390:2	443:19 504:5	547:16	295:18 297:14
460:3,16,19,23	nationwide 375:1	necessary 290:19	needed 316:12	300:10 301:8,10
461:1,16 462:22	nature 304:8,10	292:7 304:1	330:7,7 332:1	301:16,20 302:1,3
463:2 467:7	439:23,23 444:10	338:13,14 388:25	335:7 369:19	304:4 306:4,6,9
468:15 469:1,21	nay 307:8,8,25	412:21 468:14	387:4 390:17	306:15,21,25,25
471:7,20 473:1	308:1 323:25	489:4 504:5	397:19 414:14,17	307:6,16,18,21,24
476:9,25 477:10	324:2,5,10 330:21	530:21	434:14 471:14	308:1,2 309:4
478:6,20 479:3	330:23 361:2,4,10	need 296:9 302:6	478:21 510:6	312:14 313:11
480:8 481:14,24	361:17 362:14	303:25 306:9	531:22 534:9	434:16
483:19,22 484:15	363:7 366:24	315:14 320:11	needing 335:13	networks 295:8,14
485:3,17,25	367:1,3,8 387:24	331:11 338:5,7	366:14 369:19	298:16 306:2
486:10 487:11	388:1,2,3 392:25	344:4 348:23	401:18	never 335:18
489:12 490:25	393:2,3,9 405:23	350:7,12 351:18	needs 345:3 346:16	336:19 339:20
491:24 493:4,12	418:17,19,20	356:19 358:24	349:25 356:19	342:23 363:18
493:20 494:4,15	422:1,2 438:6,8	364:7 374:15,19	357:15 358:1,21	432:15
495:11,16,21	438:10 450:11,13	374:20 375:2	371:22 375:5,8,14	new 289:23 294:1
496:7,23 497:4	450:15 451:11,12	376:10,15 377:12	375:15,16,19,25	296:6,9 297:9
498:2,4,8 500:10	451:14 461:4	378:18 379:10	378:25 383:25	310:13 312:14
505:1 506:4,7,17	462:11,13 470:19	382:11 385:24	384:11 385:19	313:17 314:5
506:23 507:1,10	470:21,22,23	391:20 395:16	395:6 400:19	329:8 331:23
507:14 510:16	472:20 479:21,23	396:19,24 398:11	403:12 408:9	335:8 367:15
511:3,8,18,22	490:13,14,16,23	399:4 402:10	425:7 430:19	368:5 369:5,16
512:19 513:7,15	491:14,14 497:16	403:15 404:2,15	431:8 436:25	371:11 373:5
513:24 514:22	520:10,12,21	407:24 408:12	437:7 444:18	380:1 391:23
515:6,10,17 516:2	526:2,19 532:8	410:3,6 413:14,24	446:13 447:14	398:19 406:13
516:12,22 517:9	546:16,18	420:9 423:16	448:5 449:7,17	422:25 423:9,15
517:14,17 518:6,9	nays 308:11,12	427:13 431:14	453:9 467:11,21	423:22 437:7
518:11,21 519:14	324:18,20 331:5	433:18 435:6,8	468:3 470:3	438:23 439:1,2,3
520:17,20 521:4	367:13 388:11	436:2,5 442:15	493:23 503:15	439:4,16 440:3,12

442:7,9 443:7,15 444:1,5,7,25 445:3,25 446:1,6 449:14,20,20,21 449:22 450:12,12 450:13 452:9 454:3 464:1 465:14 484:15 489:13 503:11,17 514:9,17 515:14 515:15,25 517:23 521:13 529:18 536:3 547:20 newer 316:18 478:17 newest 316:18 news 414:3 Newton 502:3 NFPA 326:22 327:1 328:1,2,3 439:7,8,9 442:17 444:8 463:22 492:10 533:5 534:3 538:11 nice 428:24 433:20 nicely 420:8 nickel 399:9 night 548:20 nine 431:4 494:25 nomenclature 496:10 nomenclatures 476:1,2 487:25 497:13 non- 442:21 472:23 non-buried 446:4 non-combustible 501:22 non-elevator 510:20 non-GFCI 509:6 non-individual 545:9 non-occupiable	364:14 365:23 366:7 non-occupiable/n... 363:11 366:6,17 non-removal 410:22 noon 400:2 nope 387:2 481:1 482:12 norm 429:5 normal 326:19 406:20,24 418:3 452:12,24 456:20 458:4,4,15 459:12 459:12 460:15,20 460:21 Normally 505:21 noses 372:18 not-occupiable 365:2 note 313:16 351:25 463:20,21 464:3 464:19,20,20 465:8,12,12,14 472:20 496:18 517:11 520:7 522:4 noted 436:20 460:5 519:10 notes 350:11 449:16 469:22 509:20 519:23 notice 425:19 427:9 noticed 471:17 notification 430:21 notified 416:6 notify 411:21 416:1 422:23 notion 298:17 NRTL 389:6 390:3 nuances 524:2 526:3 number 299:14 301:6,16 386:22	401:24 417:6 422:20 432:3 444:23 446:21,22 447:1 449:15 450:23 451:24 467:20 468:6 471:24 481:12 482:12 484:22,25 487:7 495:11 512:22 521:6 524:20,20,21 529:11 537:5 numbering 301:7 481:5,22 483:25 484:8 485:2,15 487:6,9 489:23 490:7 numbers 315:21 484:20 496:3 520:16 numerically 514:8 <hr/> O O 289:14 481:6 484:4 o'clock 424:10 425:8,9,20,21 431:3,4 432:10 objection 510:21 objections 484:19 observing 410:18 obstruction 398:21 obvious 409:2 obviously 417:8 occasion 429:15 occasional 429:5 occupiable 363:23 364:17,25 365:12 365:17,19,23 366:11 occupiable/don't 365:12 occur 295:22 occurred 291:10	549:6 odd 372:4 offer 381:1 382:1 office 332:5 364:6 448:12 offices 376:22 official 305:20 oh 302:13 305:5 308:14 313:6 314:3 317:14 323:1 325:3,5 327:19,21 332:18 334:13,15 350:2 350:18,21 356:13 367:17 372:11 374:8 386:23 387:1 392:15 396:10 403:4,5 436:4 444:14 459:18 481:1 483:19 493:10,15 501:14 515:17 517:18 531:7 oil 439:4,21 440:2 442:9,10 444:1,2 444:5,5,7,25 446:20 448:8 449:14,22 450:13 okay 296:24 305:4 307:4,9 312:13 313:15 314:3,4 327:23 330:6 334:16 350:3,8 352:13 357:8,17 357:18 358:5,8,20 358:24,25 359:3,5 359:8,20,24 360:1 361:14 362:11,16 362:20,23 363:2,8 367:23 371:13,14 371:14 376:3,16 377:1 379:4,7,11 379:12 382:4 387:20 389:24	393:10 411:6 419:5 421:12 422:11,17 424:5 426:7,14 428:8,21 432:13 450:1,6,19 457:10 459:3 460:3,4 461:1 466:13,23 471:20 471:21 473:5 475:10 478:4 480:10 481:2,25 483:7 489:1 490:3 496:8 498:1 499:4 500:24 501:12,18 505:12,20 507:19 507:22 514:10 517:18 524:25 526:4 529:18 536:12,16 537:11 539:2,18 542:4,10 543:9 547:11 okayed 378:20 old 391:22 444:5 older 445:16 528:3 Olympia 287:18 omitted 502:22 on-site 302:7 308:22 309:5,23 311:12 388:19 436:14,16 437:9 474:10 481:3 485:4,13 487:18 488:11 489:10,17 on/off 545:25 once 292:12,13 343:24 365:16 368:6,23 370:24 382:15 460:7 466:14 472:15 492:21 493:19 494:19 496:5 one's 432:11 one-time 423:10 ones 337:22 395:25
---	--	---	---	---

473:4 495:19 501:15 522:14,23 535:3 536:2 ongoing 298:10 338:20 oops 421:8 422:16 475:19 open 292:22 293:14 293:16,20 297:6 314:20 315:24,25 316:7,20 317:1,13 318:6,10,21 319:3 319:7,13,15,17,22 319:23 320:4 321:4 322:6,12,18 323:8 383:1 384:10 391:12 407:9 416:11 420:21 423:18 440:14 453:11,21 465:23 501:23 533:20 534:8 537:1 opened 292:10,12 292:13 opening 523:15 operable 533:18 539:1 540:16 544:8 operate 290:2 300:13 373:8 536:12 operated 308:22 533:2,15 534:24 535:1,21,21 536:13,18 537:13 538:9 540:17,20 540:21,24,24 541:16 545:2 operating 290:22 308:19 407:1 411:18,18 416:14 416:20 452:14 464:1 482:9	492:13 operation 295:17 298:11 305:12 308:18 333:21 337:20 406:20,24 412:1 418:3 439:13 440:13 453:18 485:8 509:22 512:10 515:5 operational 400:19 401:3 482:16 485:7 operations 333:3,8 513:21 operative 333:14 333:17,21 operator 383:20 opinion 347:24 373:11,14 374:4 446:5 468:14 498:25 540:5 opportunity 297:24 392:13 414:21 455:9 525:24 oppose 541:1 opposed 319:22 366:23,25 452:21 504:7 525:4 526:15 opposite 469:11 521:16,22 opposition 324:1 330:20,22 387:23 387:25 388:1 405:10,12,14,15 418:16,18,20 421:20 438:5 450:9,11 451:9 462:8,10,12 479:19,22 490:12 490:14 491:10,12 491:15 516:4 520:9,11 523:1	527:23 528:9 546:14,16,17 oppressive 507:7 opt 441:5 option 377:14 431:7 432:16 486:1 optional 389:18 390:11 474:7 options 302:23 315:10 364:3 369:24 375:11 378:23 379:9 382:8 392:2 394:13 395:22 430:12 443:24 445:25 456:11 487:6 493:17 496:17 510:8 523:25 525:3 527:21 531:11 534:12 545:14 547:22 order 294:25 336:9 353:7 414:7 537:17 ordered 414:2 orders 425:12 426:1,3 organization 293:5 332:5 429:13 original 445:2,4 544:18 originally 420:1,15 508:5 originated 534:2,7 OSHA 397:10 OSV 443:8,10 Otis 297:18 303:15 319:2 340:2 343:13,16 441:21 441:23 Otis's 303:14 Oury 335:14,15,15	336:23 342:19,19 344:9,12 346:18 346:19,19 354:7,8 354:8 397:7,8,8 402:17,18 outcome 549:15 outlet 509:7 543:1 543:6,16 545:18 outline 328:5 outside 302:4 304:12 325:13,19 333:1 334:8,21 341:22 342:1,8,16 369:19 380:6,16 384:15 404:23 486:24 519:2,3 overcurrent 533:12 overhead 443:1 452:3,6 455:23 456:13 overloading 545:19 overly 329:24 overnight 312:25 overreach 370:19 374:11 overreed 445:6 overspeed 314:8,12 317:8 318:15,16 318:24 319:6 320:15,18 389:3 389:14,20,21 390:22 391:1 438:24 439:5 445:1,6 449:23 472:2 473:9,17,22 474:3,7,10,12,18 474:19 476:19 521:6 533:22 ower 415:25 owner 291:17,19 293:3 349:10 363:22 399:7 400:8 406:8,22 408:17,19,21	417:24 437:4 441:8 owner's 406:8,22 409:21 415:25 owners 295:21 410:7 488:6 <hr/> P P 289:14 P-Flow 339:15 343:7 344:2 p.m 419:18 436:25 437:1 548:24 PACIFIC 287:16 Page 288:4 371:3 pain 461:14 painted 487:8 painting 484:20 panel 329:22 439:10 440:9 445:20 447:12 448:25 464:13 panels 304:10 329:20 447:15 448:1,3 Paoa 295:25 357:24 487:15 488:23 515:11 Paoakalani 289:7 paperwork 383:3 392:4 paragraph 296:6,7 335:15 380:1 427:8 440:5 451:10 466:16,20 475:10 492:5 529:4 paragraphs 343:11 parallel 292:16 parameter 290:5 291:1 304:19 parameters 301:21 302:6 303:3 306:3 306:11,20,25
--	---	--	---	--

307:1 309:4 310:16 paraphrasing 542:1 pardon 296:5 434:6 paren 357:1 parking 419:23 420:12 421:22 part 292:13,16 300:8 306:13 311:2,12 318:13 321:18 335:17 336:14 338:21 342:10,14 344:6 345:8 346:5 347:10 349:24 352:22,23 353:1 355:17 361:22 362:18 365:22 368:6 371:21 374:17 379:9 401:15 407:1 415:22 416:13,20 421:22 422:21,21 423:2 433:25 438:20,22 439:6 441:10 442:7 445:11 448:6 449:19 450:10,19 450:19 451:22 454:4 455:3 463:20,21 466:19 478:17 479:12 482:7 486:13 488:3 489:22 490:6 496:4 503:13,15,16 511:13 513:13 515:14,15 516:14 517:23 529:4 530:7 534:22 544:6 participant 434:8 participating 434:7	particular 337:5 398:1 400:25 407:12 427:14 434:19 453:16 478:24 483:4 488:13 527:9 529:2 537:2 particularly 453:15 456:13 parts 292:15 306:3 386:8 411:11 417:7,9 446:13 451:20 party 549:14 pass 338:25 371:1 372:8 375:5,8 376:13 377:5 378:7,10,14,19 379:15 419:16 461:19 483:13 496:8,13 512:22 527:4 532:24 passage 521:14 527:12,14,24 528:13,17,19 529:3,6,7,23 530:1,13 532:2,5 532:10 passageway 530:24 passed 368:6 370:24 403:22 404:6 461:22 480:8 489:15 519:20 522:14,15 522:25 523:7 527:1 531:14 passenger 314:9 320:9,15 339:23 passengers 440:11 passes 372:3,6 376:15 378:6 381:25,25 433:17 437:10 451:4 460:8 470:3 513:1	513:5 519:3 526:24 527:1 passing 378:8 paste 301:14 351:22 pasted 391:5 495:23 Paul 407:20 pay 400:9 paying 393:15 399:13,24 400:7 pays 396:2 penalties 412:15 414:11 penalty 411:24 412:5,6,11 pending 300:1 Pentagon 297:16 297:17 people 299:14,17 299:18 300:3 305:14 306:9 309:18 311:21 313:5 316:5,12 332:2 336:5 343:20 346:14 348:21 349:15,16 353:2 357:15 358:20 359:11 364:15 365:4,24 371:7 372:17 377:4,7 383:23 384:13 387:12 398:17,23 400:6 403:9,19 409:21 409:23 419:10,14 421:2 425:22,23 425:23 429:9 448:2 454:7 456:4 457:17 482:17 495:21 499:5,7 503:10 514:19 519:21 524:20 people's 372:18	446:14 449:16 perceived 375:7 perfect 541:19 perfectly 468:22 perform 301:2 316:19 335:3 380:12,18 393:24 394:17 398:5,9 404:21 434:25 performance 294:18 performed 314:19 318:5 321:3 322:5 322:12 323:15 327:6 394:6 488:7 508:22 performing 315:4 318:22 perimeter 334:8,21 341:22 342:1,9,17 period 407:16 414:19 419:9 476:7 538:17 540:21 Peripherals 294:6 permanently 293:6 533:4 permission 382:9 406:18 407:15 412:20 413:5,11 413:11,19 416:22 418:1 419:11 permit 336:10 340:3,14 342:24 343:21 345:11 347:1 349:16 411:19 416:18 423:7 472:3 473:11,19 474:5,9 permits 343:14 344:13 345:6 353:3,4,5 359:12 368:20,21 413:9 permitted 293:20	294:11 394:8 508:10 533:7 542:20 permitting 312:1 312:17 313:18 378:13 419:13 436:17 437:12 461:23 476:14 478:12 519:18 527:2 531:12 perpetuate 430:6 Perry 308:2 325:3 325:4,5 332:20 405:11 428:11 430:10 person 291:21 293:4 295:10 301:19 306:16 308:23 320:24 321:5 364:12 375:2 393:13 402:2 408:5,17 411:7,22 412:7,12 416:2 422:22 424:20 498:19 505:3 506:2 508:5 personal 383:12 409:22 personally 440:22 442:24 personnel 291:19 294:9,13 295:23 332:18,24,25 333:4,5,7 503:2 persons 292:5,6 293:1 326:6,8 329:10,12,12 perspective 339:6 500:13 pertain 465:1 pertaining 465:21 phase 465:17 512:11,15,17 514:18 515:5
---	--	---	---	--

phone 297:6 475:19	502:17,20 509:19	323:19,20,21,23	520:23,24,25	415:17 426:14,15
phonetic 345:10	518:24	323:25 324:1,5,6	522:23 526:6,11	426:16 431:8
phrase 410:14	place 291:5,7,8	324:7,16 330:16	526:13,19 532:3,4	441:4 442:2,2
phrased 350:5,6	293:17 309:3	330:17,18,21,22	532:5,8,10,12,14	443:12 452:16
physical 290:6	326:21 368:25	330:24,25 331:1,3	532:15,17 539:4	453:5,13,19
physically 292:2,10	371:6 375:14	360:4,7,20,21,24	546:8,10,12,15,17	455:21 456:1,15
303:8 319:19,22	381:19 383:8	361:1,4,6,6 363:4	546:19,22,23,25	456:19 458:25
434:21	408:15 409:25	366:19,21,24,25	547:14 548:15	468:17 476:21
physician 411:8,23	410:2,23 415:15	367:2,2,5,6,11	plug 302:5 318:14	478:2 496:17
416:2	416:7 442:3	387:17,20,21,24	318:18 509:4	511:17 512:3,21
pick 419:19 504:1	453:15 457:13	387:25 388:1,2,4	533:7,8 534:14	512:25 513:4
picking 494:16	483:18 486:21	388:6,8 392:15,19	535:18 537:12	539:9 544:22,25
pictures 399:2	513:3,17 525:21	392:20,21,22,25	538:9,19 539:10	545:14,23
piece 311:3 316:2	532:12 549:7	393:1,5,6 394:21	539:12,12 540:1,8	pointed 357:9
332:14 351:15,16	placed 463:12	405:4,6,7,9,11,13	540:21 541:6,8,10	377:7
389:8	503:11,12 514:8	405:14,16,18,19	541:12,14,19	pointing 338:21
pieces 402:9 482:4	522:23	405:21 417:20	542:3,7,8,20,25	points 338:15
484:23 523:18,19	placement 326:5	418:5,6,10,17,19	543:6,15 544:2	367:25 430:14
piggy 344:11	330:11	418:20,22,23,25	545:3,8,18	475:5 476:11
piggyback 319:11	placing 365:21	421:4,5,6,18,25	plug-in 544:23	489:8 523:17
354:8	406:23 441:24	422:1,4,5,7	545:2	524:22
piggybacking	461:3	436:10,10 437:15	plugged 533:8	policies 368:17
299:23	plagued 338:19	437:25 438:1,3,6	534:15 539:10,11	policy 382:24,24
pinpoint 410:6	plain 448:21	438:7,9,10,11,12	540:24 541:12	383:5,9 400:18
pinpointing 322:5	plan 388:13,14,16	438:14 450:1,2,4	542:24 543:5	401:3 414:10
pipe 316:2 398:19	391:13 392:16	450:7,10,13,14,17	plugs 541:7	505:22
pipe's 316:1	393:19 547:23	451:3,7,8,11,11	plumbing 509:14	poor 544:15
pipeline 382:3	plane 452:8	451:13,15,16,18	516:8	poorly 448:15
pipes 439:17	planned 397:22	451:19 458:9	plus 304:9 393:16	pop 374:25
piping 439:2,16,23	398:14	461:25 462:1,4,6	406:11 536:14	popular 328:8
440:20 441:3,9,16	plans 345:7 359:11	462:11,12,15,16	POC 372:16	portable 328:21
442:7,19,20	388:18	462:18 470:10,14	point 299:15	329:3
443:16 446:2,4,4	plates 294:18	470:19,20,23	300:19 304:3	portion 292:13
446:6,7,19 448:8	platform 339:11	471:1,2,3 479:14	305:21 311:8	306:18 337:7,7
449:14,21 450:12	434:10 481:3	479:17,18,20,23	321:23 332:13,16	342:7 351:9
484:6 509:15	482:8,9,20,21,22	480:1,2,4,13,14	338:6 346:9	357:12 359:5
516:24	483:17 484:2	480:18 483:13	350:24 351:4	361:22 362:19
pit 334:4 341:10,15	485:12 486:7	487:12 490:4,8,13	356:18 361:11,20	379:9 393:16
482:23 502:7,10	487:22 489:21,21	490:14,16,18,19	368:5,24 369:2,6	406:10 412:11
502:14,18,19,25	490:5	490:21 491:5,7,11	369:16,18,24	417:16 426:24
503:7 504:7,16,17	please 306:22,23	491:13,14,16,18	371:10 372:13	449:15 486:15
508:15,18,21,23	307:7,12,13,19,21	491:20 497:10,11	373:5 374:24	portions 376:1
509:9 512:12	307:25,25 308:3,6	507:20,23 517:17	376:10 382:12	404:1 423:1
pits 501:20,22	308:8 309:15	520:1,4,7,10,12	403:15,18 414:8	pose 309:1,10

377:2 446:16 480:9 505:19 526:5 527:18 posed 378:1 451:5 poses 435:9 position 293:14,16 314:25 315:1,6 321:10,11 322:17 335:3 positively 292:10 possess 380:7 possibility 305:2 380:14 387:11 500:20 possible 297:22 311:21 313:3 358:16 379:1 409:6 428:20 431:15 441:2 464:9 468:10,13 493:13,25 494:2 497:1 499:25 500:20,21 505:15 possibly 304:17,18 379:21 380:16 398:10 424:8 463:5,6 467:13 506:13 posted 313:14 320:13 348:3 365:16 postpone 312:24 pot 463:6 potential 407:6 528:23 532:23 pounds 502:3 power 292:12 304:9 319:3 332:13 333:19,19 339:11 443:15 444:1 469:9 533:9 534:15,19 535:23 536:12 537:15,16 537:19 538:11,12	538:15,17,22 539:25 540:2,2 542:1,2,13 543:11 545:22 powered 335:2 534:18 535:3 541:16 544:8 practice 316:24 329:5 401:9 402:10 443:14,14 443:25 practices 295:13 pre-check 429:1 pre-checks 428:25 precaution 318:11 predetermined 333:12 predominantly 326:11 preference 337:23 preliminarily 525:7 preliminary 522:12 premature 504:24 premise 382:21 384:7,13 542:11 premises 292:25 329:9 416:21 presence 440:8 present 310:8 326:18 328:25 369:3 410:11 447:8 525:17,23 presented 312:19 313:19 524:23 525:18 presenting 540:7 press 501:5 pressure 430:16 431:16 pressures 439:18 pretty 297:14 298:5 356:2 365:25 376:8 406:2 430:4	435:22 436:7 446:14 468:21 472:16 504:15 522:10 prevent 440:10 457:20 504:16 prevented 508:14 preventing 452:13 prevents 406:22 previous 321:7 346:22 365:14 441:14 454:2 487:24 488:16 535:19 536:6,6 538:3 previously 328:15 542:21 543:13 pricing 368:20 primarily 335:1 primary 363:12 367:25 368:5,24 369:2,6,16,18,24 371:10 373:5 print 432:3 443:2 prior 305:11 368:15 391:19 424:6,8,24 426:18 436:22 437:1 488:2 508:15 privacy 295:19 private 484:18,19 512:7 523:9,10 527:13,24 529:16 530:10 533:1,2 probably 299:11 336:2 372:5 385:4 385:8 472:19 477:5 493:23 527:22 543:23 problem 303:13 383:22 407:25 429:2,4 434:14,15 435:10 504:5 538:8	problematic 396:3 425:10,14 problems 430:23 procedure 444:2 procedures 319:16 319:19,25 320:1 321:21 proceedings 287:5 549:6,7,11 process 299:18 305:20 369:15 371:8 383:4 392:3 392:5,10 404:5,9 417:5 423:17 427:12 433:18,25 436:18 437:2 504:3,3 548:15 processes 321:20 proctor 368:25 Produce 291:3 product 316:17 318:13 340:20 344:5 354:11,19 355:6,12,13 379:10 388:17,22 products 295:9 318:8 professional 461:8 program 309:9,9 309:11 310:25 332:1 339:1 368:9 369:12,13,15 378:21 381:1 415:3 433:11 437:5 440:12 467:12 Program's 311:5,5 prohibited 292:18 292:19 308:21 310:4 312:16 prohibiting 309:3 prominent 434:19 promptly 416:1 pronouns 372:4	proper 443:8 properly 309:24,25 310:1 383:15 386:9 409:16 410:1 470:12 property 329:7 proposal 289:22 298:8,21 299:2,15 305:7,15,18 307:19,23 310:25 311:22 314:5 317:5,18,22 322:7 322:8 323:12 324:17 325:8 328:12,20 329:2 329:17,21,23,24 330:10 331:4 346:9,15,23 360:1 360:5,7,16 361:1 363:4,10 366:16 367:11,15 368:4 379:19,25 380:1 387:6 388:9,13 392:15,16 393:8 404:17 405:22 406:5 417:22 419:1,20 422:8,18 437:18,19 438:15 438:19 446:16 449:19 451:20 452:2 463:7 470:6 471:4,7,23 473:14 473:15 474:21,24 476:12 478:24 479:13 480:16,23 480:24 481:2,12 481:14,17 485:1 485:15 486:24 489:20,25 490:22 491:21,25,25 495:6,7,10,11 496:3,10 501:13 501:13,18,19 503:8,23 504:6,9
---	--	---	--	---

505:24 508:8 512:25 520:1 521:1,5 522:16 523:1 524:17 526:13 527:3,5,7 529:14 531:6,24 532:18,22 540:15 541:5 542:17 543:12 545:5 546:8,15 547:1 proposals 298:10 298:13 299:12 309:7 361:3 476:14 495:20 497:8 523:18 524:23 547:5,13 propose 317:4 326:9 328:21 330:9 356:9 359:25 366:15 393:11 404:17 460:11 507:15 proposed 300:1 301:1 329:25 347:19 423:24 452:8 474:22 479:16 480:25 482:11 495:3 498:13 511:12 512:23 513:20 514:13 525:14 529:14 546:12,15 proposing 312:13 377:24 475:9 proposition 348:21 528:22 529:2 proprietary 488:6 protect 292:5 339:6 340:13 408:21 533:12 protection 295:10 314:9,14,15,18,22 317:8,9 320:15,20 320:21 321:1	322:10 323:14 326:6 328:12 329:7 503:3,5,9 533:12 protections 311:17 protocols 427:4 prove 316:24 478:14,19 proven 503:9 provide 291:6,9 292:5 295:10 329:2,9 343:10 354:18 363:20 380:4 392:7 484:7 485:11 499:13,16 503:2,5,9 505:11 505:12 507:17 provided 291:14,21 292:5 293:13 325:11 389:7 390:5 415:23 439:3,4,12 442:9 444:24 445:1 446:2 449:21,23 452:5 464:14 465:6,22 466:6 473:23,24 501:21 509:21,23 518:1,5 519:8 521:15 538:16 provides 311:16 381:18 398:24 providing 329:6 412:23 466:9 474:10 provision 292:16 295:9 326:19 provisions 293:17 311:15 398:24 440:8 proximity 328:14 328:23 464:3 public 295:20 300:25 303:10	305:19 309:7 310:20 326:18,21 327:2,6,11 328:15 328:25 329:1,11 416:11 506:15 pull 315:22,22,23 357:5 376:16 440:25 494:20 pump 438:23 439:3 444:25 445:5 449:22 508:17 509:1,22 512:10 514:3,16 515:3 518:4,15,16,20 520:2 pump/drain 509:23 pumping 334:2 341:8 439:22 440:1,3 pumps 509:19 514:2 519:8 pun 528:15 purpose 293:5 340:17 370:14 385:16 464:23 465:1 466:11 467:4 488:17 purview 444:6 push 298:3 406:3 498:8 pushes 498:21 put 296:8 297:7 304:24 305:12 310:25 311:5,24 312:4 313:16 322:21 323:11 337:10 340:20 342:7 343:5,13,19 348:16,19,22,24 349:3,18 350:11 350:14 352:25,25 352:25 356:5 357:14,19 359:11 366:3 376:22	377:4,21 378:12 379:8,16,20 385:8 386:18 387:9 389:18 392:14 403:8 404:12 411:4,6,6 413:13 414:25 415:6,19 417:20 421:10 422:13 423:16 432:22 435:4,8 436:11,13 437:17 441:19 442:10 444:5 446:6 450:14 451:8 453:15,17 459:2,5 460:4,9,11 467:3 467:9,10 475:6,15 475:24 481:4 483:18 487:12 490:11 491:8 495:3 498:14 505:9,10,22 506:1 506:12 507:11,15 508:1,3 510:10 513:1,3 514:2,21 517:17 518:24 519:15 520:1 524:14,25 525:13 525:14 527:23,25 529:12 531:24 535:11 539:9,14 546:7 547:23 puts 431:15 487:22 putting 297:15 298:3 300:4 301:23 302:2 303:21 326:9 365:10 377:16 379:12 415:10 436:19 437:19 441:24 443:8,19 444:1 453:19,21 461:5 469:4 488:8 488:9 494:16,16	506:3 507:22 510:13 525:5 528:4 529:3 PVC 518:23 <hr/> Q <hr/> qualified 292:25 quarter 368:23 question 296:23 299:8 302:10,16 302:20,24 304:17 308:15 315:7,18 336:20 347:15 352:9 354:2 361:10 365:16 374:6,8 382:8 386:11 394:13 397:4 407:21 411:1 415:1,2,12 417:4 424:14,17 437:21 453:25 477:12,15 481:1 483:9,12,14 486:5 487:13 489:19 496:15 497:5,24 507:12 512:7 516:9 517:21 518:12 527:12,18 527:23 529:19,22 531:21 535:8 536:5 539:5 547:6 547:8 questions 295:24 296:4 299:5 315:16 316:11 317:4 327:14,14 330:7,7 335:13 340:22,24 363:25 364:10 366:14,15 369:21 373:25 376:18 377:3 381:7 382:5 387:3 391:12,14,25 392:13 394:9,10
---	--	--	---	---

396:5,6 398:22	413:7,8,8 442:13	470:23 471:1,2	439:16,21 440:5	readily 292:25
403:17 404:14	442:14,14 455:15	472:14 479:21,23	452:15 465:19	293:10 325:19
407:9 414:22	455:16,16 460:12	480:1,2,13,15,18	472:10 479:15	489:10
417:20,22 420:21	460:13,13,17,19	490:4,8,13,16,18	480:24 503:2	reading 317:16
423:18,19 432:19	460:21,25 469:2,3	490:19 491:13,14	509:18 521:19	353:14 377:19
437:13,14,16	469:3 492:25	491:16,17,18	528:21 529:13,18	446:25 471:17
440:14 443:22	493:1,1 514:11,12	497:10,11 507:20	534:2 537:24	readjust 383:18
446:10 452:18,19	514:12,22 515:1,1	507:23 520:5,7,10	RCW 340:5 395:10	reads 320:13
457:24 459:5	515:7	520:12,23,24	411:7 415:1,6,8	325:10 356:6
460:11 465:23,25	Quiett's 310:5	526:6,11,13,19	415:10,10,12,16	388:15 393:13
469:2,22 472:14	quite 356:18	532:4,5,10,16	415:17 417:11	394:20 406:6
475:1 478:21	363:20 386:19	546:12,15,18,22	487:7	422:22 438:23
479:4 481:10	463:18 465:9	546:23	RCWs 368:16	464:23 518:15
483:10 484:10	486:4 522:7 541:6	raised 317:19 337:8	406:22	ready 323:11 329:3
487:2 489:25	quotation 537:1	372:1 374:7	re- 383:16	360:22 421:2
492:21 493:15	quote 343:7 355:4	437:17 462:9	re-- 353:16	423:3,12 437:22
503:20,20 510:6		477:13	re-licensing 368:15	514:24 520:13
513:8,25 519:2,15	R	raising 405:8 532:9	re-piping 442:23	530:8
519:24 527:7	r 289:14 472:1	535:6 546:11	re-set-up 383:17	real 309:22 312:4
531:22 534:9	549:1	ran 332:14 334:9	re-skin 383:16	320:7 322:3 326:9
546:5 547:15	RAC 304:25	338:24 429:3	reachable 376:10	329:13 331:10
548:6	rails 502:15	543:18	reached 368:11	386:15 400:5
quick 300:22 312:5	raise 306:23 307:7	range 426:10	371:23 373:21,24	406:2 415:20
313:16 320:7	307:12,13,25	rare 429:15	read 296:6 303:5	463:11 492:2
331:10 351:25	308:7 309:15	rarely 363:19	307:14 308:8	494:20 514:24
381:15 386:15	323:19,20,21,25	rate 304:15 406:9	320:7 324:16	realistic 432:6
406:2 415:20	324:1,7 330:16,17	rated 314:16	327:18 331:3	445:21
427:6 431:11	330:21,22,25	320:22 339:16	334:17 363:4	realize 428:5
463:11 491:1	331:2 333:3	389:11,20 390:19	367:11 371:21	really 298:22
494:20 495:19	334:24 361:1	390:23 392:9	373:19 388:8	300:15 309:13
498:9 514:24	366:19,21,24,25	472:8 473:12,19	391:8 393:7	312:22 319:22
531:11	367:5,6 387:18,20	474:1,14,19 509:2	405:21 415:19	353:22 359:10
quicker 331:17	388:5,6 393:2,5,6	514:3 515:8	418:25 420:7	372:24 373:2,23
quickly 337:24	405:13,14,16,18	518:24 521:12	422:7 431:23	377:9 382:20
409:5 441:2	405:19 418:5,6,10	533:25	438:14 448:24	385:14 399:17
472:13,14 492:2	418:17,19,22,23	rating 440:6,7,11	450:20 451:19	407:21 414:14,17
Quiett 303:11,12	421:4,6,25 422:4	440:13	458:17 462:18	415:4 417:16
303:12 309:17,17	422:5 437:15,25	ratings 440:8	464:7 466:3,16	419:6,8 426:10
316:14,15,16	438:1,9,10,11,12	Rational 481:7	468:4 471:3 480:4	434:2 435:25
317:19 318:7	450:1,2,4,10,17	rationale 329:19	490:21 491:20	444:16 448:14
323:2,3,3 327:16	451:11,13,17,18	335:7 369:17,18	492:3 496:3	449:3 452:25
327:17,17,20	461:25 462:1,4,11	378:3,4,5 380:10	516:11,20 520:25	454:14 460:14
329:15 383:10,11	462:12,15,16	394:5 406:21	532:17 535:13	461:7,11 467:21
383:11 384:3,20	470:10,14,19,20	419:25 423:7	539:3 546:25	467:24 468:4

469:23 480:10	recognize 335:23	309:6 312:14	rejection 507:5	remove 301:22
488:25 500:14	350:25 351:10	314:6 323:12,12	related 327:5 333:4	306:5,16 307:16
506:8 522:11	540:14	330:10,13 352:1	361:13 381:12	322:6 356:4
524:22 529:10,24	recognized 329:5	357:12,19 358:21	406:7 408:25	360:13 389:2
530:2,4 535:4	389:6 390:2	358:22 366:16	487:9 549:13	393:22 410:15
realm 530:2	recommend 315:20	373:25 374:9	relating 393:21	412:3 421:3,5
reapply 383:19	391:16	376:7,24 377:17	relative 338:1	473:7,16 475:8,9
rear 325:23	recommendation	380:1,2 387:6	releasing 406:19	476:5 479:2 481:5
reason 366:1 372:1	346:21,21	388:13 392:16	418:2	509:24 512:12
390:12 420:14	reconvene 497:21	393:11 398:4	relegated 395:10	533:2,10,17,21
431:24 435:16	501:10	404:18 405:5	relevant 522:5	535:23 537:14,16
441:15 460:5	record 403:4	412:20 417:23	relocating 422:22	537:19 539:25
477:18,18,19	488:22,23 496:5	419:9,21 422:12	relocation 332:12	removed 373:12
489:12 529:7,22	rectify 543:12	422:18,19 438:19	remain 293:17	403:25 406:14
reasonable 329:6,9	red 376:4 465:12	438:21 449:19	406:15,18	407:3 408:22
340:6 416:12	467:15	450:12 451:2	remaining 359:23	409:20 410:5
425:1 430:21,23	reduce 392:3 502:6	463:7,8,19 470:6	remedy 303:14	411:25 464:16
431:19 437:6	504:21	471:8,12,23,24,25	522:2	504:19 523:6
reasoning 409:4	redundant 516:7	473:4 474:21	remember 345:18	530:5
469:3	534:2,6	481:14 482:22	362:7 459:24	removes 536:12
reasons 299:1	refer 347:7 351:11	483:10 489:13,25	486:10 519:16	537:15
442:12	reference 312:12	492:1 495:1 496:7	530:15	removing 301:25
rebuttal 373:18	335:4 376:24	501:19 503:11,12	REMEMBERED	306:24 315:20
recall 447:7	403:19,21 414:25	508:9 514:1,9	289:1	359:5 360:1,3,5,6
receive 344:13	415:10,14 452:16	521:5 527:6	remote 290:1,8,10	360:17 362:22
345:6 547:19	472:10 480:24	530:12 547:5,13	290:13 297:9	417:25 421:20,24
received 291:4	510:3 513:19	regards 373:3	298:11 300:13,23	422:1 481:3
369:8,11	521:19	407:13 415:11	303:18 304:18	489:22 490:6
receives 345:11	referenced 356:7	region 428:12	308:18,21 334:6	510:1 530:11
receiving 290:17	420:1,16 471:14	registered 420:3,17	334:19 338:2,4	533:9 540:2,2
292:11 538:14	510:19	regular 400:9	341:12 347:22,23	renewal 368:14
receptacle 533:9	referencing 476:22	regulate 336:3	347:25 348:7,12	renumbered
537:13 541:14	referred 335:5	regulated 327:8	348:14,16 349:9	472:11 521:20
receptionist 364:16	356:8	regulating 290:20	349:11,21 357:7	repair 444:9,13
recess 331:14 368:2	referring 335:16	regulation 332:8	357:13 361:14	537:20
419:18 463:1	346:22 456:24	regulations 515:15	362:2 434:20	repairs 416:17
498:7	460:1 507:6	regulatory 332:9	442:22	455:19
recipient 380:6	510:19	regulatory 332:9	remotely 290:14	repeat 296:1 458:9
reciprocating	refers 329:20	reinspected 416:17	302:7,18,25 303:3	repeating 433:8
334:23 335:16,18	refined 385:20	reinspection	303:15,22 305:10	516:9
342:21 343:23	reflecting 522:20	395:17 423:6,13	307:7,18 309:20	repeats 322:21
351:2,8 352:17	regarding 289:23	432:1 433:10	removal 328:9	replace 439:21
354:15,17,22	294:22 301:19	reinstate 521:21	415:21 416:19	440:19 441:2,9
355:1	306:2,14 307:15	reject 501:24	509:4 514:3	443:17
		rejecting 504:14		

replaced 388:21 439:17 442:8 443:6 448:4	required 292:14 294:1 328:16 333:20 335:9 363:22 389:17 392:7 393:24 394:1 439:20 445:7 457:3 470:1 470:1 476:19 481:2 485:4 487:4 487:18 488:11 502:21 503:4 509:23 512:9 517:7 533:4,5 538:22,23	510:13 528:19,20 requires 348:14 390:6 465:9 474:8 487:7 507:5 508:25 514:15,15 515:3 requiring 328:13 411:7,22 416:2 441:3 476:14 484:25 485:5 507:8 541:9 reschedule 425:10 425:13,13,18,24 426:22 433:6 reservoirs 508:17 reset 303:15 resetting 303:20 reside 292:16 residence 484:18 484:19 512:7,16 523:9,11 527:13 527:25 529:16 530:10 533:1,3 544:6 residential 365:16 388:15 423:14 427:3 431:13,14 464:23,24 465:1,2 466:11,12 467:4 476:17 477:17 479:1 484:14 486:7 487:4 488:13 511:20 513:18,22 517:13 517:19 521:24 528:16 531:19 537:10,11 540:25 542:17 544:13 545:10 residentials 517:25 535:15 542:22 544:23 resides 530:10 resources 295:1	respect 298:13 384:21 517:23 534:17 respectfully 377:22 515:13 respond 342:19 403:6 responding 347:20 response 347:19,23 413:2 responsible 332:6 368:7,19 369:25 370:9,13,17,25 371:24 372:13,14 374:1,11,22 376:9 417:24 rest 304:5 305:20 322:20 331:17 334:12 351:17 362:24,25 399:18 445:21 513:14 537:7 Restating 390:4 restful 548:20 resting 502:24 restricted 328:4 restrictive 410:13 restroom 331:10 result 328:12,16 411:24 412:4 resulting 411:8,23 416:3 results 307:14 388:8 389:5 390:1 405:22 462:18 retained 544:25 retest 310:14,14 return 408:20 413:18 returning 409:5 review 288:6 289:18,22 305:1,3 305:19 311:1 313:5 378:17	388:16 399:1 404:2 422:14,17 472:19 483:5 486:2 495:22 496:25 498:11,23 499:8 510:3 519:19 526:8,16 526:23,25 reviewed 467:12 527:6 reviewers 347:1 reviewing 343:21 358:18 386:24 414:16 480:17 499:7 525:3 526:12 revise 475:16 revised 345:17 474:23 512:22 revision 454:4 reworded 375:19 449:8 rewrite 312:10 Ricky 320:8 459:11 459:14,17 rid 351:7 362:17 444:22 460:23 543:21 riding 303:10 310:20 right 296:2,13 301:9 302:13,20 305:16 307:2,10 309:8 310:9,15 312:11 318:18 320:6 321:6,13 322:4 323:2,5,22 324:15,22 325:7 330:9,23 332:24 332:25 334:15 338:7 341:12 342:10 347:18 348:11 350:3,4,10 351:6 358:6,20
---	--	--	---	---

359:6 360:11	rocker 536:1,8,10	329:12	455:24 456:17	517:3 523:14
361:15,18 362:14	536:11 546:1	RPR 287:15 549:19	457:14	526:24 528:5,16
362:21 363:8,12	roll 441:5	Rudder 421:13,15	safer 528:7 530:23	545:24
368:3 370:20	rolled 466:7	ruin 440:3	safeties 300:7	says 296:6,18,19
374:3,8 375:13	roller 336:10	ruining 442:10	363:23 365:1,5,13	316:9 318:5 321:8
376:16,21 384:25	rollers 339:11	rule 288:6 289:18	389:11 390:19,23	322:18 340:16
386:25 387:2,21	room 292:21,22,23	311:22 400:25	392:8 472:7	341:5,5,21 342:7
393:7 396:6,7	293:1 326:15	414:25 415:11	473:11,19,25	344:12 350:23
402:11 403:11	327:3 328:7,10,15	429:16 431:9,19	474:13 521:11	355:22 359:8
415:4 417:18	329:19 333:24,25	483:2 486:17	533:24	366:10 368:4
418:13 419:15	334:5,5,5,7,7,18	491:5 498:18	safety 289:25	370:7 373:19
421:4,17,23 422:5	334:18,20,20	530:9,9,21 531:2	300:19 301:8,10	389:3 396:10,11
430:6 432:17,19	338:2,4 341:6,12	rule- 383:1	301:17 303:6	410:14 411:11,21
435:7 436:16	341:18,21,21,24	rules 369:20 381:20	309:25 310:20	414:12,18 417:12
437:12 438:2	342:7,8 347:23	382:10,13 386:1	318:11 328:8	427:8 430:25
442:6 443:20	348:17,17 349:12	393:22 444:8	329:6,10 333:7	431:25 432:3
448:9 449:9,18	350:2 356:25,25	478:5 531:12	335:24 339:25	444:8,14 445:12
450:2,9,13 457:20	357:1,7,12,13	run 303:16 358:6	340:9 343:9 344:1	445:25 447:11
459:15 460:3,4,6	361:13,14,25	403:1,3 429:2	349:6 364:23	468:3,6,7 469:13
460:10 461:5,17	362:1,18,19 363:1	443:15 454:10,23	365:7 368:22	472:21 483:17
461:18 462:5,22	398:19,20 447:4	454:23,25 455:5	369:4,9 389:3,14	486:11 489:8
463:11 466:7,10	463:23,24,24,24	538:7 542:2,3	391:1 440:11	495:6 497:1 515:2
468:3 469:19,20	464:15,15,16	rung 502:12,15	441:1 447:8,9	515:7,15 518:16
470:22 471:20,21	465:5,6 466:6	rungs 502:12	472:2 473:17	528:22,24 534:14
477:13 479:5,17	468:1,2,2 469:5	running 339:8	474:3,16 528:1	534:23 539:20
481:19,25 485:17	492:11,12 509:9	383:21 440:10	533:22	542:18 543:24
485:25 490:10	516:18	500:6,18 547:17	sake 395:23	scary 298:5
491:7,24 492:8	room/control	runs 309:25	satisfy 349:4	scenario 413:24
493:8,12,20 498:4	465:20	runway 482:19	save 422:13	457:6
501:4,14 506:15	roomless 465:14	485:12	saw 297:8 387:1	scenarios 326:19
507:14 511:8	rooms 325:12,12,14	ruptured 442:25	495:19 506:9	327:7
513:21 514:10,23	348:1,1,7,8,12,14	443:7	saying 312:12	scene 410:5,15
515:6 517:1	348:22 349:22,22	Russ 298:7 299:9	315:24 320:2,3	schedule 401:19
520:20,24 523:6	358:22 442:23	311:7 329:16	330:3 345:22	427:23 428:4,14
524:4 525:12,23	464:8,10 468:9	rusted 441:16	351:9 352:24	429:11,17 432:13
527:5,15 531:21	470:13	rusting 442:2	361:10,12 365:5	443:16
532:11 537:19,22	root 409:17 410:10		371:21,24 373:18	scheduled 423:3,5
544:9 546:19	rotary 469:11	S	383:22 394:16	423:25 424:9
547:12 548:9	rouge 441:15	S 289:14	398:18 399:16	426:15,17,18
righty 307:22 421:7	roughly 493:9	S.W 287:18	424:8 426:14	428:15 429:18
473:3	498:10 522:17	safe 328:20 365:13	429:22 435:20	431:4 432:1,10
RIO 298:11	route 311:6 327:8	413:1,1,17 416:16	442:7 447:10	434:13,22 435:13
ripper 441:7	511:17	441:7 548:20	463:9 469:8 485:1	436:14,23,24
risk 329:1 528:4	routes 327:9	safely 381:10	511:11,12 513:4,5	437:8,20

scheduling 426:10 426:11	474:15 477:2,6,6 477:8 478:18	seeing 315:14 364:3 409:11 430:19 484:17	357:20 394:4,8 395:11 396:12,13 402:6 405:1 522:13,24 524:3	516:10 528:2 549:16
scope 380:10	496:18 521:13	seeking 408:9,10	522:13,24 524:3	setting 314:11 318:23 320:18 403:10
Score 498:3	534:1,21	seeks 408:5,18	sequence 453:18	settings 319:5
Scott 421:10,13	sections 377:6 525:10 541:24	seen 312:23 440:22 440:23 441:15 536:2	sequential 369:3 373:4	settle 399:10
scrambling 429:7	secure 508:19	seismic 438:24 439:4 445:1,3,6 449:23	Sergey 296:4 322:1 336:20,21 365:8,9 366:3 400:11,12 409:8,9 426:5,6 432:20 434:3,4 441:11,12 453:3,4 454:22 457:25 458:22 461:5,6 465:25 466:1 475:2,3 487:13,14 523:2,3,25 527:22 528:10,11 530:20 535:6,9 539:6,7	setup 544:18
screen 332:19 360:8 375:23 496:4	secured 509:12	self-derived 469:9	528:10,11 530:20 535:6,9 539:6,7	seven 367:22 422:24 428:16,17 438:21 439:6 440:5 444:7,18,21 445:11 446:21,23 447:1 449:15 450:20,23 451:10 451:24 494:25 517:8
screwdriver 442:5	security 299:22 410:17	sell 295:8 336:6 343:1,3,3,4 355:3	Sergey's 431:8 460:18	seven-- 419:25
scroll 350:18,19	see 294:20 303:8,22 306:9 311:2 312:23 317:17,23 318:12 331:11,18 331:18 337:24 341:18 345:9 350:20 358:7 367:23 368:1 376:18 377:23 378:8 384:12 385:5 389:4,15,22 391:2 396:12 397:1,20 411:6 413:14 414:15 418:8 419:17 424:24 427:24 433:7 442:8 454:18 462:23 464:3,19 472:4,6 472:8 473:11,13 473:20,22 474:5 474:15 480:20 481:18 482:2 483:19 484:18 494:20 496:3,21 498:5,19 502:19 503:19 504:13 507:16 511:21 513:22 516:18 518:3 520:13 521:7,8,13 530:21 531:23 533:23,25 541:15 545:23,25 548:20	selling 326:3 342:22 344:5	serious 448:5	sewer 509:13
scrutiny 305:3		send 313:3 345:13 399:19 424:12 429:12 483:4	served 329:23 538:18	shackle 452:6
search 300:1		sense 296:22 299:15 346:6 378:4,6 386:2 410:9 482:23 486:5,22 487:20 535:2,4 541:10,11	serves 333:12	shackles 452:4
Seatac 408:15		sent 305:9 471:10	service 294:7 303:21 327:4 369:12 406:14,15 406:18 407:3,14 407:17,24 408:20 408:21,22 409:5 411:8,25 412:4,24 413:13,18 416:2 418:1 444:15 445:17,18 514:18 515:5 518:1,5 537:18,20	shading 496:11
Seattle 309:3,12 310:4,21 312:17 385:7 420:4,19 428:5 530:14		sentence 322:9,13 322:22 334:18 341:10 389:16 390:10,20 410:21 427:10,14 453:16 474:5,15 537:2,23 539:20	serious 448:5	shame 350:14
Seattle's 313:11		sentences 320:25	serious 448:5	share 294:25 348:1 348:8,18 349:22 350:3 375:23 376:20 492:7
second 310:11 337:7 347:17 376:19 397:16 426:24 427:8,10 429:11 450:19 468:5 478:2 482:1 494:21 508:2 542:15		separate 305:25 306:1,7 356:16,16 396:18,23 398:25 431:9 442:15,17 446:18 447:13,19 447:20 449:12,14 466:13 467:5 502:18 503:7 517:4 523:17,18	served 329:23 538:18	sharing 332:19
secondly 371:14		separately 306:12	serves 333:12	she'd 315:21 376:23
seconds 291:10,11 492:22 531:23			service 294:7 303:21 327:4 369:12 406:14,15 406:18 407:3,14 407:17,24 408:20 408:21,22 409:5 411:8,25 412:4,24 413:13,18 416:2 418:1 444:15 445:17,18 514:18 515:5 518:1,5 537:18,20	share 294:25 348:1 348:8,18 349:22 350:3 375:23 376:20 492:7
section 289:23,24 294:16,20 303:5 308:24 311:11 325:8 331:23,23 340:18 360:16 367:15 368:5 370:3,6,18 371:3 376:5 393:12 411:20 438:20,25 444:7,18 449:24 463:12 464:25 465:7 466:7,13 467:2 472:9,21 473:13,13,20			services 295:9 393:12,14,18,23 394:25 398:7 401:1 404:20,23 405:1,5 411:23	she'd 315:21 376:23

showing 293:1 413:17 486:16	simple 372:7 413:16 448:22	skewed 466:17	446:17 451:25	348:22 364:8,14
shown 335:9 518:25	458:5 489:7 517:6 519:5,7	skip 379:19 422:14 497:6 498:12	453:7 458:20	spans 427:7
shows 390:10,24 391:6 396:21 444:14 447:2	simply 328:16 409:20 535:13	skipping 464:20 501:14,15	463:3 475:19	speak 316:15,16 336:23 338:10 424:15 436:10 443:13,13 498:18 536:11 545:14,22
shunt 447:6,6 463:14 464:13 465:18 466:21 469:9	simulate 315:23 318:15 319:3 323:7	slab 363:22,24	482:12 483:15 492:6 493:15 496:23 501:18 507:13 508:2 514:11 515:17,18 518:10 519:7 531:8 538:23 539:2 547:10	speaker 295:25 296:2 313:21,22 324:12,13,23 359:7 365:14 391:8 402:7 415:9 420:7 441:14 458:7 460:18 493:7,9,10 538:3
shut 319:2 325:6 385:20 408:8,10 414:2,7,11,13,18 417:8,12,15 509:17 545:4	simulated 316:6	sleeping 363:15	sort 306:7 309:6,12 309:13 310:4 311:24 312:15 349:20 358:25 377:17 382:23 404:9 408:3 435:2 435:8 463:17 494:4 497:19 501:8 524:16 546:1	speaker's 346:22
shutting 417:10	simulates 315:22 318:9	slip 407:23 408:6	Sound 401:8 407:11 412:19	speakers 488:2
sic 411:11 487:5	simulating 319:20 319:21	slippery 343:24	sounded 313:24 347:25 398:4	speaking 313:25 325:2 347:21 357:17 404:10 427:20 430:14 442:2
side 294:14 325:22 332:13 381:18 430:15 433:19 434:24 435:2,14 463:23 464:13 469:11 492:11 496:20 497:2 502:15 521:16,22	simulation 315:4	slope 343:24	sounds 301:18 302:8 306:8 309:5 317:6 379:4 394:14 419:15 433:19 446:12 524:15 529:1	special 385:16 464:23 465:1 466:11 467:3
side-board 500:16	single 441:2,25 502:13 509:6	small 322:13 374:24 425:21,24 435:25 514:5	source 533:9 534:15 538:12,15 538:16	specialists 536:7
sight 325:22 328:9 328:11 330:14 349:1 538:18 539:10,18 540:9	singular 441:2,25 502:13 509:6	smart 402:20,23	sources 538:22	specific 298:20 341:17 401:1 410:4,22 427:13 435:9 476:6 523:19 525:9 529:2 537:12
signal 295:6	singularly 526:16 527:4	smoke 330:4	space 329:11 363:11,11,14,15 363:24 364:4,6,17 364:25 365:2,3,12 365:17,18,19,19 366:17,18 452:4 464:18 465:20 528:20	specifically 294:20 299:21 303:25 366:9 376:8 410:7 413:6 442:19 443:17 510:23 537:7
signaling 439:10	sir 296:5	snippet 415:23	spaces 325:13	specificity 385:25 426:20
signals 290:19 292:12 295:5 315:5 328:17	sit 371:11,12 498:20	software 290:2,15 292:17 302:18,25 303:23 305:8 309:21 310:1,14 311:10,13 316:18		specified 294:19 413:10
significant 448:23	site 291:14,18 303:8 305:9,10 374:20 395:3,16 397:15 398:1,15 404:22 473:23 477:21,25	solely 370:9 371:24 434:16		specifies 536:25
signifies 466:14	singularly 526:16 527:4	somebody 298:2 303:8 309:20,23 338:6 391:19 435:11 447:3 455:18 504:1,16 505:24		specify 322:17
sill 452:11	sitting 456:14 497:22	somebody's 484:24		
silly 545:21	situation 316:6 399:3 432:8 443:12 469:5 522:2	someone's 314:1		
similar 319:2 337:25 339:12,15 439:22 454:2 503:3,24	situations 300:16	soon 431:15 532:19		
	six 426:2 455:2,2 494:24	sooner 501:7		
	sixty 492:15	sorry 301:3 310:12 313:23 317:15 318:1,19 323:1 325:1,5 332:19,22 342:13 356:11,24 357:24 367:8 370:3 374:5 396:10,20 397:6 427:23 436:4		
	size 328:7 464:2 465:21 468:6 499:5			

351:2 426:13	478:25 485:23,24	519:17 526:25	475:13,14 532:22	stir 463:6
spectrum 295:6	521:16,22 522:1	start 289:22 319:16	535:13 541:5	stone 403:10
speed 472:8 473:12	529:17 533:1,3,15	343:24 355:11	549:7	stop 298:1,2 444:24
473:20 474:14	535:16,22 542:19	358:18 369:15	statement 302:11	520:16
521:12 533:25	stakeholder 415:7	420:10 422:17	310:5 487:13	stopped 456:19
speeds 318:25	499:14,16	429:22 474:25	505:16 515:13	stopping 452:12,24
spelled 353:22	stakeholders	482:14 509:16	517:21 519:25	452:24 458:4
spelling 345:10	335:11 380:15	started 333:18	535:19 547:8	459:8,9 460:15,21
split 477:7	398:4	359:11 421:9	statements 316:12	stops 455:1
Spokane 301:6	stand 360:15,19,21	458:10	320:7 330:8	storage 365:3
304:22 350:19	361:3 457:17	starting 298:15	404:15 472:15	story 365:15 488:3
372:11 385:7	523:21 526:17	358:17 488:12	519:3,25 527:8	Strafer 532:14
396:11 413:22	stand-alone 335:4	starts 328:5 353:17	548:7	strain 435:4
444:21 516:7	337:3 339:14	state 287:1 289:5	states 360:2 362:25	strange 402:19
538:3	standard 333:6	292:17 297:11	415:24 508:25	stray 512:13
spoke 365:14 442:5	336:4 339:14	303:24 304:19	514:16 515:3	streamline 392:3
515:20	344:17,24,25	321:19 335:17,20	516:17 533:22	392:10
spot 444:16 514:24	346:24 347:11	335:22 336:6,7,8	535:17,24	stretch 331:9
spots 522:20	351:3,6 352:2,3	336:9 338:19	static 424:25	stricken 389:8
spray 484:20	353:8 354:5,11,14	339:19,22 340:7	stating 318:7,20	strict 486:12
spreadsheet 376:17	355:20 393:17	340:20 342:22,23	346:11 390:13	strictly 316:22
376:20 482:25	406:11 448:19,24	343:2,6,15,19	433:22 494:1	371:9 490:2
485:21 497:19	449:5 530:3	344:5,17,20,23	505:4 510:21	534:25
500:2	standardized	347:17 348:4	station 297:7	strike 357:16,18
spreadsheets 492:4	290:19	349:14 351:11,14	452:14 453:19	359:8,9,19,21,21
sprinkler 439:8	standards 294:19	351:20 352:4,9,18	454:24	362:2 419:23
448:7 449:1 451:2	299:21 326:5	352:19,25 353:10	stationary 335:3	420:12 444:21
sprinklers 440:9	335:5,25 336:15	354:3,15,19 355:4	status 290:18 501:2	463:23 479:20
447:1,3,14 512:13	343:9 344:1	355:23 368:18	stay 362:21 368:16	480:25 489:5
stabilize 502:14	347:10,12 351:5	373:8 393:24	407:14	492:11 496:20
staff 359:12	356:7 369:1 389:1	403:3 404:19	steam 398:19	497:2 523:6
stages 409:19	439:8 442:18	409:2 420:3,18	steel 509:11,15	528:23,25 532:23
stair 427:2,12	449:3 513:19	428:6 436:11	516:24	532:25
432:7 476:7,17,17	standing 455:12	437:5,16 448:11	stem 335:9	strike-- 528:14
482:7 485:10,22	456:4 457:15,15	476:5 488:22,23	stems 303:13	strike-out 519:1
488:10 535:22	457:18	496:23 507:3	stenographically	strike-through
536:8,18 537:6,13	standpoint 373:9	508:25 514:15,15	549:8	479:7
540:19,24 542:17	412:21 505:22	515:2 535:7 549:5	step 343:25 401:3	striking 359:3
544:9,16,16	stands 340:23	stated 294:20	407:22 430:6	372:20 389:13,21
545:18	360:6 361:12,15	301:13 302:1	stepped 314:2	390:1,5 391:1
stairs 528:2,8 531:1	361:18 362:14	361:1 373:3	stepping 365:24	445:2 474:2,13
stairway 471:9	365:2 401:2	394:24 396:19,24	steps 417:14	479:12,13 484:5
472:1 473:8,15	436:19 467:9	408:3 461:20	sterile 443:2	528:14 544:5
474:6 476:16	483:7 509:25	462:3 470:3	stick 473:2	stronger 501:25

strongly 336:24	submit 390:6	513:10	404:2 419:9,13	439:19 440:3
struck 295:16	471:19 504:1	suggestions 372:3	423:17 428:21	442:11 449:2
444:18 467:15	505:7	441:24 453:12	429:23 436:10	509:14
480:12 483:18	submittal 467:10	499:13	450:6,14 458:19	systems 298:15,23
structural 502:13	471:18 472:18	Suite 287:18	463:18 464:21	336:25 445:16
structure 290:7	477:15 498:13	sum 518:16	467:16 470:21	451:3
292:23 326:7	530:13	sump 504:17 509:1	477:21 478:16	systems' 439:9
333:5	submitted 331:25	509:16,19,22,23	487:19 488:18	
structures 329:9	331:25 356:2	510:8 512:9 514:2	489:16 491:11	T
333:2	357:11 390:15	514:16 515:3	494:6,22 495:21	T 549:1,1
struggle 372:24,25	471:10 472:3	518:4,14,20 519:8	496:24,25 497:6	table 486:2 548:9
377:22	473:7,10,18 474:4	520:2	500:11 517:12	TAC 309:1 311:2
struggling 341:19	474:9 478:5 479:6	sunsetted 371:5	520:15 534:21	312:18 313:18
stuck 426:8	479:22 486:18	420:2,16	548:13,16	340:24 378:11,18
study 299:25	495:23 505:3,24	supervision 308:22	surface 334:8,21	381:25 383:2
stuff 297:7 313:12	507:18 508:5	supervisor 428:11	341:22 342:1	404:5 452:18
339:21 340:11	516:19,20 524:18	supplied 388:19	442:4	480:9 498:15
342:8 345:8	534:22	supplies 542:19	surfaces 339:12	499:6 501:1 505:8
352:15 353:15	subparagraph	supply 443:2 447:6	342:17	525:13,22 527:2
358:12 376:18	370:23 482:7	447:6,7 484:6	suspended 440:2	534:8
402:25 403:10	subsections 466:23	supplying 486:14	swing 464:11	tackle 401:20 404:3
414:16 429:4	substantial 378:24	support 299:1	swinging 464:10	436:18 477:11
445:16 446:25	522:10	330:4 363:13	switch 292:2,4,9,19	507:21
447:7 454:11	subtle 545:1	453:1 513:17	292:20,24 293:2,8	tag 383:20
455:5 461:22	sudden 434:18	533:14	293:9,13,15,19,23	take 322:20 331:8,8
486:3,4,7 489:16	475:19,20	supported 502:2	294:1,3,9,12,14	338:16 349:20
500:6,7 501:15	sues 408:18	supports 452:4,7	298:17 306:6,10	351:1,7 353:4
504:17 506:3	suffice 413:18	suppose 429:18	307:16,19,21,24	365:1 367:18,21
519:10,11,20	sufficient 533:14	supposed 362:20	308:1,2 318:9	372:13 373:1
527:6 544:2,6	suggest 305:5,24	428:18 454:19,21	348:16 349:6	397:18 399:2,6
stupid 339:4	306:12 317:23	456:16 482:4	452:12 464:11	404:17 406:4
style 465:18	337:6,12 356:15	supposedly 413:25	469:17,17 533:19	407:24 416:25
subcommittee	357:20 372:7	sure 296:16 297:14	534:24 536:1,8	417:3 419:16
380:20 385:13,21	490:1 497:18	299:15 301:12,17	539:2 540:16	421:1 423:14
subject 294:8	507:10 522:11,22	303:6 306:10	544:12 546:1,1	442:3 452:22
326:22 349:10,18	523:12 547:13	309:19,24,24	switches 304:7	453:8 454:7,8
400:20 422:25	suggested 356:3	310:15,18 317:18	328:18 464:8,12	455:2,4,11 462:24
495:24 508:11	475:8 505:25	321:23 340:25	536:10,11	467:19,23 470:5
subjected 502:3	523:8 543:7	342:6 343:8,25	switching 292:15	479:11 489:25
submission 357:13	suggesting 434:11	350:21 358:13	synopsise 524:9	490:1 497:18
submissions 301:14	434:11	363:20 369:25	system 295:18	498:19 499:12
331:21 479:6,9	suggestion 322:20	370:11 379:14	317:12 333:18	513:13 514:24
480:21 494:25	336:22 400:13	382:13 386:19	352:23 368:8	522:13 524:15
498:10	467:5,7 476:8	399:22 400:5	381:15,16,19	548:21

taken 287:13 296:8 300:16 331:14 368:2 397:19 419:18 425:16 452:10,17,22 453:9 454:5 455:3 456:16 458:3,13 463:1 498:7 521:17 529:6,11 529:11	tank 440:1 442:10 508:17 task 525:13 tasks 485:9 Teams 289:3 tech 298:14 398:23 399:17,23 400:1,9 technical 287:4 289:2,6 368:17 393:11,14,18,21 393:23 394:3,6,25 395:6,7,14,15 396:1,22,25 398:5 398:7,25 399:3 400:6,21,22 401:1 401:4,11,22,24 402:4 403:11 404:20,23 405:1,5 487:23 536:6 technically 536:19 teeth 416:24 Tel 287:18 telephone 300:18 tell 297:4,5 355:2 428:12 429:9 517:17 518:15 524:19 telling 340:4,17 tells 541:25 542:5,5 542:6 template 376:14 temporarily 294:6 ten 494:25,25 496:3 tend 441:13 tenses 372:4 374:15 terminal 460:15,21 terminate 292:11 292:12 terminology 485:23 test 310:18 314:14 314:17 315:25 316:19,19 317:2 318:13,16,20 319:6,22 320:20	321:1,16 322:9,9 322:18 323:13 329:20,22 368:7 370:25 371:1,11 371:12 389:5 390:1,12,22 392:8 397:14 474:8,12 474:16,16,18,20 477:21 478:1,1,14 537:10 tested 305:11 314:10 319:24 320:17 389:11,20 390:19 473:25 testing 315:2,10 316:9,17,21 317:20,21,24 319:15,17 323:7 388:17,23 389:1,3 389:6,14,17,19,21 390:2 391:1 472:2 473:9,17 474:3 478:9 521:6 533:22 tests 301:2 314:19 315:4 318:5,25 319:13 321:3 322:5,11 323:15 423:2 478:10 482:15 485:6 488:7 489:9 text 298:23 376:4 378:5 413:12 thank 296:25 297:1 298:6 299:2,3,7 300:20 303:11 304:16 305:4,23 305:23 307:2,2,10 307:13,22 308:3,3 308:7,13,25 310:2 310:9 311:17 312:11 313:8,8,9 313:15,15 314:3 315:16 316:11	317:3 319:9 321:13,24,25 322:22 323:22,22 324:2,5,15,22 325:6 327:21 329:15 330:1,2,6 330:17,23 331:2,7 331:12,19 332:19 332:20 336:16 337:15,16,17 338:8,12 340:25 341:1 342:5,15 344:8 346:7,18,19 347:14,15 351:24 354:7 355:24 356:1,19,21 360:11,24 361:4,7 363:8 364:9,19 365:8 366:1,2,13 367:2,6,10,14,25 370:19,20 372:9 372:22 374:5,8 375:19,21 376:11 377:1 379:3,23 382:4,17 384:25 385:8,10 386:10 387:1,21 388:2,3 388:7,9 391:24 392:10,12,22,23 393:2,6,10 394:22 396:4,5,15 397:2 400:11 401:6 402:16 403:2,16 403:17 405:8,8,16 405:19,20,25 408:13 409:8 410:23 411:4 412:17 413:7,21 414:19,20 417:18 417:18 418:13,13 418:15,20,24 419:4,8,20 421:7 421:17 422:2,6 426:5 427:17	428:9 430:10 431:20,21 432:17 432:18 436:9 438:2,2,10,13,18 441:10 442:12 443:21 444:18,19 445:8,10,22,23 446:9 448:10 449:9 450:6,8,13 450:18 451:7,7,14 451:14,18 452:1 453:2,23 455:15 456:9 458:24 459:3,4 461:1,13 461:18 462:5,7,13 462:17,22,24 463:3 467:6,7,17 469:1,21 470:15 470:17,24 471:2,7 471:20 472:25 473:1 476:8,25 477:9,10 478:5,20 479:17,23 480:2 480:20 481:21 483:9 485:24,25 487:11,13 488:20 488:21 489:19 490:10,11,17,20 490:20,25 491:7,8 491:19,24 493:4 493:19,20 494:15 495:16,25 496:2 497:4,15,17 498:6 500:25 501:10 503:22 504:25 505:1 506:5,23,25 507:25 510:15,16 511:3,7,8 512:19 513:7,15 515:10 516:12,22 517:9 518:6,9,21 520:8 520:20,24 521:4 523:21 524:3,4 525:11,12 526:14
---	--	--	--	--

526:22 527:15	542:13,15 543:1	321:15,18 323:4	524:1,22 527:6,21	tight 530:24
528:9,10 529:20	545:7	324:9,11 336:6,12	530:20 531:2,5,18	time 291:8,20 293:4
529:21 530:18	things 297:19,19	336:18 337:12,21	534:17,20 538:3,4	301:22 306:24
531:2,3,7,19,21	300:10,17 301:18	337:24,25 343:17	538:7 540:14	308:5,9 311:1
532:6,11,11,15,16	301:24 304:8,10	343:19 344:6	543:11 544:5,10	312:17 313:18
532:21 535:5	306:2,14 316:4	345:14,15,23	545:5,20	316:19 329:11
537:25 540:10	317:10 321:16	346:1,2,14 347:20	thinking 331:19	338:16 353:2,16
541:21,22 544:4	332:1 339:2 340:1	350:11 351:6,12	349:13 376:1,2	359:22 360:3
544:20 545:12	353:6 354:10	351:18,19,23	523:25	363:20 377:3
546:3,4,13,19,23	366:12 369:19	352:10 355:10,16	thinks 409:3	378:13 379:6,13
547:4 548:13,19	370:11 373:12	355:18 356:17	thorough 299:19	379:14,17 387:3
548:21	374:10,15 377:13	358:1 359:16	thoroughly 299:19	389:7 390:5,7
thanks 303:10	383:20 385:17,25	364:12,17 365:10	thought 339:3	393:16 394:1,7
315:15 319:8	392:6 395:4	365:24 366:8	362:18 367:8	395:1,6,19 396:1
344:9 346:17	398:11 399:11	370:2,4,6 372:5	387:1 419:6	399:7,14,24 401:6
372:8 397:23	402:1,3 403:22,23	373:12,23 374:2	421:15 424:7	401:19,22 404:3,6
403:1 428:8 446:8	404:2 408:24	375:11,18 376:5,7	425:16 500:7	404:13 406:11
461:15 476:11,24	409:10 410:16,19	377:25 391:4	519:13 522:23	407:16 410:12
487:10 498:3	411:20 413:20	392:2 394:19	thoughts 487:17	413:1 419:13
538:4 539:5	415:18 420:10	399:8,13 402:19	threat 326:9 329:14	423:8,10 425:13
theoretically	422:12 425:13,18	403:14 406:1	threatening 300:19	425:21,22,24
297:21	426:22 427:4	410:3 411:1	373:11 375:7	426:18,22 427:6,6
theory 440:18	428:14,18 429:14	412:10,12,21	threats 373:1	427:20 428:23
thereof 393:16	429:17 430:5,6	414:14 420:23	three 299:11	430:3,9 432:9,10
406:10 549:15	431:17 432:20,24	425:1 426:21	343:11 356:13,23	433:3,15,24
thereto 502:24	436:19 437:10	427:19 428:7	400:3 406:1 417:9	434:17 435:3,16
thin 529:12	446:22 447:25	429:19,19 430:12	424:10 425:9,20	436:17,23,25
thing 296:18,21	448:20 449:4,12	430:20,23 436:2	429:21 432:10	437:12,20 439:14
302:8 352:13	450:21 467:14	442:15 444:5,17	435:12 438:22	440:7 445:13
365:6 375:11	475:12 482:17	445:15,18 446:13	442:17 444:23	448:3 458:10
376:20 377:16	486:20,20 487:18	446:13,18,23	450:10 464:7	460:17,20 461:23
379:15 385:5	498:13,23 499:9	447:13,16 448:14	465:16 466:23	462:21 463:16
398:10 401:14	504:4,6,9,13,22	449:6 453:12	473:4,5 476:2	472:3,13 473:11
407:13 424:25	505:25 511:25	459:13,24 467:18	477:11 479:5	473:18,23,24
429:6 432:23	516:24 517:5,15	467:21,22 468:7	494:24,24 512:22	474:4,9,10 475:14
433:8 443:20	519:10 538:7	468:10,17,18,24	530:11	476:14 478:12,12
445:18,25 446:20	539:15 540:14	477:1,10 484:7	threw 463:17	483:7 489:16
446:20 447:10	543:5	485:17 486:6,23	throw 358:2 359:17	490:14,16 496:24
449:6 454:20	think 298:20	487:9,19 488:14	385:4 400:13	498:22,23,24
456:15 460:8	299:13 300:2,13	494:3 500:22	throwing 448:6	499:4 500:11
467:19 468:5,5	303:4 309:17	501:16 504:8,8,19	510:12	506:5,6 514:22
476:16 489:5	310:22 314:1	505:4 510:13	thrown 446:24	519:18 524:8
514:1 523:4	316:10 317:1	512:1,3,4 513:25	thumb 372:17	525:21 527:2
535:13 539:19	319:4 320:4	516:14,19 523:21	thumbs 520:14	536:4 546:5,11,18

548:12 549:7	459:22,25 460:2	469:9	430:18 494:11	521:6 522:14
timer 290:5 291:2	460:14,16,20,21	tripped 472:8	Turner 313:12,13	525:19 529:4
331:12 332:23	502:12,14	473:12,19 474:14	313:13 346:7,8,8	530:7 537:5
times 338:9 382:19	total 310:21 495:3	521:12 533:24	371:19,20,20	538:22,25 547:5
391:11 409:19	497:14	trouble 343:20	375:21,22,22	547:12,17,18
429:22 442:8	totally 305:25,25	365:11	376:4 468:15,16	typing 445:14
536:5,6 539:9	336:15 367:23	true 344:13	468:16 493:21,21	type 293:11,24
title 291:12 479:2	374:16 499:4	trumped 339:2	510:16,17,17	297:18 326:12,15
titles 291:13	522:21	try 310:15 345:7	511:3 513:8,9,9	327:5 328:25
TK 297:17 303:17	tough 444:16	350:7 352:5,6	516:12,13,13	344:5,19,19,20,21
316:17,22 318:8	tougher 431:18	358:7 382:19	Turner's 496:17	347:5,5,5,6
today 305:13	track 339:11	428:15,19 429:20	turnover 316:4	381:12 384:2
331:17 344:17	traction 334:1	476:1 505:14	376:21	398:1 401:13
425:5 426:3	341:7	519:19 525:15	turns 408:18	420:3,10,17
432:11 435:6	trained 386:9	530:16 543:12	441:23,23	426:12 427:14
488:17 498:12	training 434:8	trying 299:11	twenty-- 494:1	431:11 433:23
528:25 532:25	transcribed 549:8	300:11 302:8	twenty-three	434:25 449:6
toes 365:24	transcript 287:5	303:5,6 304:23	489:13	455:19 474:12
told 303:22	549:10	306:16 309:13	twice 361:8 391:5	478:9 481:16
Toll 287:18	transcription	317:12 320:4	535:7	542:4,6,6 545:16
tomorrow 312:2,3	378:16 519:21	321:19,22 344:14	two 294:24 301:18	types 427:5 466:15
312:24 313:10	549:9	347:21 349:9	301:23 302:8	469:25 478:10
379:1,5,23 483:6	transfer 290:21	352:8 353:4,13,21	305:25,25 306:1,7	typical 467:25
486:3 499:10,11	transformer	353:23,24 357:24	306:7,12 308:17	468:1
500:6 501:9	338:19	358:14 359:10	320:25 334:12	typically 439:23,25
506:13 507:17,19	Transit 401:9	373:10 378:4,9	338:20 356:2	454:12 457:1
507:23 508:1,6	407:11 412:19	380:23 382:16,21	360:13 369:3	typing 458:11
524:9 525:17,25	transmitted 291:4	398:17 399:22	373:4 399:4,21	
526:9,10,12	transmitting	401:11 404:19	403:25 415:5	U
530:16 547:14	292:11	412:13 424:21	417:7 425:18	uh 470:1 517:14
548:9,18,21	transported 408:12	431:16 450:23	427:16 428:12,15	Uh-hum 324:21
tonight 501:9	travel 393:16 396:1	456:5 457:7,25	432:3 436:1	UL 407:20
547:14,24	396:2 406:11	458:10 459:14,17	442:15 446:13	Um 367:16
tool 291:21	428:6	467:16,22 469:18	449:11 450:21	unaddressed
tools 294:7	traveling 452:10,23	497:23 504:15	451:20 453:20	295:22
top 301:8 318:17	treat 409:18	505:7 512:21	459:25 463:10	Unattended 314:13
337:1 341:24	treated 446:18	518:2 528:2 537:4	464:7 465:13	unaware 315:10,12
348:20,25 349:6	trick 317:12 542:9	537:4,5,8	477:11 479:7,9,10	unclear 394:13
452:8,14 453:19	tried 453:6,7	turn 327:6 407:6	480:21 488:15	446:23,24 484:14
454:13,18,22,23	trigger 357:5	407:18 410:14	489:18 494:24,24	uncomfortable
455:12,12 456:5	triggers 517:5	534:4	495:14 503:1	312:22
456:18 457:15,18	trip 318:15 447:6,6	turn-ons 423:22	507:5 511:25	uncontrolled
458:3,14 459:11	463:14 464:13	turned 409:15	512:11,15,18	443:12
459:12,16,18,18	465:18 466:21	412:24 414:5	514:18 515:5	underground

442:22,25 443:9 446:3 underlined 467:15 underneath 485:10 understand 304:2 305:14 316:12,22 340:8,20 343:21 343:22 347:3 348:23 349:16 359:13 369:17 375:16 377:7 382:18 384:13,20 402:19,21 403:9 408:1 419:10 421:21 433:14,23 434:1 455:17 457:25 459:1 461:13 477:21 478:16 482:18 486:13 495:22 499:2 500:10 504:13 506:4 518:13 519:21 520:18 529:10 understanding 368:20 397:10 446:14 456:11 461:3 483:20 499:12 understands 328:12 344:2,3,3 423:17 464:22 478:8 understood 294:23 347:7 unequivocally 540:19 unfair 399:15 unfortunately 415:3 500:19 504:11 506:19 UNIDENTIFIED 295:25 296:2 313:21,22 324:12	324:13,23 359:7 391:8 402:7 415:9 420:7 458:7 460:18 493:7,9,10 unintended 314:14 314:17,22,23 317:6,9 318:22 319:7 320:19,20 321:1,8 322:10 323:13 union 440:3 509:16 unique 311:10 427:1 unit 303:18 310:15 333:14,21 340:7 407:14 408:20,21 409:5 413:13,17 427:1 438:24 439:3,22 440:1 443:15 444:1,25 445:5 449:22 545:2 units 303:24 333:17 351:12 400:3 533:15 unloading 309:20 unlocked 317:13 unmitigated 329:1 unmuted 314:2 unneded 390:4,14 unobstructed 528:20 unoccupied 316:5 Unpaid 368:15 unplug 315:23 542:3,9,10 543:8 543:19 unplugging 317:17 318:17 534:18 538:20 540:1 unreasonable 378:23 428:8 430:8,20 unsafe 319:15,15	441:17 456:7 unusual 484:24 update 472:10 477:5 492:18 496:13 498:9 521:19 updated 332:2 335:8 368:11 373:20 439:13 445:12,20 updates 419:21 472:22 updating 492:24 495:1 497:8,12 uploaded 302:25 305:10 309:24 uploading 290:14 302:17 upper 452:11 use 291:20 294:13 295:8 297:6 298:16 303:19 304:7,23 316:20 328:8 331:9 337:22 339:11 371:16 376:13 386:2 387:12 410:6 412:25 415:21 416:15 427:11 502:13 505:13 512:14 533:7 543:9 544:16 545:17 users 347:2 uses 304:11 USI 311:10 utilized 326:14 utilizing 295:14	value 290:5,5 291:1 291:1 valve 438:24 439:5 440:4 445:1,3,6 449:23 509:17,17 valves 383:18 481:4 483:24,25 484:3,5 489:22 490:6 508:16 van 441:21 variable 290:5 291:1 various 327:4 363:17 vary 327:13,25 verbiage 307:9 310:24 312:16 313:17 325:16 335:11 364:24 377:8,17 384:11 391:17 395:20 406:13 410:3,6 411:21 414:14 416:24 426:13 436:16 437:7,19 450:12 452:9 454:2,4 464:2 470:4 473:9,21 479:14 480:25 511:21 519:20 520:3 521:13 525:9 533:7,11 verification 515:24 verified 389:4,14 389:22 391:2 472:2 473:10,17 474:3 521:7 533:23 verify 314:11 318:23 320:18 verifying 318:21 319:5,6 versa 306:11 version 303:18	316:18 443:3 478:17 503:25 510:22 511:1 versions 316:18 versus 329:18 351:14 429:5 475:6,6,7 488:6,7 488:8 vertical 302:22 315:9 334:23 335:16,18 342:21 343:23 351:1,8 352:17 354:15,17 354:22,25 364:2 369:23 375:10 378:22 382:7 392:1 394:12 395:21 430:11 443:23 445:24 456:10 484:2 487:6 493:16 496:16 502:15 510:7 523:24 525:2 527:20 531:10 534:11 545:13 vet 301:14 309:23 310:24 437:11 507:18 vetted 299:14,19 300:3 499:15 vetting 504:3 vice 306:11 video 298:14,23,25 410:17,17 videoconferencing 289:3 view 434:10 466:14 466:17 539:9,10 views 446:15 violation 290:12 522:3 virtual 371:16 377:16 379:8
<hr/> V <hr/>				
V 391:11 vacuum 543:2 vague 446:5 validity 378:9				

431:10,13 434:2 477:22 virtually 377:12,20 432:8 visible 293:10 visits 403:11 visual 427:12 voice 298:14,22 500:5 voltage 465:9,16 533:16 535:1 540:18,20 541:16 541:17 542:8 545:8 volume 327:1 voluntary 394:15 volunteered 525:14 vote 306:7,12,17,22 306:23 307:8,8,11 307:12,15,20,21 307:25 308:1,6,8 308:10 311:24 312:4,7,24 313:10 313:17 317:5 323:11,20,22,25 324:2,4,7,16 330:10,16,17,21 330:23,25 331:2,3 350:12 356:4,9,10 356:12,13,22,23 356:24 357:1,20 357:22 358:19 359:16,20,23 360:4,7,12,20,21 361:2,4,5,6,6,7,9 362:7,8,8 363:5 366:14,16,20,21 366:24 367:1,11 372:6 377:5,23 378:24 387:4,17 387:24,25 388:2,4 388:5,5,6 392:14 392:15,19,20,21 392:25 393:2,7	404:12,15,16,17 405:4,6,7,10 406:4 413:23 417:21,22 418:5,7 418:17,19,20,21 418:22,25 420:24 421:1,2,5,5,16,25 422:2,8 437:18,23 437:25 438:1,5,6 438:8,9,14 440:17 446:11,16 449:12 449:13,15,18 450:3,4,8,11,13 450:17,19 451:3,7 451:11,12,14,16 451:19 459:6 460:7,12 461:4,19 461:25 462:2,4,11 462:13,14,15 470:6,10,14,19,20 476:12 479:11,14 479:17,21,23,25 480:1,1,2,4,10,12 480:14,15,15,16 480:19 483:4,6,13 489:4 490:1,4,9 490:13,14,16,18 490:19,20 491:1,5 491:7,13,13,14,16 491:17,17,19,20 492:23 493:18 494:10,18 495:4 496:8,10,13 497:8 497:11,12,16 498:11 500:1,3,13 503:15 507:20,24 507:25 513:12 519:16 520:1,5,8 520:10,12,22,22 520:25 522:13,22 522:24 525:6,13 525:21,22 526:1,3 526:5,5,11,13,16 526:17,19,21	527:4 529:1 531:6 531:24 532:3,4,6 532:8,17,24 544:14 546:7,8,10 546:13,16,18,21 546:22,25 547:16 voted 308:2 311:3 323:23 324:5 330:18,24 361:8 361:17 362:14,24 363:2 367:3 387:21 388:3 392:22 393:3 405:9 418:14 421:7,18 438:3,4 438:8 450:14,15 451:8,15,21 480:11,25 490:10 491:12 497:14 512:22 520:21 525:7 526:1 votes 307:3 470:16 470:23 471:4 477:12 479:5,18 480:20 490:11 497:17 523:7 532:12 voting 312:22 317:5 324:6,7 360:14,14 361:16 362:12,22 366:12 367:4,5 379:5,19 387:6 393:4,5 405:12,14,15,17 405:18,22 414:23 418:10 421:3,5,14 421:20 422:3,4 437:18 438:5,11 438:12 450:21 451:9,17 462:2,7 462:19 470:22,25 471:1 480:17 490:22 496:6 497:14 519:17	520:23 523:5 525:5,22 526:7,7 532:7 VPLs 431:14 432:7 VRC 336:9 340:3 342:24 343:2,10 343:10,19 346:11 346:16 349:15 350:20 351:14 352:16 355:10 359:21 VRCs 334:24 335:2 335:19,22,25 336:4,6,8 338:15 339:15,18 340:17 342:25 343:5,7,15 344:15,16 345:11 345:25 347:17 352:1,3,10,20,22 352:25 353:3,4,7 353:7,9,10 354:3 354:4,11 355:9,14 355:19,19 356:4 357:20,21 358:23 360:1,3,17 362:23	375:18 380:2 382:9,11,15,22 383:1,6,9 384:4 385:25 388:13,20 392:17,25 393:11 395:10 403:8 404:18 405:5 411:17,17 414:10 414:25 415:11,14 417:2,11,22 419:22 420:13 421:23 422:18,19 422:20 423:16 452:2 454:2,4 463:8,10,11 471:8 471:11,18,24,25 472:19 474:23 475:10,12,13,15 475:18 476:1 479:12,14,20 480:23 483:2 486:17 488:9,16 489:4 491:4 492:1 498:10,12 501:13 501:19 508:9 510:4,10,18 511:20 514:8 516:10 518:15,19 521:5 522:18 528:15,23,25 529:4 530:9 532:8 532:23 534:6 537:6 544:18 WAC-wise 500:1 WACs 368:17 406:22 Wade 302:21,21,21 302:22 315:9 364:2 369:23 372:12,12 373:18 375:10 377:7 378:22 382:7 392:1 394:12 395:21 430:11
W				
W 355:21				
WA 287:18				
WABO 530:14				
WAC 288:6 289:18 296:7,11 311:5 312:10,14 323:6 332:3 335:6,9,25 336:14,18 337:4 337:10 339:3 340:5 343:8,21 345:8 346:6,10 347:3,9,12 351:7 351:9,11 352:12 352:22 353:1,5,7 353:22 354:4,4 355:6,6,14,20,24 356:8 367:15				

431:23 432:21	464:21 467:16	467:9 475:21	367:23,24 379:14	452:2 460:7,8
443:23 444:21	476:11,16 477:8	482:24 514:23	404:7 406:4	467:16 475:24,24
445:24 456:10	478:7,15,16	wasting 430:3	419:19 446:16	476:3 481:19
493:16,22 496:16	488:21,22 494:5	water 331:10 358:3	450:20 461:18	482:1 485:15
510:7 523:24	495:21 497:6,7	359:18 434:25	462:23 463:15	486:6,19 487:17
525:2 527:20	498:12,20,24	509:10 512:12	472:15 497:21	487:22 488:4,8,8
530:20,22 531:7	499:8 500:11	514:3	498:5 501:5	488:12 489:1
531:10 534:11	503:10 505:2,9	waters 395:22	506:13 507:20	493:25 494:12
535:10 545:13	506:2 507:21	way 300:13 305:12	525:23 532:21	496:5 498:9 499:9
Wade's 396:13	511:25 512:20	307:4,9 315:11,13	547:17 548:20	499:19,22 501:2
wait 501:14 504:10	531:11,17 540:15	315:13 316:23	we're 296:20,20	501:14 508:24
504:11	541:23 542:13,15	317:24 319:23	301:23 303:10	511:1,17 514:13
waiter 334:6,19	544:11,12 548:13	339:7 345:21	306:15 323:5	515:22,23 519:22
waiting 364:15	wanted 299:8	348:6 350:5,6	331:7,8,16,16,22	520:19 526:24
376:20	311:14,23 336:22	351:23 353:24	331:23 332:25	528:14,17 529:15
walk-in 325:14	346:9 354:2 357:5	355:18 364:3,12	343:12 345:2,3,24	529:25 531:13
walked 441:21	398:16 400:5	364:18,18 371:4	345:25 352:24	535:15 536:13
walking 441:20	415:6,13 445:4	371:17,21 372:5	353:23,23,24	538:7 541:9 543:9
504:16	448:12 460:9	377:13 383:23	356:10,12,12,16	543:24 544:9
walks 325:15	470:21 477:3,20	385:6 392:6	356:22,23,23	545:6 546:3
wall 348:1,8,18	499:21 519:12	394:20 398:3	357:1,2 358:8,11	we've 308:17
349:23 350:3	545:14	400:24 402:25	359:16 360:13	310:20 347:13
439:19 464:12	wanting 301:19	413:23 426:21	363:9 364:3,4,8	351:22 356:1
521:18 539:12	306:15 361:16	444:14 447:11,23	365:12,20 366:7	383:21 398:17
walls 334:8,21	436:15 438:8	448:9,17,24 453:1	368:4 373:10	405:25 414:11
341:23 342:1,17	524:15	453:16,20 454:25	376:12 378:4	428:18 431:5
want 298:4 301:24	wants 343:1 430:16	456:1 462:3 466:8	380:3 382:13,20	435:25 455:4
304:23,24 309:10	483:3 503:14	466:8,14,15	387:13 392:7	463:10 543:18
309:19,23 310:11	548:7	474:11 483:5	394:14 395:7,14	548:8
311:20 312:3	Washington 287:1	493:10 494:19	398:6,8,10 399:4	wealth 461:11
320:7 337:18	289:5 298:16	500:2,5,5 511:11	399:5,6,7,8 400:7	website 368:9
339:18 340:7	303:24 304:20	512:8 516:17	400:25 404:3,4,18	websites 297:4
351:3 358:2,19	310:22 335:20	518:19 519:12	406:5 407:18	Wednesday 289:4
359:17 361:10	336:7 342:23	525:7 537:10,17	413:23 419:13,16	week 399:20
362:3,9 366:3	343:2,6,15,20	541:15,15 543:7	419:23 420:12	428:14
379:5,16 384:14	344:6 354:16,19	543:23 544:9,17	421:24 422:14	weeks 428:15
386:2 397:21	354:21 355:4,24	544:19 549:13	426:14 428:18,20	weighers 383:18
399:12,18 400:13	409:2 420:3,18	ways 350:12 356:10	429:22 430:1,13	weight 478:14
405:10 419:9,12	434:23 508:25	356:12,13,23	430:16,22 431:6	weird 350:25 463:9
424:5,22 426:8	514:14,15 515:2	409:15 453:7	431:11 432:8	Welcome 427:21
429:9 435:12	516:16 549:5	459:2	433:5 436:3 439:1	welfare 295:20
441:18 444:4,5	wasn't 339:5 362:4	we'll 311:5 312:4	441:3 443:7,8,14	went 323:5 459:1
447:23 450:5	367:9 395:1	331:11,18,18,22	443:18,20,25	461:14 466:3
451:10 458:21	397:22 421:16	358:22 359:22	444:22 450:21	475:19 486:18

543:22
weren't 403:23
WHEREOF
 549:16
whim 434:13,13
 435:5
whole-heartedly
 384:12
wide 326:23 465:11
 468:19 469:10
width 522:1
widths 327:12,25
wifi 434:16 435:6
 435:24
wild 424:13
wildly 424:20
willing 362:10
 524:8
Wilson 302:14,15
 302:15 414:23,24
 414:24 476:9,10
 476:10 486:25
 487:1,1 527:10,11
 527:11 531:4,4,20
Wilson's 304:17
window 425:21,24
 431:17
wire 315:22,22
 469:14 502:2
wired 295:4 318:14
 533:4
wireless 294:5
 295:4,5
wires 315:20
 317:17 332:14
wiring 332:12
 482:14 485:5
wish 324:4 331:1
 418:21 451:16
 479:25 490:18
 491:15 520:22
 532:13,13,15
 546:21
wishes 308:5

450:16
wishful 331:18
wishing 462:14,16
 491:18
witness 474:12
 549:16
witnessing 477:22
Wohlschlager
 370:21,22,22
 371:13 381:8,9,9
 382:4 391:15,16
 423:22,23,23
 424:5 476:21
 478:22,23,23
 481:11,12 495:4,5
 495:5,13,17
 511:18,19,19
 513:15,16,16
 514:10 517:9,10
 517:10,16 518:13
 524:5,6,6,19
 540:12,13,13
 544:20,21,21
wondering 396:17
 411:2 489:3,11
word 296:11,11
 385:5 424:6
 475:23 479:2
 485:24,24
worded 305:12
 322:3 345:21
 447:11 448:15
 457:25
wording 317:23
 407:13 409:13
 518:3
words 353:23
 363:17
wordsmith 455:18
wordsmithed
 373:12 453:10
 516:5
wordsmithing
 356:19 358:2

453:22
wore 439:24,25
work 299:10 310:1
 311:4 312:18
 316:25 317:10
 331:19 332:10,16
 332:17 338:17,18
 338:23 339:7,7
 340:7 358:17
 359:15 368:12
 372:15 373:21
 376:23 379:21,23
 380:6,11,12,17,18
 380:21,22,24,25
 381:3,4,12 382:12
 382:17,20 383:15
 383:19,25 384:2
 384:15,24 385:15
 385:18,25 386:4,6
 386:8 387:14
 398:22 414:14
 422:25 428:15
 429:11 435:21
 436:6 455:24
 457:19 461:16
 472:24 500:19
 501:23 516:3
 542:9 548:8,12
worked 303:17
 305:22 385:20
workers 333:3
working 297:24
 302:5 304:5
 326:22 395:3
 408:15 427:1
 433:24 434:9
 441:22 455:20
 456:17,17 481:13
 492:6
works 310:18
 469:16 492:3
 542:11
worldwide 375:1
worm 363:21

worries 386:14,14
 397:7 497:5,5
worth 428:15
wouldn't 396:18
 485:20 512:16
wrap 357:25
wrapped 382:16
write 310:16
 335:20 349:15
 353:21 359:15
 402:20 427:13
 441:17
writing 319:16
 374:14 422:24
 423:4 457:23
 461:14
written 307:5
 312:14 315:14,21
 319:5,24 320:2
 335:22 348:7
 364:19 372:5
 373:23 382:11
 401:2 406:18
 407:15 408:19
 412:20 413:2,5,11
 413:11,18 418:1
 419:11 431:9
 446:23 447:22,23
 453:2 467:8,19
 483:21 486:9
 487:23 491:3
 512:8 513:21
 518:19 536:15,19
 536:20 542:16
 543:7,12 544:19
wrong 310:6 316:1
 317:22 324:10
 339:9 344:1 365:6
 374:15 386:21
 446:7 458:11
 493:2 495:14,20
 515:19 536:2
 543:10
wrote 320:1 336:19

338:13 339:20
 374:13 380:19
 453:6 477:18,19
 517:15 528:12
www.capitolpaci...
 287:24

X

Y

yada 448:19,19,19
 448:19
Yay 470:14
yea 306:22,23
 307:20,21 308:2
 323:20,22 330:16
 330:17 360:4,7,20
 360:21 366:20,22
 387:17,21 392:19
 392:20,21 405:4,6
 405:7 418:5,7,10
 421:5,5,18 437:25
 438:1,4,8 450:3,4
 450:8 451:4,7
 461:4,25 462:2,4
 470:10,14 479:15
 479:17 490:4,9,10
 491:5,7,12 497:11
 497:12,14 507:20
 507:24 520:5,8
 521:2 525:22
 526:6,7,11,14
 532:3,4,6 546:10
 546:13
yeah 296:14,14,17
 302:15 305:6
 309:17 311:23
 312:21 314:1
 316:15 317:15
 318:3 319:10
 321:15 334:14
 341:3 342:12,13
 342:17 348:10
 350:18 351:18

353:18 358:9	471:5 480:6	0034 438:19 449:19	511:22 513:18	12 331:5 388:10
359:9 366:4	490:23 491:22	451:20	05000 336:19	478:10
372:23 373:7,16	532:20 547:2	0035 314:5 317:6	346:11	12:19 419:18
377:15 396:16	yeses 525:8	323:12 324:17	0675 512:2	1200 494:11
397:8 398:16	yesterday 337:8	0036 289:22		125% 314:16 316:9
402:24 408:1,14	441:19 488:5	0036(a) 307:14	1	316:9 320:8,22
409:9 410:25	505:4	0036(b) 307:15		321:16
414:4,24 417:15		004 477:4 479:9	1 290:14 308:11,12	13 293:11 439:8
421:15 434:4	Z	480:10,13,14	363:6,7 368:6	14 429:18
435:19 436:7,9		0040 386:19 388:13	393:9 405:23	15 427:6 451:24,25
440:16 441:12	0	392:16 393:8	419:2 438:16	545:18 547:2
443:24 451:22,23	0 367:12 419:2	476:12	451:23 472:9	150 514:4
453:4 455:17	422:9,9 438:16	0042 452:2 461:19	475:11 490:23	16 308:11,12
459:2,13 461:17	462:20 471:5	462:19	492:9 501:24	163 422:19
463:4 468:8	480:6 491:22	0044 522:17 528:13	502:8 508:13	1675 492:15
471:16 475:3	532:20 547:2	532:22,22 546:8	521:2 533:2 534:2	
476:10 481:24	0-- 392:15	546:12,15 547:1	1(b) 463:20	17 478:8 521:14
484:12 489:11	0.0437 502:1	0046 477:19 480:13	1.1 545:17	528:3,6 529:10,12
493:1,7 495:13	00-- 367:15	480:14,17	1.1.1 290:1,10	530:9,20 531:2
498:2 499:24	0002 494:8 496:11	005 496:12	292:1	532:1
506:15,18 511:25	0003 521:5 522:16	0050 522:17	1.110 502:1	17.1 325:8 358:17
515:1 517:19,22	531:25 532:18	0051 479:13 480:17	10 435:17 472:9	358:18 498:16
520:19 523:3	0004 471:7,23	481:1	477:8 478:18	499:20 518:14,16
524:6,19 528:11	475:1 480:18	0054 481:15 482:12	488:19 521:13	518:18
529:21 531:4,4	0006 496:12	491:21	547:3	18 468:21 475:11
532:19 539:7	0007 496:12	0055 501:19,19	10.3 477:6	490:23
541:4 547:2	0008 496:12	505:10 508:2	10.4 472:21,23	18.1 358:17,18
year 291:6,7	0009 496:12	0057 522:17	473:13,21 474:15	472:22 475:18
297:20 321:17	0010 491:25,25	00675 296:7 511:14	477:2 534:1	476:6 487:2 489:8
439:14 445:13	496:11	511:16 513:1,4,6	100 502:3,4,5	498:17 499:3,21
530:22	0013 496:11	0068 363:10 366:16	100% 370:17	527:14 529:6
years 295:6 299:11	0014 496:12	367:11	448:13	537:8
303:13 336:13,13	0015 496:12	0073 480:23,23	1030 391:14	18.1-2017 475:13
338:20 347:8,14	0019 508:8 520:1	481:14,15 483:13	108 379:25 380:1	19-28-010 388:21
350:22 371:2,7	521:1	489:20 490:22	388:9	1910 327:9 328:1
408:15 426:2	0023 463:7 470:6	0074 406:5 417:22	11 324:18,18,20,20	1989 342:23
476:2	471:4	419:1 442:11	331:5 380:2	1b 464:3,20 465:8
yeas 308:11,12	0024 419:20 422:8	0091 330:10 331:4	475:17,21 489:8	
324:18,20 331:5	0028 368:4	0098 501:13,13	11.4 509:24	2
363:6 367:12	0029 422:17,18,19	01070 411:17	110 465:16	2 287:8 289:1
388:10 393:9	437:19 438:15	01075 422:12	110.25 533:20	290:17 324:19
405:23 419:2	003 527:5,7,9	01075s 422:15	536:24 537:21	331:6 367:13
422:9 438:16	0031 393:11 404:18	0108 387:6 388:9	539:23	369:13 451:25
451:24,25 462:20	405:22	02552 511:20,22,22	117.00 419:25	462:20 464:8
			11s 324:24	491:23 502:17

508:19 533:6,17 533:21 534:6 536:14,19 540:19 540:23 541:19,20 548:11 2.19.2.2 315:2 2.19.2.2(1) 314:21 2.19.2.2(a) 318:6 321:4 322:13 323:17 2.19.3.2 314:11 320:17 2.2.2.5 509:21 511:15 512:8 519:9 2.2.3.1 502:21 2.2.4.5 502:19 2.3.2.3 503:5 20 360:16 363:4 427:6 478:9 20-- 544:18 20.19 322:20 2000 502:8,11 2012 310:7 2016 499:1 518:3 2017 297:8 391:18 472:4 476:23 478:3 499:2 521:8 521:9 2018 344:18 509:18 2019 311:9 320:13 320:24 321:7 337:19 476:22 499:1 509:21 510:22 511:1,6 512:2 518:2,25 519:8 2020 390:12 391:19 391:21 472:11,22 472:23,24 475:14 476:23,23 477:3,6 478:4 499:2 521:20 2022 287:7 289:4	300:2,25 305:8,16 506:15 549:17 2022.0025 346:10 2025 506:22 208 465:8 2083 287:15 549:20 21 328:2 405:23 451:23 521:2 532:20 2130 503:1 22 471:5 480:6 23 363:6 367:12 489:13 491:22 495:10,13 23701 489:6 2390s 443:4 24 325:20 393:9 421:8,10 422:9 423:5,24 424:1,2 424:6,24 426:9,12 426:13,15,18,19 428:7 429:19 430:7,9,21,22 431:17,25 436:21 436:21,22,23 437:5,19 463:25 468:13,19,23 469:15 492:12,12 493:2,22,24 494:1 494:2,10,12 496:19 497:1 2400 493:2,13 494:11 2401 287:18 2460 463:19 471:22 492:8 528:14 2460s 463:10 25 320:8 419:2 438:16 501:24 502:7 2552 511:23 518:20 26 497:15 2605 479:16 522:6 522:7 523:15	529:4 542:16,21 543:4,22 544:3,18 544:22 547:5,13 2640 471:11,12,25 473:2,9 479:20,22 480:12 523:6 2650 481:23 482:1 484:15,15 485:3 486:11,11 489:4 489:18 28 327:9 379:19 289 288:6 28th 549:17 29 327:8 328:1 296-96-00-- 336:18 296-96-00910 380:2 296-96-01030 388:13 392:17 296-96-01055 393:11 404:18 296-96-01057 417:23 296-96-01065 419:22 296-96-01075 501:13 296-96-02400 422:18,20 296-96-02452 452:3 296-96-02460 463:8,11 471:8 479:12 492:1 528:25 296-96-02550 501:19 296-96-02605 474:23 521:5 296-96-02640 471:25 528:23 532:24 534:6 296-96-02650 480:23	296-96-05000 335:6 296-96-2552 508:10 296-96-5000 351:12 356:8 296-96-5010 339:9 <hr/> 3 <hr/> 3 290:22 385:14,18 451:23 464:10 471:5 480:7 508:25 521:3 524:20 3,000 509:25 3.36.4 296:7 3/15/2021 530:9 3:00 425:22 436:25 437:1 3:30 425:23 30 326:23,25 419:17 30,000.00 440:23 300,000.00 440:24 3003.2 308:24 3029.2 308:18 35 336:12 347:14 492:14 495:6,14 352-2054 287:18 36 326:23,25 464:4 465:11 468:18 495:7,10,14 36(a) 306:17 308:9 36(b) 307:19 308:9 36.4 296:14 360 287:18 <hr/> 4 <hr/> 4 290:25 385:15,18 405:24 462:20 464:13,20 465:12 465:14 472:9 482:6 483:17,22 487:21 502:5,5	521:13 532:20 4(a)(i) 481:3 4:00 425:23 4:40 547:12 4:43 548:11,24 40 336:13 347:8,14 443:16 499:20 407-0148 287:18 430 521:14 44 498:10 524:21 528:22 529:14,14 445s 443:4 45 498:10 450 502:3 46 473:15 479:9 480:10 <hr/> 5 <hr/> 5 291:3 490:24 5,000 459:1 5:00 425:23 50 509:2 510:22,24 514:4,19 515:8 524:21 545:5 500.00 411:24 412:5 5000 345:9 346:5 352:22 353:1 51 473:14 474:21 479:6 480:5 548 288:8 <hr/> 6 <hr/> 6 388:11 6-1/2' 326:25 6-20-51c 349:8 6.4m 325:20 600 493:8,9 610 493:10,14 620.5 326:22 620.51 534:3 535:24,24 537:21 540:18 541:24,24 620.51(A) 533:6,16
--	--	---	--	--

534:3 535:13 536:19 541:20 620.51(c) 463:22 492:10 620.52 538:12 62443 299:22 66 464:4 492:16 495:10 675 289:23 323:12 331:16,20,21 422:13 501:16 68 363:10	8.6.1.6.5 325:9 8.6.1.7.6 291:24 294:21 8.6.3.2 294:21 8.6.4.20.11 314:6,6 320:14 323:13 8.6.5.8 294:21 8.6.8.3 294:21 8.6.8.4.3 294:21 8.7.2.8 439:11 8.7.3.8 439:11 8:30 289:3 548:21 800 287:18 84 503:1 84.30 393:15 406:10	998 501:13		
7	9			
7 308:11 429:18 70 326:22 328:1 463:22 492:10 533:5 534:3 538:11 70.87 415:22 70.87.190 411:7 415:1,20,24 700 331:23 337:15 360:16 70E 327:1 328:2 72 328:3 439:9 73 481:19 75 422:18 78 452:7 454:19 455:2 79 502:9,12	9 287:7 289:4 451:24,25 9.9.2 390:11,13 391:17,19 472:12 472:22 475:6,14 476:22 478:3,8,17 521:11,20 9.9.3 389:5,16,16 389:17,19 391:3 391:17,18,20 472:5,11 473:11 474:5,6,7,17,18 475:6,13 476:22 478:3,8,17 521:10 521:19 533:24 9.9.3/9.9.2 389:9,10 390:9,18,22,24 473:22,24 9.9.9.2 472:7 9:00 424:11 90 369:5 373:5 900 492:14 904 371:3,14 905 368:5 91 325:8 98502 287:18			
8				
8 308:12 388:10 8.1 289:24 301:7 8.1.6 289:24 301:8 301:10 8.4.11 438:25 449:24 8.6 294:16,20 301:16 325:8 8.6.1.1.2 294:19 8.6.1.1.3 294:15,16 296:18				

DEPARTMENT OF LABOR AND INDUSTRIES

STATE OF WASHINGTON

ELEVATOR TECHNICAL ADVISORY COMMITTEE MEETING

TRANSCRIPT OF PROCEEDINGS

February 10, 2022

Day 3

Taken Before:

Mary Jo Fratella, RPR, CCR #2083

of

CAPITOL PACIFIC REPORTING, INC.

2401 Bristol Court S.W., Suite C-103, Olympia, WA 98502

Tel (360) 352-2054 Toll Free (800) 407-0148

www.capitolpacificreporting.com

admin@capitolpacificreporting.com

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A G E N D A

AGENDA ITEMS	PAGE NO.
Meeting Purpose/Agenda	552
Safety Tip	560
WAC Rule Review	567
Recap	818
Adjourn	824

1 BE IT REMEMBERED that Day 3 of an Elevator
2 Technical Advisory Committee Meeting was held via
3 Microsoft Teams videoconferencing at 8:30 a.m. on
4 Thursday, February 10, 2022, before Mary Jo Fratella,
5 Washington State Certified Court Reporter.

6 The Technical Advisory Committee
7 facilitators were Melissa Eriksen and Paoakalani
8 Naipo.

9
10

11 * * * *

12
13
14

15 P R O C E E D I N G S

16
17
18

19 Meeting Purpose/Agenda

20
21

22 MR. NAIPO: So, right now we're just going
23 to go over our agenda real quick. Yeah, the meeting
24 purpose today is to just keep pushing through and
25 getting as much of these WAC changes reviewed, and

1 vetted, and a vote cast on them. We will be visiting
 2 a couple of things that we have already covered, one
 3 of them being the primary points of contact. Dylan
 4 Turner shared the edits with that; so, I have
 5 updated -- we will be reviewing the updated verbiage
 6 so that everyone can look at that and see if we can
 7 pass a vote on that, as well. Time permitting, the
 8 guard in the pits, I apologize, I wasn't able to get
 9 that out to you guys earlier; so, we'll be going over
 10 that.

11 I want to make sure that we understand where
 12 we're at right now and the plan moving forward. I
 13 want to give you guys the opportunity to ask any
 14 questions. We forgot about our safety tip yesterday
 15 and I apologize about that. I am surprised I'm not
 16 getting written up by, you know, Gerald, for that
 17 because this is an L & I event and we should be going
 18 over safety tips.

19 So, we'll be taking our breaks at 9:30, 11:00,
 20 1:30, and 3:00, and, again permitting, if we need to,
 21 we'll take additional breaks. So, hopefully at about
 22 8:45 in about 15 minutes Mr. Madison will be here and
 23 we'll be able to continue the work on our rule review.
 24 We'll take lunch at 12:00, be back at 12:30-ish, if
 25 not, you know, if it goes over or we take lunch

1 earlier, that's fine, but we'll have a half hour for
 2 lunch, and then at 4:40 I'm going to do a hard stop
 3 because I want to make sure everyone understands the
 4 path moving forward. We'll do a recap of the things
 5 that, you know, have passed, people understand -- so
 6 that people understand the edits that will be had, if
 7 we weren't able to address them. Those will be
 8 addressed at the ESAC. And hopefully we'll be out
 9 before five o'clock.

10 And, again, I can't thank you guys enough for
 11 your dedicated time. I know three days is a lot,
 12 especially virtually. That was one of the biggest
 13 contentions we had as far as moving it to this -- this
 14 way, I guess, instead of being in-person. Hopefully
 15 you guys feel like, you know, its gone as smoothly as
 16 it can in this type environment, but, again, I just
 17 want to -- I want to thank you guys very much for
 18 being here, being connected, putting forth your
 19 thoughts on all of these things that we've covered so
 20 far. I know its taken a lot and I really hope you
 21 know that we appreciate it here at the program.

22 Any questions on our agenda and path moving
 23 forward? Any questions? Mr. Strafer.

24 MR. STRAFER: Ah, you see my hand. All
 25 right. I was just about to put it up. Hey, I just --

1 just so everybody knows, at 4:10 today is the latest I
2 can go. I have to get out of here. My wife is a
3 medical care worker and got called in for a shift last
4 minute and she's got to work. They're a little
5 overloaded in the hospitals these days, so, and I've
6 got some stuff to do with my kids; so, I've got some
7 coverage until 4:10, but I definitely can't go past
8 that. So, if I gotta get off, you know why.

9 MR. NAIPO: All right. Thank you. Thanks
10 for that update, appreciate it. Mr. Larson.

11 MR. LARSON: Yes, thank you. I had a
12 similar comment. Unfortunately today in the afternoon
13 I have an unavoidable conflict; so, after lunch today
14 I'll be ducking out. I won't be able to join you for
15 the afternoon session.

16 MR. NAIPO: Okay.

17 MR. LARSON: One -- one more thing, after we
18 adjourned last night I was thinking about there was a
19 group of 10 proposals that we went through that were
20 primarily metric versus imperial, you know,
21 measurements. Just one comment to the team which we
22 may want to consider going forward and that is these
23 measurements, like most code measurements, are
24 primarily metric with a conversion to imperial. So, I
25 just ask that committee going forward make sure they

1 keep that in mind. Yesterday we were talking about,
 2 for instance, what's the conversion from 24 inches
 3 into metric. We ought to look at it the other way
 4 around. I think metric is the primary measure. So,
 5 thank you.

6 MR. NAIPO: Thank you, Mr. Larson. As we're
 7 getting closer to lunch time and, you know, knowing
 8 that we're going to come back, if there's anything
 9 left on the table that you feel is, you know,
 10 imperative that -- that discussions are had on or your
 11 points of view on anything that's left over, if you
 12 could pass those concerns on to maybe me or Melissa
 13 that would be great, not that we're -- you know, we're
 14 going to understand the context of where it's coming
 15 from, but we'll at least try to -- if there is
 16 anything left that you feel you need to address,
 17 anything for you, Mr. Strafer, if there's anything
 18 left like what can be talked about in that last half
 19 hour from your point of view or any concerns that you
 20 may have from Labor's side, please let us know and
 21 we'll make sure that -- we'll at least bring those
 22 things up. Again, we won't understand probably the
 23 context behind it, but at least we'll try to tell your
 24 side of the story as much as we can, if there is
 25 anything. All right. Thank you. Candace.

1 MS. LAU: Candace Law. I don't know if
 2 we're officially on or not, but I just wanted to make
 3 sure that, to Russ's point, that twenty-- I know for
 4 sure that 24 inch rule in the WAC is also a Washington
 5 amendment to the electrical code. They put it in
 6 their electrical code because of what we did, and, so,
 7 if we changed it to metric, somebody needs to notify
 8 them that -- that they need to change their's, as
 9 well. Just a comment.

10 MR. NAIPO: Thank you for that. So, I want
 11 to -- I want to go over the e-mail that I sent out
 12 yesterday, sort of the path moving forward. I'll be
 13 honest, though, the three weeks leading up to this
 14 I've had a lot of anxiety as far as the volume of work
 15 that we were going to have to do in this type of
 16 environment. The last week, though, I really thought
 17 we'd be able -- we'd be a lot further along than we
 18 have been or where we're at now, but I don't want to
 19 minimize the time that its taken, and the
 20 conversations, and the understanding that I think
 21 people have gotten from the conversations that have
 22 gone on in this avenue. With that, me and Melissa met
 23 with Gerald and Alicia Curry, who is our legislation
 24 and rule making person within our division, as well as
 25 Annette Taylor, and sort of went over some different

1 options. Some options that were posed from
2 suggestions from here within the TAC, as well as some
3 things that we have -- you know, me and Melissa tried
4 to brainstorm on before we had that meeting, and they
5 want us to continue with the WAC and the conversations
6 that are had because from what they have seen, because
7 they have been coming in, you know, Gerald has been
8 here the whole time, but Annette has been popping in
9 and out every now and then, as well as Alicia, and
10 they've seen the value in the conversations that are
11 being had and they don't want to minimize those
12 because they feel like everyone, again, is making an
13 educated decision, not something based on what they
14 think, but hopefully what they learn and what to be
15 the true intent of whatever it is we're talking about.
16 So, with that, they would like us to continue with the
17 WAC reviews as much as possible, get as much work as
18 we can done, and then the path moving forward is at
19 the end of the day we will provide you with the ESAC
20 contact for the person that represents your
21 stakeholder group and what we ask is that, if there is
22 anything left that is of concern, we ask that you
23 please get a hold of your representative that is on
24 the committee and contact them, schedule some time and
25 go over those last -- those few last items, anything

1 that is of concern within the A17.1 comparison that
2 was e-mailed out or the 18.1 comparison, if you do
3 that work, you talk to them and let them know your
4 concerns so that they can bring that forward in the
5 meeting that we will have here honestly next month,
6 the 8th through the 10th with that ESAC committee.

7 For those who are in attendance on the TAC that
8 don't have representation on the ESAC, Scott Cleary
9 volunteered for you to be able to contact him as the
10 chair person. He sort of volunteered Ricky Henderson,
11 as well, since he is the vice chair, and I would
12 rather wait for Ricky to be able to give his okay on
13 accepting those things. But, again, if you are not
14 represented on the TAC for the stakeholder group that
15 you represent here or if you are not represented in
16 the ESAC or the TAC stakeholder group that you are
17 representing here like the fire marshalls, UL, ASME
18 committee, if there's anything of concern please
19 e-mail and contact Scott, and hopefully by lunch I
20 will have the okay from Ricky, as well, that you can
21 contact them and so that they may carry those concerns
22 to the ESAC review next month.

23 With this being said, are there any questions
24 regarding that part of moving forward and what happens
25 next? Okay. Mr. Leopard.

1 MR. LEOPARD: I have a question. I'm over
2 here on the east side of the state and I typically
3 represent Spokane, but, you know, if somebody is over
4 here that doesn't have a particular point of contact,
5 I'll open it up and let them contact me. I'd be more
6 than happy to hear what you say and move it on to the
7 ESAC committee.

8 MR. NAIPO: Thank you for that. I
9 appreciate that, Mr. Leopard. So, again, those who,
10 you know, are on the east side of the mountains I
11 think may be able to contact Duane and pass your
12 concerns on to him so he may bring that to the ESAC.
13 Thank you very much for that, Mr. Leopard. All right.
14 Any other questions moving forward or anything like
15 that at all? All right. So, with that, we will go
16 over the safety topic. Melissa.

17

18

19

20

Safety Tip

21

22

23

24

25

MS. ERIKSEN: I changed my mind, we're not
going to have one. Just kidding. So, wow, that fell
flat. Planning Ahead is what we are going to be

1 talking about and how -- oh, gosh darn it -- and how
2 the lack of planning ahead affects our ability to work
3 safely. There are things that you can do in the
4 planning stage of things, and before I say what this
5 is just think of who you are and your environment.
6 This is applicable to work life, this is applicable to
7 home life, this is applicable to if you're going to
8 take a vacation, if you plan on building something,
9 it's just something that we always need to do that I
10 think we either do or do not do and take it for
11 granted.

12 So, that being said, know what your task is,
13 what are you setting out to do, what are you trying to
14 accomplish, and what is the end goal because sometimes
15 it's easier to know where you need to end up and then
16 work backwards. Make sure you have the right tools,
17 the right materials, the right clothes, and the right
18 people for the job. Unless you're my sister, nobody
19 likes to go out in the snow in a t-shirt and shorts
20 barefoot, it doesn't happen, or if you're going to go
21 out on a job, you know, make sure that you're wearing
22 the right foot gear or have what you need to do to do
23 the job. Make sure that you have your pencil, or make
24 sure that you have your flashlight so you're not
25 having to leave what you're doing and go out to the

1 car and then come back. Make sure you have the steps
 2 and/or outline of what you're trying to accomplish and
 3 to know what you need; so, this is -- this is having
 4 some forethought. Is there training or education, is
 5 there personnel, some subject matter experts, or
 6 talking with the people who actually do the work that
 7 is needing to be done, the right equipment or tools,
 8 permits, checklists, paperwork, time, and ability, I'm
 9 going to get back to that one in a second, and then
 10 flexibility, a contingency and/or a plan B.

11 Time and ability. So, there are 24 hours in a
 12 day. That is not arguable. Nobody is available to
 13 you fully 24 hours a day. In workplace where we all
 14 are kind of together for eight hours, we can't even
 15 give you a full eight hours, like uninterrupted full
 16 eight hours of our life. It's just -- it's not
 17 possible. And, then, also remember especially in the
 18 age, and time, and land that we're in now, if you're
 19 working with people's calendars, or if you're working
 20 with people at all, or even remembering for yourself
 21 because we need to remember that we need to look out
 22 for us too. Just because you don't have anything
 23 scheduled in a moment does not mean that you're not
 24 busy. It doesn't mean that that time is not occupied,
 25 and even if it's time to take a breath, lean back and

1 close your eyes or what have you, that's just as
 2 important, too.

3 So, having the ability to adjust and flex.
 4 There are things that are going to happen. There's
 5 equipment breakdowns, there's employee absences,
 6 there's weather, wardrobe malfunctions, whether, you
 7 know, you ripped your jeans, or your shoelace breaks,
 8 your frickin' shoe breaks, I mean whatever it is,
 9 there's always unexpected things that come up. Be
 10 prepared for that as much as possible and have those
 11 backup plans. Build in that extra time and the extra
 12 money for when and if something goes wrong.

13 Different ways you can help make sure that you
 14 are planning correctly or thinking of everything that
 15 you need is to think about planning differently. So,
 16 what I did is I looked up what the synonyms, some of
 17 the synonyms and antonyms of planning are, and for
 18 those whose school was a long time ago, a synonym is
 19 another word for, and antonym is opposite. So, if
 20 you're thinking of -- you think you've got everything,
 21 but you just don't know, then think of it differently.
 22 Maybe think of preparation, maybe think of provisions,
 23 design, organization, schedule, arrange, outline,
 24 plotting, even if it's to take over the world, and
 25 arrange. When you think of those words, different

1 thoughts of what you might need to do, take care of,
2 include will come to mind, so it'll help you make sure
3 that you are fully prepared.

4 Antonyms, the opposite words: Chancy,
5 improvise, chaos, disarray, accident, confusion,
6 dismissal, ignore, and messy. Where the sight of a
7 messy burger means flavor, and the best, when you're
8 trying to accomplish a job and make it be absolutely
9 amazing, messy is not exactly what you want to see
10 happen. So, hopefully, those things and different
11 ways of thinking will help.

12 You need to think of what's at risk, you know,
13 what's at risk for you not planning ahead. There
14 could be physical problems. There could be mental
15 problems. People, stress is real. And there could be
16 emotional or trust problems if things are not done
17 right, accident or not. So, those are all things that
18 we need to consider and hopefully mitigate by making
19 sure that we are taking care of things in advance.

20 And just as someone who is a project manager,
21 the planning stage should take the longest. It is not
22 about execution, people. The planning stage takes the
23 longest; so, make sure you're prepared, do the work,
24 have the information, know what's needed, and don't
25 rush. And then all along the way I just want to

1 encourage you to be brave, ask the questions, and
2 speak up. I was very proud of Bob Oury and then
3 several other people that I spoke to after the fact
4 because Bob said, "Well, maybe we do need the
5 conversation because maybe that does help us", and
6 because Bob was brave in this meeting and he took the
7 time to say something he empowered other people and
8 other people were brave enough to say, "Okay, but what
9 about this?" or what have you. And being brave is
10 hard sometimes, but it's so important and it really
11 solidifies that you have everything together.

12 So, that is your safety topic. Thank you for
13 listening. Carry on.

14 MR. NAIPO: Thank you very much for that,
15 Melissa.

16 MS. ERIKSEN: You are welcome very
17 much.

18 MR. NAIPO: I'd just like to make a comment
19 about some of the stuff that she said and I really
20 want to commend everyone here. So, from what I got
21 out of it, of what she just said, it was about, you
22 know, we've got to define the what, what are we really
23 going to do, what is our -- what's our goal, what is
24 our end goal, and, then, like she said, work back.

25 I'll be honest, that was one of the biggest

1 things that I was worried about is that people were
2 going to carry on these conversations on how this is
3 going to be done and then trying to make a decision on
4 whether this should pass based on the how. If we can
5 just define the what, what this change is going to be,
6 what we want it to look like, then it's our job as the
7 program if it passes through all those things to
8 figure out, hey, what is it really going to take, this
9 is what our stakeholders want, this is the people who
10 are going to be affected by this change, what do they
11 really want, this is what they want, okay, then it's
12 our job to figure out how we get this done, how do we
13 make this become a fruition for our stakeholders.

14 And, again, I really want to commend -- I
15 haven't had to try to stop someone from trying to --
16 you know, trying to go down the
17 how-is-this-going-to-be-done road. I can't thank you
18 guys enough. So, a lot of that has made this job a
19 lot easier, and I really appreciate that, and I want
20 to commend you guys for that.

21 ///

22 ///

23 ///

24 ///

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

WAC Rule Review

MR. NAIPO: Someone had asked earlier about where we were starting and I gave him, hey, I think the last one we did last night was 0044, but I feel like I'd like to address this 0028 because I know this one had a bit of contention because they felt like, hey, it was a little -- it was written a little poorly and I apologize about that, and there was some ambiguity in terms of that, so Mr. Turner had shared last night his edits on the screen, and what I've done is I've taken those edits and placed them in the proposal for 0028. This is regarding requirements for primary points of contact. And what I'd like to do is just go over those changes and see if it's -- if this helps people with some of the issues that they had with the original draft.

So, starting with just (1) Once the applicant -- Oh, Mr. Quiett.

MR. QUIETT: Yeah, good morning. Jonathan Quiett. Is it possible for you to send it to me because I'm having the same issue with your sharing that I did yesterday. It's only your stuff, because when Melissa shares the timer or whatever it's fine,

1 but I can't even read it on my screen.

2 MR. NAIPO: Yes. Here. What's your e-mail?

3 MR. QUIETT: j-o-n, Jon,
4 q-u-i-e-t-t@tkelevator.com

5 MR. NAIPO: Gotcha right there, thank you.
6 Is anybody else having this issue of not being able to
7 see the Excel spreadsheet that needs a copy of it?
8 All right. Thank you very much. All right, it's on
9 its way, Mr. Quiett.

10 All-righty. So, one didn't change.

11 (1) Once the applicant has passed the test they
12 will be responsible for:

13 (a) Enrolling in distribution e-mail system with
14 Elevator Program via website.

15 (b) Ensuring that contact information is updated
16 and correct so they may be able to be reached during
17 work hours regarding.

18 (i) Actions of the company and/or mechanics.

19 (ii) Company licensing renewal.

20 (iii) Unpaid invoices prior to relicensing.

21 (c) Staying informed and up to date on all RCWs,
22 WACs, codes, policies, and technical clarifications
23 adopted and used by the state.

24 (d) Educating and enforcing the pricing for
25 permits and understanding how to calculate correctly

1 for installation and/or alteration permits.

2 This was added by Melissa this morning:

3 (e) Attending virtually or in-person all
4 Elevator Safety Advisory Committee meetings held once
5 a quarter.

6 (i) If the primary point of contact -- if the
7 primary point is not able to attend they must assign a
8 proctor in their place and they must adhere to the
9 same communication standards in (f).

10 (ii) If the primary point of contact is not
11 present at more than two of any four sequential
12 Elevator Safety Advisory Committee meeting, the
13 contractor will have 90 days to apply for a new
14 primary point of contact.

15 (f) Disseminating information to impacted
16 employees of contractor, and customers received from:

17 (i) Elevator Safety Advisory Committee meetings.

18 (ii) Any communication received via Elevator
19 Program e-mail service.

20 (2) If the Elevator Program finds one or more
21 of these requirements are not being fulfilled, the
22 program may ask the contractor to start the process
23 for a new primary point of contact.

24 With these edits, are there any additional
25 questions or concerns that you feel need to be

1 addressed? Mr. Friesen.

2 MR. FRIESEN: Wade Friesen, Vertical
3 Options. I got to thinking about this a little bit
4 last night. In regards to the ESAC requirement, it's
5 unclear in this whether or not attendees, now that we
6 are required to attend this via this change, are going
7 to have ESAC voting rights. It seems appropriate if
8 we're being mandated to attend these meetings that we
9 would have voting right, and, if that is the case, my
10 concern is that the committee size may bog down the
11 process and make this less effective. Thank you.

12 MR. NAIPO: Melissa.

13 MS. ERIKSEN: I just want to clarify that.
14 Thank you for your concern, Wade. The primary points
15 of contact at ESAC will not have voting rights. The
16 importance to your being in attendance at the ESAC is
17 because that is where decisions are made and that is
18 where updates are made publicly. That is where a lot
19 of information is provided. And it's those things
20 that as a primary point of contact it is important for
21 you to disseminate to your company so that everybody
22 knows what's going on. So, hopefully, that clears
23 things up.

24 MR. NAIPO: Carl.

25 MR. CARY: Carl Cary, Lerch Bates. Good

1 morning, everybody. I still have concerns with paren
 2 (e)(ii), and I certainly don't want to go down the how
 3 road, but related to, "the contractor will have 90
 4 days to apply for a new primary point of contact" or
 5 what, like what -- what is -- you know, what's the
 6 threat there? My understanding is it's just kind of
 7 an idle threat, right? I mean they don't -- there is
 8 no arm to enact or to punish otherwise, so why even
 9 have it there? Why not say, rather than threatening
 10 language, why not say, "the contractor will be
 11 asked...", you know, "if you miss two of four
 12 meetings, the contractor will be asked to provide a
 13 new primary point of contact", or something along
 14 those lines.

15 MR. NAIPO: Melissa.

16 MS. ERIKSEN: To clarify, in the WAC prior
 17 the -- I think it ends in four -- I don't know, I
 18 can't see the number, where it talks about the primary
 19 point for a company, this is -- what this is talking
 20 about is what primary points do, right? There's --
 21 There's not been a lot of clarification in the past.
 22 It says that every company has to have a primary
 23 point, and these are the stipulations of what that
 24 looks like, and this language comes from the rules for
 25 a company having a primary point. So, it was carried

1 over.

2 MR. NAIPO: Another point is that to be a
 3 licensed elevator contractor in the state of
 4 Washington you have to have a valid primary point of
 5 contact listed under you, and so it's one of those
 6 things, though, like Melissa alluded to, there really
 7 isn't -- there hasn't been in the past any set
 8 guidelines for, hey, when you are a primary point of
 9 contact this is what you are responsible for doing.
 10 This is what, you know the intent is behind you being
 11 appointed as a primary point of contact. It's not
 12 just a title that's given to someone to be
 13 arbitrarily, okay, you're the primary point of
 14 contact. No, there are things that really need to
 15 happen.

16 Where this also is stemming from is where things
 17 have been decided at the ESAC level or been sent out,
 18 like technical clarifications sent out to anybody who
 19 is on our mailing list, and you would not believe how
 20 many phone calls we get from people saying, "Oh, I
 21 never got that. Oh, I didn't know that was going on."
 22 Oh, well, this is being talked about at the ESAC.
 23 This was sent out through our e-mail service. So,
 24 this is just a way for people to understand this is
 25 what the intent is behind that primary point of

1 contact license. Mr. Friesen.

2 MR. FRIESEN: Wade Friesen, Vertical
3 Options. Thank you, Melissa, for your clarifications
4 in regards to all of this. I -- I still have a
5 concern with the ESAC requirement. It seems that the
6 primary purpose of this is really (f), which is
7 disseminating the information. So, if that is the
8 primary purpose, why can't the department send out to
9 the point of contact a summation of the meeting,
10 notes, a cliff note version, if you will, and then
11 we're able to disseminate rather than requiring
12 attendance of the actual (audio distortion) that takes
13 many hours and has an impact on all of our businesses.
14 Thank you.

15 MR. NAIPO: Mr. Quiett.

16 MR. QUIETT: Jonathan Quiett. This is stuff
17 that was brought up yesterday and I still see that
18 it's in here. It's paren (1) bravo (i) Actions of the
19 company and/or mechanics. I'm still confused why
20 that's even in there. I mean we can't be held
21 responsible for that as the singular member for not
22 only the actions of the company, but of the other
23 mechanics, and when you get a larger company like the
24 one that I work for now that can be looped into, well,
25 it's still the same company even though it's different

1 branches that we're having to be responsible for, and
2 that's just -- just with so many people, I mean if we
3 have -- if we have no voting rights, we're there
4 basically to listen, it sounds like, and then
5 disseminate information, why don't we just get a
6 synopsis of what the changes are and then we can
7 disseminate it from there.

8 MR. NAIPO: Is that the minutes from the
9 ESAC could be sent out?

10 MS. ERIKSEN: What?

11 MR. NAIPO: The minutes from the ESAC
12 meeting, is that something that we could send out?

13 MS. ERIKSEN: Yes.

14 MR. NAIPO: Yes. So, the synopsis would be
15 pretty much the minutes. We don't -- we don't compile
16 anything like that. It's just decisions that are
17 made, conversations that are had, people who are in
18 attendance, take notes, send that stuff out. The
19 only other synopsis I feel like we would have at this
20 point is to send out the transcript from the actual
21 TAC meeting and they would review that that way. But
22 I'm just putting this in here. Again, if you guys are
23 okay with what this is trying to say, with if it pass
24 then the ESAC is going to be responsible for making
25 these changes to address these things accordingly.

1 So, again, if -- just to sort of address what you were
 2 saying, Mr. Quiett, if there is any editing that you
 3 feel could be done to (b) to make it seem like --
 4 because, again, the intent of (b) is just so that you
 5 are able to be contacted. You are not the one being
 6 held responsible for the actions. It's just we need
 7 to be able to get a hold of someone if something is
 8 going on that we need a centralized person to get a
 9 hold of, and that's what really what this primary
 10 point of contact is is the centralized person for us
 11 to be able to contact in the event that something is
 12 happening with that company. If we are having issues
 13 that is who we contact. We're not going to contact
 14 the alterations supervisor, or the new install
 15 supervisor, or anything like that, no. We go directly
 16 to our primary point of contact and it is their job to
 17 then take that issue to whomever they need to and have
 18 it addressed. But if there are edits that you feel
 19 can be done so that it's a little bit better to be
 20 understood, we're open for that, as well, and I would
 21 like to take those -- make sure we have those notes in
 22 here. Jan.

23 MS. GOULD: Yes. Ricky points out in the
 24 chat the primary points of contact are required to
 25 sign temp mechanic paperwork, and so for these

1 companies with three or four offices that's
2 burdensome. That's it. Oh, Jan Gould. Sorry.

3 MR. NAIPO: Thank you very much for that,
4 Jan. Mr. Quiett again.

5 MR. QUIETT: Jonathan Quiett. There's been
6 a couple of different issues brought up with this, so
7 I don't want to be the only one speaking on it for
8 editing this, but my feeling is even if you read it as
9 the way it is, "Once the applicant has passed the
10 test, they'll be responsible for...", and if you
11 immediately skip to "(b) ensuring your contact
12 information is updated and correct so that you may be
13 able or they may be able to be reached during working
14 hours regarding actions of the company and/or
15 mechanics", so still we are the ones that are having
16 to -- if there's a problem with the company or the
17 mechanics, why are we choosing the point of contact?
18 I mean if a mechanic is doing something that's
19 incorrect shouldn't they be the ones who are being got
20 a hold of, you know, if they're doing something that's
21 outside the scope of what they're supposed to, and if
22 there is an issue with the work that they're doing
23 shouldn't that be the person that's contacted
24 directly?

25 MR. NAIPO: Thank you for that. Mr. Oury.

1 MR. OURY: Bob Oury. Yeah, I wanted to
 2 respond to a few of the comments, but I want to first
 3 say I really like this and I don't see that this is
 4 making the point of contact responsible for any
 5 actions of the mechanic. But as a merit shop, I can't
 6 speak as a larger union company, but as a merit shop I
 7 would want to be the person contacted if there was
 8 something with regard to one of my mechanics that
 9 needed to be addressed. I think it should start with
 10 the primary point of contact. I would imagine in the
 11 smaller companies that is the owner.

12 To Wade's point about the minutes, I think the
 13 minutes are available, and he makes a good point that
 14 if you can -- if you can get the minutes and make -- I
 15 don't know how the state makes sure that you're
 16 actually, you know, being responsible with the
 17 minutes, but that is an avenue, or having somebody
 18 else sit in for you on the meetings that you can't
 19 make, but I don't think having -- I think it's pretty
 20 easy to -- it happens that you miss one. It's
 21 pretty -- it's not as difficult to miss two. I mean
 22 you can -- you can usually be there for one of them.
 23 But one of the frustrations I have in my little sliver
 24 of the world with regard to the conveyances is that I
 25 never see any of the other companies that do some

1 material lifts and I find it interesting when I
 2 sometimes hear through the rumor mill that they're
 3 asking, geez, I didn't know about this or I didn't
 4 know about that when they could stay up to date on
 5 this stuff and it's kind of the responsible thing to
 6 do, but I don't think this is really over-bearing, and
 7 I kind of like it. So, that's my comment.

8 MR. NAIPO: Thank you, Mr. Oury. Melissa,
 9 do you have your hand up?

10 MS. ERIKSEN: Yeah. So, I just wanted to
 11 clarify a couple things. There is some conversation
 12 in the chat about Jan had concerns for those that live
 13 a long way when virtual meetings go away to be in
 14 attendance and that is a fantastic point. A lot of
 15 things changed with Covid, and pre-Covid we tried the
 16 virtual thing and it was a mess. Thanks to the
 17 pandemic, we have the virtual thing down. So, one of
 18 the things that's always been a point of conversation
 19 is that our ESAC meetings are public meetings, so how
 20 are we making sure that the people who want to be in
 21 attendance or need to be in attendance are in
 22 attendance, and that's why we were trying virtual
 23 aspect before. I want to assure -- And I said it in
 24 the chat, but I want to assure everybody that even
 25 when our ESAC meetings, and they are only four a year,

1 when our ESAC meetings go back to being in-person
 2 meetings that is not going to stop the virtual aspect
 3 of your ability to join. There will still be a link.
 4 It is open to anybody. We appreciate your
 5 participation. So, that's what I wanted to say about
 6 that, about the minutes, because our ESAC meeting is a
 7 public meeting the minutes are available to everyone.
 8 There is a spot for them on our website. I am
 9 actively working -- that's one of the last things I
 10 need to do is update what minutes are on the website,
 11 but that's where they go and that way they are open to
 12 everybody for their viewing of what's gone on in the
 13 meeting if you were not able to attend or even if you
 14 were and you want to see, you know, what happened, our
 15 minutes are available to you. I can also send them
 16 out over gov delivery, if that's helpful. But the
 17 minutes are a possibility. So, hopefully that cleared
 18 things up for people.

19 MR. NAIPO: Mr. Turner.

20 MR. TURNER: Dylan Turner, Greenbusch. I
 21 guess from at least looking at this from my view
 22 point, if you're signing up to be primary point of
 23 contact, the whole point of being in that position is
 24 you can be contacted as a representative of your
 25 company. With my company if some junior engineer is

1 doing something weird, I would expect to be contacted
 2 about that. I wouldn't expect that to be dealt with
 3 at the junior engineer level. I don't see this being
 4 ultimately different. I don't see it being the
 5 agency's responsibility to track down every single
 6 individual within Thyssenkrupp, for example. I think
 7 the whole point of this is that there's one person
 8 that can say, "Hey, we have this issue. Please
 9 disseminate it to the responsible parties", and then
 10 it would be dealt with by Thyssenkrupp as a company,
 11 at least that's the way I read this.

12 MR. NAIPO: Thank you, Mr. Turner. Mr.
 13 Madison.

14 MR. MADISON: Jon Madison, Elevator
 15 Mechanic. This has brought up a lot of good points,
 16 and, Bob, you brought some up, along with that
 17 Melissa. What ends up happening is this information
 18 isn't getting disseminated down to the end user,
 19 whether that be customers, whether that be elevator
 20 mechanics, or even the inspectors asking us during
 21 inspections, "Who is the supervisor?", "Who is my
 22 point of contact?" I think there may be some language
 23 to make people feel better about it, but I think
 24 having a single point of contact is going to ease a
 25 lot of -- it's going to save a lot of time and it's

1 going to be better for the inspectors and L & I in
 2 general just to be able to reach somebody, get the
 3 information out, and then trust that it's being handed
 4 out from there instead of especially secondhand. So,
 5 I would be for this and maybe with just some language
 6 changes. Thank you.

7 MR. NAIPO: Thank you. Mr. Cleary.

8 MR. CLEARY: Yeah. Like you said, I think
 9 some of the language can be cleaned up a little bit,
 10 but the main -- the main gist for this and the reason
 11 it's going -- we need this to go forward is there's
 12 been a lot of cases where we talk a lot and go through
 13 some of the decisions that have been made in between
 14 each one of our ESAC meetings. But some of the
 15 good -- some good examples are the demarcation
 16 agreement on inspections between electrical and
 17 elevators. We still see that it's not getting out to
 18 the mechanics and not getting out to the right people.
 19 You know, getting -- you know, having path codes and
 20 then companies not understanding that, well, they're
 21 in effect now. A good example is the three and five
 22 rule that changed to three-quarter and four for
 23 residential. That went into effect back in October of
 24 '18. This is also that person has -- can disseminate
 25 it. There can be multiple points of contact from

1 multiple offices, but the gist is to make sure that
 2 there's one person or a couple people within that
 3 organization that understands what's happening from
 4 the ESAC level so they can disseminate it down. So,
 5 it's really important. I think people are blowing
 6 this out of proportion. It's just the responsibility
 7 for a couple times a year, four times a year to make
 8 sure that you know what's going on at the ESAC level,
 9 and then that you get it to your mechanics, you can
 10 get it to ownership, you can get it to management.
 11 It's one of those things where we all have a
 12 responsibility. You know, we're license holders.
 13 We're elevator companies. It's just getting the
 14 information out so we're not surprised on inspections
 15 because a lot of time if you disseminate it you're not
 16 going to get caught by inspectors with a gotcha. We
 17 talked about this. So, this is to help the companies,
 18 too. It's not to be punitive, it is to be
 19 informative, and that's what I think is getting lost
 20 here.

21 MR. NAIPO: Thank you for that, Mr. Cleary.
 22 If there are any additional suggestions for edits
 23 outside of what I have already placed for concerns for
 24 today, I would ask that you please put those forward
 25 now, and, if there aren't any, then we'll move on to a

1 vote. And, again, the vote, if it does pass with what
2 I've taken over here in Column E as far as notes and
3 concerns from you, the TAC committee, those will be
4 addressed at the ESAC level or if we have time we will
5 get to it today, if we complete all the other work
6 that we have.

7 So, any additional edits or suggestion for edits
8 from the committee? All right. With that, I ask that
9 we put proposal 0028 to a vote. If you are for this
10 change for implementing requirements for a primary
11 point of contact and those licensed as such, if you
12 are for these changes that we are submitting, I ask
13 that you please raise your hand and vote yea. If you
14 are for these changes and implementing primary points
15 of contact and a requirement for them, I ask that you
16 please raise your hand and vote yea. All right.
17 Thank you for that. Lower your hands. Thank you
18 again for your vote.

19 For those that oppose this change and these
20 requirements for a primary point of contact, I ask
21 that you please raise your hand and vote nay. Mr.
22 Montgomery, I think you already voted yea for this.
23 If you are in opposition of these changes, I ask that
24 you please raise your hand and vote nay. Thank you.

25 For those who would like to vote to abstain, I

1 ask that you please raise your hand now. If you wish
2 to vote to abstain, I wish that you please raise your
3 hand now. Thank you.

4 Melissa, will you please read the vote tally for
5 proposal 0028?

6 MS. ERIKSEN: Thank you. There were 23
7 yeas, 0 nays, and 2 abstentions.

8 MR. NAIPO: Thank you. All-righty. So
9 picking up where we left off yesterday with proposal
10 0050, this is the third of four proposals submitted
11 for WAC 296-96-02605. They are asking to replace the
12 title for this part of the section from private
13 residence inclined to inclined stairway chair lifts.

14 (1) Battery operated private residence inclined
15 stairway chairlifts are not required to be permanently
16 wired or installed on an individual branch circuit as
17 required by NEC 620.51(A) Exception 2. These
18 conveyances shall be permitted to use a cord and plug
19 that will act as the equipment disconnecting means.
20 The circuit, which is used for this equipment, shall
21 have overcurrent protection that will protect the
22 current and the equipment. The circuit shall have
23 sufficient capacity to support the additional load of
24 the new stairway chairlift. Units that are operated
25 by line voltage, adding this verbiage, and utilizing a

1 plug and cord, stop with adding and goes to, shall
2 comply with NEC 620.51(A) Exception 2, adding this
3 verbiage, by using an individual branch circuit to
4 supply the equipment.

5 They are asking to strike the current (2)
6 Governor overspeed safety testing shall be verified by
7 manufacturer's documentation (see A18.1 requirement
8 9.9.3) Safeties shall be manually tripped at rated
9 speed with no load on the chair (see A18.1 section
10 10.4).

11 And adding that part two edited to and added
12 this verbiage:

13 (2) Battery operated incline stairway chairlifts
14 installed at locations other than private residences
15 shall be permitted to use a cord and plug connection
16 similar to (1) above, however it shall be connected to
17 a receptacle fed by an individual branch circuit, and
18 the charger and receptacle shall be placed inside a
19 larger protective electrical box with a cover to keep
20 the public from unplugging the cord to the charger.

21 (3) Chairlift safeties testing shall be verified
22 by one of the following when type A non-adjustable
23 safeties are utilized:

24 (a) If compliance with A18.1 section 9.9.2 is
25 verified by manufacturer's documentation, then the

1 safeties may be tested with no load in the down
2 direction at rated speed by manually tripping the
3 overspeed governor by hand.

4 (b) Where compliance with A18.1 section 9.9.2
5 cannot be verified, then the safeties must be tested
6 with full load at rated speed in the down direction by
7 manually tripping the governor by hand per A18.1
8 section 10.3.1.1 and the tripping speed of the
9 governor measured per A18.1 section 10.3.1.2.

10 (c) When a governor is not utilized, testing
11 shall be per A18.1 section 10.3.3.

12 Rationale: Removes any misunderstanding that
13 620.51(A) Exception 2 clearly allows an AC operated
14 lift to be plug and cord connected as long as it is
15 fed from an individual branch circuit. Adds
16 clarification that commercial units can also use a
17 receptacle for the charger as long as the receptacle
18 is fed by an individual branch circuit. Clarifies
19 safeties testing on chairlifts by using 9.9.2
20 documentation.

21 Now I open it for questions from the TAC for
22 clarification. Mr. Friesen.

23 MR. FRIESEN: Wade Friesen, Vertical
24 Options. This whole thing seems unnecessary to me,
25 particularly the addition of section two. I don't see

1 any rationale for adding a dedicated circuit for a
 2 battery operated lift that's drawing one amp or less
 3 from the circuit. There's just no rationale. And it
 4 seems to be that part of the intent here is to keep
 5 people from unplugging the unit. I also don't
 6 understand the need for that. I'm not aware of any
 7 modern products, and this does apply to new
 8 installation, and I'm not aware of any modern products
 9 that don't activate an alarm if they are off their
 10 charging means. So, if the thing was to get
 11 unplugged, it will sit there and beep, notifying
 12 people that it is unplugged and the thing can be
 13 simply plugged back in. I just don't see a need for
 14 any of this. Thank you.

15 MR. NAIPO: Anything additional questions or
 16 comments for clarification? Mr. Wohlschlager.

17 MR. WOHLSCHLAGER: Lyall Wohlschlager. To
 18 answer Wade's question, item two addresses only
 19 commercial stair lifts, and that was one of the things
 20 that Labor and Industries in the past that's why they
 21 required a hard wired disconnect for stair lifts and
 22 commercial applications because they were always
 23 concerned with the public coming by and unplugging,
 24 you know, battery chargers and then rendering that
 25 lift unusable for the next user. So, the intent of

1 two was only in commercial applications would you need
2 to protect that battery charger from being unplugged
3 from the public. So, that was the purpose of it.
4 Thank you.

5 MR. NAIPO: Mr. Barnhart.

6 MR. BARNHART: Yeah, to address the other
7 question about the individual branch circuit, it's not
8 an individual branch circuit so that it doesn't
9 overload the circuit, it's an individual branch
10 circuit so the only thing on that circuit is the lift
11 so that nothing else attached to that circuit causes
12 the lift to be non-functional. The purpose is you
13 have a dedicated circuit so something else getting
14 plugged into that circuit doesn't cause the circuit to
15 be tripped and cause the lift to be non-functional.
16 Thank you.

17 MR. NAIPO: Mr. Turner.

18 MR. TURNER: Dylan Turner, Greenbusch. Not
19 so much a technical comment, just it seems like these
20 are two kind of unrelated items. Maybe they should be
21 voted on separately. Just a suggestion.

22 MR. NAIPO: Candace.

23 MS. LAU: Candace Lau. With the exception,
24 maybe I'm missing something, but with the exception of
25 the electrical box cover to keep the public from

1 unplugging, with the exception of that, the rest of it
2 is already in code, I thought. So, I am not
3 understanding what the difference between what is
4 being said here than what is being allowed by the NEC
5 currently. So, with the exception of the -- I'm
6 talking about number two now and three, so two and
7 three. One, I really don't have a problem with one,
8 except for it's not crossed off, but the part that
9 says that will act as the equipment disconnecting
10 means is misleading there, as I said yesterday, that
11 these cord and plug residential stair chairs still
12 need a disconnecting means to disconnect power from
13 the motor, and when the verbiage says that they may
14 use a cord and plug that will act as a disconnecting
15 means is misleading because it does not disconnect
16 power from the motor, and I hope that the ESAC -- Even
17 if this pass -- even if this does not pass or it
18 passes, the statement that that will act as the
19 equipment disconnecting means does not do anybody any
20 favors and it's not in the -- it's not safe.

21 MR. NAIPO: Dylan.

22 MR. LATHE: Dylan Lathe. I'd like to
23 propose something to the TAC to see if they would be
24 willing to review this. I have a proposal that I've
25 entered -- that I've submitted and I was wondering if

1 I could show a revised proposal instead? Would
2 anybody be willing to view what I have?

3 MR. NAIPO: Is it regarding this WAC 2605?

4 MR. LATHE: Yes.

5 MR. NAIPO: I will put that vote to the TAC.
6 If you are willing to see the edits for something from
7 Mr. Lathe, I ask that you please raise your hand now.
8 All-righty. Thank you for that. That is more than
9 half; so, that's a majority. All right, Mr. Lathe, go
10 ahead and -- go ahead and share your screen. Thank
11 you.

12 MR. LATHE: Thank you. Dylan Lathe, by the
13 way I'll go ahead and read it whenever anybody can
14 see it.

15 MR. NAIPO: Yeah, we can -- I can see it.

16 MR. LATHE: Okay. So, changing the title to
17 Incline Stairway Chairlifts instead of private
18 residence, that way it encompasses both commercial and
19 residential.

20 (1) Private residence battery operated incline
21 stairway chairlifts are not required to be supplied by
22 an individual branch circuit in order to comply with
23 NFPA 70 620.51(A) Exception 2. These conveyances
24 shall also comply with NFPA 70 620.52. The rest of it
25 remains the same.

1 The circuit which is used for the equipment
2 shall have overcurrent protection that will protect
3 the circuit and the equipment. The circuit shall have
4 sufficient capacity to support the additional load of
5 the stairway chairlift. Units that are operated by
6 line voltage shall comply with NEC 620.51(A) Exception
7 2.

8 Number two is added:

9 (2) Commercial battery operated incline stairway
10 chairlifts installed in compliance with NFPA 70
11 620.51(A) Exception 2 shall also comply with NFPA 70
12 620.52 if there is more than one source of power
13 provided.

14 I also changed the wording of the overspeed
15 governor.

16 (3) If applicable, governor overspeed safety
17 testing shall be verified by manufacturer's
18 documentation (see ASME A18.1 2017 9.9.3/ASME A18.1
19 2020 9.9.2.) If provided, safeties shall be manually
20 tripped at rated speed with no load in the chair (see
21 ASME 18.1.) If ASME A18.1 2017 9.9.3/ASME 18.1 2020
22 9.9.2 documentation is not applicable, safeties shall
23 be tested with rated load (see 18.1).

24 My rationale: Statement of problem and
25 justification. The design of incline stairway

1 chairlifts at times involves cord and plug to supply
 2 power to a battery charger, and then the battery
 3 supplies power to the incline stairway chairlift. If
 4 the cord and plug is removed from the outlet, the only
 5 control of hazardous energy is the ungrounded main
 6 power supply conductors to the charger. A hazard to
 7 an affected person remains from ungrounded main power
 8 supply conductors from batteries to the incline
 9 chairlifts. As incline stairway chairlifts is under
 10 the scope of NFPA 70, Article 620.1 and thus Article
 11 620.52 is applicable and adequately addresses the
 12 hazards precipitating from power and from more than
 13 one source. Additionally, although not within our
 14 enforcement scope, this provides compliance with the
 15 State of Washington Occupational Safety and Health
 16 regulation 29 CFR 1910.147.

17 So, if anybody has any questions what this ---
 18 This addresses that there's two disconnects required
 19 by code currently in NFPA 70 and that is the -- that
 20 is the 620.52. I'll stop presenting.

21 MR. NAIPO: Mr. Friesen.

22 MR. FRIESEN: Wade Friesen, Vertical
 23 Options. I just want to comment that this seems like
 24 a cleaner version or alteration to the WAC that I am
 25 for and I think it addresses Candace's concern about

1 this disconnecting means, and I just think this is a
2 much better way to go with this, personally. Thank
3 you.

4 MR. NAIPO: Thank you, Mr. Friesen. Mr.
5 Barnhart.

6 MR. BARNHART: Paul Barnhart from UL. While
7 I understand what was intended here, I think the
8 biggest problem I see is forcing compliance of the NEC
9 onto a piece of utilization equipment. The NEC
10 disconnect is required for the AC connection to the
11 product. The NEC has no jurisdiction over a switch
12 inside a product that's plugged into the distribution
13 system. So, I think we have a problem here in saying
14 you got to comply with, I forget what it is, dot 52
15 because that doesn't apply. Just like a battery
16 charger for any other product, the battery charger may
17 have a switch in it to act as the disconnect of the
18 battery, but it's not dedicated or it's not required
19 by the National Electric Code. So, there's a problem
20 in doing it this way. Thank you.

21 MR. NAIPO: Thank you. Mr. Wohlschlager.

22 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
23 agree with the simplicity of Dylan's proposal. I am
24 also for it to address this issue. I think it
25 leaves -- A lot of it that was put in the original

1 verbiage is now -- it's there in the code, we just
 2 have to enforce it. Historically, though, there's
 3 been a real problem with inspectors not interpreting
 4 the code the same and so there was always this
 5 question of what do we do on a commercial stair lift,
 6 you know, do we need to have it hard wired or not, and
 7 so originally it was put in the proposed language so
 8 that it would get rid of that ambiguity. But I think
 9 Dylan's proposal clarifies that. And I wholeheartedly
 10 agree with the last comment regarding NEC has no
 11 coverage of the disconnect on the chair.

12 MR. NAIPO: Okay. Thank you. Candace.

13 MS. LAU: Candace Lau. Yeah, I agree that
 14 this is a much better version and it simplifies
 15 things. It does cover our concerns, but to address
 16 Paul's issue, currently we've already addressed it.
 17 So, there's a code right now that -- that -- that does
 18 have requirements even though your concern is that we
 19 have no business going -- require-- making
 20 requirements for D/C voltage, I'm paraphrasing,
 21 currently it's in the code already. So, this is a
 22 much better version of what the code actually says
 23 today. So, I'm all for this change.

24 MR. NAIPO: Mr. Cleary.

25 MR. CLEARY: Yeah. Like I said, this has

1 always been a long running concern because stair
 2 chairs started out a long time ago they were all AC;
 3 so, it was pretty clear. My concern has always been
 4 is, if you make me hard wire a charger, you're making
 5 me to lose the UL rating because I've got to cut the
 6 end of that cord to get that power wired into a
 7 disconnect or anything else. So, not allowing me to
 8 do a plug and play with other sorts of protection
 9 means is making me lose my one -- my warranty, and
 10 then I -- by cutting the wire, that unit, that charger
 11 is no longer UL approved. So, that's always been a
 12 concern. So, I agree that what Dylan put together is
 13 a cleaner way of doing it. It looks pretty good. I
 14 would just add if you don't have that 9.9.3 or the
 15 9.9.2 certificate, then you must do it at rated load
 16 and rated speed. You just didn't have rated speed on
 17 that, so... And that is in A. But I'm okay with it.
 18 I just don't like cutting pieces of electrical
 19 equipment and then I lose -- the UL rating goes away.

20 MR. NAIPO: Thank you. Mr. Lathe, I saw you
 21 had your hand raised and then put it back down. Are
 22 you good? Okay. Thank you. Mr. McKenzie. If you're
 23 talking, we can't hear you.

24 MR. MCKENZIE: Nothing wrong with that.

25 UNIDENTIFIED SPEAKER: Hey, hey.

1 UNIDENTIFIED SPEAKER: Peanut gallery.

2 MR. MCKENZIE: Perry McKenzie, Elevator
3 Supervisor, Inspector Supervisor. These documents
4 that you're talking about to leave on-site, are they
5 to verify that the governor that's on that particular
6 unit has been tested or a governor of similar nature
7 has been tested in the factory? I know years ago they
8 had to come with a tag that said this particular
9 governor itself with a number on it was tested in the
10 factory, blah, blah, blah, blah. So, is that what
11 those documents say, because I don't know.

12 MR. NAIPO: Dylan Lathe.

13 MR. LATHE: Dylan Lathe. So, the 9.9.3 or
14 the 9.9.2 documentation is a document that shows that
15 a stair chair manufacturer has sent their stair chair
16 through a series of tests that are certified. So,
17 that particular chair was not sent to that testing,
18 but that model has been tested and it's 12 tests; so,
19 what that does is it gives them the exemption to test
20 the safeties with no load in the field versus a load.
21 If they don't have a 9.9.3 or a 9.9.2, either one,
22 then in field tests are full load safety tests. Thank
23 you.

24 MR. NAIPO: Thank you. Perry, you still
25 have up. Did you have an additional question or

1 statement?

2 MR. MCKENZIE: Well, I would just say I
3 don't agree with that. I mean there are a lot of cars
4 out there and just because one passed in the factory
5 it doesn't mean that the car that I'm driving is a
6 safe car just because you tested one car of similar
7 nature. If you tested the governor that I've got on
8 that job and you've got documentation, that's fine,
9 but I've got to know that's the one, otherwise I have
10 no idea, and you don't have no idea, whether that
11 governor is going to work properly if it's not tested.
12 So, that's my concern.

13 MR. NAIPO: Thank you. Mr. Cleary.

14 MR. CLEARY: Scott Cleary. It's under type
15 testing. So, Dylan's correct that 9.9.3, I'm
16 obviously saying 9.9.3 or 9.9.2, as that 9.9.3 changes
17 in the '20 version of 18.1. So, basically, like he
18 said, there's 12 different really in-depth tests that
19 have to be done at different angles, different
20 weights, different speeds. So, that's the type
21 testing, and that's pretty common in the industry on
22 how that's done. So, in that -- and one of the main
23 things that everybody needs to know is that testing
24 must be done without any damage to any other
25 components, including the rail, track, or OSG. So, to

1 do it in the field at a rated load, rated speed, I
2 think is not a good thing to do. It never has been.
3 That's why ASME allows type testing to be done with
4 the manufacturer. So, as long as you have that from
5 the manufacturer and you're still setting that OSG,
6 you're just not setting it at rated load.

7 MR. NAIPO: Thank you. Mr. Leopard.

8 MR. LEOPARD: If it helps, I just did a
9 chairlift inspection a week ago. The paperwork, if I
10 remember right, had the actual serial number on the
11 unit that it was tested and complied. I can't
12 remember what brand out there, but, yeah, it would be
13 something to look at whenever you're looking at the
14 paperwork if it applies to that unit or not. I think
15 there's another company that is specifically testing
16 to the units by serial number, if that helps.

17 MR. NAIPO: Thank you. Dylan, Dylan Lathe.

18 MR. LATHE: Dylan Lathe. I just wanted to
19 clarify a question that Mr. McKenzie had and that Mr.
20 Cleary also answered, and that the 9.9.3 or 9.9.2 does
21 not exclude them from testing the OSG in the field.
22 No matter what, that OSG on that chair gets tested in
23 front of the inspector. It's only is it with weights
24 or is it not with weights. Thank you.

25 MR. NAIPO: Thank you. Mr. Leopard, did you

1 have an additional comment or question? I see that
2 your hand is still raised. Thank you. Mr. Sergey.

3 MR. DOLGIKH: Yeah. Sergey Dolgikh,
4 Elevator Inspector. I just wanted to congratulate
5 Dylan on better verbiage. I hope that our
6 conversation yesterday after TAC somehow inspired him
7 a little bit to re-word the initial proposal, and both
8 in tandem I think we understood each other that this
9 would be really nice language to put in. But I
10 appreciate it, Dylan, thank you.

11 MR. NAIPO: Way to toot yours and his horn,
12 Sergey, good job. All right. Are there any
13 additional questions or concerns before we put this to
14 a vote? And this vote will be on a new proposal that
15 will have a new proposal number I will send. You guys
16 at the end of this will receive a recap of all the
17 proposals that passed, and, if this one does, you will
18 see this one will be a number that you don't currently
19 have on your spreadsheet and this will be number, Let
20 me share this with you, 109. And once I get that
21 actual verbiage from Mr. Lathe, I will make sure that
22 this gets put into this Column C. Are there any
23 additional comments or questions? Mr. Friesen.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. My only question is as procedural, wow,

1 what do we do with the existing one sitting on the
2 table that we are going to vote on the revised
3 version? Thank you.

4 MR. NAIPO: If we vote on this revised one,
5 what we'll do is we will hand a vote of understanding
6 that, you know, if you still need to review this, then
7 we'll review it, we'll vote yea if you feel you need
8 to review it still, nay if you feel like it's good and
9 we can get rid of it, and then we'll do that process
10 with the next one, as well, because we do have one
11 additional 2605 that needed to be reviewed at this
12 time, so...

13 So, without any additional other questions being
14 posed or clarifications needed, I'd ask that we please
15 vote on proposal 109. Right now it's Dylan version,
16 Dylan Lathe's version of 02605, WAC 296-96-02605. If
17 you are for the proposed changes that were shared by
18 Mr. Lathe I ask that you please raise your hand in
19 favor of and vote yea. If you are for the changes
20 proposed by Mr. Lathe, I ask that you please raise
21 your hand and vote yea at this time.

22 Melissa, are we good?

23 MS. ERIKSEN: We are good.

24 MR. NAIPO: Thank you. Thank you for those
25 that voted. You can go ahead and lower your hands.

1 Thank you again for those voted yea. Please lower
2 your hands.

3 Those in opposition of Mr. Lathe's edits that
4 were shared earlier, I ask that you please raise your
5 hand and vote nay in opposition of those. I ask that
6 you please raise your hand and vote nay in opposition
7 of those changes by Mr. Lathe. Thank you for your
8 votes. Please lower your hands. Thank you.

9 Those who would like to vote to abstain, I ask
10 that you please raise your hand at this time. If you
11 wish to abstain, please raise your hand at this time.
12 Thank you very much.

13 Melissa, will you please read the vote tally for
14 proposal 0109.

15 MS. ERIKSEN: Yes. There were 22 yeas, 1
16 nay, and 3 abstentions.

17 MR. NAIPO: Thank you. So, now what we will
18 do is we will place a vote on whether we still need to
19 review proposal 0050 in its entirety. If you feel
20 like there is discussion to still be had on this, I
21 feel that -- I please ask that you raise your hand and
22 vote yea. I ask that you please raise your hand and
23 vote yea if you still think there's a discussion that
24 needs to be had on proposal 0050. Thank you.

25 If you feel no further discussion on proposal

1 0050 needs to be had, I ask that you please raise your
2 hand now. Please raise your hand if you feel there's
3 no further discussion needed on proposal 0050, please
4 raise your hand now. All right. Thank you.

5 So, with that majority vote, we will move on
6 from proposal 0050. We will do a quick reading of
7 proposal 0057, which has to do with the same WAC
8 296-96-02605.

9 MS. ERIKSEN: Paoa.

10 MR. NAIPO: Yes.

11 MS. ERIKSEN: It's break time, honey.

12 MR. NAIPO: Oh, I'm sorry. Thank you very
13 much, everyone. I appreciate the conversations and
14 everything. We'll take a quick five minute break.
15 Thank you. See you guys.

16 (Recess taken)

17 MR. NAIPO: All-righty. It is 9:55, a
18 little bit more than a five minute break, but that's
19 okay. Thank you, everyone, for coming back. Before
20 we get started, Mr. Cline, was this a comment you
21 wanted to have on the record, or was this just
22 something you wanted to say, or did you not put your
23 hand down after voting? That's probably what
24 happened. All right. Dylan Lathe, did you have a
25 question or statement?

1 MR. LATHE: Yes. Dylan Lathe. This next
2 one, is this 0057, correct?

3 MR. NAIPO: Yeah, we will get -- we'll get
4 right to that.

5 MR. LATHE: What I was going to say is this
6 one is not necessary to read. This is one that I
7 submitted. The one that I just now read to everybody
8 has this lower portion included already. That was
9 what I already read to you. In addition was the upper
10 section that I modified. Just putting that out there.
11 Thank you.

12 MR. NAIPO: Okay. All right. So, now that
13 we're starting back up, and with that information from
14 Mr. Lathe, Mr. Lathe, are you saying that you would
15 like to withdraw proposal 0057 since you were the one
16 who originally submitted it?

17 MR. LATHE: Dylan Lathe. Correct, I would
18 like to withdraw 0057 because it's already in the
19 submittal that I just read to everybody. The only
20 thing I changed was I added the actual years
21 specifying the 9.9.3 and the 9.9.2, which was
22 recommended yesterday by Lyall. Thank you.

23 MR. NAIPO: Thank you. So, with that I just
24 made a quick note on this one regarding proposal 0057.
25 It was asked to be removed via the person submitting,

1 Dylan -- by the person submitted, Dylan Lathe, as the
2 additional edited proposal was allowed by the TAC to
3 be reviewed and voted on, which is proposal 109.

4 With that, on to proposal 0053, WAC 296-96-2610.
5 This is regarding adding a new WAC rule. The edits
6 are as follows. To add this new section, it will be
7 titled Private Residence Platform Lifts.

8 (1) Battery operated private residence platform
9 lifts are not required to be permanently wired or
10 installed on an individual branch circuit as required
11 by NEC 620.41(A) Exception 1. These conveyances shall
12 be permitted to use a cord and plug that will act as
13 the equipment disconnecting means if the following
14 conditions are met:

15 (a) The lift's main power source must be from a
16 battery system that is receiving its charge from a
17 cord and a plug connected to AC battery charger
18 connected to a branch circuit.

19 (b) The circuit supplying the battery charger
20 must be protected by a ground fault circuit protector
21 (GFCI breaker).

22 (c) The receptacle used to connect to the
23 battery charger must have a cover meeting the
24 requirements of NEC 406.8(B).

25 (d) The cord must be:

1 (i) Hard service rated.

2 (ii) Listed by an electrical testing laboratory
3 approved by the Department of Labor & Industries
4 electrical program.

5 (iii) In compliance with the requirements of NEC
6 400.

7 (iv) Properly secured at least every 24 inches,
8 not present a tripping hazard, and be limited to 12
9 feet in length from the battery charger.

10 (e) A sign must be posted at both the AC and DC
11 source of power disconnecting means that states,
12 "Warning - Parts of the control panel are not
13 de-energized by this switch."

14 (f) At the DC source of power a disconnect must
15 be located on the exterior of the lift and within
16 sight of the lift. The disconnect must be lockable,
17 identify the available voltage, and be identified
18 according to NEC 110.22.

19 Rationale: Incorporates into WAC the former
20 department policy for battery operated vertical
21 platform lifts, reworded to be inclusive of inclined
22 battery operated platform lifts also. This has been a
23 standing department policy that needs to be included
24 in the WAC.

25 I open it up for questions for clarification

1 from the TAC. Melissa.

2 MS. ERIKSEN: Okay. This is Melissa. So,
3 I'm sorry, I am not voting on anything. One editorial
4 change is that because this is official language,
5 officially when the Department of Labor and Industries
6 is referred to the "and" needs to be an ampersand.
7 So, I just need to include that.

8 MR. NAIPO: Mr. Quiett.

9 MR. QUIETT: Jonathan Quiett. This is more
10 for clarification. In some of our other discussions
11 we were talking about not modifying cords for NEC.
12 Now I personally have not installed one of these.
13 This is more of a clarification. So, a question to
14 the people who do install these, is it normal to have
15 a 12 foot long cord on these units when they are sent
16 out, considering we have language here that says we're
17 limited to 12 feet from the charging unit?

18 MR. NAIPO: Thank you. Mr. Friesen.

19 MR. FRIESEN: Wade Friesen, Vertical
20 Options. To answer Jon's question, I don't know
21 necessarily about a 12 foot cord. I've never gone out
22 and measured one. But before the rule changes that
23 prohibited the plug and play we did install some that
24 had some pretty substantial cords on them and that did
25 allow some flexibility. I wanted to go on and

1 discuss sections (b) and (c). I'm not understanding
 2 why we need a GFCI breaker on this circuit. This
 3 battery charger circuit is, in essence, no different
 4 and in some -- with some companies it's exactly
 5 identical to their chairlift chargers. And the
 6 receptacle with (c), the receptacle used to connect
 7 the battery charger must have a cover, I wanted to
 8 discuss why a cover would be necessary, particularly
 9 in a private residence application, and also point out
 10 that 406.8(B) in NEC is non-existent. There is no
 11 section B under 406.8.

12 MR. NAIPO: Thank you. Candace.

13 MS. LAU: Candace Lau. This policy was in
 14 place at some time a few chiefs ago, and I don't know
 15 when it actually was taken off as a policy, but
 16 there's a lot of things that have changed since this
 17 policy was written, and it's like I haven't looked at
 18 what Wade was referring to, the 406.8(B), but I know
 19 for sure that 12 feet in length, I'm not sure that's
 20 even accurate because I'm under the impression that it
 21 needs to be six feet, no further than six feet from
 22 the plug to the charger, and then no more from six
 23 feet from the charger to the -- to the rail. So, if
 24 we were to do this, it would need some additional
 25 information on there or it needs to be changed up a

1 little is my opinion.

2 MR. NAIPO: Jan.

3 MS. GOULD: Jan Gould. Just to let you
4 know, by comparison the sump pump single grounded
5 outlet that was required in pits is now under the 2020
6 required to be GFCI, and it never had been in the
7 past, and it's not typically designed for personnel
8 to use.

9 MR. NAIPO: Thank you. Mr. Wohlschlager.

10 MR. WOHLSCHLAGER: Lyall Wohlschlager.
11 Yeah, this was just a direct dump of the original
12 policy into this proposal; so, yes, it probably does
13 need to be -- some of the references need to be
14 checked against the current electrical code. But it
15 was just a direct dump, other than adding incline
16 platform lifts. And to answer Wade's question about
17 the GFCI, or, excuse me, about the cover, a lot of
18 these lifts are installed outdoors, they're porch
19 lifts typically, and that was the original reason for
20 having a cover was because of the outdoor nature. But
21 certainly indoors I would agree that it's probably not
22 necessary. So, it probably should be wordsmithed to
23 get rid of the requirement for indoor lifts.

24 MR. NAIPO: Mr. Lathe.

25 MR. LATHE: Dylan Lathe. I would just like

1 to say that I like the idea of being able to plug in a
2 residential VPL. I like this idea, but I think that
3 this entire thing would have to be re-written. But I
4 do support the initial idea. Thank you.

5 MR. NAIPO: Mr. Barnhart.

6 MR. BARNHART: Yes. Paul Barnhart from UL.
7 The correct reference for the cover would be 406.9(B),
8 but like the previous commenter stated, that only
9 applies if it's outdoor use. So, it would need some
10 tweaking there.

11 MR. NAIPO: Thank you. Are there any
12 additional questions for clarification or comments
13 before we look at putting this to a vote? Mr.
14 Friesen.

15 MR. FRIESEN: Wade Friesen, Vertical Options
16 Just one quick comment. I'm with Dylan on this. I
17 think the intent of this is solid. I'm in support of
18 the idea. If the notion here, as you've referenced
19 several times, is to support the idea and get this on
20 to the ESAC committee for further editing, I think
21 that's appropriate. Thank you.

22 MR. NAIPO: Thank you. So, yes, that is the
23 intent if these things pass, and I appreciate you guys
24 looking at, hey, we understand the idea behind this.
25 We support the idea, but, yes, it definitely needs

1 wordsmithing. And, again, if time permitting, we
 2 would definitely be tackling that, but if we did that
 3 with each of these that we've done we would not be as
 4 far through it as we are right now. So, again, I
 5 appreciate you guys making a judgment call, putting
 6 faith on if this does pass that it will be codified to
 7 what you guys or at least amended by the conversations
 8 had that will be driven by the notes that we're taking
 9 now, both Melissa and I, regarding these. So, thank
 10 you for that, Mr. Friesen.

11 So, if there are not any other additional
 12 questions for clarifications, if you do have any, I'd
 13 ask that you please raise your hand now before we cast
 14 proposal 0053 to a vote. If anyone has any additional
 15 comments or questions, please raise your hand now.
 16 All-righty. And with that, we will -- Oh, Candace.

17 MS. LAU: Yeah. Candace Lau. So, are we
 18 voting on the intent of this like Wade and Dylan were
 19 saying? It's kind of hard for us to vote if we
 20 don't -- if we're not clear on what we're voting for.
 21 So, are we voting on the intent of this code and not
 22 really all of this or are we voting on this and hoping
 23 that something is going to change after we vote it in?

24 MR. NAIPO: So, no. So, what I've taken in
 25 Column E, and I'm sorry you guys can't see that, it's

1 up here where I'm editing, but just for reference
 2 these are the notes that will be passed on to the
 3 ESAC: It was brought forth the Department of Labor &
 4 Industries needs to be Labor (ampersand) & Industries;
 5 why (b) and (c) states needs a GFCI circuit, why a
 6 cover necessary, well cover was necessary for -- was
 7 for outdoor use, may need to be wordsmithed to
 8 differentiate; it was stated that, hey, there's no NEC
 9 406.8(B), only (A), and thank you to Mr. Barnhart's
 10 clarification that there is a 406.9(B) is the correct
 11 reference; it is not more than six feet, that was
 12 another comment that was brought forth; that this was
 13 a direct dump of old policy, that it needs to be
 14 codified and rewritten definitely to make sure that
 15 the code references are correct; that people support
 16 the idea behind this, but it definitely needs to be
 17 rewritten. And, so, that is what is going to be taken
 18 to the ESAC for review and editing is those comments
 19 that you guys have made that I've taken so far. And I
 20 know Melissa has been taking notes, too; so, there may
 21 be additional things that I have missed that we will
 22 collaborate these two and make sure the ESAC has
 23 these. Yes, Mr. Cleary.

24 MR. CLEARY: Scott Cleary. I just -- I just
 25 want to support what Paoa says, that we don't want to

1 throw everything out. If the premise is good, but it
 2 needs to be wordsmithed, that's what we want to do at
 3 the ESAC and get it fixed and voted on, and get the
 4 right language in it. And I've never been able to get
 5 any answer from the State, maybe some of the state
 6 representatives can help me here, but none of us know
 7 why that policy sunsetted, when it sunsetted, and by
 8 whom. So, that would be really helpful because it
 9 really helped out and worked really well during the
 10 interim, and it was place since I think 2010, so it's
 11 got a good track record of safety and really help out
 12 residential homeowners, so, and without any danger,
 13 so, and most of those chargers, especially on VPLs,
 14 are anywhere from five amp to three amp. They're
 15 pretty de minimus on a load. So, none of them are at
 16 one amp that I know of, and most of them are three to
 17 five. So, it's still a de minimus load. And if the
 18 gentleman from UL could ring in and help make sure
 19 that I'm correct that we do lose our UL rating once we
 20 cut a cord, correct?

21 MR. NAIPO: Mr. Barnhart, I believe that's a
 22 question to you.

23 MR. BARNHART: Paul Barnhart from UL. The
 24 UL mark means the product when it left the factory met
 25 the requirements. If you've modified the product once

1 it left the factory, the UL mark does not cover the
2 modified product. So, cutting the cord on a product
3 would essentially make the product modified and it may
4 or may not meet the requirements. In this case, it
5 probably doesn't. But I have to be careful what I say
6 because it doesn't void the mark because the mark only
7 meant when it left the factory it complied. So,
8 legally, I can't say it voids the mark, but in reality
9 it turns it into a product that can't meet the UL
10 listing requirements. I hope that answers your
11 question.

12 MR. NAIPO: Thank you very much for that
13 clarification, Mr. Barnhart. I really appreciate it.
14 Thank you. Mr. Lathe.

15 MR. LATHE: Dylan Lathe. Yes, I'd like to
16 piggyback on what was just talked about. Right there
17 on (i), and Gerald put it in the chat, right there on
18 (i) it says the cord must be hard service rated. So,
19 whatever cord comes on that platform lift it's going
20 to have to be the cord that's used. If you're -- if
21 you're cutting that cord off, then putting something
22 that the WAC requires, well that's not going to be UL
23 labeled anymore. In addition to that, like I stated,
24 I support this idea, but the entire thing would have
25 to be rewritten, including we're running into the

1 exact problem where it's going to be misleading as
2 this lift, just like the stair chair, would have to
3 have two means for -- it has two different power
4 sources, but you still have to have all of that
5 language written in that I just addressed on my last
6 proposal. Thank you.

7 MR. NAIPO: Thank you. Mr. Barnhart.

8 MR. BARNHART: Paul Barnhart from UL. To
9 address the issue, if the lift is a UL listed lift it
10 will have a hard service or a junior hard service
11 rated cord as part of the lift. So, that should not
12 be a problem.

13 MR. NAIPO: Thank you. Mr. Friesen.

14 MR. FRIESEN: Wade Friesen, Vertical
15 Options. You know, just as a note for the potential
16 rewriting of this, you know we're asking to have an
17 external source -- let's see, where was this -- it
18 said we needed to have a means on the outside of this
19 thing to turn it off, whereas -- I'm not seeing it at
20 the moment. I just wanted to discuss that or have
21 that discussed in the ESAC meeting because if the --
22 if the product is a UL listed product, it does not --
23 if it has the 24 volt disconnecting means on the
24 chair, or, I'm sorry, on the lift platform, for
25 example, then we would be having to modify the

1 manufacturer's product to comply with that section of
2 code and I'm not so sure how prudent that is. Thank
3 you.

4 MR. NAIPO: Are your comments about the (f)
5 the last part, "At the DC source of power a disconnect
6 must be located on the exterior of the lift and within
7 sight of the lift?

8 MR. FRIESEN: Yes, yes. Thank you.

9 MR. NAIPO: Okay. And, I'm sorry, what was
10 your comments regarding that? I wanted to take the
11 notes, but I wanted to make sure I was referencing the
12 right thing.

13 MR. FRIESEN: Wade Friesen, Vertical
14 Options. My comment was that if a manufacturer has a
15 UL listed item that does not have a disconnect located
16 on the outside of the lift, as this states, then in
17 order to install that equipment and comply with it, it
18 would have to be modified and then would no longer
19 meet the UL requirements.

20 MR. NAIPO: Thank you. Mr. Barnhart.

21 MR. BARNHART: Yeah. Paul Barnhart from UL.
22 With respect to item (f), at this point I can't tell
23 you if every UL listed lift has an externally operable
24 disconnect for the DC power or not. I'm guessing they
25 may not, but I'm not sure. I haven't looked at every

1 one that's certified. So, the point that was raised
 2 is interesting. I would think that if there's a
 3 disconnect for the DC, it should be externally
 4 operable and it should be part of the certification of
 5 a lift, but I don't know that the requirements are
 6 there because the lifts are certified to A18 and I'm
 7 not sure that requirement is in A18. Thank you.

8 MR. NAIPO: Thank you, sir. Candace.

9 MS. LAU: Candace Lau. That's accurate.
 10 The A18.1 does not cover this kind of -- these kinds
 11 of codes. The NEC doesn't -- is silent on it and
 12 that's kind of why it's really important when we
 13 change and allow things that we -- that we've thought
 14 this whole thing through. (f) is talking again about
 15 the disconnect that disconnects power from the motor.
 16 Any time you have a battery operated system you
 17 should -- by code you have to have something to
 18 disconnect power from the motor. I can't -- I don't
 19 recall if there are any out there that are -- that
 20 don't have it, but this is to ensure that in case a
 21 unit comes out and it does not have it then we can
 22 require -- we can require it. And I know this in the
 23 past for a lot of the AC units, line voltage ones, in
 24 the beginning when all this stuff was happening they
 25 did not come out with a -- they didn't have this

1 disconnect. I know that for sure because I remember
2 that all they had was a key switch, and the key switch
3 turned it on and off, but the key switch didn't
4 disconnect power. So, we wouldn't want to repeat that
5 for these battery operated ones, and so it's really
6 important that something like that is put in there
7 when we're using these battery operated units.

8 MR. NAIPO: Thank you. Mr. Lathe.

9 MR. LATHE: Dylan Lathe. Yes, I have a
10 question. So, 18.1 adopts NFPA 70 by reference. NFPA
11 70 Article 620.1 Scope says, "This article covers the
12 installation of electrical equipment and wiring used
13 in connection with elevators, dumb waiters,
14 escalators, moving walks, and platform lifts, and
15 stairway chairlifts, okay. So, platforms are included
16 in this. So, it's the same as I spoke about earlier,
17 620.52 Power from more than one source, this applies.
18 So, I don't know how you would have a battery operated
19 VPL that doesn't have a disconnect on the VPL because
20 whether it's hard wired or whether it's cord and plug,
21 if you flip -- let's say it's hard wired in, if you
22 flip that main line disconnect that's still just the
23 power from the building to the batteries. You still
24 have power from batteries to the motor. So, it says
25 right there power from more than one source on 620.52.

1 You still have to have a second means of disconnect.
2 So, you would still have to have a lockable disconnect
3 on the VPL the same as the chair. Thank you.

4 MR. NAIPO: All right. Mr. Cleary. Oh, no.
5 All right. Mr. Cleary.

6 MR. CLEARY: Scott Cleary. Most of -- Some
7 of these new requirements come out. That's been in
8 there for a long time. But, you know, we went back to
9 our manufacturers and they did add an externally
10 lockable one on the outside. So, most of the
11 manufacturers understand that something is required.
12 Like it goes back to Bob Oury and material lifts, you
13 know, they had to do a lot of work with their
14 manufacturers to make sure that they're Washington
15 State compliant. All of our manufacturers kind of
16 wrinkle their forehead and put on a grin when we say,
17 you know, we need to do this in Washington. So, they
18 have their own little make list of the special
19 modifications or the requirements for the state of
20 Washington. So, we find it, you know, once we go back
21 and discuss it with our manufacturers they'll add
22 whatever we need to add to make sure that they're
23 compliant.

24 MR. NAIPO: Thank you. Mr. Barnhart.

25 MR. BARNHART: Paul Barnhart from UL. Well,

1 I don't dispute the desirability of a disconnect for
 2 the DC source of power. I have to argue that 620.52
 3 does not apply. The Article 620 applies to the wiring
 4 to the lift. The wiring to the lift, if the battery
 5 charger and the battery are internal to the lift, the
 6 wiring to the lift stops at the point at which the
 7 lift is plugged in. The code does not require a
 8 second disconnect. Now, I'm not saying it shouldn't
 9 be there, but it's going to be part of the equipment,
 10 not part of the wiring to the lift. So, 620.52
 11 doesn't apply, although there's no problem with the
 12 State of Washington saying, "We want a DC disconnect
 13 as part of the lift." That's not a problem. I think
 14 expecting it to be provided at the installation and
 15 not be part of the lift creates those other problems
 16 where now I've got to go in and modify the lift, take
 17 some wiring out of the lift to a disconnect that's
 18 mounted on the wall somewhere, and that's not
 19 appropriate. I don't have a problem with (f) as it's
 20 written because that disconnect can be inside the
 21 lift. I think the problem is it says the disconnect
 22 must be located on the exterior of the lift. I think
 23 that should say the disconnect must be operable from
 24 the exterior of the lift, right, because it's part of
 25 the lift. It's not part of the wiring to the lift.

1 Thank you.

2 MR. NAIPO: Thank you, Mr. Barnhart. Mr.
3 Madison.

4 MR. MADISON: Jon Madison, Elevator
5 Mechanic. I think we're going back and forth just
6 following everybody. We can -- we can follow the
7 code. We can dispute in detail what it is and that's
8 part of what this meeting is for, but I think we'll
9 all agree that safety-wise if there's a charge system
10 we would all working on it want to have a disconnect.
11 So, if it becomes Washington has to mandate it, and,
12 then, like Scott said, you have to tell your
13 manufacturer, "include this with it", then that's
14 where it is. But I think for safety this is -- this
15 is what we're all trying to achieve is to keep not
16 only the public but the maintenance personnel safe on
17 it. A disconnect seems like it's strongly needed.
18 So, I don't know if we should keep arguing whether the
19 code says it or not and just decide if we're going to
20 say yes about it.

21 MR. NAIPO: Thank you for those comments,
22 Mr. Madison. Candace.

23 MS. LAU: Candace Lau. Yes, that's correct.
24 I'm totally in agreement with the last three speakers.
25 Cleary is correct. In the past -- It's just how I

1 explained it earlier. In the past the equipment came
 2 out without these disconnects and you had to work --
 3 the companies had to work with the manufacturers to
 4 provide that, and we are talking about the -- the
 5 disconnect on the lift, we're not talking about an
 6 external separate disconnect, it is on the lift, the
 7 manufacturers came out with that, because in this --
 8 we just did not agree that you can just have a cord
 9 and plug and that's it, so... And Jon Madison is
 10 absolutely correct, this is in the -- it's for safety
 11 and it needs to be said because a lot of these stair
 12 chairs are not -- a lot of states do not -- most
 13 states don't adopt the A18.1. So, these stair chairs
 14 are made for -- you know, they make them, and then
 15 when they come in to the state and we're now
 16 inspecting them a lot of them aren't even being
 17 inspected. So, now that it comes into our state and
 18 we see issues with them, we need to address these
 19 issues and that's why we're trying to develop codes to
 20 address these types of issues.

21 MR. NAIPO: Thank you. Sergey.

22 MR. DOLGIKH: Yeah. Sergey Dolgikh,
 23 Elevator Inspector, L & I. So, to Candace's point
 24 that she just brought up, I have a question with that,
 25 and so with having -- the platform lift having a

1 switch already on it for the removal of the power from
 2 the motor, does it mean that -- and I'm not going to
 3 say vetting, I'm going to say a different word --
 4 let's say for -- for state of Washington to allow new
 5 products in, and let's say if the platform lift comes
 6 without one, that switch that removes power from the
 7 motor, does it mean that that particular product is
 8 not going to be allowed within the State of Washington
 9 based on the criteria that we're looking at right now?
 10 So, that kind of is my question with that -- with that
 11 limit only the product that does comply with WAC if we
 12 adopt it the way it's written here or the way it's
 13 getting wordsmithed. That's -- that's the question I
 14 have. Thank you.

15 MR. NAIPO: Candace.

16 MS. LAU: Candace Lau. I don't know if that
 17 question was directed to me, but I think I can answer
 18 that. All new equipment when we look at them today or
 19 when I look at them today, all the ones that I've been
 20 involved in I've always asked the manufacturer because
 21 when we're vetting new equipment sometimes we forget
 22 to look in the NEC. A lot of these equipment they
 23 don't -- they don't cover the disconnecting means.
 24 So, we can look at a -- even the residential elevator
 25 it's not going to talk about the disconnect. It just

1 kind of refers you to the NEC. So, that's something
 2 that I personally ask the manufacturers to -- how
 3 their disconnecting means are, where their
 4 disconnecting means are, especially battery powered
 5 ones, and I have asked several manufacturers and
 6 they've all said -- have indicated to me that they can
 7 come either way. They can come with a disconnect or
 8 just depending on the jurisdiction, and I always tell
 9 them that in this jurisdiction we are requiring a
 10 disconnect that disconnects the power to the motor and
 11 not just a plug in, and so -- and they've always --
 12 the ones that I've been dealing with they've always
 13 been accommodated. They have never said, "Oh, there's
 14 no way. We can't do that." So, I don't know what's
 15 happened in the past. I don't know how the vetting
 16 was done prior to that. And I don't know what's been
 17 in the past, but nothing -- no one -- This has not
 18 been an issue for a while because we've addressed it
 19 in the years past with the requirement of the
 20 disconnects. So, moving forward, I've been asking for
 21 all this information from the manufacturers and none
 22 of them are telling me that it just does not exist.
 23 So, I hope that answers your question, Sergey.

24 MR. DOLGIKH: Yes. Thank you.

25 MR. NAIPO: Melissa, did you have a

1 statement or question?

2 MS. ERIKSEN: No. I just -- there's
3 conversation about this happening in the chat. So,
4 Gerald kicked it off by saying that he likes the
5 battery disconnect in (f) or a lockable kill switch
6 for them to safely get access under the lift for
7 debris, cell phones, etc, unplugging it or turning off
8 the battery charger power, doesn't make it safe. Jon
9 Madison agreed with that, and then Paul Barnhart said,
10 "I have no problem with the proposed item (f) being a
11 requirement in the WAC. The only issue I have is that
12 it says the disconnect must be located on the
13 exterior. It should say the disconnect must be
14 operable from the exterior of the lift.

15 MR. NAIPO: Thank you, Mr. Barnhart. That
16 was one of the things I definitely heard you say and I
17 made that as a note, the disconnect should be operable
18 from the exterior of the lift as an edited piece that
19 will be reviewed at the ESAC.

20 So, with that, I think we've had some pretty
21 long conversations on this, and like sort of Mr.
22 Madison has alluded to, it sounds like we're going
23 around and around and around. I think we're at the
24 point where I think we can make an educated vote or
25 that people, you know, you as the TAC can make an

1 educated vote on whether you feel like with edits
2 you're okay with this being passed to the ESAC to
3 really rewrite this the way it should be done or if
4 you feel like, you know what, I can't see this being a
5 positive for us, then go ahead and feel free to vote
6 nay.

7 So, like with all of them, we're going to pass
8 this on to vote. Proposal 0053, if you are for the
9 changes, and the discussions, and the questions and
10 clarifications that you guys have all brought up to be
11 addressed by the ESAC in editing this, I ask that you
12 please vote yea now. So, if you are for this change
13 with the edits that will be discussed at the ESAC
14 level, I ask that you please vote yea for this and
15 raise your hand now. All right. Thank you for those
16 who have voted. Please go ahead and lower your hands.
17 Thank you again very much for your votes.

18 For those who are in opposition of this, I ask
19 that you please raise your hand and vote nay. If you
20 are in opposition of these changes that were proposed,
21 I ask that you please raise your hand and vote nay.
22 Thank you. Go ahead and lower your hands.

23 If you vote to abstain, I ask that you please
24 raise your hand now at this time. If you vote to
25 abstain, please raise your hand at this time. Thank

1 you.

2 Melissa, will you please read the vote tally for
3 proposal 0053?

4 MS. ERIKSEN: Absolutely. There were 21
5 yeas, 1 nay, and 1 abstention.

6 MR. NAIPO: Thank you. So, we are moving
7 on to proposal 0037 regarding WAC 296-96-02700. This
8 is adding to that title Residential, it's already
9 stated that it's Machine Room, adding slash Machinery
10 Space, and when is already there is requirements.

11 (1) Main line disconnects and car light
12 disconnects shall be located adjacent to the
13 controller when not located in a dedicated machine
14 room. When located in a dedicated room, removing
15 commercial machine room requirements shall be
16 followed, keeping verbiage main line disconnects shall
17 comply with WAC 296-96-02460.

18 Access to the motor -- or (2) Access to the
19 motor brake in the hoistway shall have:

20 (a) A lockable door that is a minimum of 6 x 6 or
21 36 square inches.

22 (b) A stop switch shall be located within reach
23 of the access door.

24 (c) A light switch and GFCI receptacle shall be
25 located within reach of the access door.

1 This is to better -- The rationale is to better
2 clarify the machine room/space within a residence, and
3 requirement for disconnect in certain scenarios.

4 With this there are one, two, three, there's
5 three -- Actually, it looks like that third one has to
6 do with a little bit further down in the hoistway
7 access opening doors, but I would say that there are
8 two regarding proposal 0037 and 0059 regarding WAC
9 296-96-02700 and pretty much everything that is at
10 the begin of it. So, we have a couple questions.
11 What I'm proposing is that we pass a vote on whether
12 we discuss each of these, proposal 0037 or if you feel
13 like, you know what, 0059 because of the notes and the
14 things that you've taken you want to discuss 0059, if
15 you feel like discussions need to be had on both and
16 they need to be merged, then we can do that as well.

17 I see we have a couple comments and questions
18 coming out. Sergey.

19 MR. DOLGIKH: Yeah. Sergey Dolgikh,
20 Elevator Inspector. So, and I don't know if I missed
21 it, but I guess when we discussed 296-96-02460 WAC
22 previously wasn't residential called exempt from the
23 rules? And now we're saying the rules for main line
24 disconnects shall comply with 296-96-02460. Is it
25 kind of circular dependency we're having here? Just a

1 question. I'm trying to clarify it for me.

2 MR. NAIPO: Hey, sorry, what was that WAC
3 reference you were talking about?

4 MR. DOLGIKH: The WAC reference is WAC
5 296-96-02460 where it specifically states that
6 residential elevator machine rooms are exempt from --
7 Okay, and now what we're saying it shall comply with
8 the exempt rule. So, it's a little contradictory as
9 far as I can see. It creates a circular dependency,
10 what we call it in mechanical design. Thank you.

11 MR. NAIPO: Thank you. Mr. Friesen.

12 MR. FRIESEN: Wade Friesen, Vertical
13 Options. I really like the fact that we're striking
14 commercial machine room requirements out of this. I
15 think that's extremely appropriate for residential to
16 have a residential machine room with HVAC and other
17 requirements for commercial applications doesn't seem
18 appropriate. But just speaking to this, 0037 and 0060
19 are addressing similar issues. I like the fact that
20 0060 is a stand-alone section. That makes it easier
21 to find in WAC and read and understand, but it seems
22 to me that section (2)(a), (b) and (c) in 0037 should
23 be struck out since it is in it's own section under
24 0060 and they'd be two separate items. Thank you.

25 MR. NAIPO: Given me that reference where

1 you believe that section two is addressed in another
2 WAC. What was that other WAC number? I apologize.

3 UNIDENTIFIED SPEAKER: The other one is
4 right on your screen, 0060.

5 MR. NAIPO: Oh, oh, oh, in --

6 UNIDENTIFIED SPEAKER: Yes.

7 (Talking at the same time)

8 MR. NAIPO: Thank you for that. Candace.

9 MS. LAU: Candace Lau. So, I haven't had a
10 chance to look at all the rest of the proposals, but
11 this particular one was added to the WAC. I don't
12 even remember when this 02700 was. It was since --
13 Since the last -- Since 2018 somehow this got added on
14 there, and when -- I get a lot of questions from
15 people and the main question that I get from people
16 is, "What does that mean, commercial machine room
17 requirements shall be followed? What does that mean?
18 Does that mean we have to shunt trip? Does that mean
19 we have to put, you know, all this other stuff in
20 the -- A/C, air conditioning units, in the machine
21 rooms?" And I say, "Well, yeah, that is really
22 unclear." I don't think that was the intent, okay.
23 And, so, first of all, this -- this -- this whole
24 section is kind of -- it's written a little bit --
25 That's why I added the residential machine room in

1 there instead of just saying machine room because if
 2 you're just reading the code itself you can't even
 3 tell you're talking about the residential, that these
 4 are for residential. The only way you can tell is
 5 when you go to the -- the table of contents. When you
 6 go to the table of contents it'll have a heading
 7 residential. I believe the heading says private
 8 residence elevators. And, then, if you go to this
 9 2700, it doesn't say residential. So, that's kind of
 10 why I added the word residential in there to clean up
 11 verbiage. And then the second thing is I added the
 12 machinery space because that's how you can get to the
 13 number two where it talks about access to the motor
 14 brake because without that machinery space there
 15 you're still in the machine room and there's no -- it
 16 doesn't make any sense.

17 So, I just wanted to do this to clean up the
 18 fact that we're talking about machinery space. And
 19 the number two is already there for accessing the
 20 hoistway. We can put it somewhere else, but that was
 21 my easiest fix is to just maybe add the word machinery
 22 space and then cross the other part out. The rest of
 23 it I don't have any problems with, but if somebody
 24 wants to put it somewhere else that's not problem.
 25 It's just that the way it's written right now it's

1 really not clear.

2 And to answer Sergey's point is, yes, 2460 does
3 say that residential elevators don't have to comply
4 with 2460, but this is basically saying that if you
5 have a machine room then you have to put the
6 disconnect basically within 24 inches of the strike
7 side of the jamb. If you don't have a machine room,
8 then the other part, the 2460, doesn't comply. I
9 think that's what this is trying to say. And, again,
10 this is just clean-up language what I saw was lacking
11 in the new rule.

12 MR. NAIPO: All right. Thank you, Candace.
13 Mr. Wohlschlager.

14 MR. WOHLSCHLAGER: Lyall Wohlschlager.
15 Yeah, I think proposal number 37 does create a
16 circular loop by referencing 2460 and sends us back
17 there for requirements, and then the very last line of
18 2460 says, well, we're exempt from all the above
19 requirements. So, I think this adds confusion to the
20 whole understanding of what do we need to do with main
21 line disconnects.

22 The second thing I disagree with here is when
23 controllers are located in a dedicated room that they
24 need to have special treatment. I don't see any
25 purpose in that and I would advocate that, you know,

1 the language that is in proposal 59 is more
2 appropriate for disconnects that they should be just
3 located next to our equipment regardless of whether
4 they're in a dedicated room or not. And then I also
5 advocate that paragraph two here regarding access to
6 the motor brake also be in a separate sections as
7 proposed in proposal number 60.

8 MR. NAIPO: Sergey.

9 MR. DOLGIKH: Yeah. This is Sergey Dolgikh,
10 Elevator Inspector, L & I. So, just with that comment
11 that was made prior by Candace, may I suggest a
12 friendly edit to alleviate the confusion that
13 referencing 2460 generates in this particular
14 paragraph. Maybe we can do a friendly edit to that
15 and just remove it all together with clarifying
16 requirements that are already in there in this
17 particular proposal. That would be my take on it.
18 Thank you.

19 MR. NAIPO: So, the friendly edit that I'm
20 hearing is removing pretty much this whole last
21 sentence here, "When located in a dedicated room, main
22 line disconnects shall comply with WAC 296-96-2460";
23 is that correct?

24 MR. DOLGIKH: Just the reference to WAC
25 296-96-02460. It just -- it could add additional

1 verbiage saying like, oh, what is that specific
2 requirement. You know, you could add that in there.
3 But that whole confusion that comes from it is sending
4 you back, and then the person goes back and has more
5 questions and saying, "Well, you just exempt me from
6 this", and so that is the portion. That's all.
7 That's all that is.

8 MR. NAIPO: Okay.

9 MR. DOLGIKH: Thank you.

10 MR. NAIPO: Thank you. Candace. Yeah,
11 Candace Lau. Again, I just want to be really clear
12 here that I'm not -- This is not proposing -- This
13 proposal is to just clean up what's already there.
14 So, if you're concerned that we're having these
15 requirements, it's already there. So, the concern is
16 that you -- if you want it to cross it off, that's a
17 separate issue. But if you do not vote to pass this
18 through, it's already there is all I'm saying. This
19 is to clean up the fact that we're not going to say
20 you need to come up with commercial, the commercial
21 code. The stuff in black is already there is all I'm
22 saying and this is just to clean up what's already
23 there. I'm not advocating for what's there. I'm just
24 saying if we leave what's there, there's issues.

25 MR. NAIPO: Thank you. Jan.

1 MS. GOULD: Jan Gould. In chapter 30 of the
2 Seattle Building Code we have 3020.6, which is
3 location of main line disconnects, which has a W next
4 to it because it was a -- it's a WAC rule, but we
5 exempt special purpose residential elevators and
6 residential incline elevators from this requirement
7 because typically up until the 2018 building code we
8 always had dedicated machine rooms, but typically
9 they were a closet where you open the door and that's
10 where you got your electrical clearances. So, I think
11 the 24 inches from the door is excessive. But that's
12 it.

13 MR. NAIPO: Thank you. Any additional
14 comments or questions before we move to vote on this?
15 Any additional questions? Jan, did you have an
16 additional question or comment that you'd like to
17 make? Your hand is still rates.

18 MS. GOULD: Yes. Sorry. Jan Gould. And
19 finally in 2018 we added the access door for private
20 residence elevators, but we have no requirement for a
21 light switch, or a stop switch, or an outlet up there.

22 MR. NAIPO: Thank you. Mr. Wohlschlager.

23 MR. WOHLSCHLAGER: Lyall Wohlschlager. The
24 light switch and receptacle are they not required by
25 the NEC, Jan? So, they're already a requirement, even

1 if they're not specified?

2 MS. GOULD: What's your code reference by
3 NEC?

4 MR. WOHLSCHLAGER: Oh, it would be in the
5 620, I think 23 or 24 section, regarding machine
6 spaces and control spacing is needing lights and
7 outlets.

8 MS. GOULD: I'll have to check. Thanks.
9 Jan Gould.

10 MR. NAIPO: Thank you. Candace.

11 MS. LAU: Candace Lau. Yeah, I just wanted
12 to clarify something Jan just said, but those closets
13 that you're referring to those are machinery spaces as
14 far as I understood the code. Machine rooms are ones
15 that you actually can step into. Full bodily entry is
16 what a machine room is. So, this is in regards to
17 machine rooms, I believe, when located in a dedicated
18 room. So, these are not talking about the closets.
19 These are talking about rooms that are dedicated for
20 the elevator, and in residential we rarely have that.
21 Most of the time it's in a closet. Most of the time
22 it's sitting in the garage somewhere. This is talking
23 about a room dedicated for the -- the elevator itself.
24 So, I think the attempt is to say that if you had --
25 if you it in a closet or in a garage, then the main

1 line disconnects and car lights shall be located
2 adjacent to the controller when not located in a
3 dedicated machine room. When located in a dedicated
4 room, then the main line disconnect shall comply. I
5 think what's it's trying to say is it needs to be
6 within 24 inches of that room. So, that's the
7 attempt. I didn't write this. This is already in
8 code. So, that's the difference between control space
9 and control rooms, that's my understanding.

10 MR. NAIPO: Thank you, Candace. Mr.
11 Wohlschlager.

12 MR. WOHLSCHLAGER: Lyall wohlschlager.
13 Sorry, I failed to put my hand down.

14 MR. NAIPO: Oh, okay. Jan.

15 MS. GOULD: Jan Gould. Up and through 2015
16 we had dedicated machine rooms since quite a while
17 ago, three, four code cycles ago, and so it is
18 dedicated machine or a control room. The only thing
19 we changed, there's nothing else in the room but
20 elevator equipment, is that we allowed by opening the
21 door to have your electrical clearances provided with
22 the door open, and now under 2018 building code that
23 machine equipment can be located in a room with other
24 things for the house like a boiler, a washing machine,
25 just as long as you have clearance.

1 MR. NAIPO: Thank you. Mr. Barnhart.

2 MR. BARNHART: Yes, Paul Barnhart from UL.

3 I just wanted to clarify that 620.23 of the NEC talks
4 about branch circuits for machine rooms, control
5 rooms, machinery spaces, or control spaces requires
6 the lighting in the duplex. So, the comment that was
7 made earlier that this only applies to control rooms
8 with full bodily entry is not correct. A control
9 space does not require full bodily entry; so, these
10 areas would be considered -- in the code be considered
11 as a control space and would be required to have the
12 duplex receptacle and the lighting switch, in my
13 opinion. Thank you.

14 MR. NAIPO: Thank you. Candace.

15 MS. LAU: Candace Lau. I hope I wasn't that
16 person that said that because that's not what my
17 intent was. My intent was to -- just to clear up the
18 difference between a control space and a control room,
19 and my -- I was just trying to clear up what the
20 difference between a control space and a control room
21 is. When you have a door on a closet that's a control
22 space. When you have full bodily entry that's a
23 control room or a machine room. So, that's the
24 difference. So, when you -- We can't apply a control
25 space, a closet as Jan described, we can't say that

1 the main line disconnect has to be within 24 inches of
 2 that control space. What this code is saying is when
 3 it's in a dedicated room then you have to have the 24
 4 inches within -- the disconnect within 24 inches of
 5 the door. So, that's the whole premise behind this.
 6 We're not talking about a control space. Control
 7 spaces, it would be the first part, main line
 8 disconnects and car light disconnects shall be located
 9 adjacent to the controller because it's not located in
 10 a dedicate room. Again, this proposal, we're not --
 11 I'm not talking about the rest of what is already in
 12 there. This proposal is to just clean up what's
 13 already there.

14 MR. NAIPO: Thank you. And with that final
 15 comment, I ask that we place a vote on 0037. If you
 16 are for this change with these notes that I've taken
 17 down here for conversation to be had by the ESAC,
 18 there's a lot of it, and I'm sure there are more that
 19 Melissa took, as well, if you are for this change to
 20 be reviewed a little bit more by the ESAC, but, again,
 21 you understand the premise of what the person was
 22 trying to submit this for, I ask that you please raise
 23 your hand and vote yea now on proposal 0037. If you
 24 are for this change, I ask that you please raise your
 25 hand and vote yea on this proposal. Thank you for

1 those who voted. Please go ahead and feel free to
2 lower your hands. Thank you again. If you voted yea,
3 please feel free to lower your hands.

4 If you are in opposition of the changes that
5 were submitted for this proposal 0037, I ask that you
6 please raise your hand and vote nay. If you are in
7 opposition of proposal 0037, I ask that you please
8 raise your hand and vote nay. Thank you.

9 If you would like to vote to abstain, I ask that
10 you please raise your hand and vote now. If vote to
11 abstain, please raise your hand and vote now. Thank
12 you.

13 Melissa, will you please read the vote tally for
14 0037.

15 MS. ERIKSEN: Yes. There were 22 yeas, 1
16 nay, and 2 abstentions.

17 MR. NAIPO: Thank you. So now with that,
18 those changes, if anything else regarding 2700 is
19 passed, they will need to be merged by the ESAC. If
20 these things passed, there will be something that will
21 need to be done to merge these things together.

22 So, with that, we will continue or start a new
23 discussion on proposal 0059 regarding WAC
24 296-96-02700. They're asking to remove machine room
25 and add the new title Machinery Spaces, Machine Rooms,

1 Control Spaces, and Control Rooms, adding section one.

2 (1) The room or space outside of the hoistway
3 that contains elevator equipment shall not be
4 considered a machine room. This barrier shall comply
5 with:

6 (a) 5.3.1.6.1 (a) and (b).

7 (b) 5.3.1.6.2 Motor and operational controllers.

8 (c) 5.3.6.3 Guarding of sheaves and sprockets.

9 (d) 5.3.1.6.4 Maintenance path and clearances.

10 (e) 5.3.1.6.5 Temperature and humidity.

11 Recategorizing section one in the original text
12 to two.

13 (2) Main line disconnects and car light
14 disconnects shall be, adding this verbiage, grouped
15 together with, and removing located adjacent to, the
16 controller. So, it would read: Main line disconnects
17 and car light disconnects shall be grouped together
18 with the controller. Removing text, "When not in a
19 located dedicated machine room. When located in a
20 dedicated room, commercial machine room requirements
21 shall be followed. Main line disconnects shall comply
22 with WAC 296-96-02460.

23 Remove section (2) Access to the motor brake
24 shall have:

25 Remove (a) A lockable door that is a minimum of

1 6" x 6" or 36 square inches.

2 Remove (b) A stop switch shall be located within
3 reach of the access.

4 Remove (c) A light switch and GFCI receptacle
5 shall be located within reach of the access door.

6 Adding section (3) The working space about
7 electrical equipment in NEC Article 110 shall apply.

8 Rationale: The rooms that contain elevator
9 equipment also contain a variety of everything like
10 luggage, clothing, household goods, vehicles, etc.
11 Generally, at the time of the acceptance inspection,
12 the owners have not moved in or might be at the
13 beginning stages and inspectors have a tendency to
14 refer to these rooms as elevator equipment rooms or
15 machine rooms, but in reality they are not. Once the
16 AHJ has signed off on the elevator, these rooms 99.9%
17 of the time are turned into storage. It is in the
18 best interests of all to ensure the equipment is
19 safely protected and guarded. This is a separate
20 A17.1 requirement for the access door required for the
21 motor and brake and should be struck from the existing
22 WAC language. This is addressed in another proposal.

23 Clarifying questions? Mr. Friesen.

24 MR. FRIESEN: Wade Friesen, Vertical
25 Options. Just a quick question. Are all of these

1 five three code references out of the 2019 code? I'm
2 just not seeing them in 2016 and just want to be clear
3 on that. Thank you.

4 MR. NAIPO: Thank you. Mr. Brinkman.

5 MR. BRINKMAN. Thank you. Kevin Brinkman.
6 Yes, from what I can see, they are in the 2019 code.
7 So, I'm actually not sure -- Well, I don't feel this
8 code change is needed, proposal is needed. I think
9 it's adequately addressed. Machinery space, machine
10 rooms, etc. is adequately addressed in the 2019 code.
11 So, I think we should not include these changes.
12 Thank you.

13 MR. NAIPO: Thank you. Any additional
14 questions or comments? Any additional clarifications
15 or comments? Okay. With that I ask that we please
16 put proposal 0059 to a vote. If you are for these
17 changes, I ask that you please vote yea. If you for
18 these changes proposed in proposal 0059, I ask that
19 you please raise your hand and vote yea now. If you
20 are for these changes I ask that you please raise your
21 hand and vote yea now. Thank you for those that have
22 voted. Go ahead and lower your hands.

23 If you are in opposition of these changes I ask
24 that you please raise your hand and vote nay. If you
25 are in opposition of these changes submitted on

1 proposal 0059 I ask that you please raise your hand
2 and vote nay. All right. Thank you for your votes.
3 Go ahead and lower your hands. Thank you again for
4 your votes. Go ahead and lower your hands.

5 If you vote to abstain, I ask that you please
6 raise your hand now. If you vote to abstain, please
7 raise your hand now. All right. Thank you for that.
8 Go ahead and lower your hands. Thank you for your
9 votes.

10 Melissa, will you please read the vote tally for
11 proposal 0059.

12 MS. ERIKSEN: Absolutely. There were 6
13 yeas, 15 nays, and 5 abstentions.

14 MR. NAIPO: Thank you. All-righty. To get
15 back on track with breaks, what I suggest we do is we
16 take our eleven o'clock break now and my co-worker
17 will throw up her handy dandy little five minute timer
18 for us because I know I need it, too, I do, to be
19 honest with you. So, thank you guys very much. We'll
20 see you guys in five minutes. Appreciate it.

21 (Recess taken)

22 MR. NAIPO: Welcome, everybody. It's good
23 have you guys back. I hope you guys had a great,
24 wonderful, refreshing five minute break. I need more,
25 but anyways... All-righty. Moving on to 0060,

1 proposal 0060. This is regarding WAC 296-96-02700,
2 but this is regarding -- yes, it's housed in that same
3 section, but this regarding hoistway access opening
4 doors okay.

5 MS. GOULD: Paoa.

6 MR. NAIPO: Yes.

7 MS. GOULD: Could you show the document?

8 Thank you.

9 MR. NAIPO: Thank you. Again, I need help
10 myself, so... Oops, here we go. There we go. Thank
11 you for that. All right. Here we go. Number 60, so
12 they are asking on Hoistway Access Opening Doors to
13 remove part (d) Hoistway access doors or panels shall
14 be provided with an electrical switch that shall cause
15 the power to be removed from the driving machine,
16 motor and brake when opened, changing it to, hoistway
17 access doors shall have:

18 (a) A lockable door that is a minimum of 6" x 6"
19 or 36 square inches.

20 (b) A stop switch shall be located within reach
21 of the access door that shall cause the power to be
22 removed from the driving machine motor and brake when
23 opened.

24 (c) A light switch and GFCI receptacle shall be
25 located within reach of the access door.

1 Rationale: This language is currently found in
2 WAC 296-96-02700 and is better suited as a stand-alone
3 rule since this is how it is in this national
4 standard.

5 So, with that comment set aside, they are
6 stating that, hey, this should be its own section.
7 Whether we create a 2705 or something like that, that
8 is beyond what I will ask this TAC committee to do.
9 But in reviewing this, does this possibly contradict
10 anything that we've already passed within the other
11 parts of 2700, just to address any of the current
12 concerns that were part of conversations that you felt
13 needed to be had on the one that passed prior? And
14 now I will open it for questions for clarification.
15 Jan.

16 MS. GOULD: Jan Gould. Is this for private
17 residence elevators?

18 MR. NAIPO: Yes.

19 MS. GOULD: Thank you.

20 MR. NAIPO: With the intent of the changes
21 that were made to the original proposal of 2700, yes,
22 this would incase residential hoistway access opening
23 doors. Mr. Brinkman.

24 MR. BRINKMAN: Yeah, Kevin Brinkman. I
25 question the need for this. The 2019 edition has

1 extensive language in 5.3.1.6.6 for access doors and
 2 openings. The only thing that's not covered by that
 3 section of the code is the light and outlet; so, if
 4 maybe that -- if that's something that the WAC feels
 5 is necessary, maybe that could stay, but the rest is
 6 really covered by that standard. It doesn't actually
 7 specify 6" x 6" minimum either, but the reality is it
 8 provides detailed instructions for access doors and
 9 openings, including that it has to be kept closed and
 10 locked, has to have a switch to remove power from the
 11 motor and brake, and a few other thing, but... So, I
 12 guess I'm questioning the need for most of what's in
 13 there, so... Thank you.

14 MR. NAIPO: Thank you, Mr. Brinkman. Before
 15 I move on to the next question, I just want to make
 16 sure that the comment you made regarding the extensive
 17 language is already covered, I want to make sure I
 18 have the correct code reference. I apologize if I
 19 wrote this down incorrectly, but I got 5.3.1.6. Is
 20 there an edit that I need to make to that code so if
 21 this passes it goes to the right code reference?

22 MR. BROWN: Yeah. It's 5.3.1.6.6.

23 MR. NAIPO: Six six. Thank you, sir.

24 MR. BROWN: Sure.

25 MR. NAIPO: Candace.

1 MS. LAU: Hi. Candace Lau. I'm having a
 2 hard time finding 02700(d). I don't -- Maybe I have
 3 the wrong version, but when I look in 2700 there's
 4 no -- maybe there is. Maybe I have a different --
 5 Yeah, I don't even see a (d). So, I don't -- I'm not
 6 understanding. Can you pull up the 2700, 027000 right
 7 now? This kind of says that we're crossing out
 8 something and I don't even see it there.

9 MR. NAIPO: Here is it as it currently
 10 stands, and she is correct, there is no (d) referenced
 11 here. So, whether or not that needs to be removed or
 12 their reference needs to be amended at all...

13 MS. LAU: Yeah. I'm not understanding what
 14 we're amending if it's not there.

15 MR. NAIPO: Sorry. I'm bouncing in between
 16 like four different screens. I apologize about this.
 17 Okay, so with that, are there -- Mr. Brinkman, did you
 18 have another question or comment? So, with that, as
 19 it stands now, are there any additional questions or
 20 clarifications had? So, it looks like we're just --
 21 regarding the removal of part (d) or that section (d)
 22 regarding the hoistway access doors, I didn't even see
 23 that verbiage on the 2700 that was in there. Is there
 24 any other questions or concerns over the things that
 25 are in blue and underlined? Jan.

1 MS. GOULD: Jan Gould. We need the heading
2 Private Residential Elevators so it's clear.

3 MR. NAIPO: Well, this was one of the things
4 that they were talking about in the rationale is that
5 it's better suited as a stand-alone rule since this is
6 how it is in the national standard. So, taking that
7 into account, as well, that wasn't something that when
8 you were writing proposals we were asking you to do
9 was, hey, create a brand new WAC number because there
10 are ones that were used before that I don't know if we
11 can recycle or something like that, but if they were
12 asking that if this does pass that this should be in
13 its own section. So, it would be moved from 2700 to
14 probably 2705 just for reference and it would be
15 regarding, yes, residential hoistway access opening
16 doors because that's what the title has changed to on
17 the last pass for --

18 MS. GOULD: Thank you. Jan Gould.

19 MR. NAIPO: -- 2700. Thank you.

20 MR. NAIPO: Candace. Yeah, Candace Lau.
21 That's exactly what I was going to say is that
22 that's -- the previous proposal that we just passed
23 that's what it was, we added the word residential on
24 there; so, that was already addressed.

25 MR. NAIPO: Okay. So, with that and the

1 changes that are made as far as adding the text on
2 proposal 0060 -- Jan, did you have another question or
3 statement?

4 MS. GOULD: No. Jan Gould. I'll raise
5 my -- I'll lower my hand. Thank you.

6 MR. NAIPO: It's all right. Hoistway access
7 doors, so we're voting on adding this verbiage and
8 creating a new section within 2700 of Hoistway Access
9 Doors shall have:

10 (a) A lockable door that is a minimum of 6" x 6"
11 or 36 square inches.

12 (b) A stop switch shall be located within reach
13 of the access door that shall cause the power to be
14 removed from the driving machine motor and brake when
15 opened.

16 (c) A light switch and GFCI receptacle shall be
17 located within reach of the access door.

18 It was brought forth the comment that the
19 question -- that questions the need for this. 2019
20 has extensive language in 5.3.1.6.6. The only thing
21 not covered is light and outlet. If we feel that a
22 WAC should address that, provide extensive
23 requirements, the code already provides extensive
24 requirements for door and stop switch.

25 So, with that, are there any additional

1 questions or clarifications needed before we cast a
2 vote on 0060? With that, we will be casting a vote on
3 0060. If you agree with these changes of adding a new
4 section regarding hoistway access opening doors under
5 the residential heading that was passed earlier, if
6 you are for these changes that are listed on this
7 proposal, I ask that you please raise your hand and
8 vote yea. If you are for these changes, I ask that
9 you please raise your hand and vote yea. If you are
10 for these, I ask that you please vote yea. Thank you.

11 If you are opposed to these changes in proposal
12 0060, I request that you please raise your hand and
13 vote nay. If you are against these changes, opposed
14 to these changes in 0060 I ask that you please vote
15 nay now. All right. Thank you. Go ahead and lower
16 your hands. Thank you very much for your
17 participation. Mr. Leopard, you still have your hand
18 up.

19 If you are voting to abstain, I ask that you
20 please raise your hand and vote now. If you are
21 voting to abstain, please raise your hand and vote
22 now. Thank you.

23 Melissa, will you please read the vote tally for
24 proposal 00060.

25 MS. ERIKSEN: Yes. There were 4 yeas, 17

1 nays, and 5 abstentions.

2 MR. NAIPO: Thank you. Moving on to
3 proposal 0052, 0052. So, this is to add a new WAC
4 rule to incorporate technical clarification 18-02,
5 Private Residence Elevator Landing Doors. All of this
6 is new text.

7 (1) To meet ASME A17.1 2016 sections 5.3.1.7.2
8 and 5.3.1.8.3 clearance requirements at landing doors,
9 add on door fillers, or baffle systems shall not be
10 utilized to obtain the required clearances for landing
11 doors and new installations. Doors and frames shall
12 be constructed to ensure the door clearance
13 requirements are met with use of the door and frame
14 only. No addition of fillers or baffles allowed.

15 (2) It is permissible to use fillers, baffles on
16 existing residential landing doors in order to reduce
17 the clearances to the safer more current standard.
18 This applies to existing elevators that were properly
19 permitted and had met the door clearance standards in
20 effect at the time of the permitted installation prior
21 to the adoption of 2016 ASME A17.1. We'll have to
22 change that if this passes.

23 (3) Residence elevator hoistway doors. This is
24 a new part three. Residence elevator hoistway doors
25 may be constructed, furnished, and installed as part

1 of the hoistway construction and the work performed by
 2 a general contractor or homeowner. Construction of
 3 the doors, frames, and hardware will require special
 4 preparation to ensure compliance with the clearance
 5 requirements of ASME A17.1 section 5.3.1.7.2 and
 6 5.3.1.8.3. Installation of any component to the doors
 7 or frames that interface with the elevator controller
 8 such as the interlocks or hall call stations shall be
 9 installed by licensed elevator contractors only. When
 10 any of the following occurs, the elevator hoistway
 11 doors and/or frames shall be installed by a licensed
 12 elevator contractor:

13 (a) When door and frame assemblies are ordered
 14 from the elevator manufacturer or third party supplier
 15 and include a pre-assembled integral door interlock or
 16 hall call on either the door or frame components.

17 (b) Horizontal sliding doors at landings.

18 Rationale: Incorporates Technical Clarification
 19 18-02 with modifications. It is not customary for
 20 residential elevator hoistway doors to be furnished
 21 and installed by elevator contractors. Swinging
 22 landing doors have been for decades furnished and
 23 installed by general contractors and homeowners as
 24 part of H/W construction. Elevator contractors will
 25 continue to add the door interlocks to general

1 contractor -- or interlocks to GC installed
2 doors/frames as the interlock is the only A17.5/A17.1
3 labeled component for the hoistway door system
4 (typical swing door).

5 I'll open this up for questions for
6 clarification. Jan.

7 MS. GOULD: Just one comment. Jan Gould.
8 Number one should be to meet 2019 because that's what
9 the state is proposing to adopt. Thank you.

10 MR. NAIPO: Mr. Friesen.

11 MR. FRIESEN: Wade Friesen, Vertical
12 Options. I don't see the need to have any of this
13 adopted whatsoever. ASME outlines the rules pretty
14 clearly on what needs to be done and what needs to be
15 met. If the doors are not installed properly and
16 don't meet the proper clearances, inspector are not
17 going to pass the inspection or pass the conveyance.
18 And, you know, just to address part of the rationale
19 says it's not customary for residential elevator
20 hoistways to be -- or hoistway doors to be furnished
21 and install by elevator contractors, I think that that
22 has changed substantially. We, as a company,
23 mandatorily supply the doors for all of our customers
24 in order to alleviate these difficulties in meeting
25 these -- these tight clearance requirements. I'm sure

1 we're not alone. I'm sure we're not the only company
2 out there that's kind of switched their policy for
3 that. So, I just don't see the need for this. I
4 think that if the conveyance is installed to meet ASME
5 requirements as they're written I think that's
6 sufficient. Thank you.

7 MR. NAIPO: Mr. Quiett.

8 MR. QUIETT: Jonathan Quiett. Yeah, I also
9 feel that this is fairly redundant. It seems to be
10 spelled out pretty good in the A17.1 2019 edition. If
11 the plan is for adoption of that, it seems redundant.

12 MR. NAIPO: Thank you. Mr. Brinkman.

13 MR. BRINKMAN: Kevin Brinkman. Yeah, I have
14 the same concern. You know, A17.1 and A17.3 define
15 the requirements for new and existing residential
16 elevators based on the new requirements and they tell
17 you what you need to do. This is really getting to
18 how you should do it and I don't think we need to be
19 doing that.

20 MR. NAIPO: Thank you. Mr. Wohlschlager.

21 MR. WOHLSCHLAGER: Lyall Wohlschlager. This
22 was just to incorporate the technical clarification
23 that the state had issued and I take exception with
24 the requirement that only an elevator contractor can
25 install these doors, and that was the primary reason

1 for trying to incorporate the policy in the WAC, but
2 then take an exception to the requirement that only a
3 licensed elevator contractor.

4 When we're installing a residential elevator in
5 a five million dollar home and we are limited to four
6 or five different door types and frames from an
7 elevator manufacturer that have no bearing, or match,
8 anything that's going on in a largely expensive home,
9 door suppliers can build these doors and frames much
10 nicer, much better than we're seeing elevator
11 manufacturers, and so I think it's not prudent for us
12 to hold them hostage to whatever is available by the
13 elevator manufacturer to furnish the doors. A lot of
14 these elevators are future. So, having, then, the
15 ability to put doors on a future elevator at the time
16 of construction of the home also gives them some
17 flexibility so they don't have to swap those doors out
18 at a later date.

19 So, I don't have a problem with eliminating all
20 of this and going back to the ASME standard as long as
21 the policy also goes away that dictates that only
22 elevator contractors can install these swing doors.

23 MR. NAIPO: For clarification, do you mean
24 the technical clarification 18-02 goes away if this
25 whole thing is removed?

1 MR. WOHLSCHLAGER: Lyall Wohlschlager. Yes,
2 that's what I meant. I'm sorry.

3 MR. NAIPO: All right. Thank you. Candace.

4 MS. LAU: Candace Lau. If it's in the 02710
5 section of the code it would be for new installation
6 and so part of this is talking about existing stuff,
7 which should be in part (d) of the WAC code. So, just
8 taking the TC and just throwing it in a place in a WAC
9 is probably not the best thing to do. That's my
10 comment on that.

11 But second of all, I don't know where this is
12 really coming from, but my -- The push here I think
13 right now is from the Feds. I haven't read -- I
14 haven't gone to all these sections exactly and whether
15 we're talking about 2019 or 2016, but there's a lot of
16 older elevators out there that has the three five rule
17 instead of the three quarter four; so, I'm not sure if
18 this is saying that some of these elevators that were
19 built with the three five rule needs to comply now
20 with the three quarter four rule is what the Fed is
21 trying to push. So, there's a lot of stuff that's --
22 you know, I just take caution on taking a TC and just
23 throwing it in a code.

24 MR. NAIPO: Thank you. Mr. Wohlschlager.

25 MR. WOHLSCHLAGER: And maybe Mr. Brink--

1 It's Lyall Wohlschlager. Maybe Mr. Brinkman can
 2 elaborate a little bit on the -- does the code address
 3 existing elevators and how to obtain compliance with
 4 the three quarter four rule voluntarily and what kind
 5 of product is allowed to do that. I know there's been
 6 some discussion about half high baffles, are they
 7 acceptable for meeting the three quarter four rule,
 8 are they not. Clearly it's the case with new
 9 construction or new installations that it's not, but
 10 there is some question as to whether or not it's
 11 acceptable for a retrofit.

12 MR. NAIPO: Mr. Brinkman.

13 MR. BRINKMAN: Yeah, A17 -- Kevin Brinkman.
 14 A17.3 does have requirements for existing residential
 15 elevators. It would require compliance with the three
 16 and five rule, which was in place before, not the
 17 three quarter four. That can be done with baffles,
 18 and I'll have to admit I don't recall whether it was
 19 a -- it required a full height or half height baffle.
 20 If it's half height I know it would have to have a
 21 sloped top to prevent anybody from standing on it.
 22 New construction of the A17.1 would not allow baffles
 23 to be used. The door has to be constructed so that
 24 the requirements are met without use of baffles or
 25 other things that might be removed later on.

1 MR NAIPO: Thank you. Mr. Cleary.

2 MR. CLEARY: Scott Cleary. Yeah, I'll agree
3 with Kevin. The 17.3 we adopted is the 2015 version.
4 Part 10 addresses existing residential elevators. He
5 is correct that at that point it says that all must
6 meet the three and five, and they do not give you the
7 requirements that it has to be a full height. The
8 2020 A17.3, which we have not codified, does address
9 the three quarter four, but it says you must have a
10 full height baffle. So, since we've not addressed or
11 codified it in this section, the 17.3 '20 version,
12 that we need to have some sort of language somewhere
13 that talks about existing because we have no language
14 in part (d) of the WAC that references existing
15 elevators in the 17.3 part ten. It is not adequate to
16 meet what the Feds and the recall are requiring.

17 MR. NAIPO: Thank you. So, with that I will
18 ask are there any additional -- Scott, you still have
19 your hand raised. Did you have any additional --
20 Okay. What I propose is that if there are any
21 additional questions or clarifications -- Melissa?

22 MS. ERIKSEN: Paoa, in the chat Gerald is
23 saying we could strike the code year so that it
24 doesn't have to change with each code adoption, and
25 that we need to fix it with adopting the 2020 section

1 on that issue to point to three quarter four.

2 MR. NAIPO: It's a possibility. It's not
3 something that we have to do. We can do it and
4 putting it in part (d) as well. So, Mr. Cleary.

5 MR. CLEARY: Scott Cleary. That makes
6 sense, but then we'd have to modify it because the
7 agreement with the feds are to use half height baffles
8 and that's what all the manufacturers that are part of
9 that recall are doing and obviously they have the
10 angle at the top that meets the 70 degree requirement.
11 So, if we do that, that's going to have to have some
12 modifications or changes to it, too.

13 MR. NAIPO: Thank you. So, with that, if
14 there are no additional questions or clarifications,
15 so if anyone doesn't have any questions, comments, I
16 move that we pass vote on 0052. So, we will be
17 passing a vote on proposal 0052 WAC 296-96-02710. If
18 you are for these submitted changes, I ask that you
19 please raise your hand and vote yea. If you are for
20 these changes, I ask that you please put your hand --
21 raise your hand and vote yea if you are for these
22 changes. Thank you.

23 If you are against these changes proposed in
24 0052 -- Perry, your hand is still up. If you are
25 against these changes, I ask that you please raise

1 your hand and vote nay now. If you are against these
2 changes, I ask that you please raise your hand and
3 vote nay now. All right. Thank you for those. Go
4 ahead and lower your hands.

5 If you are voting and abstaining, I ask that you
6 please raise your hand and vote now. If you would
7 like to abstain, please raise your hand and vote now.
8 Thank you.

9 And with that, Melissa, will you please read the
10 vote tally for proposal 0052.

11 MS. ERIKSEN: Yes. There were 7 yeas, 10
12 nays, and 9 abstentions.

13 MR. NAIPO: Thank you. Moving on to
14 proposal 0058, so this is again -- And whenever you
15 see an xx like that, that means we're trying to figure
16 out a new place to put this within the 2700 block of
17 the WAC. So, there currently wasn't anything in
18 there, but this is what they would like to address.

19 So, regarding proposal 0058 WAC 296-96-027-- 027
20 and the rest of the number to be developed, this is
21 regarding Construction of Hoistway and Hoistway
22 enclosures. The hoistway shall be solidly enclosed
23 throughout its height without grill work or openings
24 other than for landing or access doors. Removing
25 verbiage, except that any exterior windows within the

1 hoistway shall be protected by metal grill work.
2 Grill work shall reject a ball 76 millimeters (3 in)
3 in diameter and shall be securely fastened from the
4 inside of the hoistway. Adding this new verbiage:
5 Glass, plastic, or acrylic enclosures shall be
6 permitted provided it conforms to ANSI Z97.1, 16 CFR
7 Part 1201 or CAN/CGSB-12.1, whichever is applicable
8 (see Part 9) Markings as specified in the applicable
9 standard shall on each separate piece of glass,
10 plastic, or acrylic and shall remain visible after
11 installation.

12 Verbiage that is already still there:
13 Enclosures shall be sufficient strength to support in
14 true alignment the hoistway doors and gates and their
15 locking equipment. The fire resistance rating shall
16 be in accordance with the requirements of the building
17 code. Non-fire resistant enclosures shall be
18 permitted to be glass complying with 2.1.1.2.2(e).

19 Rationale: Residential elevators are becoming
20 more esthetically enhancing additions to a home,
21 requiring prison-like bars inside/outside a home is
22 rather absurd. All homeowners that we have dealt with
23 when having a hoistway made of a transparent enclosure
24 have all been granted variances.

25 So, with that I ask that we open it up for

1 questions for clarifications. Mr. Turner.

2 MR. TURNER: Apologies. I forgot to put my
3 hand down.

4 MR. NAIPO: Oh, no worries, man, no worries,
5 you're good. So, any additional questions? Mr.
6 Brinkman.

7 MR. BRINKMAN: This is Kevin Brinkman. Not
8 a question, but a comment. I wasn't part of that
9 committee when this language was put in. Its been
10 there a long time. But from talking to someone who
11 was in the past, my understanding is this requirement
12 was put in because of fire fighters. The concern was
13 that if you have a second story or third story window
14 that's in part of the elevator hoistway you could have
15 a fire fighter attempting to enter the house to fight
16 the fire or rescue somebody, not realizing it was an
17 elevator hoistway thinking he was going to the second
18 or third floor and potentially fall into the hoistway.
19 So, that was why the requirement was put into place.

20 While I understand the desire to eliminate that
21 bar or grill work, I think there's a safety reason
22 it's there. Thank you.

23 MR. NAIPO: Candace.

24 MS. LAU: Candace Lau. I just wanted to
25 make sure that maybe at the very beginning again it

1 should say residential construction, construction of
2 residential hoistways, if that's what we're talking
3 about. You know, the only reason why I know that
4 that's what it's about -- well, not the only reason,
5 if you were not to read the other part, the
6 explanation, and read it as a stand-alone code, unless
7 you know that 02700 or 27 wherever you're putting it,
8 unless you looked at the table of contents, you're not
9 going to even know you're talking about prior
10 residence. I get phone calls about these things a
11 lot. People get confused.

12 MR. NAIPO: Mr. Leopard.

13 MR. LEOPARD: Duane Leopard, city of
14 Spokane. I'm assuming that ANSI Z97.1 covers the,
15 what is it, the shatterproof glass or tempered glass,
16 am I correct in saying that? I'm not real familiar
17 with that number. I just wanted to be sure this is
18 what it was eventually leading to. Does anybody know?

19 MR. NAIPO: Mr. Brinkman.

20 MR. BRINKMAN: Yeah, this is Kevin Brinkman.
21 Yes, Z97 does cover glass and other glazing materials
22 and their structural or their integrity, you know,
23 requirements.

24 MR. NAIPO: Candace.

25 MS. LAU: I'm not positive on this, but and

1 I don't know if it's changed, but in the past since
 2 this is for residential elevators when I've looked it
 3 up in the past there was no code requirement for glass
 4 hoistways, and maybe its changed, I don't know, with
 5 the 2019 I'm really not clear on that, and I think
 6 that maybe that's why this is put on here because
 7 there is -- there was none. I don't know if there is
 8 today, but there was no code for a requirement for
 9 glass in the hoistway. Maybe that's changed.
 10 Somebody else can tell me. I don't recall.

11 MR. NAIPO: Is there anyone who has ability
 12 to answer Candace's question? Mr. Wilson.

13 MR. WILSON: Sorry. Mike Wilson here. I
 14 may not be able to Candace's question, but I do have a
 15 comment. People need to understand that these
 16 elevators are in multi-million dollar homes, and I
 17 know we have a fire marshall on the committee and
 18 maybe he can chime in, but I think in some of the
 19 instances in the past that I've dealt with is that the
 20 fire department that we've gone to on some of these
 21 homes have said they don't want -- they don't care
 22 if -- they're not worried about the bars because
 23 they're not to going in through the hoistway. So,
 24 I've just got some -- it's just some esthetics things
 25 and some questions that people need to consider when

1 you start talking about your own private home or a
2 multi-million dollar home, and then you start adding
3 bars and stuff to this equipment, to the windows.
4 That all I had.

5 MR. NAIPO: Thank you. Mr. Brinkman.

6 MR. BRINKMAN: Yeah, Kevin Brinkman. To
7 answer Candace's question, you are correct, the A17.1
8 2019 does not include glass requirements for private
9 residence elevator enclosures.

10 MR. NAIPO: Thank you. Mr. Wilson, do still
11 have additional questions or a statement? Jan.

12 MS. GOULD: Yes, 2019 part 53 had
13 substantial changes, but I don't believe esthetics
14 trumps safety.

15 MR. NAIPO: Thank you. Mr. Leopard.

16 MR. LEOPARD: I kind of like this idea, but
17 I won't -- Sorry. Duane, city of Spokane. The last
18 line where it says building code, I would suggest
19 changing that to residential code since that's the
20 current codes that actually apply to residences and
21 the actual building code does not. Just food for
22 thought.

23 MR. NAIPO: Candace.

24 MS. LAU: Candace Lau. I'm just kind of
25 confused on this 027xx. Since this is a new section,

1 why isn't everything on here underlined? So, I'm
 2 confused. Is this whole section new?

3 And then the second thing is I think it's really
 4 important to have that glass requirement since the
 5 code, the A17.1 code is silent on hoistway, glass
 6 hoistways for residential elevator, it's really
 7 important to have that one piece that's highlighted or
 8 I mean that's underlined in there, but I don't know
 9 where the rest of it is coming from because it's not
 10 underlined. So, I think that piece of it is very,
 11 very important and that we need to add that to the
 12 code.

13 MR. NAIPO: Before I move on to Mr.
 14 Leopard's question, I need to make sure and clarify
 15 that people understand exactly what this process was
 16 and so I'm going to take a couple minutes and speak to
 17 this. I know I've addressed this multiple times in
 18 these last two days, but I feel like I need to say it
 19 again. Everyone needs to understand the process for
 20 this. If you were on the previous TAC, a lot of
 21 proposals were thrown out because of how they were
 22 written or how they were maybe not written correctly
 23 or in the correct format. They were just summarily
 24 dismissed. They weren't even reviewed. And I felt
 25 that did a huge disservice to the stakeholders who put

1 forth the effort to say, hey, we feel like this change
2 would be -- would help us out.

3 With that being said, I did not want that to
4 be -- I did not want that to happen, nor did our
5 program. We understood that, hey, people are people.
6 You guys are subject matter experts in the stakeholder
7 field that you represent. You are not government
8 officials trying to write code, and neither am I, to
9 be honest with you; so, even on the things that I
10 submitted there were a lot of edits that still need to
11 be done since it did pass, so I'm okay with that. But
12 at the same time, we can't sit here and nitpick the
13 little things because, yeah, there isn't a section for
14 this. So, how the person sent this to me it's not of
15 no fault of their own. Maybe this is a whole new
16 section. Maybe there are bits and pieces that were
17 housed in 2700 that they want done. I don't know.

18 The main thing I want us to make sure that we're
19 trying to really focus on is what does this person --
20 what is driving this change, the rationale, does that
21 make sense. Then, does the rationale and what they're
22 trying to do in the edits does this complete that
23 rationale. If it does, great, let's get it to pass so
24 we can get it to the ESAC. If you're like, you know
25 what, I can see where they're coming from, but this

1 needs some edits, which is some of the -- a lot of the
 2 stuff that we have passed, that's what we're here for,
 3 too, is that we understand the rationale. Yes, there
 4 are possibly some edits to make sure that we
 5 understand further on when it finally gets put in the
 6 WAC, if it does, because it's still got to go through
 7 the ESAC, it still has to go through the program, and
 8 with a lot of these there's going to be something
 9 that's called a cost benefit analysis to see if
 10 whether we really can put these into WAC, and, if so,
 11 you guys will understand, hey, this is really what
 12 we've quantified that it's going to cost the
 13 stakeholders.

14 So, I want to make sure that we're not getting
 15 stuck on some of the nit-picky stuff because, again,
 16 yes, I could have gone through -- yes, I could have
 17 tried to make sure these references are right, but I
 18 feel like that would do a disservice to the person who
 19 actually sent this thing in because they sent it in
 20 believing this and here I am trying to change this,
 21 well, it should be here, it should do this, it should
 22 be labeled as this. That is not my job. My job is to
 23 sit here and gather that information, present it to
 24 you, and then you, as the TAC, get to make the
 25 decision on trying to discern whether what this person

1 submitted -- is what they submitted, you know, a good
 2 rationale, hey, I agree with that. You know, what the
 3 verbiage is, eh, maybe it's a little bit where there
 4 are some edits that need to be done, and that's really
 5 what we're here for. So, if we can, I understand,
 6 yeah, there's only a small couple lines in 2700.
 7 That's why I put 2700xx because it sounds like they
 8 want this to go away regarding private residential
 9 elevators and the like, which is on 2700, so it's
 10 going to fall in there somewhere. We're going to have
 11 create a part for it.

12 So, I just wanted to set that out there. Mr.
 13 Brinkman.

14 MR. BRINKMAN: Thank you. Kevin Brinkman.
 15 I think the answer to the question, the reality is
 16 this wording came from A17.1 and I do agree the intent
 17 of this person was probably to add the whole thing
 18 here, minus what's in red. I guess the only other
 19 comment I'll make is I don't have -- As I mentioned
 20 earlier, I don't have a problem adding requirements
 21 for glass or permitting glass with the proper
 22 endorsements of (audio distortion) on 17.1 or etc,
 23 maybe this could be divided into two segments for
 24 voting. One would be whether or not to take out the
 25 exterior windows, which I can't support because of the

1 rationale for why it was put in initially, but I think
2 the glass permitted otherwise is okay, you know, like
3 on the inside of the hoistway or something else,
4 provided it's structurally supported. So, just
5 thoughts. Thank you.

6 MR. NAIPO: Thank you. Are there any
7 additional questions or clarifications? Melissa.

8 MS. ERIKSEN: Dylan Lathe added that it's
9 coming from 5.3.1.1, I guess supporting what Kevin was
10 saying. And Paul said, "I agree with adding the
11 requirements for glass and plastic. I don't agree
12 with removing the grill work on exterior windows,
13 agree there is no need for grill work on interior
14 windows."

15 MR. NAIPO: Can you read that again?
16 "...don't agree with the..."

17 MS. ERIKSEN: Paul does not agree with
18 removing the grill work on exterior windows, but does
19 agree that there is no need for grill work on interior
20 windows.

21 MR. NAIPO: Thank you. Are there any
22 additional questions or clarifications before we pass
23 a vote on 0058? With that again, I want to preface
24 before we take this vote, that if this does pass, the
25 notes that I have taken regarding some of the

1 conversations that have been had will be reviewed by
2 the ESAC and made editorially throughout this. Yes,
3 Dylan?

4 MR. LATHE: Dylan Lathe. I just wanted to
5 point out that in the bottom -- in the bottom of
6 5.3.1.1 out of the ASME 17.1 2019 it says,
7 "Non-fire-resistive enclosures shall be permitted to
8 be glass, complying with 2.1.1.2.2(e)". So, if
9 it's -- if it's -- That part is important because it
10 gives you an exception. It has to be,
11 "Non-fire-resistive enclosures shall be permitted to
12 be glass." You can't just put glass in it; it has to
13 follow that code. Thank you.

14 MR. NAIPO: Thank you. Mr. Wilson.

15 MR. WILSON: Yeah, Mike Wilson here. I just
16 wonder if we could get the fire marshall to chime in
17 on some of this --

18 MR. NAIPO: Oh, thank you.

19 MR. WILSON: -- in regarding the glasswork
20 and bars on private residences. Thanks.

21 MR. MONTGOMERY: So, Dylan Montgomery, State
22 Fire Marshall's Office. One reason why I didn't have
23 it on this one is because we don't regulate
24 residential and so it would come more from local
25 jurisdictions, and so I didn't want to put something

1 in that would like sway it in any sort of way that we
2 don't really have jurisdiction over.

3 MR. NAIPO: Thank you for that.

4 MR. MONTGOMERY: It's the one reason why I
5 hadn't chimed in yet.

6 MR. NAIPO: Thank you, Mr. Montgomery. So,
7 with that, we will be passing a vote on 0058.
8 Candace.

9 MS. LAU: Hi. Candace Lau. I saw that in
10 the 2016 and I'm still trying to find it in the 2019,
11 but in the 2016 it refers you to 2.1.1.2.2(e), but if
12 you go to two -- there is no 2.1.1.2.2(e) in the 2016.
13 So, I'm still looking to see if there's a 2.1.1 for
14 the 2019. I'm just wondering if they changed it in
15 2019, that's all, so, because, if it's covered under
16 A17.1, then it's not necessary to add it, is my
17 comment, but I've got to check.

18 MR. NAIPO: All right. Thank you. Mr.
19 Quiett.

20 MR. QUIETT: Jonathan Quiett. Just so I'm
21 clear on this, we are -- we are only talking about
22 exterior windows in a hoistway. If we have a complete
23 glass hoistway, then this is a moot point to be
24 talking about, is what I'm gathering by listening to
25 the discussions, reading what's there, kind of sifting

1 through it. So, if we have windows in a hoistway of a
2 residential elevator, that's when we have to have the
3 other stipulations that are being crossed off. I just
4 want to make sure I'm understanding correctly.

5 MR. NAIPO: Mr. Brinkman.

6 MR. BRINKMAN: Kevin Brinkman. First of
7 all, thank you, Dylan. I missed that. I was looking
8 for a section on glass and I didn't see that last
9 sentence. And the -- That does refer to 2.1.1.2.2(e),
10 which has basically the wording that they are
11 proposing to add, "...enclosures shall be permitted to
12 be glass provided it's laminated glass conforming to
13 ANSI Z97.1 16 CFR Part 1201, or CAN/CGSB 12.1,
14 whichever is applicable. Markings as specified in the
15 applicable standard shall be on each separate piece of
16 glass and shall remain visible after installation."
17 So, I'm going to say now I don't think any changes are
18 necessary to this section. And to answer Mr. Quiett's
19 question, yes, that crossed out language would apply
20 only to an exterior window that, you know, they built
21 a hoistway after the fact and there's a window in the
22 hoistway that's accessible to the outside would
23 require the grill work.

24 MR. NAIPO: Any additional questions or
25 clarifications? Dylan? Mr. Lathe.

1 MR. LATHE: Dylan Lathe. One more thing
2 I'd just like to point out, I agree this is a safety
3 issue because of what I can picture is a large window
4 that would go from the upper story all the way down to
5 the bottom story, and if a fire fighter is running in
6 there at night time they could smash that and see
7 inside of there with their flashlight and notice that
8 there's a space in there and enter there not knowing
9 that there's an elevator above them which could come
10 down and crush them. So, it's not just a fall hazard,
11 but it's also a crushing hazard or an entrapment
12 hazard. So, I think this is a dangerous issue. Thank
13 you.

14 MR. NAIPO: Thank you. All-righty. With
15 that, I will ask that we put this to a vote on
16 proposal 0058. If you are for the changes that have
17 been presented, as well as the discussions and notes
18 that have been taken regarding possible edits to this,
19 I ask that you please vote yea. If you are for this
20 change to WAC 296-96-027, I ask that you please vote
21 yea now. Thank you. And please lower your hands.

22 If you are against this change, I ask that you
23 please raise your hand and vote nay. If you are
24 against this change, I ask that you please raise your
25 hand and vote nay. Thank you. Go ahead and lower

1 your hands. Thank you very much. Sergey, can you
2 please put your hand down, if you've already voted.
3 Thank you.

4 If you are voting to abstain, I ask that you
5 please raise your hand now. If you are voting to
6 abstain, please raise your hand now. Thank you.

7 And with that, Melissa, will you please read the
8 vote tally for proposal 0058.

9 MS. ERIKSEN: Yes. It is 5 yeas, 18 nays,
10 and 1 abstention.

11 MR. NAIPO: Thank you. I'm going to hope
12 that we can get through this one quickly. All right.
13 All-righty. Then, after that, we will take our lunch.
14 So, this is regarding proposal 0061. I'm believing
15 that this is adding a section to WAC 296-96-027. This
16 is regarding Machine and/or Controller Mounted on the
17 Car, adding verbiage: Machines and controllers shall
18 not be located on the car when the elevator is located
19 within an enclosure.

20 Rationale: There are some elevators that only
21 serve two floors, but do not travel within a hoistway.
22 This puts the elevator mechanic in a hazardous
23 situation as they may have to work on operational
24 machinery. This will also eliminate further safety
25 needs for working in a confined space.

1 Again, because of the change to the title on
2 2700, this is regarding residential machines and/or
3 controller mounted on the car. So, this is regarding
4 residential. Mr. Friesen.

5 MR. FRIESEN: Wade Friesen, Vertical
6 Options. The rationale for this is, in my opinion,
7 fundamentally flawed. First off, the first line of
8 the rationale says that for elevators that don't
9 travel in a hoistway, yet we're talking about one in
10 an enclosure. As it sits currently, whether the
11 controller is mounted on the car or not, in Washington
12 State we are required to put a disconnect switch that
13 kills the power to the unit outside of the enclosure,
14 outside of the hoistway. So, I'm not seeing how this
15 puts the elevator mechanic in a hazardous situation.

16 Furthermore, if the elevator controller is
17 mounted on a car in such a way that you'd have to work
18 on it by accessing the car, this doesn't seem to me to
19 be any different than working on a commercial elevator
20 and accessing the COP or a control board that most
21 modern elevators have in COP. So, I mean if it gets
22 classified that way, it seems to me that working on
23 the COP in any conveyance whatsoever might be
24 considered confined space. So, I'm opposed to this.
25 Thank you.

1 MR. NAIPO: Thank you, sir. Mr. Madison.

2 MR. MADISON: Jon Madison, Elevator
3 Mechanic. I've been in this situation multiple times
4 on residentials where you're working through a swing
5 gate door, leaning over to work on the car top because
6 there's, you know, literally a 24 x 36 or 36 x 36 cab.
7 I agree that this should be (audio distortion) because
8 it gets -- it gets the people into a spot, and you
9 talked about COPs, Wade, I agree, you're actually
10 standing in front of the COP, not trying to stand, or
11 kneel, or lay down on a car top to try to look at the
12 control circuits. That's all.

13 MR. NAIPO: Thank you. Mr. Brinkman.

14 MR. BRINKMAN: Yes. Thank you. Kevin
15 Brinkman. Just a couple comments from a standpoint of
16 the code. The code does have allowances for
17 equipment, controls mounted on the car top. To do
18 that, they either have to be accessible from inside
19 the car, you know, typically through some kind of lock
20 panel, or if they're located on top of the car then
21 additional overhead clearance conforming with 2.4.7 is
22 required, and 2.4.7 is the requirements for what I
23 would call commercial elevators. So, if you have to
24 work on it, if it's on the car top and you have to
25 work on it from inside the hoistway, then those

1 additional clearances are required, so there is not an
2 any crushing hazard.

3 MR. NAIPO: Thank you. Mr. Friesen.

4 MR. FRIESEN: Wade Friesen, Vertical
5 Options. I think what we're talking about here is new
6 installation. And just to address Mr. Madison's
7 concern, I believe that any time we're talking with
8 controls that are on top of the car a stop switch is
9 required. So, I don't -- I don't see where we're in
10 any situation where this is any more dangerous than
11 working on like a commercial piece of equipment.
12 There are safeguards in place to ensure safety of
13 workers. Thank you.

14 MR. NAIPO: Thank you. Are there any
15 additional questions or comments of clarification?
16 All right. So, with that, since there are no
17 additional questions or clarifications -- Who are you
18 pointing at? You, Gerald? What?

19 MR. BROWN: This would probably create some
20 problems with our CPHs that have the machines and
21 controllers by design according to the code that are
22 located on the top of cars; so, you need to have an
23 exception on this and write down residential on this
24 or whatever. But you can't arbitrarily say that
25 machines and controllers shall not be located on the

1 car when the elevator is, you know, located -- they're
2 not located in enclosures, but, still, I just wanted
3 to make sure that clarification is there, that this is
4 talking about something other than construction
5 personnel --

6 MR. NAIPO: I appreciate this, boss, but,
7 like I stated before we started this, that is prefaced
8 by the changes we've already passed regarding 2700 and
9 that that title for this is regarding residential
10 elevators so that this is regarding just residential
11 elevators, regarding the machine and/or controller
12 mounted or the car top. But thank you for that.

13 Are there any additional -- I thought someone
14 else had their hand up, but, okay, I guess not.
15 All-righty.

16 So with that, if there are no additional
17 comments or questions for clarification, I ask that we
18 please move this to a vote on proposal 0061 regard WAC
19 296-96-027 Machine and/or Controller Mounted on the
20 Car, and the verbiage being, "Machines and controllers
21 shall not be located on the car when the elevator is
22 located within in an enclosure."

23 If you are for this change to the WAC, I ask
24 that you please raise your hand and vote yea. If you
25 are for this change, I ask that you please raise your

1 hand and vote yea on this change. All right. Thank
2 you for those that have voted. You can go ahead and
3 lower your hands. Thank you very much.

4 If you are opposed to the change in this verbiage
5 or the addition of this verbiage, I ask that you
6 please raise your hand and vote nay. If you are in
7 opposition of this change, I ask that you please raise
8 your hand and vote nay at this time. All right.
9 Thank you for those that have voted. Mr. Leopard, if
10 you could, please lower your hand.

11 If you are voting to abstain, I ask that you
12 please raise your hand and vote now. If you are
13 voting to abstain, please raise your hand and vote
14 now. All-righty. Thank you very much for everyone
15 who has voted.

16 Melissa, will you please read the vote tally for
17 proposal 0061.

18 MS. ERIKSEN: Yes. There were 9 yeas, 10
19 nays, and 7 abstentions.

20 MR. NAIPO: Thank you. So, with that, we
21 will take our 30 minute lunch. Melissa will throw the
22 30 minute timer up. And we will see you guys back in
23 30 minutes. Thank you very much.

24 (Lunch recess taken at 12:06 p.m.)

25 MR. NAIPO: So, all right, the extra minute

1 is up. So, I want to thank you, everyone, for, again,
 2 all the work you guys have done so far. And I just
 3 want to add another comment to -- I didn't mean to go
 4 on a diatribe earlier, but I really hope that you guys
 5 can see the value in us going over all of these
 6 submissions from our stakeholders. Yes, it is a lot
 7 of work. Yes, there are a lot of discussions. Yes,
 8 there are a lot of assumptions that we're having to
 9 have as we're trying to read these things and read
 10 into the rationale that was written and trying to make
 11 a justification on whether, "Hey, I'm okay with this
 12 moving forward as it stands", or "I'm okay with this
 13 moving forward, but, man, I do not like how this was
 14 written, but you know, they say they've taken some
 15 comments."

16 Again, that process wasn't had before; so, I'm
 17 open to your comments and recommendations after this
 18 TAC is convened. Please feel free to e-mail, like I
 19 said, me or Melissa on any recommendations you have,
 20 like, "You know what, Paoa, I thought we -- you know,
 21 things took a little too long." I know that there are
 22 some people who felt that I heard some of those
 23 comments. The only reason why is because, again, I'm
 24 not a subject matter expert and what I'm trying to
 25 listen for is things getting off in the weeds

1 regarding like -- Like there was one point yesterday
 2 when we were talking about one specific thing, but it
 3 seemed like the conversation was having it grow into a
 4 bigger problem. Well, no, this is just regarding this
 5 one focal thing, and I think Mr. Madison was someone
 6 that pointed that out and helped us refocus on, hey,
 7 this isn't regarding all these other things that we're
 8 having discussions about, it's regarding this one
 9 thing that this person wrote in their proposal. So,
 10 again, we're open to your conversations. I'm going to
 11 state that again at the end of this and we'll pick
 12 back up. I really appreciate it.

13 So, we're going to be looking at proposal 0062.
 14 Oh, Mr. Bob Oury has a hand raised. Mr. Oury, how can
 15 we help you?

16 MR. OURY: Paoa, I just wanted to say now
 17 instead of waiting until the end of the day that I
 18 really appreciate what you guys are doing, you and
 19 Melissa. This is -- You had a lot of patience,
 20 there's a ton of work here, and I think it's going --
 21 it's going really well the way you guys are handling
 22 it. So, I just wanted to make that comment before the
 23 end of the day.

24 MR. NAIPO: Thank you, Mr. Oury. I really
 25 appreciate that.

1 UNIDENTIFIED SPEAKER: Bob, that was very
2 brave of you.

3 MS. ERIKSEN: Brevity is a beautiful thing.

4 MS. GOULD: And, Paoa, don't be shy about
5 putting us in our place.

6 MS. ERIKSEN: That's what he's got me for.
7 I get to be the bitchy one.

8 MR. NAIPO: All right. So, we're picking up
9 with proposal 0062. This is -- Again, it's going to
10 be housed in WAC 296-96-2700. Again, this is prefaced
11 with this is regarding residential elevators because
12 that was what was passed prior; so, that is what we
13 want to feel the context of this verbiage is going to
14 be addressing is residential.

15 MS. GOULD: Please show your doc.

16 MR. NAIPO: Thank you. Thank you, Jan.
17 There we go. So, 0062. Now, again, I want to also
18 preface that, hey, 2700 prior to that change was
19 regarding, do-do-do-do. Oh, it is pretty much private
20 residence elevators. So, it's section 13 is where
21 2700 starts. So, anything that references 27027xx or
22 whatever is after it, this is all regarding private
23 residence elevators, that is it.

24 So, with that, we'll go on to, like I was
25 stating, proposal 0062. This is regarding Light in

1 Car, okay. The car shall be provided with an electric
2 light. The light shall be controlled by a switch
3 located in the car near the car entrance or by
4 automatic means in conformance with 2.14.7.2.2. The
5 minimum illumination at the car threshold with the car
6 door -- with the door closed shall be not less than 50
7 -- I can't remember what you guys said -- lx (5fc).

8 This is adding new verbiage: If the normal car
9 lighting power source fails, it shall be permissible
10 to automatically transfer to a source of power capable
11 of maintaining car lighting for at least four hours.

12 Rationale: Residential elevators do not have a
13 requirement addressing emergency or backup lighting,
14 and inspectors are always requiring a test to show
15 that the lights will remain on once power is removed.
16 All residential elevators are provided with a
17 Universal Power Supply or UPS generally of 550 watts
18 or more as a battery backup for emergency
19 lowering/rescue. This power source provides power
20 for the entire elevator opening -- or operating system
21 including the cab lights. This will remove be
22 ambiguity of what is and is not required. To put this
23 into perspective, most of these elevators operate on a
24 24 vdc or a 28vac control circuit and this includes
25 the cab lighting, and it is for this reason that UPS

1 is used as a central power supply in the event of
2 power loss.

3 And with that, I will ask for any questions for
4 clarification regarding this light in car in
5 residential elevators? Any comments? Mr. Friesen.

6 MR. FRIESEN: Wade Friesen, Vertical
7 Options. I have not reviewed 2019 code as of yet; so,
8 if this is in the code, then perhaps I'm mistaken, but
9 I believe that the rationale is not correct. I do not
10 believe that every residential elevator comes with a
11 Universal Power Supply, unless it's required by the
12 new code. I know of two manufacturers that we work
13 with where it is an optional thing to include the
14 battery backup. That being said, I am certainly not
15 opposed to having a battery backup for the lighting
16 circuit and I think that's appropriate. Thank you.

17 MR. NAIPO: Thank you, sir. Jan.

18 MS. GOULD: Jan Gould. There's no change
19 between the '19.

20 MR. NAIPO: Thank you for that
21 clarification. Any other comments or questions
22 regarding this change? Mr. Wohlschlager.

23 MR. WOHLSCHLAGER: Lyall Wohlschlager.
24 Yeah, I don't think there's any change in the code.
25 This appears to be an elevator inspector training

1 problem where they're asking for something to occur
2 when, in fact, the code doesn't require it. So, it
3 appears that maybe they're just trying to say, you
4 know, it's permissible to have automatic lighting in
5 the event of an emergency, but nowhere in the code is
6 it mandated and I think that's the issue here.

7 MR. NAIPO: Jan, do you have an additional
8 question or comment? Your hand is still raised.

9 MS. GOULD: No. So sorry.

10 MR. NAIPO: No, you're good, you're good.
11 All right. Any additional questions or comments?
12 Okay, with that, I ask that we please put the verbiage
13 change in proposal 0062 to a vote. It's regarding WAC
14 296-96-027, which is regarding private residential
15 elevators and regarding the light in car, the change
16 being if the normal car lighting power source fails,
17 it shall be permissible to automatically transfer to a
18 source of power capable of maintaining car lighting
19 for at least four hours. If you are for this change
20 to the WAC, I ask that you please raise your hand and
21 vote yea.

22 MS. ERIKSEN: Paoa.

23 MR. NAIPO: Oh, yes?

24 MS. ERIKSEN: You totally just read the
25 wording addition for the next one, not the one were

1 on, right, or am I off?

2 MR. NAIPO: We're proposal 0062, Light in
3 Car.

4 MS. ERIKSEN: My bad. I'm sorry.

5 MR. NAIPO: Okay. I'm sorry. Lyall, are
6 you asking a question or are we -- Okay. So, putting
7 this to a vote again for proposal 0062, if you are for
8 this change, I ask that you please raise your hand and
9 vote yea. If you are for this change, please raise
10 your hand and vote yea. Are you good, Melissa?

11 MS. ERIKSEN: Yeah.

12 MR. NAIPO: All right. Thank you. Thank
13 you for those who have voted. Please lower your
14 hands. Thank you again for your votes.

15 If you are in opposition of this change, I ask
16 that you please raise your hand and vote nay. If you
17 are in opposition of this change, I please ask that
18 you raise your hand and vote nay. If you are in
19 opposition to these changes to our WAC, I ask that you
20 please raise your hand and vote nay. Thank you.

21 For those who vote to wish to abstain, I ask
22 that you please raise your hand now. If our
23 abstaining, please raise your hand and vote now.
24 Thank you.

25 And with that, Melissa, will you please read the

1 vote tally for proposal 0062.

2 MS. ERIKSEN: Yes. There were 18 yeas, 2
3 nays, and 4 abstentions.

4 MR. NAIPO: Thank you. With that, moving on
5 to proposal 0063, again this is housed with WAC
6 296-96-027 regarding private residential elevators.
7 It's regarding the location of speed governor.
8 5.3.1.12.5 states where a speed governor is used it
9 shall be located where it is readily accessible from
10 outside the hoistway, they're wanting to add verbiage,
11 inside the car or on top of the car, and it cannot
12 be -- end of the new verbiage continuing on, and it
13 cannot be struck by any moving object in normal
14 operation or under conditions of over-travel and where
15 there is sufficient space for full movement of the
16 governor parts.

17 Rationale: Residential elevator speed governors
18 are not of the same size as found on a commercial
19 elevator. Some are as small as in 3 inch in diameter.
20 For instance, one manufacturer has the governor access
21 through the COP. Informational Note: Manufacturers
22 are looking into adding the governor for added safety,
23 not because it's required.

24 And with that, I will ask for questions for
25 clarification. Any statement of clarification needed

1 on this change? If there's no discussion to be had, I
2 ask that we please place -- Oh, Mr. Wohlschlager.

3 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
4 think the only item of discussion here is the fact the
5 requirement for residential governors to be accessible
6 from outside the hoistway is not something that any of
7 the manufacturers are able of achieving. That's a
8 requirement that's even greater than those for
9 commercial elevators which are allowed our governors
10 from inside the hoistway. So, it's my understanding
11 that even the ASME code might be addressing this
12 particular paragraph in the ASME and getting rid of
13 the requirement possibly, that it only be accessible
14 from outside. So, this is just allowing he governors
15 to be accessible from inside the car or on top of the
16 car and still be used.

17 MR. NAIPO: Thank you. Mr. Cleary.

18 MR. CLEARY: Scott Cleary. Yeah, you're
19 correct, and I think Kevin will help add to the
20 discussion, too. ASME is looking at getting rid of
21 the section that requires only residential elevators
22 OSGs to be accessed from outside. Most of them are
23 put into their encoders and it adds another level of
24 safeties when you got Type A safeties that only
25 actuate with slack cables or chains. This will also

1 add another level of safety because if it overspeeds
2 these will set. So, ASME is addressing this, and
3 hopefully Kevin can add a little bit more to that.

4 MR. NAIPO: Thank you. Mr. Brinkman.

5 MR. BRINKMAN: Thank you. Kevin Brinkman.
6 Yeah, I can confirm that the ASME private residence
7 elevator working group is looking at a proposal to
8 change this and eliminate the requirement to be
9 accessible from outside the hoistway. Obviously, its
10 not passed yet. It's not part of the existing public
11 review document, but it is something they're looking
12 at.

13 MR. NAIPO: Mr. Cleary, do you have another
14 comment or question? Okay. Thank you. Are there any
15 additional -- Listen here, man. If there are any
16 additional questions for clarification or comments for
17 clarification, please raise your hand, if you have
18 any. All right. Mr. Barnhart.

19 MR. BARNHART: No, I spoke too soon.

20 MR. NAIPO: No worries. Okay. So, with
21 that, we will be placing to vote proposal 0063, WAC
22 296-96-027, residential elevators regarding location
23 of speed governors and allowing it to be inside the
24 car or on top of the car. If you for that change --
25 Jan, did you have a question?

1 MS. GOULD: Jan Gould, voting.

2 MR. NAIPO: Okay. If you are voting for
3 that change, I ask that you please raise your hand and
4 vote yea. If you are for this change, I ask that you
5 please raise your hand and vote yea if you are for
6 this change of allowing residential elevators to have
7 their speed governor located inside the car or on top
8 of the car. All right. Thank you for those who
9 voted. Go ahead and please and lower your hands.
10 Thank you again for your votes. Mr. Cline, your hand
11 is still raised.

12 If you are in opposition of this change, I ask
13 that you please raise your hand and vote nay. If you
14 are in opposition of this change, I ask that you
15 please raise your hand and vote nay. If you are in
16 opposition of this, I ask that you please raise your
17 hand and vote nay. Thank you.

18 If you vote to abstain, I ask that you please
19 raise your hand and vote now. If you vote to abstain,
20 I ask that you please raise your hand and vote now.

21 All-righty. And with that, Melissa, will you
22 please read the vote tally for proposal 0063.

23 MS. ERIKSEN: There were 19 yeas, 1 nay, and
24 5 abstentions.

25 MR. NAIPO: Thank you. Moving on to

1 proposal 0064, again regarding WAC 296-96-027
 2 regarding residential elevators, Governor Ropes. This
 3 is regarding code reference 53 -- 5.3.1.12.8, The
 4 governor ropes, where used, shall be iron, steel -- I
 5 don't know how to pronounce that. Can someone please
 6 help me out with that one? m-o-n-e-l metal or
 7 phosphor bronze not less than 6 millimeters (.25 in)
 8 in diameter, and adding verbiage, and belts or other
 9 approved means, ending the adding of this verbiage,
 10 and it still reads on, Tiller rope construction shall
 11 not be used.

12 Rationale: Residential elevators are limited in
 13 speed, 30 feet per minute to 40 feet per minute, and
 14 traveling at such low speeds makes it possible to use
 15 other than wire rope like belts to operate encoders.
 16 Some of the encoders that are being supplied have the
 17 capabilities of functioning as an encoder and
 18 overspeed governor. It is for this reason
 19 consideration of allowing belts.

20 So, with that, this change, it sounds like they
 21 just wanted the ability for residential elevators on
 22 the governor ropes to be of a belt of other approved
 23 means. So, now I will open it up for any questions
 24 for clarification. Mr. Barnhart.

25 MR. BARNHART: Basically, the way the text

1 is written is strange because it shall be iron and
2 belts, which doesn't make sense. It should be or
3 belts. But then the question I have is: If you say
4 or belts or other approved means, that basically means
5 you can use anything you want, right, leather belt,
6 cotton belt, aramid fiber belt, what kind of belt.
7 Thank you.

8 MR. NAIPO: Mr. Lathe.

9 MR. LATHE: Dylan Late. Yes, I have a
10 problem with the words belts because I don't know if
11 they're talking about non-circular elastomer coated
12 steel suspension members or what type of belts they're
13 referring to, but I think it's way too vague to be put
14 in a WAC code like this. Thank you.

15 MR. NAIPO: Mr. Friesen.

16 MR. FRIESEN: Wade Friesen, Vertical
17 Options. Having some familiarity with this particular
18 drive system that they're talking about, it may just
19 be as simple as adding cog belts because that is the
20 type of belt that's used, much like a timing belt on a
21 car, it's got teeth on it, and that would simplify
22 things and make it clear as to what that belt is and
23 how it needs to be designed. Thank you.

24 MR. NAIPO: Mr. Friesen, if I can ask for
25 clarification, was that cog, c-o-g, belt, cog belt?

1 MR. FRIESEN: That is correct.

2 MR. NAIPO: Thank you, sir. Jan.

3 MS. GOULD: Jan Gould. Yeah, 5.3.1.13.1
4 lines out several types of suspension means and none
5 of them are belted, but if the committee was to
6 consider belted, it should be added that it must be
7 FT-1 rated.

8 MR. NAIPO: Candace.

9 MS. LAU: Yeah, Candace Lau. This
10 particular code is talking about residential governor
11 ropes and I've just -- I've never even seen a
12 commercial governor rope that's a belt of any type.
13 So, I don't know if the code is changing. I'm not
14 positive about a governor rope that's a belt.

15 MR. NAIPO: Jan, did you have an additional
16 question or statement? Sergey.

17 MR. DOLGIKH: Sergey Dolgikh, Elevator
18 Inspector. Isn't FT-1 rating required only on
19 commercial installations and specific to traction
20 belts rather than a governor rope? Just a question.
21 I just want some clarity on that. Thank you.

22 MR. NAIPO: Mr. Cleary.

23 MR. CLEARY: Scott Cleary. To those that
24 aren't familiar with how the residentials are set up,
25 this belt runs a little three inch encoder. That is

1 the one that gives the position for the elevator and
 2 its embedded that if it overspeeds it kicks out little
 3 arms and then that actuates the Type A safeties. So,
 4 it's just another level. It's not required. But it's
 5 just another level of safety in case you have an
 6 output shaft. You remember, these are cantilevered
 7 pieces of equipment. If you break an output shaft and
 8 don't slacken your cables or chains in overspeeds then
 9 the Type A safeties aren't going to set. This just
 10 gives another level. It's common practice for these
 11 OSGs and for these encoders, that they've been in
 12 practice now for years. They are cogged or tooth
 13 belts. They are three eighths inch wide and they meet
 14 all the standards that meet the requirements for 17.1,
 15 5.3 compliance.

16 MR. NAIPO: Thank you. Jan.

17 MS. GOULD: Jan Gould. A question for you,
 18 Scott. Are those FT-1 rated? Because you don't want
 19 it in the hoistway if it's not fire rated. Just like
 20 our traveling cables are FT-1 rated. That's why Otis
 21 used to have sprinklers in the hoistways when they
 22 weren't FT-1 rated.

23 MR. CLEARY: I will check and get back to
 24 you on that. That's a good question.

25 MS. GOULD: Jan Gould. It'll be right on

1 the belt if it's FT-1 rated.

2 MR. NAIPO: Mr. Brinkman.

3 MR. BRINKMAN: Thank you. Kevin Brinkman.
4 Just a couple comments in response to some of the
5 things I've heard. I'm not aware of any changes
6 currently in A17.1 that are being considered for
7 commercial elevator governor ropes to be made of
8 belts. I do concur this is a -- you know, that
9 residential elevators are certainly a different
10 situation. So, I haven't really worked with these
11 systems they're talking about, but, again, it's a
12 different situation.

13 So, the other comment about FT-1, yes, that's a
14 requirement for belted suspension means on commercial
15 elevators, but most residential elevators are not
16 installed in a fire rated hoistway. So, whether or
17 not the belt -- the belt for the governor is FT-1
18 rated is probably not a factor, in my opinion.

19 MR. NAIPO: Mr. Leopard.

20 MR. LEOPARD: Duane Leopard, city of
21 Spokane. I have another question for Scott. Where
22 are these governors mounted at? I haven't -- I don't
23 know if I've ever seen one as of late. Of course, I
24 don't do a lot of home elevator inspections. But do
25 they mount at the top or on the car at the bottom,

1 what?

2 MR. CLEARY: Scott Cleary. They're behind
3 the COP. If you swing open the COP, they're right --
4 accessible right there, and they're a part -- like I
5 said, they're imbedded into the encoder that runs on
6 that belt. These run at such low speeds that friction
7 isn't a problem with the belts. They run from 30 to
8 40 feet per minute. And it's just another level of
9 safety. None of this -- It's not required to have an
10 OSG, but I heard manufacturers think it's really a
11 good idea and I do, too, another level of safety for
12 overspeeds or for setting safeties if you have a
13 catastrophic motor failure, which has happened. So,
14 in other parts of the country there's been one where
15 an output shaft had a flaw in it, it snapped, and the
16 Type A safeties didn't set, and so the manufacturers
17 went in there, but the manufacturer said let's put
18 another level of safety in. So, that's why they did
19 that.

20 MR. NAIPO: Thank you. Mr. Wilson.

21 MR. WILSON: Yeah, Mike Wilson here. I
22 believe that the intent on what's being asked here is
23 that we do (audio distortion) on the residential side
24 that the governor rope be made of iron or steel. It's
25 just to allow another process to be used. And by

1 adding in the verbiage of other approved means, I
 2 would suspect that that would have to be all ran
 3 through the Department. If that's not true, I don't
 4 know, maybe Candace or Gerald could speak on that
 5 part. Thanks.

6 MR. NAIPO: Candace or Gerald, do you have
 7 a comment to reply to Mr. Wilson's. Mr. Quiett, if
 8 you don't mind, I'm going to take Candace's comment
 9 real quick. Hopefully it's in reply to Mr. Wilson's.
 10 Candace.

11 MS. LAU: Yeah, Candace Lau. Pretty much
 12 anything new you're going to have to run through the
 13 Department for approval, but the current -- I
 14 understand the intent of this, but my issue with this
 15 is that if you had a -- And I know what you guys are
 16 saying now. You guys are talking about a different
 17 type of governor than what we're -- elevator people
 18 are used to seeing, so... But if -- if -- if this
 19 were put in place the way it's written, I don't want
 20 it to -- you know, if you have a traditional governor
 21 rope or a governor and a governor rope for a
 22 residential setting, I don't want it to be -- this to
 23 imply that this belts are okay. So, maybe some
 24 wording on here needs to be changed a little bit and
 25 exactly what it is that you're talking about, what

1 type, what governor ropes are you referring to, what
2 type of governors are you referring to, because the
3 traditional governors that elevator people are used to
4 looking at is -- we paint a picture of something
5 completely different than you just described.

6 MR. NAIPO: Thank you. Mr. Quiett.

7 MR. QUIETT: Jonathan Quiett. Yeah, just by
8 definition of what's going -- what is -- the way it's
9 presented here, a belt is not a rope. So, we're kind
10 of -- I mean there needs to be other wording, not just
11 talking about a different kind of rope being a belt.
12 So, we've got two different things going on there.

13 MR. NAIPO: Thank you. Mr. Wilson.

14 MR. WILSON: Yeah, Mike Wilson here. So,
15 what I'm -- I guess what we're -- I guess it is
16 confusing between what the governors are. When we're
17 talking about a residential elevator, the governor is
18 imbedded with the encoder, and on a commercial
19 elevator you can visualize that an encoder is
20 basically about three inches in diameter. So, all
21 this is all part of one piece, one component. And I'm
22 speaking of one particular manufacturer, this is how
23 their's is designed: So, their encoder is driven off
24 of a belt, which would be the same as their governor
25 being driven from that same belt, and it somehow is

1 trying to get this worded correctly to allow something
2 of that nature to happen. And, Scott, you may want to
3 speak in on this. You've probably got more
4 information on it than I have. Thanks.

5 MR. NAIPO: Mr. Cleary.

6 MR. CLEARY: Scott Cleary. Yeah, that's
7 the whole thing is most traditional centrifugal
8 coating or Hollister Whitney's know they've got a bale
9 that sets down on the wire. This is just a belt that
10 is attached at the top of the rails and at the bottom
11 that the encoder runs on. So, it's just an entirely
12 different design than the normal ones that are on
13 commercial elevators. It's not meant to meet
14 commercial requirements. And, so, it really is a
15 quite nice little set up. It sets at 75 feet per
16 minute. And so it's just another level. Like I said,
17 it already runs the encoder that talks and you can
18 program it and that's what sets floors and everything
19 else and speed. So, it's different than what
20 everybody is, and I agree that we need to do some
21 wordsmithing on this one here, but I think it enhances
22 safety and right now with Type A safeties you don't
23 have to have a governor. Our manufacturers are
24 putting them in there for another level of safety. To
25 me there's no downside to this whatsoever. Now, I

1 agree we need to -- New technologies, we need to come
2 up with some better verbiage and make sure the
3 nomenclature is correct. But just remember, it's an
4 extra level that we don't have to do. So, limiting it
5 I think would be short-sighted.

6 MR. NAIPO: Thank you. Mr. Friesen.

7 MR. FRIESEN: Wade Friesen, Vertical
8 Options. Just to piggyback off of what Scott was
9 saying, I don't think in a lot of ways we're even
10 talking about a governor rope. What we're talking
11 about is a position encoder tape, if you will, that
12 runs the position encoder, and the encoder just so
13 happens to also have an overspeed governor feature
14 built into it. So, I'm not even sure this is even
15 relevant. Thank you.

16 MR. NAIPO: With that, I'll open it up for
17 any other additional comments or questions for
18 clarification before we move to vote on this.
19 Candace.

20 MS. LAU: Yeah, Candace Lau. I tend to
21 agree with Wade on this. This is -- I think that if
22 we're going to take vote we need to know exactly what
23 we're voting for because I don't think the intent here
24 is to have a traditional governor be belted. And what
25 they're describing is not a traditional governor and

1 what they're describing is more of what Wade just
 2 said. I think -- I don't know how we're going to vote
 3 on this, but I think that we're a little bit -- It's
 4 difficult to vote yes on something like this when the
 5 wording is not right. So, I just -- I think we need
 6 to be really clear what we're voting on. And to just
 7 vote yes and just have somebody else take over and try
 8 to figure it out later, I just don't think it's the
 9 right thing either.

10 MR. NAIPO: Okay, I'm going to take liberty
 11 with this. I understand your concern for this, but
 12 that is -- again, that's not the working of the TAC.
 13 Again, we're trying to look at what it is -- In the
 14 minutia of what that says, there's no long
 15 conversation as far as what needs to addressed. That
 16 is what will be brought to the ESAC is the ideas and
 17 the like. Now, granted, one of the things
 18 unfortunately, and this is no knock, Mary Jo, please,
 19 it's not a knock on you, but unfortunately we're not
 20 going to get our transcript until probably the week
 21 prior to the ESAC meeting. That is going to be our
 22 reference to help go back and research the
 23 conversation that is had on those items that have
 24 passed and so that we can look at the conversation
 25 that is had, and the questions that have been posed,

1 and the concerns of these people, and that is what the
2 ESAC is going to address. It is, yes, I will try to
3 give what notes me and Melissa have both taken because
4 the ESAC is going to get this hopefully as soon as
5 possible with our notes of concerns of the
6 conversations that have been had. You have every
7 right to vote nay if you don't feel comfortable with
8 the way it stands and the conversations that's been
9 had, and trusting that the people who represent you on
10 the ESAC will be able to put this forth and make this
11 editing to where you believe it should be. If you
12 don't feel that, that is why we vote nay. If you feel
13 like you want to vote yea because you understand the
14 rationale, you understand, hey, this does need to
15 change, I can hear all of the different things that
16 are being brought up, those are what going to be
17 addressed at the next level. I'm never asking you to
18 sit here and blindly vote yea on something that you --
19 I can sort of see the thing from this, no, you need to
20 trust that the process that the ESAC is going to do is
21 going to be able to cover these concerns that you
22 have, and, if you don't feel that way because there
23 hasn't been enough clarification or questions raised
24 to address these concerns, then please vote nay. That
25 is what we're voting on. We're voting on the intent

1 for this, the verbiage, as well as the conversations
 2 that are being had because we're not going to spend
 3 time sitting here trying to edit this to get it to a
 4 point to where you feel good and it'll pass. That is
 5 not the -- that is not the work that we are doing here
 6 at the TAC. I apologize, but we just do not have time
 7 for that.

8 And with that, I will go to Mr. Cleary.

9 MR. CLEARY: Scott Cleary. I'm extremely
 10 passionate about this one because it adds that extra
 11 level of safety that now does not exist. How we word
 12 it, wordsmith it, and how we tweak it a little bit,
 13 that's -- that's what we need to do. But a governor
 14 is a governor. This is an overspeed centrifugal that
 15 trips, you know, our safeties. So, I want people to
 16 keep an open mind. I agree that we need to go in and
 17 put the right nomenclature and make sure it's really
 18 understandable. But we already approved or you guys
 19 already approved 0063, which says it can be behind the
 20 controller, and, with any other type of means to
 21 actuate it, it can't be done with the traditional
 22 quarter inch wire rope. And, so, this is new
 23 technology that adds a very good level of safety, that
 24 it doesn't have, nor is it required by code to have.
 25 I just want to make sure that we can have a good

1 discussion and at ESAC be able to present what this
 2 looks like, and how it works, and the extra level. I
 3 think -- You know, we can work out the details, but I
 4 think we really need to understand this is an extra
 5 level of safety and I never want to walk away from
 6 that. Thank you.

7 MR. NAIPO: Thank you. And again that
 8 process that I spoke to earlier, that is what the
 9 process will be for everything that has been voted
 10 yea, even those things that you were really not sure
 11 on, these notes and conversation that me and Melissa
 12 both have taken, as well as what will be reviewed
 13 against the actual transcript when we get that, that
 14 will be reviewed at the ESAC level so people
 15 understand exactly the context of the conversations
 16 that are had regarding these different changes.

17 So, with that, if there are no additional
 18 questions, I ask that we please put this to vote on
 19 0064. Are there any additional questions or
 20 clarifications needed? All-righty. And with that, I
 21 ask that we please vote on 0064 regarding the concept
 22 and rationale of adding belts or other approved means,
 23 and some severe editing at the ESAC level, if you are
 24 for that change, and understanding that this will be
 25 reworded and redrafted again, I ask that you please

1 vote yea for 0064. If you are for that change and the
2 conversation that will need to be had at the ESAC
3 level regarding what has been spoken about here and
4 concerns, I ask that you please vote yea now. Thank
5 you for that, everyone. Thank you.

6 If you are in opposition of these changes, I ask
7 that you please raise your hand and vote nay. Mr.
8 McKenzie, you still have you hand up. If you are in
9 opposition of this change, I ask that you please raise
10 your hand and vote nay. If you are in opposition of
11 this verbiage, please raise your hand and vote nay.
12 Thank you.

13 If you wish to vote and abstain, I ask that you
14 please raise your hand and vote now. If you are
15 voting to abstain, I ask that you please raise your
16 hand and vote now. Thank you.

17 Melissa, will you please read the vote tally for
18 proposal 0064.

19 MS. ERIKSEN: Yes. There were 17 yeas, 1
20 nay, and 6 abstentions.

21 MR. NAIPO: Thank you. All right. Moving
22 on to proposal 0065, again this is regarding
23 residential elevators. This is regarding Driving
24 Machines: General Requirements.

25 (j) Car top mounted machine or controller,

1 adding.

2 (1) Machines and controller shall not be located
3 on the car when the elevator is located within an
4 enclosure.

5 Driving machines and controllers shall be
6 located in a room or space, not in or on the car.
7 This creates a hazardous work space for elevator
8 mechanics and requires confined space protocol.

9 I'll open this up for questions of
10 clarification. Any comments for clarification on
11 this? Carl, did you have a question?

12 MR. CARY: No. Sorry.

13 MR. NAIPO: You're good. Mr. Friesen.

14 MR. FRIESEN: Wade Friesen, Vertical
15 Options. This just seems to be just an extension of
16 what we already covered with having the controller
17 located on the car, just adding the machine section.
18 I don't see any other change to this. This seems
19 pretty cut and dry. Thank you.

20 MR. NAIPO: If that is the feeling of the
21 TAC that this is an extension of what was already
22 added, I ask that you please raise your hand and vote
23 yea, if you feel that this is an extension.

24 MR. WOHLISCHLAGER: Are we voting to --
25 whether it's the same or are we voting to say -- just

1 approve this change. I guess I'm confused.

2 MR. NAIPO: I'm sorry, what we're doing is
3 we're voting to -- if you feel like this change has
4 already been addressed in our previous -- the previous
5 proposal that's already been done, is that correct,
6 Mr. Friesen, is that what you were saying is that this
7 has been addressed already and all we're doing is
8 adding the word machine to it?

9 MR. FRIESEN: I am saying that, yes. I'm
10 not necessarily saying that we need to vote on that.
11 That was my note, yes. Thank you.

12 MR. NAIPO: No, I appreciate that.

13 MR. NAIPO: Okay. So, if you could, just
14 raise your hand if you feel like, yes, this is the
15 same as what was produced before, I ask that you
16 please raise your hand yes. And, then, what we will
17 do is if we have a majority vote on, yes, you guys
18 feel this is the same, we will pass a vote on the
19 added verbiage that is within this. Okay, that is a
20 majority vote. Thank you very much for that.

21 So, with that, I ask that we take a vote on
22 proposal 0065 in conjunction with a previous proposal
23 already done. But this, from the comment that was
24 made, looks like it adds the word machines and
25 controllers, instead of just controllers. Mr.

1 Brinkman, yes?

2 MR. BRINKMAN: Kevin Brinkman. I believe
3 the other proposal was not passed. So, it's not
4 adding something to something that was passed. It's e
5 similar to something that was not passed, I believe.

6 MR. NAIPO: Let's see if we can't find that.
7 Was it this one, 0061, machine and/or controller
8 mounted on the car?

9 UNIDENTIFIED SPEAKER: That's the one.

10 UNIDENTIFIED SPEAKER: Yes, that is the one.

11 MR. NAIPO: And that failed? Okay.

12 UNIDENTIFIED SPEAKER: Yeah, it appears to
13 be virtually identical.

14 MR. NAIPO: All right. With that, I ask if
15 you are okay with passing the vote that was had before
16 on to this, as well, if you are okay passing that fail
17 vote from before on to this, I ask that you please
18 raise your hand and vote yea for that. Again, we are
19 voting on carrying over the vote from a previous
20 proposal to this one as the verbiage seems to be
21 roughly the exact same. All right. And with that
22 majority vote, we will move on from this one, as it
23 has failed previously, and it pretty much was
24 regarding the same exact verbiage. Thank you very
25 much for that. And thank you very much for that

1 finding, Mr. Friesen. Thank you.

2 So, now on to proposal 0066. Oh, sorry, it
3 looks like there's a couple questions. Mr. Quiett.
4 Oh, no? I'm sorry, I saw your hand raised. Mr.
5 Cleary.

6 MR. CLEARY: Scott Cleary. Just to let
7 everybody know that there's discussion now, and,
8 Kevin, maybe you can help me out with a little bit of
9 this, but moving hoist-less-way -- hoistless elevators
10 out of 17.1 and putting them into 18.1 because they're
11 constant pressure and basically they're a VPL with a
12 structural cap in the door. So, that's being worked
13 on as we speak. Kevin, you got anything else on that?
14 That was the last one about -- I just want to make it
15 clear, there is a push to get them out of 17.1.

16 MR. NAIPO: And I just want to clarify, is
17 this regarding proposal 0066?

18 MR. CLEARY: Yes.

19 MR. NAIPO: Okay. Thank you. Mr. Brinkman,
20 did you have --

21 MR. BRINKMAN: Yeah. This is Kevin
22 Brinkman. I'll have to admit I was not aware of that,
23 but I will try to find out more, if I can.

24 MR. NAIPO: So, with that, here's the
25 proposal for 0066. This will be housed in again WAC

1 296-96-027 regarding residential elevators. It's
2 regarding Disconnecting Means (5.3.1.19.5), adding
3 verbiage for hoistwayless elevators, and the verbiage
4 for 5.3.1.19.5 currently reads, "Where the controller
5 is located on the car, the disconnecting means shall
6 be located adjacent to the controller. Auxiliary
7 disconnect means shall be provided at the main landing
8 where the main power supply disconnecting means is
9 mounted adjacent to the controller on the car."

10 Rationale: This clarifies and allows for
11 hoistwayless elevators.

12 Any questions for clarification? Mr. Wilson.

13 MR. WILSON: Yeah, Mike Wilson here. This
14 is regarding -- I don't know if people have ever heard
15 of a telecab. I know it's kind of a quaint term from
16 Savaria. With these elevators, they have no hoistway.
17 They actually have the floor on top of the -- The
18 second floor above is you can walk across it. That
19 whole floor plate will lift up when the elevator
20 passes up to that floor, and that's what this is
21 addressing, and it probably should have been better
22 clarified for that. And this is going along with what
23 Scott had mentioned about these being possibly being
24 moved into 18.1 because these types of lifts are
25 constant pressure only. Thanks.

1 MR. NAIPO: Thank you. Mr. Friesen.

2 MR. FRIESEN: Wade Friesen, Vertical
3 Options. I am really for this adding a disconnect at
4 the main landing. I think for safety reasons that's a
5 must. If for some reason your car was to get stuck
6 between floors, quote/unquote, you know, in the middle
7 of its travel and you needed to ladder up to the car
8 to work on it and you were unable to shut that thing
9 off, it does pose a hazard for personnel trying to get
10 to it. I think it's as simple and as cut and dry as
11 that, and I think this needs to go through. Thank
12 you.

13 MR. NAIPO: Thank you. Mr. Wilson, your
14 hand is still up. Do you have an additional question
15 or comment you would like to make? Thank you. Mr.
16 Leopard.

17 MR. LEOPARD: Duane Leopard, city of
18 Spokane. I just wanted to reiterate that this is in
19 discussion. I'm on the RAC committee. It is being
20 discussed to move it into A18.1.

21 MR. NAIPO: Thank you for that
22 clarification. Mr. Brinkman.

23 MR. BRINKMAN: This is Kevin Brinkman. Just
24 a question. Was the intent that this is all new
25 language because only the title is underlined. I

1 don't -- I'm assuming because of the xx it's new
2 language; is that correct?

3 MR. NAIPO: Yes, sir. This would be a brand
4 new part of 2700 and the residential elevators
5 underneath it. Thank you. Sergey.

6 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
7 Inspector, L & I. I want to test this, the importance
8 of this particular addition. I think it was the first
9 or second one in the state that I was physically
10 inspecting on installation and observing how this
11 elevator functions. I think that extra feature of
12 safety should be added on there. Thank you.

13 MR. NAIPO: Mr. Wohlschlager.

14 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
15 would just recommend a friendly amendment regarding
16 better defining what main landing is. I can see that
17 being something open to interpretation with
18 inspectors.

19 MR. NAIPO: Candace.

20 MS. LAU: Yeah, Candace Lau. So, I guess I
21 have a question for those that keep saying that it's
22 going to be moved to a different code. So, is the
23 objective here -- Because this exact code is in the
24 2019 5.3, just like what it says in 5.3(b) -- I don't
25 see any difference between what's written in

1 5.3.1.19.5 in the 2019 edition and what is written
2 here. So, is it because there's a move to move this
3 code 5.3.1.19.5 out of the A17.1 and into A18.1, is
4 that why we want to ad it in the WAC because currently
5 it's in A17.1.

6 MR. NAIPO: Mr. Cleary.

7 MR. CLEARY: Scott Cleary. I just wanted to
8 bring that up. I think we need to address it. I
9 think -- I like Lyall's suggestion that we make sure
10 we define what the name is because we don't want it to
11 be the state of Maine, but the bottom line here is
12 that I think this is a -- it makes sense. I just
13 wanted to give a little bit of heads-up that, you
14 know, we'll have to address this maybe in three years
15 in a different code book. So, that's it. No, I agree
16 with this. I just brought it up. I probably
17 shouldn't have.

18 MR. NAIPO: Thank you. Mr. Wilson.

19 MR. WILSON: Yeah, Mike Wilson here. I
20 guess it was to ensure -- I know it's in 17.1, but
21 this is to bring it into WAC to put it directly in
22 proportion to regarding a hoistwayless elevator.
23 That's all. Thank you.

24 MR. NAIPO: Thank you. Lyall, your hand is
25 still raised or did you have an additional comment or

1 question? Okay. Thank you. Mr. Leopard.

2 MR. LEOPARD: Duane Leopard, City of
3 Spokane. Just to clarify when we're talking about
4 hoistwayless elevator, these are kind of like a
5 chairlift with a full cab and that's about it. It
6 goes from one landing to the next and then back down
7 to the bottom landing. They just have a full cab on
8 them. To me, that's about the only difference. A
9 little safer, more convenient, but I'm not sure it's
10 really allowable to call them a residential elevator.
11 I think it's misnaming them, that's my opinion. But
12 it's the type of equipment. It's not the codes that's
13 being discussed changing or moving, it's the type of
14 equipment, but where they'll be placed in the codes.
15 I do agree with this shut off switch, but just I'm
16 trying to let everybody know -- reiterate what
17 somebody else said that A17.1 committees are looking
18 at moving this equipment, the type, to A18.1 because
19 it is more or less accessibility equipment. I hope
20 that clears things up. Thank you.

21 MR. NAIPO: Sergey.

22 MR. DOLGIKH: Yeah, Sergey Dolgikh,
23 Elevator Inspector. I can see how the definition
24 could be argued one way or another. Just because
25 something doesn't have a hoistway, it doesn't

1 necessarily put it in a conjunction with platform -- a
 2 glorified platform lift, same way as the platform lift
 3 with fully enclosed hoistways don't become an
 4 elevator. So, my understanding of this -- not my
 5 understanding, but my experience with this and
 6 observance of the test and actually seeing it in
 7 different modalities is that even though it doesn't
 8 have a hoistway it has a lot of possibilities and
 9 potentials for pinch points, and it's a moving portion
 10 of the floors that goes up with this car top. There
 11 is a lot of micro switches and things like that. So,
 12 to prevent a possibility of a failure, I think there
 13 should be a redundancy in how the power can be removed
 14 from -- from -- our disconnecting means should be
 15 addressed, very focused on that specific for that
 16 specific type of residential elevator, and that's why
 17 I emphasize it's the type residential elevator because
 18 it has a cab, it has everything, every features other
 19 than not having convention rails and hoistway, but
 20 it's a counter-lever production. So, either way you
 21 want to point it, I think this consideration should be
 22 isolated on its own right. Thank you.

23 MR. NAIPO: Any other additional comments or
 24 questions before we put this to a vote? Any other
 25 questions? All right. With that, we will be casting

1 a vote on proposal 0066, adding hoistwayless elevators
2 to the code reference of 5.3.1.19.5, Hoistwayless
3 Elevators, "Where the controller is located on the
4 car, the disconnecting means shall be located adjacent
5 to the controller."

6 If you are for that verbiage change, I ask that
7 please vote yea. If you are for this change, I ask
8 that you please vote yea now. Thank you for that.
9 Thank you for your votes. Go ahead and lower your
10 hands. Thank you again.

11 If you are in opposition of these changes or of
12 this change in the WAC, I ask that you please raise
13 your hand and vote nay. If you've already voted yea,
14 I ask that you please lower your hand. Thank you. If
15 you are in opposition of this, I ask that you please
16 raise your hand and vote nay. Thank you. If you can,
17 please lower your hand if you voted nay. Mr. Friesen,
18 your hand is still raised.

19 If you are voting to abstain, I ask that you
20 please raise your hand and vote to abstain. If you
21 are wanting to abstain, I ask that you please raise
22 your hand and vote to abstain now. All right. Thank
23 you very much.

24 Melissa, will you please read the vote tally for
25 proposal 0066.

1 MS. ERIKSEN: There are 21 yeas, 1 nay, and
2 3 abstentions.

3 MR. NAIPO: Thank you.

4 MR. FRIESEN: Wade Friesen. Just to
5 clarify, I was voting yea on that one, if I didn't get
6 my hand down. Sorry.

7 MR. NAIPO: Thank you. Thank you for that,
8 Mr. Friesen. All right. It looks like there is just
9 one more and then we will be out of this residential
10 section. Yes.

11 MS. ERIKSEN: Hold on. Sorry, I must have
12 muted too quickly. That changes the vote. So, there
13 were 21 yeas, 0 nays, and 3 abstentions.

14 MR. NAIPO: Thank you. All-righty. And
15 with that, we're moving on to 0067. This is, again,
16 this is the last require or last code reference
17 regarding WAC 296-96-027 regarding residential
18 elevators. This is regarding Two-Way Communication
19 Means, code reference (5.3.1.20.1). They are asking
20 to strike in that code, A two-way communication means
21 permanently installed in the car shall be provided to
22 summon personnel who can take the appropriate action
23 24 hours each day. The two-way communications means
24 shall not be transmitted to an automated answering
25 service. But adding, A telephone connected car to

1 either a cellular network, VOIP, or central telephone
 2 exchange shall be installed in the car. The code
 3 currently reads, If the normal power source for the
 4 communication means fail, the communications means
 5 shall automatically transfer to a source of, striking
 6 standby or emergency, keeping power capable of
 7 providing service for at least four hours.

8 Rationale: The state or city inspects
 9 residential conveyances once, at time of acceptance.
 10 During follow-up maintenance visits, we often find
 11 that the phones no longer work because the homeowner
 12 doesn't want to pay for a landline phone. This code
 13 requires that the phone be monitored 24 hours a day by
 14 someone other than an answering machine/voicemail, and
 15 is just short of requiring an ADA phone. There will
 16 be a lot of pushback from general contractors and
 17 homeowners to require them to have an answering
 18 service to monitor the elevator phone. We want people
 19 to be safe and to believe their elevator is safe, by
 20 giving options on how the phone needs to be connected,
 21 will result in less phones be rendered inoperative.
 22 As for the phone power, these elevators are all
 23 provided with a UPS for battery backup control power.
 24 Once the house power is lost to the main disconnect,
 25 the UPS provides power for rescue.

1 And with that, I'll open it up for questions of
2 clarification. Any questions? Any statements for
3 clarification, raise your hand. Mr. Friesen.

4 MR. FRIESEN: Wade Friesen, Vertical
5 Options. I like what this -- what the intent of this
6 code is. It sounds like the intent is to give some
7 leeway in other more modern methods of phone
8 connection. I think the troublesome part that I'm
9 having with this is that I'm not sure the industry has
10 caught up to this. When dealing particularly with
11 residential elevator manufacturers, I'm not aware of
12 any of these guys putting forth a phone that is ran
13 off of UPS power or anything else that would be VOIP.
14 So, you know, if a customer is using a VOIP phone,
15 it's their VOIP system that would have to have a four
16 hour battery backup on it. How is the Department
17 going to enforce that because that would be on their
18 computer, or their router, or whatever. So, I'm not
19 sure how to implement this. I think it's a great
20 idea. I'm just not sure that we have any phones
21 currently, unless it's going to be clearly defined and
22 is a cellular phone running on a battery backup
23 system, how this is accomplished.

24 MR. NAIPO: Thank you. Mr. Madison.

25 MR. MADISON: Jon Madison, Elevator

1 Mechanic. Touching off of what Wade just said, I do
2 like the what, and the how is going to be up to the
3 committees going forward. That's all.

4 MR. NAIPO: Thank you. Mr. Brinkman.

5 MR. BRINKMAN: Kevin Brinkman. Just a
6 couple comments. One, the ASME committee did change
7 the wording either in '16 or '19 to what was crossed
8 out. That was -- The old wording just said it had to
9 be connected to a central telephone exchange, would
10 apply only to a hard line. So, they did change it
11 with the intent of allowing cellular, or VOIP, or
12 other things. So, I'm fine with that part of the
13 change. My concern is they got rid of the part about
14 it being permanently installed and it gets rid of the
15 part about having it go to a service. But I know
16 that's a concern, but it was there for safety reasons.
17 And, then, finally, crossing out standby emergency,
18 I'm not sure of the value of that. If it's not -- I
19 mean in A17 it defines standby emergency power, and
20 whether it's a UPS, or a battery, or whatever it is,
21 it would meet one of those definitions. So, I don't
22 see the need to cross that out. Thank you.

23 MR. NAIPO: Jan.

24 MS. GOULD: Jan Gould. Just a comment.
25 There was no change between the '16 and the '19.

1 MR. NAIPO: Thank you. Candace.

2 MS. LAU: Yeah, Candace Lau. I agree that
3 the intent here is good because it allows homeowners a
4 little bit more leeway. Perhaps instead of saying
5 that the communication means shall be automatically
6 transferred, it could say something like the
7 communication system because if we're talking about a
8 network voice over IP and all that stuff, voice over
9 IP especially, when people call me and ask me I always
10 tell them they need to have back-up on that, and most
11 of the time we're talking about commercial jobs at
12 this point. But there's really no requirement in
13 A17.1. The only thing I have to hang my hat on is
14 that, hey, the code says the phone has to be -- has to
15 work, and, so, if you're on voice over IP and you
16 don't have battery back-up, when the power goes out
17 the phone doesn't work. It's not -- Even though the
18 phone can be backed up, the voice over IP, if it's not
19 backed up, it's not going to work. So, I struggle
20 with that myself answering these questions and telling
21 people they need it, they need the back up for the
22 voice over IP, but I think I -- I can extrapolate from
23 what the code what the intention of the code is, and
24 that's what I tell people, but there's really nothing
25 in the code with those exact words. And so if we're

1 going to put it in here, maybe the ESAC can come up
2 with a different verbiage for communication systems
3 rather than just the communication means.

4 MR. NAIPO: Thank you. Mr. Wohlschlager.

5 MR. WOHLSCHLAGER: Lyall Wohlschlager. Can
6 somebody clarify if they believe that this particular
7 proposal is going to allow cell phones. I can't even
8 tell if this is supposed to be permanently installed
9 or temporarily installed. So, I'm wondering if we're
10 trying to allow the use of cell phones in a
11 residential elevator under this proposal.

12 MR. NAIPO: Mr. Friesen.

13 MR. FRIESEN: Wade Friesen, Vertical
14 Options. I'll leave this to somebody else to answer
15 for sure because I'm not sure who wrote this, but I
16 would suspect that they're not necessarily talking
17 about just allowing a cell phone in the elevator, but
18 rather a cellular gateway that the phone is connected
19 to, so more of a hard line type set-up. I just wanted
20 to get a word of caution out with this. I think this
21 is great, I really do. I'm just -- If we decide that
22 this needs to move forward now and say, okay, in the
23 name of safety we need to approve this, and get it in,
24 and it needs to be on a four hour back-up power
25 supply, I'm just concerned that this is going to get

1 written into code and then we're not going to have any
2 equipment available to us from the manufacturers or
3 any other sources to meet the code, and that's my
4 concern. I -- I just feel like this needs a lot more
5 discussion before we implement it. Thank you.

6 MR. NAIPO: Lyall, do you have an additional
7 question? Your hand is still raised. Thank you. I
8 feel like a little bit of a procedure of how this
9 works from here on out. So, we've talked about, hey,
10 you know, we're putting trust into the ESAC to be able
11 to review not only our comments, but what was actually
12 written, transcribed, and be able to take those needs
13 within the context that those conversations were had
14 and create new verbiage on these things that have
15 passed and that you guys feel need new verbiage or
16 tweaked a little bit.

17 What's going to happen after that is that will
18 get passed to Gerald. Gerald will then go and review
19 those, and, you know, it's from the understanding
20 that, you know, hey, he's part of this TAC committee
21 here, listened to the conversations, and he knows what
22 the concerns are of your stakeholders. He's going to
23 take that into, hey, do we push this forward and adopt
24 these changes.

25 At some point public comment is going to be

1 given to those people who want to make public comment
 2 on these changes. You will receive -- If you are part
 3 of our e-mail system, you will receive, hey, public
 4 comment is being opened, here's the document that
 5 shows all of the changes, and I know it's going to be
 6 additional work, but that is the time that you're
 7 going to be able to look at the things that have been
 8 submitted that were edited by the ESAC. I'm not
 9 saying that you won't have other opportunities to work
 10 with your stakeholder chairperson and they'll be able
 11 to possibly share those things with you, I don't know,
 12 but that's at the point that you will see, hey, this
 13 is what the program then has decided to put forth.
 14 That's the time that you are going to be able to
 15 actually review that and say, hey, does this cover the
 16 concerns that I brought up regarding this specific WAC
 17 change, and, if it doesn't, you are then given the
 18 opportunity to come and make public comment on that
 19 and when you can bring up, "Wait, I've got to be
 20 honest, I really like the fact of what you just
 21 stated", that, "Hey, you know, I don't think the
 22 industry is there yet. I appreciate what this was
 23 trying to say, but the industry is not there." Those
 24 are conversations that we need to be had so that we,
 25 as the program, can look at it from your perspective

1 like, hey, this guy's in contact with the
 2 manufacturers, he agrees with this change, but even
 3 he's found out, you know what, they don't even have
 4 this capability yet; so, therefore, you can bring that
 5 forward at public comment. Anybody can come and make
 6 comments on any of the changes that we are submitting
 7 once it gets to that point.

8 So, I want to make sure that once you get done
 9 with this and you're sort of okay, well, let's see
 10 what the program does, there are going to be
 11 opportunities for you to review what the ESAC has put
 12 forward, as well as if there's anything that Gerald
 13 edits to make sure it falls in line with what your
 14 vision was for that edit and the things that you
 15 were -- you know, where are those things that you were
 16 worried about are addressed.

17 I hope that puts it a little bit at ease for you
 18 people and that you're sitting here like putting trust
 19 in this process. So, I just wanted to put that
 20 forward to you guys and let you guys know, hey, that's
 21 what's going to happen. So, hopefully, that works,
 22 and it hopefully eases maybe a little bit of tension
 23 or anxiety maybe people have on voting yea on these
 24 things and are just sort of feeling like they're
 25 blindly voting on something that they hope gets

1 changed and their concerns are addressed.

2 And with that, Sergey, did you have a statement
3 or question?

4 MR. DOLGIKH: Sergey Dolgikh, Elevator
5 Inspector. Yes, sir, I do. So, and there was a
6 mention in the chat Gerald brought up that voice over
7 IP router may be powered by other than phone. Voice
8 over IP, to my understanding, and I'm not an IT guru,
9 but I have some remote understanding of a little bit
10 of that, and voice over IP shall have some kind of
11 internet connection, in the way that I see it, and it
12 has to have either wifi capabilities, or direct modem,
13 or what-have-you, and, so, when the power goes down,
14 those things disappear. They just go away. And, so,
15 but they're not part of elevator systems, and so that
16 then we would have to impose on the owner to say,
17 well, now you have to have extra back-up battery for
18 your router to run, which to them it could behoove of
19 them to have, but we can't put that in the code
20 because, like Wade said, the industry is not ready for
21 it, and specifically for voice over IP. I don't
22 disregard other things and other means to communicate,
23 it's a great concept and great intent, but voice over
24 IP encumbers a little more than just an ability to
25 call out from the elevator. That's my comment to

1 this. Thank you.

2 MR. NAIPO: Mr. Leopard.

3 MR. LEOPARD: Duane Leopard, city of
4 Spokane. You know, I was happy with the code the way
5 it was written before. As long as it's permanently
6 wired or install in the car and it dials out, it has
7 ae 24 hour monitor, I don't care how it gets there,
8 whether it was cellular, or VOIP, central telephone
9 exchange, or tin cans on a string as long as somebody
10 is on the other side to answer it. This, to me, I
11 think we're just trying to re-write the code to try to
12 solve some other problems that are happening. I'll be
13 voting no on this because, you know, I don't think we
14 should really go in and re-write the code anyway. It
15 was brought up many years ago that that's what we were
16 doing in the past and it was suggested that we don't
17 do that anymore, and I think this is going to be one
18 of those circumstances. Thank you.

19 MR. NAIPO: Thank you. Are there any
20 additional questions or comments before we pass this
21 to a vote, any additional questions or comments? All
22 right So, with that, I ask that we please take a vote
23 on proposal 0067 regarding two-way communication means
24 and allowing a telephone connected to either a
25 cellular network, voice over IP, or central telephone

1 exchange shall be installed in a car while removing
2 the capabilities for permanently being installed in a
3 car, removing 24 hour day monitoring, and the two-way
4 communication means shall not be transmitted to an
5 automated answering machine, and that removing the
6 requirement for standby or emergency power. If you
7 are for that change, I ask that you please raise your
8 hand and vote yea. If you are for that change, I ask
9 that you please raise your hand and vote yea now.
10 All-righty. Thank you for those that voted.

11 If you are in opposition, if you are in
12 opposition of these changes, I ask that you please
13 raise your hand and vote nay now. If you are in
14 opposition of these changes, I ask that you please
15 raise your hand and vote nay now. Thank you.

16 If you vote to abstain, I'd ask that you please
17 raise your hand and vote now. If you wish to abstain,
18 I ask that you raise your hand and vote now. Thank
19 you very much.

20 And with that, Melissa, will you please read the
21 vote tally for proposal 0067.

22 MS. ERIKSEN: Yes. There are 10 yeas, 6
23 nays, and 8 abstentions. Before we move on, I need to
24 address something. So, this is Melissa. For those of
25 who are voting members, I appreciate your

1 participation. I appreciate your voting. I
2 appreciate your conversation. For the observers, I
3 appreciate that you have done just that, just watched.
4 You haven't injected yourselves. For the non-voting
5 members that are on here, that includes the Chief,
6 that includes Scott and Ricky from the ESAC, and that
7 includes me and Paoa. There are times where
8 clarifications, comments, additions need to be made,
9 and it is okay for that to happen. What cannot happen
10 is we cannot pose a vote. So, none of us, none of the
11 five of us I've named have voted, and the
12 contributions that were made have been kept to a
13 minimum and I thank you guys for that. So, in case
14 there was any confusion, I wanted to clarify that, and
15 I thank everybody for their good continued work.

16 MR. NAIPO: Thank you. And with that, I say
17 that we take our five minute break, and everyone get
18 up and stretch and take a quick walk around. I'm
19 going to see my grandson before he gets picked up here
20 before our next break; so, I'll be right back. Thank
21 you very much, everyone.

22 (Recess taken)

23 MS. ERIKSEN: Everybody is back on time.
24 Thank you.

25 MR. NAIPO: Yes, thank you, everyone. And

1 one more thing, just one more comment to add regarding
 2 what I was stating earlier regarding that you'll have
 3 the opportunity to make a public comment on these
 4 changes, and if you want to direct anything
 5 specifically to a change we, as the program, anything
 6 that comes through public comment we have to respond
 7 to. You know who gets to do that, me and then that
 8 gets to go to Gerald to be reviewed, and then reviewed
 9 by our AG, as well. So, if there is anything that
 10 you, like I said, feel strongly about that, hey, these
 11 edits aren't right, that is going to be your
 12 opportunity to put forth those concerns, and we'll
 13 have to address those in writing back to you, as well.
 14 So, I just wanted to let you guys know that's part of
 15 the process, as well.

16 So, with that, moving on to -- And, ah, I will
 17 share my screen before I start going into this. The
 18 last couple of times I've forgotten. There we go.
 19 Okay. We'll be going over -- We're finally in a new
 20 section of review. This is regarding proposal 0025
 21 regarding WAC 296-96-05000, and this is the overall
 22 scope. This is probably going to have a lot of
 23 conversations. This is requiring -- The requirements
 24 in this part are intended to cover those stand-alone
 25 standard application material lifts, adding verbiage,

1 and VRCs better known as vertical reciprocating
2 conveyors. The writing as it stands now is, Where
3 Type A or Type B material lifts are installed that
4 they shall comply with ASME A17.1/CSA B44 Part 7.

5 Adding verbiage:

6 (1) Standard application material lifts,
7 commonly called VRCs designed under ASME/ANSI B20.1
8 (not excluded by WAC 296-96-05010(2)) shall include
9 the additional safety standard requirements contained
10 in this chapter, "Part C1 - Minimum standards for new
11 and altered standard application material lifts."

12 For these ASME -- or (2) For these ASME/ANSI
13 B20.1 lifts to be permitted, installed, inspected
14 initially at time of acceptance, and inspected
15 annually in Washington state they must comply with all
16 the provisions of the reference standard and this
17 section.

18 Rationale: Lack of clarification for
19 stakeholders that wish to install VRCs in the state,
20 they need to adhere to both the 5000 section of WAC,
21 but also the ANSI B20.1 reference, as well.

22 Before we dive into this, I know that there
23 was -- when we were on the definitions when we were
24 going over WAC 296-96-00700 and the definitions of
25 VRCs were brought up, there was a lot of additional

1 conversations that we felt needed to be had
 2 specifically about VRCs. If this is something we feel
 3 we need to cover or not, I'm going to pose this to the
 4 TAC because you guys are the ones who voted down
 5 removing vertical reciprocating lifts from our
 6 definitions; so, I'm asking for your opinions now.
 7 Instead of directing us just to vote, I really would
 8 like your opinions on this one specifically. Mr.
 9 Oury.

10 MR. OURY: Yeah, I appreciate you making
 11 that comment or throwing that question out there. I
 12 think if you voted -- I think basically how ever you
 13 voted on the last vote regarding inclusion of VRCs,
 14 vertical reciprocating conveyors ANSI B20.1, and
 15 everything in that conversation, this is all pretty
 16 much the same stuff and I would imagine how ever you
 17 voted the last time you would vote similarly on this,
 18 as well. So, maybe we don't have to have the big
 19 conversation.

20 The only thing I would like to add is I really
 21 think the title that comes right before the scope of
 22 Part C1 Minimum Standards, that title, if
 23 clarification is needed, I would be more than happy to
 24 submit a proposal to change the title from Part C1
 25 Minimum Standards for New and Altered Standard

1 Application Material Lifts to WAC material lifts and
 2 remove the word standard application. There is
 3 absolutely nothing standard about each material lift
 4 that is installed in the state of Washington, and I
 5 think that's where, when we added that a couple of
 6 years ago, that's probably where confusion started.
 7 We were fine until that happened and that's kind of a
 8 separate issue. So, that's really all I have to say.
 9 If somebody wants me to add or put in a proposal, I'd
 10 be more than happy to do that for the ESAC to make a
 11 decision on. And I'll wait to hear others.

12 MR. NAIPO: Just so everybody understands,
 13 when we were talking about the VRCs and the
 14 terminology, that was in our definition section and it
 15 was proposed and passed that we just strike that. So,
 16 that definition as it currently stands will not be
 17 added to our definitions and so because we will not be
 18 referencing VRCs in any way per our definitions.

19 So, with that, I'd like to put it to a vote on
 20 whether you feel we need to talk about this, we need
 21 to have a conversation, if you feel that needs to be
 22 had regarding this just as it stands now, just the
 23 scope, what Mr. Oury, you know, put forth, I think
 24 that that is a good idea because I know that is
 25 something that has been brought up a lot regarding the

1 title and changing it from standard application
2 material lifts because of, like what he stated,
3 there's nothing standard about them. They are built
4 and manufactured to the code referenced in WAC
5 296-96-5000.

6 So, with that, what is submitted here, if you
7 feel a conversation needs to be had, I ask that you
8 please vote yea now. If you feel a conversation needs
9 to be had on this submitted stuff, I ask that you
10 please raise your hand and vote yea now. I think we
11 have one vote for yea. Okay. Two votes, one vote for
12 yea. All right.

13 If you don't believe because of the
14 determination we have already done with definitions
15 and VRCs being removed, if you feel this conversation
16 does not need to be had, I ask that you please raise
17 your hand and vote nay now. If you do not feel a
18 conversation regarding this change needs to be had
19 because of prior conversations we have already had
20 regarding our definitions, I ask that you please vote
21 nay now. All right. Thank you with that.

22 So, with that, it has passed that we will not
23 have a conversation on this. The nays have it. And,
24 again, this s because of our conversation we had
25 regarding the definitions of VRCs being stricken from

1 that. So, thank you. Mr. McKenzie, do you have a
2 question? Okay. Thank you.

3 I believe that there is nothing wrong with -- If
4 anyone has any issue with Mr. Oury submitting a
5 proposal to change the title from Minimum Standards
6 for New and Altered Standard Application Material
7 Lifts and changing it to WAC, I ask that you please
8 raise that concern now. If you have any concern or
9 issue with Mr. Oury being given the opportunity to
10 submit a change for that, I ask that you please raise
11 your hand and vote now. Since there is no opposition
12 to that, Mr. Oury, you can -- we'll give you an
13 opportunity to submit a proposal for this, which will
14 be reviewed at the ESAC level in a month from now, if
15 that is okay. So, I'm going to ask that you please
16 get that to me boy no later than -- no later than
17 February 25th. So, it gives you a little over two
18 weeks to get that to me just so that we can get that
19 submitted into the spreadsheet and things that they
20 will need to review. Thank you.

21 MR. OURY: Thank you, Paoa.

22 MR. NAIPO: Okay. And with that, we will
23 move on to proposal 0011, Definition and Use -- And
24 wait a second. This is to update and include the
25 metric values. Okay, so from what I searched last

1 time regarding the metric values and changing and
 2 carrying on that standard from the ASME, we had passed
 3 that, hey, these conversions they need to be vetted and
 4 made sure they're correct. Is everybody okay with us,
 5 because we voted that, yes, we were going to pass all
 6 those that we passed, it looks like one, two -- yeah,
 7 it looks like we had two, and just because I searched
 8 for dimensions in it the last time, so it brought up
 9 everything that had dimensions in it, and,
 10 unfortunately, there was something else that says to
 11 update measurements to include the metric values.
 12 So, if you are okay with us just carrying that vote
 13 over that, hey, we're good with these being converted,
 14 I ask that you please raise your hand and vote yea now
 15 if you are for us to just carry over that vote from
 16 the previous to update dimensions to include metric
 17 dimensions and to identify with the format used in the
 18 A17 -- or A17.1/B44. All right. Thank you very much
 19 for that. With that, we will carry over the yea votes
 20 for the dimensions, including metric dimensions and to
 21 identify with the format used in A17.1 that passed
 22 earlier to -- Please put your hand down, Mr. Dolgikh.
 23 I see you waving it. Thank you. And we will carry
 24 these over with the pass from the previous vote.
 25 Thank you. Mr. Dolgikh.

1 MR. DOLGIKH: Yes, sir. This is Sergey
 2 Dolgikh, Elevator Inspector. I actually raised a hand
 3 when you were asking about some questions and then
 4 went straight into the vote, so and that's why I had
 5 my hand up so that I'd be noticed. But the only
 6 suggestion I was going to bring up is, since Mr. Oury
 7 is going to work on the standard application material
 8 lift definitions and things, this particular rule
 9 refers to a definition of standard -- this will define
 10 the standard application material lift. So, it kind
 11 of references standard application material lift, and
 12 I, granted, understand that we were in bulk approving
 13 the metric -- the metric designations for dimensions,
 14 but as we just discussed just a second ago, I don't
 15 know if this should be considered also as part of --
 16 because it refers to standard material lift --
 17 standard application material lift, that's all I'm
 18 saying.

19 MR. NAIPO: So, what will happen is at the
 20 time that we review all the changes that come from the
 21 ESAC, it is our job as the program to go through and
 22 make sure that those changes don't contradict
 23 something else that is already in the WAC. So, thank
 24 you for that.

25 MR. DOLGIKH: Thank you.

1 MR. NAIPO: So, now moving on to proposal
2 0032, WAC 296-96-18080, Boat Launching Elevators. It
3 was proposed that we strike this whole section from
4 WAC 296-96-18010 through 18080. The elevator program
5 feels it's over-regulating a conveyance that is a
6 minimally used, let alone for the riding public. I
7 want to make sure that people understand, too,
8 because I want to make sure everyone understands the
9 context of this change before you vote on it is that
10 we currently have four active conveyances of this type
11 in Washington, three at Point Defiance Boat House, one
12 at Narrows Marina Mill Building. I feel it would be
13 premature and irresponsible for our department to just
14 throw these conveyances to the wind without talking to
15 the owners of these conveyances as this WAC has been
16 in effect for some time, and they've been inspected
17 and maintained to this created standard. Unless
18 there's another standard that directly addresses these
19 types of conveyances that we are looking at adopting,
20 these are not like auto garage elevators for which we
21 have no records for within the state.

22 So, with that, I open this up to conversation.
23 Any clarifications on this? Any questions needing
24 before we pass this to a vote. Okay. No questions.
25 With that, we will be passing a vote on proposal 0032

1 and striking boat launching elevators from the WAC.
2 If you are for this change, I ask that you please
3 raise your hand and vote yea. If you are for this
4 change, I ask that you please raise your hand and vote
5 yea now. All right. Thank you for those.

6 If you are in opposition of this change, I ask
7 that you please raise your hand and vote nay now. If
8 you are in opposition of this change, I ask that you
9 please raise your hand and vote nay now. Thank you.

10 If you are voting to abstain, I ask that you
11 please raise your hand and vote now. If you are
12 voting to abstain, I ask that you please raise your
13 hand and vote now. Thank you. Melissa, will you
14 please read the vote tally for proposal 0032.

15 MS. ERIKSEN: There were 19 yeas, 2 nays,
16 and 3 abstentions.

17 MR. NAIPO: Thank you. Moving on to
18 proposal 0018, proposal 0018, this was previously
19 voted on regarding mechanized parking garages. We
20 have already voted on to remove that fee from the list
21 of fees. With that, I ask that we vote to take just a
22 quick vote on passing that vote forward from the fact
23 that we removed the fees to now we are striking WAC
24 296-96-20010 regard the minimum maintenance
25 requirements for mechanized parking garages. If you

1 are for that carrying over that past vote from
2 removing the fees, I ask that you please vote yea now,
3 and this will remove mechanized parking garages from
4 the WAC. If you are for that change, I ask that you
5 please raise your hand and vote yea now. All-righty.
6 So, it looks like that is going to carry over from the
7 fact that it passed when we removed the fees. Thank
8 you very much for that. 0018is passing because of
9 the fact that we remove the fees, I believe, on day
10 one. So, thank you for that.

11 Moving on to proposal 0026, this is regarding
12 WAC 296-96-2300 and in all actuality it's the Part D
13 title. Part D - Regulations for Existing Elevator
14 Standard Application Material Lifts, Dumbwaiters,
15 removing and, keeping Escalators, and adding and
16 Accessibility Lifts.

17 Rationale is: Rationale for striking "and" is
18 to make room to add one more conveyance type to the
19 list. The rationale for adding a comma "and
20 accessibility lifts" is to show in the title that Part
21 D covers commercial accessibility lifts.

22 Any questions for clarification on this?
23 Questions for clarification on updating the Part D
24 title to add "and accessibility lifts"? Any comments
25 on this change? Any comments on this change? With

1 that, we will pose it to a vote. For proposal 0026 --
2 Candace. Oh, no? Okay. I'm sorry. All right. So,
3 voting on proposal 0026, if you are for this change
4 and removing the "and" and adding "and accessibility
5 lifts" at the end of Part D's title, I ask that you
6 please raise your hand and vote yea now. If you are
7 for this change, I ask that you please raise your hand
8 and vote yea now. All right. Thank you for that. Go
9 ahead and lower your hands. Thank you very much.

10 If you are in opposition of this change, I ask
11 that you please raise your hand and vote nay now. If
12 you're in opposition of this change, I ask that you
13 please raise your hand and vote nay now. Thank you.

14 If you vote to abstain, I ask that you please
15 raise your hand and vote to abstain, and raise your
16 hand now. If you wish to abstain, please raise your
17 hand and vote now. Thank you.

18 Melissa, will you please read the vote tally for
19 proposal 0026.

20 MS. ERIKSEN: There were 22 yeas, 1 nay, and
21 2 abstentions.

22 MR. NAIPO: Thank you. Moving on to
23 proposal 0033 regarding WAC 296-96-2300-(4)(b).

24 (b) Where Firefighters Emergency Operation is
25 required by ASME A17.3, requirement 3.11.3 (Note ASME

1 A17.3 requirement, strike verbiage 3.11.3 only
2 pertains to elevators where fire fighter emergency
3 operation does not comply with the 1987 or later
4 editions of ASME A17.1 or ASME A17.1/CSA B44. There
5 is no requirement to add Fire Fighters Emergency
6 Operation (FEO) under ASME A17.3 if the elevator was
7 not provided with FEO during the initial
8 installation), adding verbiage shall mean that
9 ASME/ANSI A17.1 - 1987 rules 211.3 - 211.8 apply
10 unless at time it was installed or if there is an
11 alteration it shall meet the code year at time of
12 alteration.

13 (c) Upon discovery at time of annual inspection
14 it has been determined that the building NFPA fire
15 code standard NFPA 13 "Installation of Sprinkler
16 Systems" and NFPA 72 "National Fire Alarm and
17 Signaling Code" fire alarm panel have been altered,
18 the conveyance Firefighters Emergency Operations shall
19 be updated to the code year at the time the building
20 was altered.

21 Rationale: This creates a life safety hazard
22 when it is not installed at that time -- at that time
23 and present time.

24 Any questions for clarification on this one?

25 Any questions for clarification on this at all? Mr.

1 Brinkman.

2 MR. BRINKMAN: Yeah, this is Kevin Brinkman.
3 The last portion there, Part C, we actually voted on
4 that as a number seven under change proposal 34, I
5 believe it was, and we voted that. So, we've already
6 voted on that language and it failed 9 to 15 to 2; so,
7 I don't know that we need to vote on it again. The
8 first part is different language; so, we should
9 probably discuss that.

10 MR. NAIPO: So, what Mr. Brinkman has
11 proposed is that because he feels that number C, or,
12 excuse me, not number C, letter C was already
13 addressed and voted on prior on proposal 0034 and that
14 it failed, that that can be stricken and not be part
15 of this conversation because it was already addressed
16 in a prior proposal. If you are in favor of skipping
17 this conversation on Part C, again because it was
18 already voted on and shot down on proposal 0034, I ask
19 that you please raise your hand and vote yea now. If
20 you are for us bypassing this because of a previous
21 vote on proposal 0034 and the fact that it had failed
22 covering the same verbiage, I ask that you please
23 raise your hand and vote now. All right. So, we have
24 a majority vote and so we will be bypassing the
25 conversation on this and this will be stricken from

1 our conversation, so we will strike that through. And
2 so the vote for proposition or proposal 0033 will just
3 be on the edits of removing, "3.11.3 only pertains to
4 elevators where Firefighters and Emergency Operations
5 does not comply with the 1987 or later editions of
6 ASME A17.1 or ASME A17.1/CSA B44. There is no
7 requirement to add Firefighters Emergency Operation
8 (FEO) under ASME A17.3 if the elevator was not
9 provided with FEO during the initial installation"
10 adding "shall mean that ASME/ANSI A17.1 - 1987 rules
11 211.3 - 211.8 apply, unless at time it was installed
12 or there is an alteration it shall meet the code at
13 year -- at code year at time of alteration."

14 And I will open it up for questions of
15 clarification. Mr. Leopard. Mr. Leopard, did you
16 have a question? Oh, there you are.

17 MR. LEOPARD: I'm sorry, I forgot to lower
18 my hand.

19 MR. NAIPO: Nope, no, you're good. Mr.
20 Friesen.

21 MR. FRIESEN: Wade Friesen, Vertical
22 Options. I wonder if Kevin or somebody could speak to
23 what rule 2.1.1.3 and 2.1.1.8 are from the 1987 code.
24 Thank you.

25 MS. GOULD: Jan Gould. It's a very basic

1 phase one and phase two. That was before we
2 harmonized Canada; so, it was in the 200 code,
3 buttered section. Jan Gould. Sorry.

4 MR. NAIPO: Thank you. Any additional
5 comments or questions? Any additional questions of
6 clarification or comments to clarify this change? And
7 with that -- Candace.

8 MS. LAU: Oh, okay. Candace Lau. I
9 don't know if everybody understands what's going on
10 here. I think what happened was on the last go around
11 because of the verbiage that is now crossed out it
12 doesn't meet A17.3 code. The A17.3 code pretty much
13 has that same language. A17.3, 3.11.3 basically says,
14 I'm paraphrasing, that all elevators have to -- all
15 passenger elevators, something like that, has to meet
16 the 1987 fire service codes, and there's a lot of
17 things in the 1987 fire service codes. That does not
18 mean every elevator has to have fire service. In
19 1987, for example, it will say elevators greater than
20 25 feet of rise have to have fire service. So, just
21 because you're allowed -- I mean you're required to
22 have the 1987 fire service, it does not mean every
23 single elevator still has to have fire service.
24 However, what was written into the code is that if you
25 were never provided with fire service, you don't need

1 to do anything at all, which is not what the intent of
2 A17.3 was.

3 So, I think this is an attempt to get it back to
4 what A17.3 meant to convey, and what the Department --
5 and this is -- this is just something that I think
6 this change is -- is -- the intent of it is to follow
7 A17.3. That's my understanding of what this is.

8 MR. NAIPO: Sorry. For some reason, I'm
9 muting myself. I'm sorry. Carl, did you have any
10 questions or comments? I apologize. I called on you
11 a couple times and I was like why can't he hear me?
12 Because I'm muted, that's why. My bad.

13 MR. CARY: So, the language in here
14 sounds -- is completely funky to me and maybe that's
15 why I'm scratching my head. So, it's stating, "shall
16 mean that ASME 1987 rules 211.3..." I'm sorry, Carl
17 Cary, Lerch Bates. "Shall mean that ASME/ANSI A17.1
18 1987 rules 211.3 - 211.8 apply, unless at time it was
19 installed or if there was an alteration". I think
20 it's missing a period or -- I (audio distortion) on
21 what they're saying is -- I assume they are saying
22 that it doesn't apply unless it was (audio distortion)
23 at the time of installment. If there is an
24 alteration, it shall meet the code year at the time of
25 alteration. Am I the only one that is struggling with

1 that sentence?

2 MR. NAIPO: Mr. Leopard.

3 MR. LEOPARD: Duane Leopard, city of
4 Spokane. I agree with the previous speaker. There's
5 some language in this that seems to be contradictory
6 to the purpose of A17.3. To me, it's kind of
7 confusing. I can't really put my finger on it either.
8 And I'm sitting here reading A17.3 and comparing the
9 two. But I agree with him, it's kind of muddled.

10 MR. NAIPO: Are there any other questions
11 or clarifications? Candace.

12 MS. LAU: Candace Lau. I'm just wondering
13 if we can just strike this whole 2300(4)(b) altogether
14 and just go with the A17.3, if that's the intent. I
15 don't know what the intent is. I don't know who wrote
16 this, but it almost seems to copy and paste some of
17 the requirements from A17.3 on here. So, I'm unclear,
18 but leaving it the way it is will not be beneficial
19 because if you leave it like this the way it's written
20 today in our codes, it does not meet the intent of
21 what A17.3 is asking.

22 MR. NAIPO: Thank you, Candace. Mr. Leopard,
23 did you have an additional question or comment? Okay.
24 Mr. Brinkman.

25 MR. BRINKMAN: Thank you. Kevin Brinkman.

1 Yeah, I agree with Candace. I'm confused by this a
2 little bit. I think the intent was to say you either
3 need to meet 211.3 - 211.8, which is basically A7.3,
4 unless the elevator was installed or altered after
5 that point, in which case you need to meet the newer
6 code, which is what A17.3 says. So, I don't know that
7 there's much value in this language being here.

8 MR. NAIPO: So, I'll raise any additional
9 questions or comments for clarification either?
10 Candace.

11 MS. LAU: So, I do have a comment that if we
12 don't vote this through we won't even have a chance
13 to -- we won't even have a chance to go with what
14 A17.3 is saying because currently the code is saying
15 we're not going with A17.3. So, unless we vote this
16 through and rely on the ESAC to change the wording,
17 we're going have what we have today, which is we're
18 not going to require fire service, even if they are
19 required by A17.3. Just to let everybody know, I
20 support not this verbiage, but I support the intent of
21 this. It is to try to be more in line with the A17.3
22 is much better than just saying, hey, we're not --
23 you don't have to comply with A17.3. I think that the
24 -- We need to -- I vote for this to pass on to the
25 ESAC to do some wordsmithing.

1 MR. NAIPO: All-righty. Mr. Leopard.

2 MR. LEOPARD: I have to agree with Candace.
3 This is so contradictory. I think the ESAC committee
4 or any other committees involved really need to take a
5 closer look at it because it's saying if you never had
6 fire service before, you don't have to put it in now.
7 Well, A17.3 says if you're over 25 feet of rise you
8 got to have fire service and that -- that's what
9 Spokane did a long time ago, but under a different
10 regulation. If it was over 25 feet of rise, you had
11 to install fire service and make it compliant. We had
12 a lot of those that didn't have fire service at the
13 time. And the bottom line is if it would -- if it
14 didn't meet the standards of the 1987 or later codes
15 then we required you upgrade at that point, too,
16 because there's some others that did have some kind of
17 fire service on them, but they were no where close to
18 being compliant with 1987.

19 MR. NAIPO: Mr. Friesen.

20 MR. FRIESEN: Wade Friesen, Vertical
21 Options. I guess I'm confused about this whole thing
22 and I think I want to address what Candace mentioned.
23 She mentioned that it was good idea to get this into
24 WAC because, from what I understand, the Department is
25 not enforcing A17.3, yet they've adopted A17.3. So,

1 we're writing a law on top of a law that already
2 exists. This just doesn't make sense. Thank you.

3 MR. NAIPO: Thank you. Gerald.

4 MR. BROWN: Yeah. I wanted to address a
5 couple of parts. The Department fully recognizes the
6 fact that we have A17.3 on the books, and we do indeed
7 enforce A17.3 as it comes up in alterations, and we
8 enforce A.17.3 as a code citation for finding
9 equipment prior to 1963 when the Department was
10 created, if we see infractions we -- and then we have
11 to cite a code, and can cite the A17.3 things for
12 that, number one. Number two, the blanket enforcement
13 of A17.3 where we're going to go out and survey every
14 job and present a list to the building owner to go
15 shopping for all of the A17.3 improvements and things
16 was supposed to take place the first of this year, but
17 with our staffing the way it is and the burden on the
18 business owners and building owners because of the
19 encumbrance of all the Covid-19 impacts that it had on
20 businesses throughout the state, it was a really bad
21 time to bring something up. That's -- It's not a fair
22 assessment or application of our adopted code. We
23 still intend on doing that, we just put it back a year
24 and let the businesses recover so they can handle
25 these high dollar ticket items. Number one is the

1 A17.3 issue.

2 The issue that we're seeing is our inspectors go
 3 out and we find existing buildings that have
 4 conveyances that will allow water to be sprayed on
 5 elevator controls with people inside because of one of
 6 two things. They've installed sprinklers into the
 7 building and when they get their sprinkler permits
 8 there was no notation of, "Please contact your, you
 9 know, elevator company and address the issue that the
 10 car should really park before the sprinklers are
 11 activated, which is where we talk about, you know,
 12 phase one, you know, making the cars auto recall
 13 before you throw water on them. And, then, the other
 14 part is if they update the fire panel in the building,
 15 these are the code years of the building that have
 16 been altered since the building was installed. The
 17 fire code year when that building was built, if they
 18 added sprinklers to it, has been updated to the date
 19 of the application and installation of sprinklers for
 20 that building that's changed the status of fire rating
 21 and the fire code that that building is operated
 22 under.

23 The same thing on the panels. When they install
 24 a new panel, we walked in the machine room and here's
 25 the fire service module because the fire alarm guys

1 are right on the money installing the right equipment.
 2 Here we see, you know, main call, alternate recall,
 3 shunt trip, and we have flashing hat, we have all
 4 those modules installed; it's just not hooked up to
 5 the equipment because that car ran during the fire,
 6 even though it's got a new fire panel hooked up, and
 7 it should have been addressed at the time of the
 8 alteration. When that -- when that building fire code
 9 was updated and that equipment became available, there
 10 should have been a notation on that permit to allow
 11 the new panel, that they needed to contact and address
 12 the needs to have that elevator now respond under the
 13 enhanced fire code year that's been imposed on that
 14 building. Now it has sprinklers or now it has a new
 15 fire panel that offers this equipment, if it's
 16 installed, just not hooked up. We're tired of seeing
 17 unsafe situations upon discovery of the annual
 18 inspection that these conditions are allowed to exist.
 19 This is the bad part about not -- you know, one hand
 20 not --

21 MR. NAIPO: Boss, I'm sorry, we were trying
 22 to give people an allowance of two minutes regarding
 23 the comments that they made. If there's anything else
 24 that you can say to hopefully, you know, wrap this up
 25 as soon as possible, that would be great so that we

1 can move on. I appreciate the additional information,
2 but I'm sorry you had to be the first one that I had
3 to mute. Sorry about that. So, if you could, try to
4 wrap it up as quick as you can in 30 seconds so we can
5 get to a two part of what this vote may be. Thank you
6 very much. Feel free to unmute yourself and continue
7 on as quickly as possible, please.

8 MR. BROWN: I was basically done. We just
9 needed to address the issue of an unsafe situation of
10 the elevators. Thank you.

11 MR. NAIPO: Thank you. Mr. Quiett.

12 MR. QUIETT: Jonathan Quiett. I just want
13 to make sure that I'm understanding what we're
14 actually doing. By lining out what's there, were
15 saying two parts with a short part that was added.
16 Any elevator that doesn't have fire service is going
17 to have to be brought up to at least the 1987 fire
18 code, and if that building was altered to something
19 later than the 1987 fire code, that is going to be
20 what the elevator would have to be brought up to, and
21 we're writing this -- we want to put this in the WAC
22 because we're delaying enforcement of the A17.3. It
23 seems like a cumbersome thing to do to write something
24 that we're putting in the WAC and then we're going to
25 have to take out of the WAC to then start enforcing

1 A17.3.

2 MR. NAIPO: Thank you for that. Mr.
3 Friesen.

4 MR. FRIESEN: One quick comment just to
5 piggyback off of what Jonathan just said, it sounds to
6 me like what we've got going on is an enforcement
7 issue and it seems inappropriate to write a law on top
8 of an existing law because of an enforcement issue.
9 Thank you.

10 MR. NAIPO: Thank you. Carl.

11 MR. CARY: Yeah. Just listening to the
12 chief's -- Carl Cary, Lerch Bates -- the chief's
13 statements, it sounds like the issue or at least what
14 I'm understanding is is that the building owner does a
15 fire sprinkler upgrade and doesn't do the applicable
16 upgrade to the elevator; so, I guess seconding the
17 comment, I mean isn't this more of an enforcement
18 issue where some checks need to be made with the
19 permits when you're doing that because the elevator --
20 the issue is not necessarily generated from the
21 elevator.

22 MR. NAIPO: Thank you. Candace.

23 MS. LAU: Yeah, Candace Lau. I'm going to
24 try to explain this again. I'm trying to let everyone
25 know that Gerald was trying to talk about two separate

1 things, but if you just talk about (b) itself,
 2 currently the stuff that's crossed off in red is in
 3 the WAC code; so, therefore, if we don't vote this
 4 through, the red stuff stays, which is not in -- it's
 5 not what A17.3 is requiring. It's completely not what
 6 A17.3 is requiring. So, when we strike this stuff
 7 out, we're going back to what A17.3 is saying. So,
 8 that's what I'm getting out of (b). You know, the
 9 verbiage after that gets a little -- it's -- it needs
 10 some wordsmithing, but, please, if we want to be in
 11 regulating the A17.3 as it's written we need to pass
 12 this through so that we can have them wordsmith it so
 13 that we can move forward because right now we're not
 14 doing anybody any good by having less safety on these
 15 elevators because it's written on there that we're not
 16 going to require fire service if you've never had fire
 17 service. I don't even know where that came from, but
 18 that is not the intent of A17.3.

19 MR. NAIPO: Sergey.

20 MR. DOLGIKH: Sergey Dolgikh, Elevator
 21 Inspector, Olympia. I just want to chime in a little
 22 bit real quick, and, I'm sorry, I probably talk too
 23 much as it is, but to what Candace just spoke, as an
 24 example of that, I have two or three buildings in the
 25 city of Olympia that had installed sprinkler systems

1 and shunt trip on the old Otis installation that had
 2 no fire service to begin with, but they do have a
 3 shunt trip and it does say right there, you know, the
 4 heat detector and such like that. So, to my
 5 knowledge, if an elevator doesn't have a fire recall
 6 phase one, and phase two, for that matter, but phase
 7 one specifically, the shunt trip is going to draw the
 8 main line disconnect and guess what happens, people
 9 get trapped in the elevator in time of fire, and
 10 that's not a good thing. So, but -- but my hands are
 11 bind -- binded by-- bound by the fact that I can't
 12 really write out fire service on that installation or
 13 in that conveyance because at the time of installation
 14 the fire service wasn't required. And so -- and so
 15 I've addressed it with building officials, and fire
 16 marshalls, and stuff, and, guess what, for the last
 17 six months nobody getting back to me on how they're
 18 going to remedy this -- this instance, and there are a
 19 lot of buildings out there in this condition. So,
 20 this is important topic that shouldn't be omitted out
 21 of discussion and out of presentation, how we're going
 22 to wordsmith it, whether it's going to be under 17.3
 23 or anything else, it doesn't mater. What matters is
 24 that it's a life safety situation and it needs to be
 25 addressed. That's my hopefully compelling argument,

1 but I appreciate your attention. Thank you.

2 MR. NAIPO: With that, are there any
3 additional comments or questions of clarification
4 before we pass this to a vote? Mr. Friesen.

5 MR. FRIESEN: Wade Friesen, Vertical
6 Options. I do have a question. It seems like we're
7 talking about two different things here. If someone
8 has done a modification to the building where they've
9 added fire sprinklers to it, I fail to understand why
10 they can't hook up a shunt trip to the existing
11 elevator and that is a completely separate thing from
12 requiring a fire recall. So, maybe somebody could
13 address that as a separate thing from what this
14 verbiage says. Thank you.

15 MR. NAIPO: Mr. Leopard.

16 MR. LEOPARD: I'll answer both of those real
17 quick. If the building adds sprinklers to the
18 building, I've been in old elevator, there's no fire
19 service recall. Put a shunt trip in like it was
20 mentioned earlier, and if you've got a fire and people
21 are still riding up and down the elevators, and they
22 do do it, I've had it happen in this town, drop the
23 power and somebody is going to be trapped in an
24 elevator, not a good situation.

25 For Sergey and the chief, I've got kind of a

1 remedy that Spokane did with it. If you want to get
2 with me later, I'd be happy to tell you what it's all
3 about, but it's beyond the topic of this. I suggest
4 we go ahead and vote on this one right now. Thank
5 you.

6 MR. NAIPO: Mr. Quiett.

7 MR. QUIETT: Yeah, Jonathan Quiett. I was
8 going to talk about the point, but it got squared away
9 as far as why we have to have fire recall if we're
10 going to put a shunt trip on something. With
11 following with what is in the WAC right now, it
12 references to A17.3, and, then, if you follow A17.3
13 with the amount of rise of an elevator, it requires
14 the minimums for fire recall to be the 1987 code. So,
15 I guess I'm still failing to see what's -- why we
16 can't enforce what's already in place right now.

17 MR. NAIPO: Candace.

18 MS. LAU: Candace Lau. A17.3 has the
19 requirements. What the WAC code currently says is
20 that it references A17.3, 3.11.3, but it says it only
21 pertains to elevators where firefighters and emergency
22 operation does not comply with the 1987 blah, blah,
23 blah, and then it says, "There is no requirement to
24 fire service, firefighters emergency operation, under
25 A17.3 if the elevator was not provided with FEO during

1 the initial installation. So, there could be
 2 something built in 1950 that is a 10 stop elevator,
 3 but it never had fire service; so, what this is saying
 4 is that it doesn't have to have fire service. You
 5 don't have to come to up to the 1987 code if it never
 6 had it, so, which is not what A17.3 is saying.

7 What A17.3 is saying is that all the elevators,
 8 all elevator have to meet the 1987 A17.1 code, which
 9 basically says that if you're more than 25 feet of
 10 rise, there are certain parameters. It doesn't
 11 exclude elevators that don't already -- that are not
 12 already provided with fire service. I hope that that
 13 kind of gives you an idea.

14 Let's just not get away from what A17.3 is
 15 saying. Let's just go with what A17.3 is saying.
 16 What the WAC code is currently saying is just it's --
 17 it's bringing into parameters for A17.3 and what I'm
 18 saying is, if we don't vote this through, we're going
 19 to be stuck with what we have, which is 10 stop, 12
 20 story buildings without fire service that are not
 21 required to have it is my point. I don't know if that
 22 addresses your answer -- I mean your questions.

23 MR. NAIPO: Mr. Quiett.

24 MR. QUIETT: Jonathan Quiett. Yeah, I mean
 25 it kind of does, I mean if it's -- it's the wording in

1 that last sentence in the WAC and let's strike that
 2 out because the way -- I'm following through the
 3 A17.3 through the non-mandatory appendix (c) of the
 4 A17.3. I'm not seeing how this can't be applied to
 5 existing elevators that are older than that, other
 6 than the last sentence of (4)(b) in the WAC.

7 MR. NAIPO: So, since there aren't any
 8 additional questions or comments for clarification
 9 after Mr. Quiett's last comment and a couple of
 10 suggestions I've heard, what I ask is that we put to a
 11 vote the verbiage as it stands now here. If you are
 12 okay with it, with some wordsmithing, as it is
 13 initially proposed, we got rid of (c), which is
 14 initially how it was proposed, and wordsmithing it,
 15 are you okay with it? If you are okay with it and it
 16 being wordsmithed, I'd ask that you please raise your
 17 hand and vote yea now. If you are okay with it, how
 18 it stands here on the screen, and it just needs
 19 wordsmithing, vote yea. All right. So, that is a
 20 majority. Thank you. Thank you, everyone.

21 With that, one of the things that -- suggestions
 22 that were made that I heard from both Mr. Quiett and I
 23 think Candace alluded to, as well, is if we just keep
 24 the verbiage as it stands now, which it states here,
 25 "Where Firefighters' Emergency Operation services

1 required by ASME A17.3 requirement 3.11.3 (note: ASME
 2 A17.3 requirement 3.11.3 only pertains to elevators
 3 where Firefighters' Emergency Operation does not
 4 comply with the 1987 or later editions of ASME A17.1
 5 or ASME A17.1/CSA B44). Stop. And we get rid of this
 6 last sentence, as Mr. Quiett alluded to, and I saw
 7 some other nods of head that, you know, hey, this is,
 8 I think, more along the lines of the intent of where
 9 we're trying to get to, if you are okay with that, I'd
 10 ask that you please vote yea now. If you are okay
 11 with just omitting this last sentence in the current
 12 way that WAC 296-96-23000(4)(b) is written now and we
 13 just omit that last sentence, I'd ask that you please
 14 vote yea now. Okay. Thank you we have a majority
 15 vote.

16 So, now we are going to pass a vote on proposal
 17 0033. Please listen carefully. If you are voting
 18 yea, you are voting for us to carry this over to the
 19 ESAC as it states now with some definite verbiage
 20 change that needs to be had. If you vote nay, when
 21 you vote nay, you are voting to keep WAC
 22 296-96-23000(4)(b) as it currently is written and
 23 omitting the last sentence. I'm going to say that
 24 again.

25 If you are voting yea on proposal 0033, you are

1 passing how it states now on with the conversation and
2 it will be edited at the ESAC. If you are voting nay,
3 you are voting for how the verbiage is currently
4 housed in the WAC and omitting the last sentence.

5 Before we pass that vote, Mr. Wohlschlager, it
6 sounds like or it looks like you had a question or a
7 statement. No? Okay.

8 So, does everybody understand how we're going to
9 vote. If you vote yea, we're passing this on to them.
10 If you vote nay, you want to keep 23000(4)(b) and just
11 omit the last sentence. Can I get a thumbs up from
12 people so I can see. Are you okay with that? Do you
13 guys understand that? Are we good? All right, Mr.
14 Barnhart, thank you. Thank you everyone. Okay, so
15 with that, we will be passing a vote on proposal 0033.
16 With that, if you are voting yea, you will pass on the
17 current proposal as it us, with the understanding that
18 the ESAC will come up with new verbiage to get the
19 intent correct. If you are voting nay, you are asking
20 that 23000(4)(b) is going to have the last sentence as
21 it currently reads just omitted. And with that, I ask
22 that we please cast your votes. If you are voting
23 yea, please raise your hand and vote yea. Please
24 raise your hand and vote yea if you are for passing on
25 current proposal 0033.

1 MS. LAU: Paoa.

2 MR. NAIPO: Yes.

3 MS. LAU: This is Candace. I got confused
4 because what you said was if you vote nay we're
5 omitting that last sentence in the WAC; is that what
6 you said?

7 MR. NAIPO: Yes.

8 MS. LAU: But that's -- I don't think that
9 that's the -- I thought if we voted yea, we would omit
10 just that last sentence in the WAC, not on this -- I'm
11 confused on what we're voting.

12 MR. NAIPO: Okay. So, what we had done
13 before is we had voted on, hey, were you okay with
14 this and carrying it on forward. There was 20 votes
15 for that. But then I also proposed if you are okay
16 with just keeping the current WAC as it stands now,
17 23000(4)(b), and just omitting that last sentence, if
18 you are okay with that being a proposal, that came
19 back with a majority that, yeah, hey, we were good
20 with that, as well. So, now what I'm asking is for a
21 vote for one or the other. If you are voting yea, you
22 are voting for as it is currently written and standing
23 on my screen that's being shown to you, that is what
24 is going to be passed on to the ESAC for consideration
25 and editorial review. If you vote nay, then you are

1 carrying on that, hey, I don't like how this is
2 written. I don't want ESAC to mess with this. I want
3 them to know that all I want is 23000(4)(b) the last
4 sentence to be stricken, which is, "There is no
5 requirement to add Firefighters' Emergency Operation
6 (FEO) under ASME A17.3 if the elevator was not
7 provided with FEO during the initial installation."
8 So, yea is for this moving on. Nay is nor, hey, I
9 don't want them to look at that, but I want them to
10 remove part (b), or not part (b), but the last
11 sentence of () (b). Gerald.

12 MR. BROWN: I have a quick question. Paoa,
13 was this my proposal or not?

14 MR. NAIPO: I honestly don't know off the
15 top of my head.

16 MR. BROWN: It sounds mine, and, if it was
17 mine, I would say we'll strike everything in blue and
18 do just like you said, just have the last sentence
19 stricken and vote on that yea or nay. I'm just asking
20 if it was; if not, I'm just clouding the issue and I
21 apologize.

22 MR. NAIPO: I think we should just move
23 forward with how I was sort of setting it up because,
24 again, there may be -- It sounds like there were some
25 comments regarding this that they were for this and

1 that that definitely needed to be wordsmithed and
 2 there were things that needed to be addressed. But
 3 then there was also conversation that I heard that,
 4 hey, we'd be good with just removing that last
 5 sentence on (4)(b). So, that's what I'm proposing we
 6 vote for. On proposal 0033, if you vote yea, you are
 7 pushing this forward as it is now. If you vote nay,
 8 you are asking that, hey, you're good with the last
 9 sentence of (4)(b) being stricken. Do we understand
 10 that? Any questions? Are there any questions for
 11 clarifications on this? Please feel free to ask
 12 anything you have right now before we pass this vote
 13 because it's pretty serious. No? Okay.

14 So, if you are for this change for proposal 0033
 15 and it being moved on to the ESAC for editorial review
 16 and revision, I ask that you please raise your hand
 17 and vote yea now. If you are for the current proposal
 18 as it is written and passed on to the ESAC for review
 19 and editorial review, I ask that you please raise your
 20 hand and vote yea now. Thank you for your vote.

21 If you are now voting nay, what you are saying
 22 with your nay vote is that. "I am okay with WAC
 23 296-96-23000(4)(b) as it is written now, as long as we
 24 strike the last sentence of (4)(b). Please raise your
 25 hand and vote nay for that. If you are okay with the

1 way 23000 WAC 296-96-23000(4)(b) is written currently
2 and we are asking to strike the last sentence of
3 (4)(b). Are we good? All right. Thank you for those
4 votes. Okay. If there is anyone who wishes to vote
5 to abstain -- If you have voted nay, I ask that you
6 please lower your hand. If you are voting to abstain,
7 I ask that you please raise your hand and vote now if
8 you are voting to abstain. Thank you.

9 So, with this, I am going to remove all of this.

10 MS. ERIKSEN: While he's doing that, for the
11 record the vote was yea 0, nays 25, and 0 abstentions.

12 MR. NAIPO: Thank you. So people understand
13 what that is, this was -- This note I put in here was
14 just for our own clarification to understand what we
15 passed forward is that this passed with the
16 understanding that WAC 296-96-23000(4)(b) and we are
17 omitting the last sentence. That is what we voted on
18 on proposal 0033. And with that, I suggest we take
19 our last five minute break. Thank you guys very much
20 and I will see you guys back here in five minutes.
21 Thank you.

22 (Recess taken)

23 MR. NAIPO: Again, I just want to preface
24 before we get started again, I can't thank you guys
25 enough for conversations that we've had. I know some

1 of this stuff can feel like we're going around and
 2 around, and people are having to repeat themselves,
 3 but it's all with the intent of I want to make sure
 4 that people understand exactly what they're voting on.
 5 So, thank you for that. I know there's a lot of
 6 frustration sometimes with these conversations as they
 7 go on, but I do want to -- I want to make sure that
 8 you understand that, hey, you guys have all been very
 9 professional in how you've spoken with other. Nothing
 10 has really gone off the rails. No one is really
 11 taking anything personally that I can see, you know,
 12 and so in my understanding of how other TACs have
 13 operated sometimes, some discussions can get a little
 14 heated sometimes and maybe that's because we're
 15 in-person and it's just easier. But in this avenue I
 16 want to say thank you very much for everybody's
 17 professionalism as we're going about this.

18 So, just a few more until we're at the end of
 19 the list. I know there's some other things that we
 20 didn't even address yet. Time permitting, we'll get
 21 to that stuff. But we're going to try to hammer away
 22 this last roughly about a little over an hour and a
 23 half and see what we can't get done. We've been
 24 moving at a pretty good clip so far today; so, let's
 25 see if we can keep that going, outside of these last

1 couple conversations we've had to have.

2 So, thank you with that. And we'll get started
3 on proposal 0043 regarding WAC 296-96-23605, and what
4 this is just so people understand the context of it --
5 Let me to do something else real quick. I'm still
6 sharing my screen, but I'm going to go like this. So,
7 this is regarding 23605, and what I'm going to do is
8 I'm going to share the actual page that has 23605 so
9 you guys understand the intent on where this is
10 actually housed at in the WAC so people have a
11 context.

12 Like I stated again, 23605 has to do with
13 absence of safety bulkhead, subpart four Alterations,
14 Repair, Maintenance, and Testing. 23605 is the
15 Examination of Standard Application Material Lifts.
16 Yes, we understand that a proposal is going to be sent
17 through to actually change that. If it goes through,
18 we will make sure that all of these references to the
19 Standard Application Material Lifts are updated in the
20 new WAC. With that being said, this has to do with,
21 as it stands now, examination of standard application
22 material lifts, special purpose elevators, electric
23 manlifts, and hand-powered manlifts. And with that,
24 the changes submitted to add a part three:

25 (3) All new, existing, and altered standard

1 application material lifts shall be provided with code
2 data plates on them in accordance with ASME A17.1
3 Section 8.9 Code Data Plate that will reflect the code
4 year of the conveyance that was in effect at the time
5 of that installation or alteration.

6 Rationale: It is needed to identify the code
7 year of the standard application material lifts for
8 the purpose of accurate application of the code
9 requirements. Prior to the adoption of WAC 296-96 on
10 October 1st of 2018 there was no terminology of
11 Standard Application Material Lifts in the WAC. They
12 were all considered to be material lifts. WAC was the
13 only code that was governing those types of
14 conveyances. Because of the adoption in 2018 and
15 because of certain sections of ASME A17.1 apply to
16 certain types of Standard Application Material Lifts
17 with adoption of the current WAC 296-96 we need to
18 distinguish the difference when conducting annual
19 inspections. Code data plate gives the AHJ
20 appropriate tools to assess what code citations need
21 to be met for that year of install.

22 And with that, I ask for questions of
23 clarification need from the TAC? Any questions? Mr.
24 Oury.

25 MR. OURY: Yeah, this is good, but just to

1 piggyback on a comment that was made earlier, if our
2 proposal gets accepted with changing the name from
3 Standard Application Material Lifts, this obviously
4 has to be changed, too. You probably already had that
5 idea. Thanks. Oh, and Bob Oury.

6 MR. NAIPO: Thank you. Jan.

7 MS. GOULD: Jan Gould. I suggest we put it
8 in Part C1 where the rules arise for material lifts.

9 MR. NAIPO: Sergey.

10 MR. DOLGIKH: Yeah, Sergey Dolgikh, Elevator
11 Inspector, Olympia. I was the one who put it in and I
12 didn't know at the time that we were going to be
13 discussing this at length and adjusting the
14 definition. So, Mr. Oury can do whatever you want
15 with it. It was just the intent of having a code data
16 plate on it so it can identify the time of the year of
17 installation. Thank you for that.

18 MR. NAIPO: So, with that, are there any
19 additional questions or comments on this change, the
20 change being with the intent of, like was stated by
21 Sergey, the previous -- or the elevator inspector
22 saying we just wanted a way to track the code year and
23 this was a way for us to do it. Now, where it is
24 placed in the WAC, that can be defined later on, but
25 as it states now are there any additional questions or

1 clarifications needed before we pass this pass on for
2 a vote? All-righty.

3 With no questions or clarifications needing done
4 or no one raising their hand, I ask that we please
5 pass proposal 0043 on to a vote and adding a part
6 three or some sort of semblance of this verbiage to be
7 added within our WAC regarding all new, existing, and
8 altered Standard Application Material Lifts shall be
9 provided with code date plates on them in accordance
10 with ASME A17.1 Section 8.9 Code Data Plate. If you
11 are for this change, I ask that you please raise your
12 hand and vote yea now. If you are for this change, I
13 ask that you please raise your hand and vote yea now.
14 All right. Thank you for that. If you voted, please
15 go ahead and feel free to lower your hand. Thank you
16 again for those votes.

17 If you are in opposition of this change, I ask
18 that you please raise your hand and vote nay. If you
19 are in opposition of this change, I ask that you
20 please raise your hand and vote nay. Thank you.

21 If you would like to vote to abstain, I ask that
22 you please raise your hand and vote now to abstain.
23 If you are voting to abstain, please raise your hand
24 and vote now. Thank you.

25 And with that, Melissa, will you please read the

1 vote tally for proposal 0043?

2 MS. ERIKSEN: There were 21 yeas, 0 nays,
3 and 3 abstentions.

4 MR. NAIPO: Thank you. With that, we're
5 moving on to proposal 107 regarding WAC 296-96-23606.
6 This is regarding installations placed in voluntary
7 red tag status, and what is being proposed is that the
8 term voluntary be stricken from the title, part one
9 and part three, so that it will read as such,
10 Installations placed in red tag status:

11 (1) Maintenance, examinations, and safety tests
12 shall not be required when an installation is placed
13 in red tag status. All code required maintenance,
14 examinations, and safety tests shall be up to date
15 prior to removal of the red tag.

16 (3) Annual operating certificate, maintenance,
17 examinations, inspections, and tests shall not be
18 required when an installation is placed in red tag
19 status.

20 The Rationale is: To better clarify these
21 requirements are to be followed regardless of either
22 voluntary or program directed red tag.

23 And with that, I'll open this up for questions
24 of clarification? Any comments? One more time, I'll
25 ask if there's any questions of clarification or

1 comments for clarification needed on this change? And
2 with that, we'll put it to a vote because there are
3 none. Regarding proposal 107, removing voluntary from
4 the terminology in WAC 296-96-23606, if you are for
5 this change, I ask that you please raise your hand and
6 vote yea. If you are for this change, I ask that you
7 please raise your hand and vote yea. Thank you.

8 Thank you for all of your votes. Please feel free to
9 lower your hands if you voted yea already.

10 If you are in opposition of this change of
11 removing that terminology from 23606, I ask that you
12 please raise your hand and vote nay. Mr.
13 Wohlschlager, if you already voted yea, can you please
14 lower your hand. If you are in opposition of this
15 change, I ask that you please raise your hand and vote
16 nay now. Thank you.

17 For those who wish to abstain, I ask that you
18 please raise your hand and vote now. If you wish to
19 abstain, I ask that you please raise your hand and
20 vote now. Thank you.

21 Melissa, will you please read the vote tally for
22 proposal 107.

23 MS. ERIKSEN: Yeah. There were 22 yeas, 0
24 nays, and no abstentions.

25 MR. STRAFER: Let the minutes reflect 3:17

1 on Thursday no comments and unanimous vote. Moving
2 on.

3 MR. NAIPO: Way to go, Mr. Strafer. Thank
4 you. This is regarding twenty-- okay, so the reason
5 why I highlighted these together is because they're
6 all regarding 23701. This will be regarding -- So,
7 we'll sort of do the same thing. We're just going to
8 cursory review proposal 16, 27, and 56, and, yeah,
9 just discuss them and see how they go. All right.
10 So, this is regarding proposal first 0016. Sergey,
11 you have a question?

12 MR. DOLGIKH: Sergey Dolgikh, Elevator
13 Inspector. As you can probably can guess, I'm
14 passionate about accessibility equipment. But, no,
15 the question I have here is this: There is one just
16 maybe we are putting section 10 and 11, shouldn't it
17 be plural sections, but that's not a big deal, and
18 meaning sections rather than section. So, it was
19 before, it was section 11. Now we're saying section
20 10 and 11; so, sections 10 and 11 means plural, right?
21 But, then, what the biggest problem I'm seeing here is
22 Chapter 11 we need to put something in there because
23 what we're saying basically is the owner should be
24 routinely examining, maintaining, and testing in
25 accordance with ASME 18.1 sections 10 and 11, and with

1 this sub-part, okay. So, section 11 only was
 2 applicable at the time of adoption and installation
 3 that we adopted in October 1st of 2018. Should there
 4 be any kind of mention of the fact that earlier
 5 installations prior to that code? Chapter 11 or
 6 section 11 doesn't apply for that matter. I mean we
 7 kind of across the board telling everybody you can
 8 enforce section 11 and that's being done when
 9 inspectors go out and say, hey, you need to have WMP,
 10 or you need to have maintenance per section 11, but
 11 the installation was prior to that code that they are
 12 citing it with on annual inspection and I don't think
 13 that's accurate. So, we need to put some kind of
 14 wording in there that reflects that. Does that make
 15 sense?

16 MR. NAIPO: I will pose that question. I
 17 thank you for those comments. I thought it might
 18 have been before I was reading it, but I just want to
 19 make sure that everyone understands the reason why I
 20 have read to what's in column C is so that it's on
 21 record so that people understand the conversation is
 22 had after it, after I read the proposal number, the
 23 WAC, and then the actual changes so that everyone
 24 knows that all the conversation that is had is
 25 regarding what was covered before. So, it was my

1 fault for calling on you, Sergey, before I actually
2 finished that thing, but I thought you might have had
3 something to say prior to that. So, I apologize.
4 That doesn't discount what he said, but, if you could,
5 please hold your comments until after I'm done reading
6 the body of column C.

7 So, in the changes submitted 0016 is to keep
8 part one as it stands which states:

9 (1) One and five year inspection test tags in
10 accordance with ASME A18.1 Section 10.3 shall be
11 attached and visible. A full load safety test shall
12 be performed with weights on all commercial
13 accessibility equipment.

14 () The owner shall ensure that the
15 accessibility lifts are routinely examined,
16 maintained, and tested in accordance with ASME A18.1,
17 section adding 10 and 11, and with this subpart.

18 (3) Documentation of tests, examinations, and
19 maintenance shall be readily accessible on site.

20 And the rationale for this was: To update
21 correct code references.

22 And with that, in addition to what Sergey has
23 already stated, are there any additional comments or
24 questions regarding this change at all? Wow. Oh, Mr.
25 Lathe.

1 MR. LATHE: Dylan Lathe. I don't see the
2 necessity of putting section 10 in there, as section
3 10 in 18.1 is applicable to existing installations.
4 So, I don't think that's necessary. And to answer
5 Sergey's question, in my opinion, it's stating chapter
6 11. Yes, that's only applicable to new installations,
7 but it's not anymore because this is under part (b)
8 which is existing. So, this supersedes that. So,
9 it's now saying that chapter 11 does apply to
10 existing. That's how I read it.

11 MR. NAIPO: Thank you. Any additional
12 questions or clarification needed before that? Mr.
13 Wohlschlager.

14 MR. WOHLSCHLAGER: Lyall Wohlschlager.
15 Section 10 is not only acceptance tests, but it also
16 cover the periodic inspections and tests. So, I think
17 section 10 does need to be in there for existing
18 equipment so the periodic tests are conducted. And I
19 would concur with Sergey in that I don't think the
20 intent by having section 11 cited here, I don't think
21 it was ever the intent to have a written maintenance
22 program for existing equipment. The intent was that
23 existing equipment would have to be maintained and the
24 logs left on site. But I don't think there was a
25 requirement that they have -- I don't think it was the

1 intent to have them have a written maintenance plan.
2 That would currently be required if we left section 11
3 in there, as it's currently stated.

4 MR. NAIPO: Any additional questions or
5 clarifications on this change? All-righty. I know
6 it's getting late in the day, guys. We're almost
7 done, a little over an hour left. So, with that, I
8 ask that we please put this to a vote for proposal
9 0016 regarding removing or just mainly adding that an
10 examined, maintained, and test in accordance with ASME
11 A18.1 Section 10 and 11. If you are for this change
12 in the WAC, I ask that you please raise your hand and
13 vote yea. If you are for this change, please raise
14 your hand and vote yea.

15 You're the one who's counting these. I just
16 want to make sure that you're okay with --

17 MS. ERIKSEN: No, no, no, I'm good. I
18 just -- I love that you think you're done and, nope,
19 there's one more, and then one goes away. I'm making
20 sure we've got the right number.

21 MR. NAIPO: All right. The last number
22 that I saw before we started talking was 20 and that's
23 when I saw people start to -- dropping off, so...

24 MS. ERIKSEN: I got 20, as well.

25 MR. NAIPO: And I got 20 on the record.

1 So, with that, thank you for your votes for yea. If
2 you are in opposition of this change -- Again, if you
3 already voted yea, please put down your hand. If you
4 are in opposition of this change, please raise your
5 hand and vote nay. If you are in opposition of this
6 change, please raise your hand and vote nay. Thank
7 you. If you wish to abstain, please raise your hand
8 and vote to abstain by raising your hand. If you are
9 voting to abstain, please raise your hand and vote
10 now. Thank you.

11 With that, Melissa, will you please read the
12 vote tally for proposal 0016.

13 MS. ERIKSEN: There were 20 yeas, 1 nay, and
14 3 abstentions.

15 MR. NAIPO: Thank you. So, carrying you on
16 to proposal 0027, this is removing in that same
17 section in part one, Maintenance and Tests On
18 Commercial Accessibility Lifts.

19 (1) one and five year inspection test tags in
20 accordance with ASME A18.1 section 10.3 shall be
21 attached and visible. Remove: A full load safety
22 test shall be performed with weights on all commercial
23 accessibility equipment. Keeping part two and part
24 three. As it currently stands, part two would be
25 adjusted a little bit from what had passed in proposal

1 0016, but we won't reference that as this just
2 regarding part one.

3 So, the rationale for striking full load safety
4 tests on all commercial accessibility equipment, this
5 requirement excludes two exceptions for full load
6 safety tests that is written in ASME A18.1 section
7 10.3. A full load safety test is not required for
8 those operating on wood guide rails or for inclined
9 platform lifts and inclined stairway chairlifts with
10 Type A non-adjustable safeties complying with para
11 9.9.3.

12 With that, I will pass it on to the TAC for any
13 questions of clarification needed. Any questions?
14 Any comments for clarification on this? Mr.
15 Wohlschlager.

16 MR. WOHLSCHLAGER: Lyall Wohlschlager. The
17 subtle difference here is that trying to eliminate the
18 need for five year full load testing on all commercial
19 accessibility lifts, the ASME 18.1 code does not
20 require full load testing on all equipment, but it
21 does cover those pieces of equipment that it does need
22 it. So, I'm not sure why Washington State would want
23 to impose a five year test on all the equipment. So,
24 we're just trying to be in compliance with the way
25 18.1 is written by striking this.

1 MR. NAIPO: Thank you. Any additional
2 questions or comment before we place this to a vote?
3 All-righty. And with nothing being needed, we will
4 pass this on to a vote for proposal 0027 and the
5 removal in part one under maintenance and tests on
6 commercial accessibility lifts, removing verbiage of a
7 full load safety test shall be performed with weights
8 on all commercial accessibility equipment and that
9 will be stricken from the WAC.

10 If you are for that change, I ask that you
11 please raise your hand and vote yea. If you are for
12 that change, I ask that you please raise your hand and
13 vote yea. All right. Thank you for those votes. Go
14 ahead and please lower your hands. Thank you again
15 for your participation. Mr. Rudder, please feel free
16 to lower your hands or your hand.

17 If you are in opposition of this change, I ask
18 that you please raise your land and vote nay. If you
19 are in opposition of this, I ask that you please raise
20 your hand and vote nay at this time. If you are in
21 opposition of this change to the WAC, I ask that you
22 please raise your hand and vote nay. Thank you.

23 If you would like to wish to abstain from this
24 vote, I ask that you please raise your hand and vote
25 to abstain. Please raise your hand at this time and

1 vote to abstain. Thank you.

2 And with that, Melissa, will you please read the
3 vote tally for proposal 0027.

4 MS. ERIKSEN: There were 22 yeas, 0 nays,
5 and 3 abstentions.

6 MR. NAIPO: Thank you. Moving on to
7 proposal 0056 regarding the same WAC 296-96-23701, The
8 Maintenance and Tests on Commercial Accessibility
9 Lifts, all that is being changed is verbiage within
10 part one. The changes are as such:

11 (1) One and five year inspection is being
12 stricken, replaced with periodic test tags, remove in
13 accordance with, replaced with for tests required by
14 A18.1 sections adding 10.2 and, as it's stated now,
15 10.3 shall be attached and visible. A full load
16 safety test shall be performed with weights on all
17 commercial accessibility equipment, adding during each
18 five year periodic test.

19 Rationale: A18.1 doesn't clearly require full
20 load safety tests at the every five year periodic
21 test, but it should be clearly mandated for rider
22 safety. Test tag requirements were dropped from
23 A18.1, but we feel they should continue to be used to
24 provide a more permanent record of periodic testing.

25 And with that, I will open it up for questions

1 for clarification. Any comments for clarification?
2 Oh, questions. Mr. Brinkman.

3 MR. BRINKMAN: Yeah, Kevin Brinkman. We
4 just took action to strike that second sentence about
5 full load safety tests, so -- so, we to need modify
6 this proposal to get rid of that statement, as well,
7 if we're going to make decide we want to make the
8 other changes.

9 MR. NAIPO: So, what was proposed is, as far
10 as showing what is already passed, is that this has
11 been stricken, if that will help with people
12 understanding what the changes are here, and I thank
13 you for that, Mr. Brinkman. Mr. Turner.

14 MR. TURNER: Dylan Turner. I was just going
15 to say the same comment.

16 MR. NAIPO: All right. Thank you. So, with
17 that, are there any additional comments or
18 clarifications needed on 0056? As the verbiage will
19 read now with that commentary from Mr. Brinkman and
20 Mr. Turner, it will read, Maintenance and tests on
21 commercial accessibility lifts:

22 (1) One and five year, strike inspection, put
23 in periodic test tags, strike in accordance with, put
24 in verbiage for tests required by A18.1, the verbiage
25 as it stands now, sections add 10.2 and, verbiage as

1 it stands now, 10.3 shall be attached and visible.

2 Any questions or clarifications needed on that?

3 Any comments? And with that, I will put this to a
4 vote for proposal 0056. If you are for this change, I
5 ask that you please raise your hand and vote yea. If
6 you are for this change, I ask that you please raise
7 your hand and vote yea. If you for this change,
8 please raise your hand and vote yea. Thank you for
9 your votes. Go ahead and lower your hands. Thank you
10 again. Please go ahead and feel free to lower your
11 hands if you've already voted yeah. From Mr. Friesen,
12 your hand is still up. If you are in opposition of
13 this change, I ask that you please raise your hand and
14 vote nay. If you are in opposition of this change, I
15 ask that you please raise your hand and vote nay now.
16 Thank you for that.

17 If there are any votes to abstain, I ask that
18 you please raise your hand and vote now. If you are
19 voting to abstain, I ask that you please raise your
20 hand and vote now.

21 With that, Melissa, will you please read the
22 vote tally for proposal 0056.

23 MS. ERIKSEN: There were 20 yeses, 0 nays,
24 and 5 abstentions.

25 MR. NAIPO: Thank you. Oh, boy, this is

1 going to be a fun one. All right. This is for
2 proposal 0078 regarding WAC 296-96. It will be placed
3 in the 2300 section. This is regarding adding a whole
4 new part regarding Roof Access Through Horizontal
5 Hatch-type Covers, and this is all new verbiage, Roof
6 Access Through Horizontal Hatch-type Covers:

7 (a) Fixed wooden ladders are prohibited.

8 (b) Where such ladders exist, they shall be
9 replaced with one of the following:

10 1. Non-combustible conventional stairway with a
11 slope of not more than 60 degrees from horizontal.

12 2. Non-combustible collapsible (retractable)
13 stair.

14 3. Non-combustible fixed vertical ladders
15 complying with ANSI A14.3, standard for ladders,
16 fixed and safety requirements.

17 4. Horizontal hatch-type covers.

18 a. While facing the ladder, covers shall be
19 hinged and shall be located so as to open to the left
20 or right side of the opening

21 b. The cover shall be provided with a
22 mechanical-assist means to open (e.g. springs,
23 hydraulic, counterweights, etc.)

24 c. The cover shall be constructed of
25 non-combustible material where required to be replaced

1 d. Where a fixed ladder is provided

2 i. handrails shall be located on the roof on
3 both sides of the opening in line with the access
4 ladder. They shall extend not less than 36 inches
5 (900 mm) in height above the roof level. They shall
6 be located as to provide easy reach from the top of
7 the ladder.

8 ii. Means shall be provided to hoist tools and
9 materials to the roof level once the hatch cover is
10 open.

11 Rationale: Provide for safer access to roof
12 doors leading to elevator machine rooms. Some access
13 to roof areas are currently provided with wooden
14 ladders which do not comply with ANSI A14.3. The
15 access is not through a conventional vertical door,
16 but through a horizontal hatch cover. In some cases
17 personnel are expected to grasp the ladder with one
18 hand while unlocking and opening the hatch cover with
19 the other. This creates a potential fall hazard.
20 There may be instances where a stair is not
21 technically feasible due to existing building
22 constraints (i.e. structural elements). Providing a
23 fixed ladder may be the only option. The proposed
24 language makes allowances where a stair or a
25 collapsible stair is not feasible.

1 And I will pose or open it up for any questions
2 of clarification needed on this change. Mr. Barnhart.

3 MR. BARNHART: Thank you. Paul Barnhart
4 from UL. I have a couple of issues with the numbering
5 here. We start out with (a) and (b), and (b) says
6 where such ladders exist, they shall be replaced with
7 one of the following, one, two, three, four, and four
8 is horizontal hatch-type covers. I don't think you
9 replace a ladder with a cover. So, the numbering
10 needs to be changed here somewhat. And down in d.
11 Where a fixed ladder is provided, you've got
12 handrails. What about when you use a non-combustible
13 collapsible stair? Do you need a handrail there?
14 Right now it only says you need it if you've got a
15 fixed ladder. So, those are just a couple issues.
16 Other than that, I'm good. Thank you.

17 MR. NAIPO: Jan.

18 MS. GOULD: Jan Gould. Seattle has a lot of
19 wooden stairs and ladders going up to the roof in
20 certain neighborhoods, and my concern would be, if
21 they had to remove the metal and put a new ladder in,
22 those hatches are very narrow. Would people be able
23 to fit into those areas if you have to have a certain
24 maintenance by installing that new ladder from the
25 ladder to the wall. But it's a good idea.

1 MR. NAIPO: Mr. Leopard.

2 MR. LEOPARD: I love this idea. I've needed
3 this code of some sort to really bite into it because
4 I've got a whole bunch of wooden ladders around and a
5 lot of them are getting pretty rickety. I just kind
6 of, at this point, write them up as a safety hazard if
7 they might feel, you know, like they're going to fall
8 apart. But this way I can walk in and tell somebody,
9 "Put in a non-combustible ladder way before it's
10 time." Thanks.

11 MR. NAIPO: Thank you. Mr. Mills.

12 MR. MILLS: Sorry, I realized I never put my
13 camera back on. Eric Mills, field mechanic. Most of
14 the major employers require the mechanics and
15 apprentices to use -- not use wooden ladders. So,
16 when these are in place, the maintenance can't --
17 technically can't be done because we're this safety
18 violating safety policy by using those ladders. Some
19 will not go there and do the maintenance in the
20 machine room or get up on the roof because of that,
21 some will. I think this will fix that. It will make
22 it a -- make it code compliant and give everyone teeth
23 to write them up to get them replaced. Because I'm a
24 big guy, I won't use them because I don't know who
25 built that, I don't know how old it is, and I don't

1 want to fall, it's going to hurt. So, I'm all for
2 this.

3 MR. NAIPO: Thank you. Mr. Leopard, did you
4 have an additional comment or question?

5 MR. LEOPARD: No. I forgot to put my hand
6 down. Sorry.

7 MR. NAIPO: No worries. You're good. Are
8 there any additional questions or -- Oh, Jan.

9 MS. GOULD: Just take a peek in the chat.
10 Gerald shared a ladder that is awful. Jan Gould.

11 MR. NAIPO: I looked at the chat. I'll put
12 this up real quick. Yeah, that is -- that is no
13 bueno.

14 MS. GOULD: Jan Gould. Gerald, is this in
15 Washington state?

16 MR. BROWN: Oh, yeah. I just put in the
17 chat, that brown door you see at the bottom here,
18 that's the door to come in to the men's room where the
19 ladder is located. So, if you're on the ladder or
20 coming down, you've got to be able to pop open the
21 door, and then that little door at the side there has
22 a padlock on it. So, you have to get off of the
23 ladder. You're standing on the ladder, and you're
24 leaning over, and you're trying to unlock the padlock
25 so you can go out the side door to get out on the

1 roof, and so it just got worse and worse.

2 This is from one of our inspectors that sent
 3 this in. I've got some other pictures of wooden
 4 ladders where you can see the wood is actually
 5 rotting. Where they put their feet, the dry rot comes
 6 off underneath their feet and piles up on the floor at
 7 the bottom of the wooden ladder. But ladders like
 8 this, yes, that's a really good metal ladder, but you
 9 have reasonable access out on the roof. It's been
 10 that way for years.

11 And the one in the hallway at the top of the
 12 stairway, the pole is showing there, that's another
 13 case where if you go up that ladder and you've got to
 14 reach up and undo a padlock and lift off or open up
 15 the roof ladder and they don't even have -- you know,
 16 they make a device called a stiff bar that goes down
 17 behind the ladder that you can deploy and it locks in
 18 place and it's good for about 150 pounds, so when you
 19 go out on the roof you at least have something to hold
 20 on to while you're getting on the ladder to come
 21 through the roof. But I've dealt with OSHA and NIOSH
 22 and they said, "Oh, I'm sorry, we can't back you up if
 23 you require those because it hasn't come up before."
 24 It's a horrible reason. But anyway, ladders, very
 25 important to keep them safe. We live on these things,

1 we die on these things.

2 MR. NAIPO: Mr. Friesen.

3 MR. FRIESEN: Wade Friesen, Vertical
4 Options. I just wanted to throw out a suggestion or
5 perhaps an addition to this that if we are dealing
6 with a vertical ladder that a lad-safe system be
7 installed in addition to that so that you can tie off
8 to that when climbing a vertical ladder. Thanks.

9 MR. NAIPO: Mr. Friesen, was that a latch
10 safe system that you referenced?

11 MR. FRIESEN: The system is called a Lad Saf
12 system and it's a cable that is secured in front of
13 the ladder that you can attach or wear a fall arrest
14 system and attach a rope grab to the table while
15 you're climbing the ladder.

16 MR. NAIPO: Thank you. Are there any
17 additional questions or comments regarding proposal
18 0078? Okay. Well, with that, I ask that we please
19 take a vote on proposal 0078 adding a new requirement
20 within WAC 296-96-2300, somewhere within there
21 regarding roof access through horizontal hatch-type
22 covers. If you are for this change and updating the
23 WAC, I ask that you please vote yea for this. If you
24 are for this change regarding roof access through
25 horizontal hatch-type covers and creating a standard

1 for ladders that are allowed in the state of
2 Washington, I ask that you please raise your hand and
3 vote yea now. All-righty. And with that, thank you
4 very much. Thank you for those who voted. Go ahead
5 and please feel free to lower your hands if you voted
6 yea already.

7 If you are in opposition of this, I ask that you
8 please raise your hand and vote nay now. If you are
9 in opposition of this, I ask that you please raise
10 your hand and vote nay now. Thank you.

11 If you wish to vote to abstain, I ask that you
12 please raise your hand and vote now. If you would
13 like to vote to abstain, please raise your hand and
14 vote now. Melissa, will you please read the vote
15 tally for proposal 0078.

16 MS. ERIKSEN: There were 21 yeas, 0 nays,
17 and 1 abstention.

18 MR. NAIPO: Thank you. I honestly thought
19 there was going to be a lot more conversation on this
20 one, but I'm glad we got through it quickly. Proposal
21 0017 regarding WAC 296-96-24301, Applicable
22 Regulations. All material hoist installations,
23 maintenance, repair, and tests shall comply with the
24 edition of ANSI/ASSE A10.5 safety requirements for
25 Material Hoists under the edition to which they were

1 installed, and striking the exception, lifts and
2 hoists for materials that are erected temporarily for
3 use during construction work only and are designed in
4 one of the following ways:

5 (1) Powered platforms used for, and temporarily
6 constructed in, conjunction with exterior work on
7 buildings, facades, or to erect scaffolding, not
8 intended to move material from one landing to another.

9 (2) Portable lifts for material only.

10 The Rationale: As we are to reconvening our
11 permitting and inspection of construction personnel
12 and material hoists, which this WAC exempt per an
13 interpretation implemented in 2018. This exception
14 needs removed as it precludes us and contradicts what
15 we are currently trying to accomplish to reinstate
16 permitting and inspections of these conveyances.

17 Now I will open it up for questions and
18 clarification from anyone? Any comments? Once again
19 I'll ask, are there any questions for comments for
20 clarification needed? Mr. Friesen.

21 MR. FRIESEN: Wade Friesen, Vertical
22 Options. I'm just plain not familiar with these. I'm
23 wondering if somebody could enlighten us a little bit
24 as to what these mechanisms. Thank you.

25 MR. NAIPO: Gerald, if you want, do you

1 want me to speak on this, on CPHs?

2 MR. BROWN: It wasn't my proposal, but
3 reading through here, this is indicative of some of
4 the illegal stuff that was brought in that didn't meet
5 the A10.5 code, or 10.4 code for, you know, people
6 movers, and A10.5 for the material lifts or vice
7 versa. This is just indicative of non-code compliant
8 lifts, and why there was an exception on them I'm not
9 real sure, but we definitely want to strike these.
10 But that's, of course, I'm trying to sway you, but I'm
11 just saying that's what it was in reference to. And
12 so we don't want illegal lifts here, no matter if
13 they're temporarily used like this indicates. Thank
14 you.

15 MR. NAIPO: Jan.

16 MS. GOULD: Jan Gould. Is the acronym ASSE
17 correct?

18 MR. BROWN: Yes, it is. I thought it was
19 ANSI, but it's ASSE.

20 MS. GOULD: Thank you. Jan Gould.

21 MR. NAIPO: Mr. Wilson.

22 MR. WILSON: Yeah, Mike Wilson here. This
23 is strictly regarding construction personnel hoists,
24 is that true?

25 MR. NAIPO: Yes.

1 MR. WILSON: Okay. Thank you.

2 MR. BROWN: There's two different codes that
3 we recognize, construction personnel hoists and
4 construction material hoists, and this is more along
5 the material hoist, but it's still an issue and it's
6 still a safety problem.

7 MR. NAIPO: Any additional questions or
8 clarifications needed before we move to a vote?
9 All-righty. With that, I will propose that we vote on
10 proposal 0017 regarding removing the exemption for
11 material hoists and WAC 296-96-24301. If you are for
12 that, of removing the exception, I ask that you please
13 raise your hand and vote yea now. If you are for that
14 change, I ask that please raise your hand and vote yea
15 now. If you are for that change, I ask that you
16 please raise your hand and vote yea now. If you are
17 for us removing this exception, I ask that you please
18 raise your hand and vote yea now. All-right. Thank
19 you very much for your votes. Go ahead and please
20 lower your hands. Thank you very much.

21 If you would like to vote in opposition of this,
22 I ask that you please raise your hand now and vote
23 nay. If you are in opposition of this change and
24 removing this exception, I ask that you please raise
25 your hand and vote nay now. Thank you very much.

1 If you would like to wish to vote to abstain, I
2 ask that you please raise your hand and vote now. If
3 you wish to abstain, I ask that you please raise your
4 hand and vote now. Thank you.

5 With that, Melissa, please read the vote tally
6 for 0057.

7 MS. ERIKSEN: There were 22 yeas, 0 nays,
8 and 2 abstentions.

9 MR. NAIPO: Thank you. All right. This is
10 for removing -- oh, excuse me, now we'll be reviewing
11 proposal 0030. This is regarding WAC 296-96-24700.
12 This is subpart 13 regarding casket lifts. It is
13 proposed that we strike this whole section from WAC
14 296-96-24700 through 24780.

15 Rationale: It is seen as over-regulating of a
16 conveyance that poses no threat to riding public.

17 I just want it to be known that we have three
18 conveyances in our conveyance management system, one
19 which is active, one inactive, and one red tagged.
20 And if you would like to read any further, please feel
21 free in column E. But with that, are there any
22 questions regarding striking casket lifts from our
23 WAC? Any questions, clarifications? Mr. McKenzie.

24 MR. MCKENZIE: This is a joke; so, don't
25 take it seriously, but are we trying to get rid of the

1 dead weight? Okay. Sorry.

2 MR. NAIPO: I'm fine. At 3:55 on the very
3 last day, three days of this, I'm surprised you
4 haven't made a joke sooner. But thank you very much
5 for that, Perry, appreciate it. Mr. Friesen.

6 MR. FRIESEN: Wade Friesen, Vertical
7 Options. Well, I don't anticipate running across any
8 of these things, should it happen is the notion that
9 we not have to permit or inspect an installation, if
10 it were to come up since this section is being struck?
11 Thank you.

12 MR. NAIPO: I want to make sure people
13 understand, though, in our conveyance management
14 system we only have three conveyances that are under
15 that conveyance type. But if you search by funeral
16 homes or anything regarding that type of facility,
17 they have conveyances in their morgues that are
18 material lifts or they are labeled as different lifts.
19 So, all this is removing from the WAC and from our
20 system are those that are categorized as casket lifts.
21 I just want to make sure people understand that. So,
22 if you go to a funeral home and they have something
23 they're using as a casket lift, but we have it in our
24 system as a material lift that it needs to fall in
25 line with the code that, you know, is enforced with

1 that piece of equipment at that time. So, I just want
2 to make sure that's clarified for everyone. This is
3 regarding those that are right now in our system
4 listed as casket lifts.

5 So, with that, are there any additional
6 questions or clarifications needed before we pass this
7 on to a vote? All-righty.

8 And with that I ask that we please pass a vote
9 on proposal 0030 regarding removing subpart 13, Casket
10 Lifts. If you are for that, I ask that you please
11 raise your hand and vote yea now. If you are for that
12 change and removing subpart 13 regarding casket lifts
13 and removing them from the WAC, please raise your hand
14 and vote yea now. Thank you for that. So, please go
15 ahead and lower your hands.

16 Before I go through the process of asking nay
17 and abstaining, is 24 all of the voting members that
18 we have now, since I know Mr. Strafer had to leave and
19 there may have been someone else leave? Is 24 all the
20 voting members that we have now; so, it would have
21 been a total majority vote? Oh, you are still here.
22 Mr. Strafer, my bad. I thought you were leaving.
23 Okay.

24 So, with that, we will continue on with the
25 vote. If you are voting nay for that -- Mr. Rudder,

1 please lower your hand already, as I believe you have
2 voted yea. If you are voting in opposition of
3 removing casket lifts from the WAC, please raise your
4 hand and vote nay now. If you are in opposition of
5 removing casket lifts from the WAC, I ask that you
6 please raise your hand and vote now. Thank you.

7 If you would wish to vote to abstain, I ask that
8 you please raise your hand and vote now.

9 I think 24 is what we have. All right. Thank
10 you very much. Melissa, will you please read the vote
11 tally for proposal 0030?

12 MS. ERIKSEN: 24 yeas, 0 nays, 0
13 abstentions.

14 MR. NAIPO: So, I know everybody is probably
15 like, oh, my gosh, we're at the end. Unfortunately,
16 no. What I am going to do is go back --

17 MR. STRAFER: And this is when I leave you
18 guys and girls. Thanks, everybody. It's good to see
19 you.

20 MR. NAIPO: Mr. Strafer, its been a
21 pleasure. Thank you very much, sir.

22 MR. STRAFER: I'll see most of you at the
23 ESAC meeting, but take care.

24 MR. NAIPO: Thank you, sir. So, what I
25 would suggest is that we take a quick five minute

1 break. What I'd like to do during that five minute
2 break, Melissa, is, if you could, help me tally up
3 with the votes so I can adjust this because I would
4 like to at the end sort of close with showing them,
5 hey, this is what's passed, this is what's going on,
6 so that ESAC has a reference of numbers that are going
7 to them, and then we will come back from our five
8 minute break and start on 76. So, please feel free to
9 take a break and we'll see you guys back at 4:06.

10 (Recess taken)

11 MR. NAIPO: All right, guys and ladies,
12 guys, gals, men and women, 30 more minutes. Here we
13 go. I don't expect us to get through the rest of
14 these. I really believe the intent of what this
15 person submitted these under was a little bit
16 incorrect, but, again, I didn't know for sure; so, I
17 will leave that to you. I feel like these should be
18 put in 675, but as we go through this one and sort of,
19 if we get to the second and third one, if that's what
20 the consensus you guys feel is, then, if they pass,
21 that's what we will make sure happens with these.

22 So, with that, we are going over proposal 0076,
23 0076. The person submitting this felt like it should
24 be under WAC 296-96-0175, and this is to amend A17.1,
25 section 8.6 as follows, to revise 8.6.11.15, to remove

1 presence of elevator personnel, to keep when motor
2 controllers, remove are, locate in public spaces,
3 adding verbiage, motor controllers shall not be
4 installed in public spaces, remove verbiage elevator
5 personnel are to maintain a closed and locked motor
6 controller door when they are not present at the
7 controller cabinet.

8 So, what I will do is I will read the amended
9 code 8.6.11.15 as best I can with these edits and how
10 the person proposed it to be read. When motor
11 controllers located in public spaces. Motor
12 controllers shall not be installed in public spaces,
13 and at the end it says (see 2.7.6.3.2).

14 The rationale: "Manufacturers decided to move
15 equipment out of the machine room, which provided or
16 which provides engineering controls on the hierarchy
17 to protect persons and then authored this requirement
18 which places administrative controls in lieu of
19 engineering or higher safeguards. The requirement now
20 places all the liability on the elevator personnel,
21 putting both the effected worker and your inspectors
22 in liability. This proposal works in conjunction with
23 proposal I submitted regarding 2.7.6.3.2."

24 Are there any questions for clarification on
25 this? Any comments? Mr. Brinkman.

1 MR. BRINKMAN: Yes, Kevin Brinkman. He
2 references a proposal in 2.7.6.3.2, which happens to,
3 I think, be the very next proposal in the original
4 list which is number 77. That was basically to remove
5 the controller in public spaces which was voted down.
6 So, if we vote, we would -- We need to vote this one
7 down to be consistent with our action in proposal
8 number 77.

9 MR. NAIPO: Thank you for that. Mr.
10 Brinkman, did we vote on that today or was that
11 yesterday?

12 MR. FRIESEN: It was either yesterday or the
13 first day, I can't remember.

14 MR. NAIPO: Okay.

15 MR. CARY: Carl Cary, Lerch Bates. It was
16 the first day.

17 MR. NAIPO: It was the first day? Okay.
18 Would anybody like to review that right now or do you
19 guys feel like, hey, you know what, you guys do
20 remember that and you feel like, you know, what was
21 voted on before should be carried over on this one
22 because this one sort of falls in line with the
23 proposal that was before. Jan.

24 MS. GOULD: Jan Gould. Was the other
25 proposal for motion controllers and now this is motor

1 controllers?

2 MR. NAIPO: Let me see. There it is, right
3 here. So, it was the motor controller shall be
4 located in a machine room or control room. Electrical
5 clearance requirements shall comply with the NFPA,
6 NFPA70E. So, this was all here. I don't see anything
7 for motion controllers in here in what was referenced.
8 This is regarding just the motor controller. So, and
9 we did vote this one down, as was state by Mr.
10 Brinkman. So, if everyone is of agreement that since
11 we struck this down, we need to strike down this other
12 one that was in sort of referenced by it, as well. I
13 say that we put that to a vote.

14 So, is there any opposition with us carrying
15 over the vote from proposal 77 to this one, as they
16 are -- one is congruent on -- or one is dependent on
17 the other. Is there any opposition? Okay. Since
18 there was no opposition, I show that we are not going
19 to vote on this as it was struck down before. So, we
20 will not be voting on 76.

21 Moving on to 98, proposal 0098, Amend A17.1
22 section 2.8 as follows: 2.8.2.1 Installation of
23 Electrical equipment and wiring shall conform to NFPA
24 70 or CSA C22.1, whichever is applicable (see Part 9)
25 and to add all of this verbiage, Except that outlet

1 device junction or pull boxes located in public areas
 2 shall be enclosed to protect against accidental
 3 contact using tamper proof fasteners used for the
 4 purpose of attaching covers or other equipment to the
 5 box. Fasteners shall be either machine screws
 6 matching the thread gauge or size that is integral to
 7 the box or shall be in accordance with the
 8 manufacturer's instruction. Covers and other
 9 equipment fastened to an outlet, device, junction or
 10 pull box located in public areas shall only be
 11 removable with tools to remove and install tamper
 12 proof fasteners.

13 Any electrical -- Rationale: Any electrical
 14 enclosure in a public space must protect all persons
 15 regardless of voltage, material, or purpose. They
 16 physical security of an electrical enclosure, if
 17 breached, can precipitate multiple hazards ranging
 18 from, but not limited to, shock, electrocution,
 19 equipment failure, equipment failure with passenger
 20 trapped, loss of revenue to multiple parties due to
 21 equipment being unavailable. NFPA 70 currently has an
 22 error or omission that does not protect against this
 23 hazard." Are there any questions for clarification on
 24 this? Any comments for clarification on this? Mr.
 25 Barnhart.

1 MR. BARNHART: My only comment is I think
2 this is extremely extreme. We don't require
3 tamper-proof protection on all kinds of things. Why
4 do we need it in this particular case? So, I would
5 say, no, we don't need this.

6 MR. NAIPO: Mr. Brinkman.

7 MR. BRINKMAN: Yeah, Kevin Brinkman.
8 Basically the same thing as Mr. Barnhart. I mean we
9 have -- This says outlet boxes. I mean this could
10 apply to outlet boxes; so, every outlet box in the
11 building, not just related to the elevator, is
12 supposed to have tamper-proof screws on it? I think
13 it's well-covered by the National Electric Code and we
14 shouldn't be messing it.

15 MR. NAIPO: Any additional questions or
16 comments for clarification? Since no other questions
17 or comments are being proposed, I'd ask that we please
18 take proposal 0098 to a vote. If you are for this
19 change and this verbiage to be updated in our WAC
20 wherever it may be, we will make sure we find that
21 correct place, but if you feel like this is something
22 you are for, I ask that you please raise your hand and
23 vote yea now. If you are for this change, I ask that
24 you please raise your hand and vote yea now.

25 If you are against -- Thank you. Go ahead and

1 lower your hands. If you are against this change, I
2 ask that you please raise your hand and vote nay now.
3 If you are against this change, I ask that you please
4 raise your hand and vote nay now. Thank you. Please
5 lower your hands.

6 If you would like to wish to vote to abstain, I
7 ask that you please raise your hand now. If you wish
8 to abstain, please raise your hand now.

9 Melissa?

10 MS. ERIKSEN: Can I just confirm that
11 everybody who currently has their hand up has put it
12 up to abstain? Thank you.

13 MR. NAIPO: Thank you. Melissa, will you
14 please read the vote tally for proposal 0098?

15 MS. ERIKSEN: Yes. There was 1 yea, 18
16 nays, and 4 abstentions.

17 MR. NAIPO: Thank you. Moving on to
18 proposal 0099, Amend A17.1 Section 8.6, as follows:

19 8.6.1.2.1(d) Remove this verbiage: Where the
20 MCP is maintained remotely from the machine room,
21 machinery space, control room, or control space (see
22 8.11.1.8) instructions for on-site locating or viewing
23 the MCP in either hard copy or an electronic format
24 shall be posted on the controller or at the means
25 necessary for test (see 2.7.6.4). The instructions

1 shall be permanently legible with characters a minimum
2 of three millimeters (0.125 in.) in height. Adding
3 this verbiage now, The use of remote maintenance
4 control programs is prohibited. Maintenance Control
5 Programs shall be maintained within the physical
6 building or structure the conveyance is permanent
7 installed.

8 Rationale: Elevator personnel and building
9 owners suffer from persons making MCPs and records
10 hard to see. Compliance cannot be accomplished or
11 verified. There is no legal provision that easily
12 ensures a private entity provides freedom of
13 information, thus the above proposal should make it
14 clear that the necessary documentation is required to
15 be there where the affected people are and needing to
16 see it. The proposed also solves the problem wherein
17 a company is the maintenance provider, and, then,
18 after not being that entity, takes the required safety
19 documents off the job site making it unsafe for any
20 future company to ensure compliance. The code and
21 your justifications enforcement should not favor a
22 company's so-called secrets at the expense of safety.

23 Now, I'll open it up for questions and
24 clarification, opening it up to questions and
25 clarification. Any comments? Any comments for

1 clarification? Carl.

2 MR. CARY: This is an area I don't have a
3 tremendous amount of experience in related to grain
4 elevators. And one of the discussions I thought I
5 heard earlier was this presented a significant
6 hardship for them where they had, you know, 15 houses
7 in the middle of nowhere maintaining the books for
8 each one was presenting a challenge. Is that the
9 still the case?

10 MR. NAIPO: Mr. Hawks.

11 MR. HAWKS: (Audio difficulty)

12 THE COURT REPORTER: I'm sorry, this is the
13 court reporter, I cannot hear Mr. Hawks.

14 MR. NAIPO: Yeah, you're unmuted. It's
15 just I think it's cause you're a little bit far away
16 from the mic, Mr. Hawks and we can't hear you. Can

17 MR. HAWKS: (Audio difficulty)

18 MR. NAIPO: If I can, I think I can remember
19 this conversation, Mr. Hawks. Yeah, what he was
20 stating is they have a lot of conveyances that are
21 spread miles and miles and miles apart, and there
22 isn't a place to house those records on-site in the
23 conveyance because all it is is the conveyance
24 on-site, and because of these type of conveyances
25 they don't have an actual room that these can be housed

1 in, as well, because of, you know, they're outside,
 2 they're in the elements, susceptible to mice, you
 3 know, in there because these are grain elevators. It
 4 is an issue about being documents on-site, and so they
 5 would like something to dress that when this gets to
 6 the ESAC. Whether or not this would affect them, I
 7 believe, as it's written it sort of does. So, if it
 8 does pass, I think this is another part of a
 9 conversation that needs to be had at the ESAC or do
 10 people feel like this is the same thing that was
 11 already stated, and it did pass regarding maintenance
 12 records being held on-site, as well as the MCP. So,
 13 I'll just put that out there as possibility. Mr.
 14 Brinkman.

15 MR. BRINKMAN: Yeah, I was just going to ask
 16 because I knew we'd -- I think it was proposal 0096
 17 and I was going to ask what the vote count was because
 18 I somehow missed to write that down. But this is
 19 similar language to that; so, I'm not sure we need
 20 both of them, but I'd be curious what the vote count
 21 was on that one if Melissa could let us know. Thank
 22 you.

23 MR. NAIPO: Do you have that readily
 24 available, by any chance, Melissa?

25 MS. ERIKSEN: I'm looking. I have to find

1 it. So, on proposal 2022.0096, it did pass, 16 nays,
2 8 nays, 2 abstentions. The one thing that I'll say is
3 that in this specific proposal it is talking about
4 them being -- the MCP being on site, whereas the one
5 that we are currently on, which I have to find where I
6 was, it's saying that it needs to be there, but
7 it's -- I feel like it's more about using an MCP
8 instead of having an electronic MCP.

9 MR. NAIPO: Mr. Quiett.

10 MR. QUIETT: Jonathan Quiett. We discussed
11 multiple times about the MRL elevators. I can speak
12 for TK Elevator. They have been shipping out a
13 hardened plastic folder for all of the MCP and the
14 required on-site documentation for their jobs for a
15 couple years now. We don't currently use them in this
16 state, but I know they're shipped with every job; so,
17 it's definitely there are other options out there and
18 it's something we're all going to have to combat here
19 very shortly with the introduction of MRL -- full MRL
20 traction and hydraulic equipment.

21 MR. NAIPO: Thank you. Jan.

22 MS. GOULD: Jan Gould. City of Seattle
23 amends the same and strikes (d) and states, "The MCP
24 shall be posted in a machine room, machinery space, or
25 control room", and we do that throughout all the

1 records. They can keep it electronically. We just
2 require it to be on-site. Thank you.

3 MR. NAIPO: Thank you. Mr. Wohlschlager.

4 MR. WOHLSCHLAGER: Lyall Wohlschlager.

5 Yeah, I would just like to, on behalf of the grain
6 industry, also recommend that they be exempted from
7 this requirement or there be some wordsmithing done at
8 the ESAC to give them some leeway on where those
9 records are kept.

10 MR. NAIPO: Mr. Brinkman, can you remind me
11 what that previous proposal was, just the number that
12 you had referenced before? It was see 96, is that
13 what --

14 MR. BRINKMAN: Kevin Brinkman. It was 96.

15 MR. NAIPO: Thank you, sir, very much. All
16 right. Mr. McKenzie.

17 MR. MCKENZIE: I'm just curious on the grain
18 elevators, do they fill the MCP out while they're
19 there and then take it back somewhere at one central
20 location, wherever it is, where they keep all their
21 MCPs, is that what they do, or how do they fill out
22 the MCP while they're there, while they're doing all
23 their testing and everything? Do they write it on a
24 separate piece of paper and go back and fill out the
25 MCP? Because you don't keep the MCP there, how do you

1 keep track of what you're doing and what you're
2 testing, and all that stuff?

3 MR. NAIPO: Lyall.

4 MR. WOHLSCHLAGER: Lyall Wohlschlager.
5 Since we can't hear from Mr. Hawks, I'll fill it in
6 for you. Yes, they're normally kept in a central
7 location, and when their mechanics go in the field
8 they take those MCP books and logs with them and
9 complete those while they're doing their annuals or
10 their exams. Some locations have the ability to have
11 the logs left on-site, but there's a good majority
12 that can't. So, they are kept in a central location
13 with the mechanics in the main office. And when an
14 inspector comes out there, they are normally escorted
15 by those same mechanics and so those logs are
16 available to the inspector as he's let into each of
17 those facilities. Thank you.

18 MR. NAIPO: Thank you. Perry, did you have
19 any additional questions? Your hand is still raised.
20 Thank you. Are there any additional questions or
21 clarifications needed before we put this to a vote?
22 All-righty. With that, I ask that we please pass a
23 vote on proposal 0099 regarding adding verbiage of the
24 use of remote maintenance control programs is
25 prohibited. Maintenance Control Programs shall be

1 maintained within the physical building or structure
2 the conveyance is permanent installed. If you are for
3 that change, I ask that you please raise your hand and
4 vote yea. Again, the notes and comments that have
5 been made have been tracked as best as they can in
6 conjunction with what Melissa did. So, these will be,
7 if it does pass, taken to the ESAC for further
8 consideration and edits.

9 So, if you are for these changes, please raise
10 your hand and vote yea. Thank you. Thank you to
11 those who have voted.

12 If you are in opposition of this, I ask that you
13 please raise your hand and vote nay. If you are in
14 opposition of this, I ask that you please raise your
15 hand and vote nay. Thank you.

16 If you wish to vote to abstain, please raise
17 your hand and vote to abstain. If you would like to
18 vote to abstain, please raise your hand and vote
19 accordingly.

20 Thank you. And with that, Melissa, will you
21 please read the vote tally for proposal 0099?

22 MS. ERIKSEN: Yes. There were 19 yeas, 2
23 nays, and 2 abstentions.

24 MR. NAIPO: Thank you.

25 MS. ERIKSEN: You're welcome.

1 MR. NAIPO: So, we'll see if we can get
2 through this one real quick, the last one for today.
3 This is proposal .0100 and this going to Amend A17.1
4 Section 8.6 as follows:

5 Code reference 8.6.1.4.1(b) Repair and
6 Replacement Records, keeping all of the verbiage of
7 this code requirement and striking the very last
8 sentence, "These records may be kept remotely from the
9 site."

10 Rationale: Elevator personnel and building
11 owners suffer from persons making MCPs and records
12 hard to see. Compliance cannot be accomplished or
13 verified. There is no legal provision that easily
14 ensures a private entity provides freedom of
15 information, thus the above proposal should make it
16 clear that the necessary documentation is required to
17 be there where the affected people are and needing to
18 see it. The proposed also solves the problem wherein
19 a company is the maintenance provider, and, then,
20 after not being that entity, it takes the required
21 safety documents off the job site making it unsafe for
22 any future company to ensure compliance. The code and
23 your jurisdiction's enforcement should not favor a
24 company's so-called secrets at the expense of safety.

25 Before I open this up to questions, because I

1 feel like it's going to come up when I go to comments,
 2 is that -- Everyone has to understand, too, that we
 3 just voted for MCPs to not be kept electronically off
 4 site or anything. It has to be a physical copy
 5 on-site. So, this regarding repair and replacement
 6 records. So, what I'd ask is that if there is no
 7 discussion to be had, I will ask one time if there are
 8 points of clarification that are needed or questions.
 9 I will offer that once and then we will move forward
 10 because we just passed that, hey, MCPs can't be held
 11 electronically on-site; so, therefore, this is repair
 12 and replacement. But, again, because these are
 13 specifically a different type of record, I do want to
 14 give people the opportunity to ask a question or
 15 clarify their point of view before we cast this vote,
 16 but I will only give you this opportunity once. So,
 17 if you have any points questions or clarifications, I
 18 ask that you please raise your hand now. Mr.
 19 Wohlschlager.

20 MR. WOHLSCHLAGER: Lyall Wohlschlager. I
 21 would just ask for the same wordsmithing for some sort
 22 of leniency with the grain industry on this one.

23 MR. NAIPO: I don't see anybody else's hand
 24 for clarifications or questions. So, with that, I ask
 25 that we please pass a vote on proposal 0100 and

1 removing -- regarding Repair and Replacement Records,
2 removing the capability for these records to be kept
3 remotely from site. If you are for that change, I ask
4 that you please raise your hand and vote yea now. If
5 you are for that change, I ask that you please raise
6 your hand and vote yea now. Thank you. Go ahead and
7 lower your hands. Thank you for everyone who voted.

8 If you are in opposition of this change, I ask
9 that you please raise your hand and vote nay now. If
10 you are in opposition, I ask that you please raise
11 your hand and vote nay now. Elena, did you --

12 MS. CAMPBELL: Elena.

13 MR. NAIPO: Elena, I'm sorry. Elena, did
14 you vote yea already? Thank you. If you are in
15 opposition of this, I ask that you please raise your
16 hand and vote nay. If you are in opposition of this,
17 please raise your hand and vote nay. Thank you.

18 If you would like to vote to abstain, I ask that
19 you please raise your hand and vote now. If you wish
20 to abstain, I ask that you please raise your hand and
21 vote now. Thank you.

22 Melissa, will you please read the vote tally for
23 proposal 100.

24 MS. ERIKSEN: Yes. The vote came out 19
25 yeas, 2 nays, 2 abstentions.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Recap

MR. NAIPO: All-righty. It is three minutes early from when I said that we would end our day and recap everything. I'm not going to force you guys to go through anything. I don't see anything that's going to be a quick, easy conversation to have. So, with that, I would like to close the TAC at this time. And with that, I just want to say thank you guys very much for everything, your patience, your due diligence, and for you guys to stay engaged and have conversations, ask questions, especially this last half of the day. Mr. Carl, Carl Cary.

MR. CARY: Yeah, Carl Cary, Lerch Bates. I guess Gerald said he want us to talk about something before we conclude and I just want to make sure we do that.

MR. BROWN: Yeah, that was -- It's about a controversial 2019 thing. We don't have time for it. I'm going to pass and we'll hash through it during the ESAC. Thank you.

MR. NAIPO: All right. Thank you. Mr. McKenzie.

1 MR. MCKENZIE: Perry McKenzie, Elevator
2 Inspector, Supervisor, blah, blah, blah. Paoa,
3 fantastic job, fantastic job. Melissa, thanks for
4 supporting him and all he did. I think you did a
5 great job. I would not want to do what you do. I
6 will not do what you do, and I thank you for not
7 making me do what you do, but you did a great job; so,
8 thank you very much.

9 MR. NAIPO: Thank.

10 MS. GOULD: Here, here, thank you so much.

11 UNIDENTIFIED SPEAKER: Right on, that was
12 perfect.

13 MS. GOULD: Grueling.

14 MR. NAIPO: I'm not going to say it's
15 grueling because, to be honest with you, its been a
16 pleasure working with all of you. I did have some
17 preconceived notions of how this might go and I
18 thought it was going to go a lot -- it was going to be
19 a lot harder. Now, granted, we didn't get through the
20 volume of work that I wanted to, but it was a pleasant
21 surprise to see the conversations going on; so, thank
22 you for lowering that anxiety within myself and
23 proving me way wrong, and I over-estimated how hard
24 this really would have been. So, thank you for that.
25 Thank you for the comments that are coming in on the

1 chat. I've only seen a couple come through. Thank
 2 you very much.

3 Just for a quick re-cap, I just want people to
 4 know so of the 108 proposals, there are going to be
 5 one, two, three, four, five, six, seven, eight, nine,
 6 about nine that didn't really get reviewed. There are
 7 some that I have a yellow line by it, but there's
 8 stuff that needs to be reviewed against it, but of
 9 those seven that we didn't get to, five we've already
 10 sort of talked about, so there is already some
 11 conversation had in the record that we can go back
 12 against. But with that, we got through 103, or excuse
 13 me, not 103, we got through almost 100; so, I
 14 appreciate that. No, we didn't get to the code part
 15 of it, but, like I stated before at the beginning of
 16 this meeting, Melissa and I will forward you an e-mail
 17 and point you to the direction of your ESAC contact
 18 and representative. What I ask that you do is, if
 19 there was anything left on the docket that we didn't
 20 to go and review, and there are concerns that you had
 21 regarding that change, I ask that you please get a
 22 hold of your ESAC representative so that they can
 23 carry your -- so that they can carry your concern on
 24 to the ESAC and hopefully address it like you would,
 25 even though we didn't have the opportunity to do it

1 here, and that is for all of the WAC changes, as well
2 as the comparison between 17.1 '16 to '19, as well as
3 18.1 2017 to 2020. If there are any concerns you have
4 as a stakeholder for those changes, please, please,
5 put those forth to the people that -- like I said
6 again, we will give you the contact person for each of
7 you in our closing e-mail today. I'll also try to --
8 I don't think I'll have time to actually give you guys
9 a full synopsis of, hey, this is what passed, this is
10 what didn't, and the like, but I think, if you do need
11 that information, please feel free to reach out to us
12 next week and I feel like we'll be able to provide
13 that to you, or, if you want, I can just send that out
14 to you next week, sort of what the ESAC is going to
15 have to be reviewing.

16 MS. ERIKSEN: We'll send it out this week.

17 MR. NAIPO: Okay, we'll send -- Thank you.
18 Thank you for making that executive decision for me.

19 MS. ERIKSEN: It's what I do.

20 MR. NAIPO: Are there any questions or
21 clarifications, any suggestions? Now, again, for
22 those were in the TAC prior, if you felt there are
23 things that worked better then that you feel we should
24 implement now, you don't have to speak now, you can
25 send an e-mail to Melissa or I and we can put that

1 into this. This is something new for us. And, again,
2 the main intent was to make sure that people's
3 opinions were heard. And that they weren't summarily
4 dismissed because of formatting. I really had an issue
5 with that because, again, I know how important and
6 valuable your time is, and if you submitted something
7 and because there was a common here, or it wasn't
8 formatted correctly like some of these that we've
9 already found, like, hey, it was a wrong WAC
10 reference, or, hey, that's something new, why isn't
11 that underlined blue, and all that, I appreciate your
12 guys's willingness to look at these things and try to
13 help and wrap your head around what was this person
14 really trying to get done, and if that was really
15 something you felt was of value to your stakeholder
16 group that you represent. And with that, I will open
17 it up to any comments, suggestions, if there is
18 anyone.

19 MS. ERIKSEN: Quit sharing your screen,
20 please.

21 MR. NAIPO: What's that?

22 MS. ERIKSEN: Quit sharing your screen,
23 please.

24 MR. NAIPO: All right.

25 MS. ERIKSEN: Thank you. See, you all

1 aren't the only ones; I'm bossy, too.

2 MR. NAIPO: Anybody, any compliments, any --
3 not compliments, any questions or anything like that
4 at all? Oh, Melissa.

5 MS. ERIKSEN: I want to say thank you to
6 everybody. Paoa, you did a fantastic job. I'm very
7 proud of you. It is super fun working with you.
8 Thank you to everyone who said something really nice
9 or said thank you at all, but this was a team effort
10 and it's because everybody decided to say, "I want to
11 be a part of this" and stepped out, and we came
12 together, and despite any differences, despite any
13 anything, we worked together as an amazing team, and I
14 appreciate each and every one of you for that. Mary
15 Jo, you are a rock star. Mary Jo is our court
16 reporter for this meeting and I just specifically want
17 to call you out. Wow, I can do a lot of things, and
18 there are a lot of things I cannot do, and your job
19 specifically I'm so thankful for you; so, you have a
20 lot of work to go through, please take out any bad
21 words I said. I tried to be really good. But in all
22 seriousness, thank you very much. And all of you guys
23 are rock stars.

24 ///

25 ///

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Adjourn

MR. NAIPO: So, if there isn't any other comments, questions, or anything like that, thank you guys very much for all of your time, all of your effort, all your concentration, trying to staying engaged as much as possible because I know when we're not talking about things that you are impacted by it can be a little easy to sort of drift off, but I know there were a lot of people who chimed in on things that maybe they don't readily work on all the time, but they did have some context to give to those people, and to those things, and regarding those subjects, and I want to thank you very much for that, and it did not fall on deaf ears, and I really appreciate everybody's willingness to be open and conversate about these things. And with that, 2022 TAC, I say we should convene, but Mr. Gerald would like to say something.

MR. BROWN: Yeah. I just want to once again thank everybody for being here and your contribution. I've learned a lot, got to share a lot. We appreciate you helping, help this important part of conducting business for the state. Please read the

1 e-mail from yesterday about how were going to look at
2 the 2019 version of A17.1 in 2018. Please review
3 those handouts that you got, and be sure to submit
4 questions, concerns to ESAC on that. So, we still
5 have that work that needs to be done, but signing up
6 for another week of this is probably not going to
7 work. So, thank you, again, and thank you for making
8 Washington State great. I just made that up. I liked
9 it.

10 MR. NAIPO: Thank you, everyone. Have a
11 great rest of your week. Take care and be safe
12 everyone. Thank you.

13

14

15 (Concluded at 4:49 p.m.)

16

17

18

19

20

21

22

23

24

25

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

C E R T I F I C A T E

I, Mary Jo Fratella, a Certified Court Reporter in and for the State of Washington, residing at Covington, authorized to administer oaths and affirmations pursuant to RCW 5.28.010, do hereby certify:

That the foregoing proceedings occurred before me at the time and place stated therein and that the proceedings were by me stenographically reported and later transcribed by means of computer-aided transcription;

That the foregoing transcript is complete and accurate insofar as the proceedings were audible, clear, and intelligible;

I do further certify that I am in no way related to any party in the matter, nor do I have a financial interest in this matter or the outcome thereof;

IN WITNESS WHEREOF, I have hereunto set my hand this 3rd day of March, 2022.

Mary Jo Fratella



Mary Jo Fratella, CCR, RPR
Certified Court Reporter, CCR No. 2083

A	A18 616:6,7	742:16 767:5,6,8	644:25 645:22	604:12
A.17.3 751:8	A18.1 585:7,9,24	772:21,22,23	646:1,8 647:22	action 718:22 784:4
a.m 552:3	586:4,7,9,11	774:17,19 780:7,8	648:15 649:6,8,13	803:7
A/C 629:20	591:18,18,21	780:9 782:23,25	649:17 650:4	actions 568:18
A10.5 793:24 795:5	616:10 621:13	783:1 785:17,19	660:24 688:20	573:18,22 575:6
795:6	712:20 714:3	793:11,13 797:1,3	786:4,6 787:3,11	576:14 577:5
A14.3 786:15	715:18 777:10,16	800:7 807:6,8,12	787:12,15 791:9	activate 587:9
787:14	779:11 780:20	814:16,17,18	792:21,24	activated 752:11
A17 657:13 721:19	781:6 783:14,19	817:18,20	Accessibility	active 739:10
737:18	783:23 784:24	abstaining 660:5	741:16	797:19
A17.1 559:1 641:20	A7.3 749:3	687:23 799:17	accessed 689:22	actively 579:9
651:7,21 652:5	ability 561:2 562:8	abstention 626:5	accessibility 715:19	actual 573:12
654:10,14 657:22	562:11 563:3	675:10 793:17	741:20,21,24	574:20 598:10
665:7 666:5	579:3 655:15	abstentions 584:7	742:4 775:14	599:21 603:20
669:16 672:16	664:11 692:21	601:16 639:16	777:13,15 780:18	665:21 705:13
696:6 714:3,5	727:24 813:10	643:13 651:1	780:23 781:4,19	769:8 776:23
715:17 722:13	able 553:8,23 554:7	660:12 680:19	782:6,8 783:8,17	809:25
737:21 743:4,9	555:14 557:17	688:3 691:24	784:21	actuality 741:12
745:6,10 747:17	559:9,12 560:11	706:20 718:2,13	accessible 673:22	actuate 689:25
760:8 762:4 770:2	568:6,16 569:7	729:23 740:16	677:18 688:9	704:21
770:15 772:10	573:11 575:5,7,11	742:21 767:11	689:5,13,15 690:9	actuates 695:3
801:24 804:21	576:13,13 579:13	773:3 774:24	697:4 777:19	ad 714:4
807:18 815:3	581:2 609:1 612:4	780:14 783:5	accessing 630:19	ADA 719:15
825:2	664:14 689:7	785:24 797:8	676:18,20	add 595:14 604:6
A17.1/B44 737:18	703:10,21 705:1	800:13 807:16	accident 564:5,17	618:9,21,22
A17.1/CSA 732:4	724:10,12 725:7	811:2 814:23	accidental 805:2	630:21 632:25
743:4 745:6 762:5	725:10,14 788:22	817:25	accommodated	633:2 639:25
A17.3 654:14	790:20 821:12	absurd 661:22	623:13	651:3,9 652:25
657:14 658:8	absence 769:13	AC 586:13 593:10	accomplish 561:14	666:11 669:17
742:25 743:1,6	absences 563:5	595:2 604:17	562:2 564:8	672:16 673:11
745:8 746:12,12	absolutely 564:8	605:10 616:23	794:15	681:3 688:10
746:13 747:2,4,7	621:10 626:4	acceptable 657:7	accomplished	689:19 690:1,3
748:6,8,14,17,21	643:12 734:3	657:11	720:23 808:10	731:1 733:20
749:6,14,15,19,21	abstain 583:25	acceptance 641:11	815:12	734:9 741:18,24
749:23 750:7,25	584:2 601:9,11	719:9 732:14	account 648:7	743:5 745:7 765:5
750:25 751:6,7,11	625:23,25 639:9	778:15	accurate 607:20	769:24 784:25
751:13,15 752:1	639:11 643:5,6	accepted 771:2	616:9 770:8	804:25
754:22 755:1	650:19,21 660:7	accepting 559:13	776:13 826:13	added 569:2 585:11
756:5,6,7,11,18	675:4,6 680:11,13	access 624:6 626:18	achieve 620:15	591:8 603:20
759:12,12,18,20	687:21 691:18,19	626:18,23,25	achieving 689:7	629:11,13,25
759:25 760:6,7,14	706:13,15 717:19	627:7 630:13	acronym 795:16	630:10,11 634:19
760:15,17 761:3,4	717:20,21,22	632:5 634:19	acrylic 661:5,10	648:23 670:8
762:1,2 765:6	729:16,17 740:10	640:23 641:3,5,20	act 584:19 589:9,14	688:22 694:6
A17.5/A17.1 653:2	740:12 742:14,15	644:3,12,13,17,21	589:18 593:17	707:22 708:19

713:12 734:5,17 752:18 754:15 758:9 772:7 adding 584:25 585:1,2,11 587:1 604:5 608:15 626:8,9 640:1,14 641:6 649:1,7 650:3 661:4 665:2 669:20 670:10 675:15,17 684:8 688:22 692:8,9 693:19 698:1 705:22 707:1,17 708:8 709:4 711:2 712:3 717:1 718:25 731:25 732:5 741:15,19 742:4 743:8 745:10 772:5 777:17 779:9 783:14,17 786:3 792:19 802:3 808:2 813:23 addition 586:25 603:9 613:23 651:14 680:5 686:25 713:8 777:22 792:5,7 additional 553:21 569:24 582:22 583:7 584:23 587:15 591:4 596:25 599:1,13 599:23 600:11,13 604:2 607:24 609:12 610:11,14 611:21 632:25 634:13,15,16 642:13,14 647:19 649:25 658:18,19 658:21 659:14 662:5 665:11 670:7,22 673:24	677:21 678:1,15 678:17 679:13,16 686:7,11 690:15 690:16 694:15 701:17 705:17,19 712:14 714:25 716:23 724:6 725:6 728:20,21 732:9,25 746:4,5 748:23 749:8 754:1 758:3 761:8 771:19,25 777:23 778:11 779:4 782:1 784:17 790:4,8 792:17 796:7 799:5 806:15 813:19,20 Additionally 592:13 additions 661:20 730:8 address 554:7 556:16 567:7 574:25 575:1 588:6 593:24 594:15 614:9 621:18,20 645:11 649:22 653:18 657:2 658:8 660:18 678:6 703:2,24 714:8,14 729:24 731:13 750:22 751:4 752:9 753:11 754:9 758:13 768:20 820:24 addressed 554:8 570:1 575:18 577:9 583:4 594:16 614:5 623:18 625:11 629:1 641:22 642:9,10 648:24 658:10 666:17	702:15 703:17 708:4,7 716:15 726:16 727:1 744:13,15 753:7 757:15,25 766:2 addresses 587:18 592:11,18,25 658:4 739:18 760:22 addressing 628:19 683:14 684:13 689:11 690:2 711:21 adds 586:15 631:19 689:23 704:10,23 708:24 758:17 adequate 658:15 adequately 592:11 642:9,10 adhere 569:8 732:20 adjacent 626:12 636:2 638:9 640:15 711:6,9 717:4 Adjourn 551:16 824:1 adjourned 555:18 adjust 563:3 801:3 adjusted 780:25 adjusting 771:13 admin@capitolp... 550:24 administer 826:6 administrative 802:18 admit 657:18 710:22 adopt 621:13 622:12 653:9 724:23 adopted 568:23 653:13 658:3 750:25 751:22	776:3 adopting 658:25 739:19 adoption 651:21 654:11 658:24 770:9,14,17 776:2 adopts 617:10 advance 564:19 Advisory 550:4 552:2,6 569:4,12 569:17 advocate 631:25 632:5 advocating 633:23 ae 728:7 affect 810:6 affirmations 826:6 afternoon 555:12 555:15 AG 731:9 age 562:18 agency's 580:5 agenda 551:4 552:23 554:22 ago 563:18 595:2 596:7 598:9 607:14 636:17,17 728:15 734:6 738:14 750:9 agree 593:23 594:10,13 595:12 597:3 608:21 620:9 621:8 650:3 658:2 669:2,16 670:10,11,13,16 670:17,19 674:2 677:7,9 700:20 701:1,21 704:16 714:15 715:15 722:2 748:4,9 749:1 750:2 agreed 624:9 agreement 581:16 620:24 659:7	804:10 agrees 726:2 ah 554:24 731:16 ahead 560:25 561:2 564:13 590:10,10 590:13 600:25 625:5,16,22 639:1 642:22 643:3,4,8 650:15 660:4 674:25 680:2 691:9 717:9 742:9 759:4 772:15 782:14 785:9,10 793:4 796:19 799:15 806:25 817:6 AHJ 641:16 770:19 air 629:20 alarm 587:9 743:16 743:17 752:25 Alicia 557:23 558:9 alignment 661:14 All-right 796:18 All-righty 568:10 584:8 590:8 602:17 610:16 643:14,25 674:14 675:13 679:15 680:14 691:21 705:20 718:14 729:10 741:5 750:1 772:2 779:5 782:3 793:3 796:9 799:7 813:22 818:5 alleviate 632:12 653:24 allow 606:25 616:13 622:4 657:22 697:25 700:1 723:7,10 752:4 753:10 allowable 715:10 allowance 753:22
---	---	---	---	---

allowances 677:16 787:24	713:15	anticipate 798:7	771:3 772:8	704:18,19 705:22
allowed 589:4 604:2 622:8 636:20 651:14 657:5 689:9 746:21 753:18 793:1	amends 811:23	antonym 563:19	applications 587:22 588:1 628:17	approving 738:12
allowing 595:7 689:14 690:23 691:6 692:19 721:11 723:17 728:24	amount 759:13 809:3	antonyms 563:17 564:4	applied 761:4	aramid 693:6
allows 586:13 598:3 711:10 722:3	amp 587:2 612:14 612:14,16	anxiety 557:14 726:23 819:22	applies 598:14 609:9 617:17 619:3 637:7 651:18	arbitrarily 572:13 678:24
alluded 572:6 624:22 761:23 762:6	ampersand 606:6 611:4	anybody 568:6 572:18 579:4 589:19 590:2,13 592:17 657:21 663:18 726:5 756:14 803:18 816:23 823:2	apply 569:13 571:4 587:7 593:15 619:3,11 637:24 641:7 665:20 673:19 721:10 743:9 745:11 747:18,22 770:15 776:6 778:9 806:10	area 809:2
alteration 569:1 592:24 743:11,12 745:12,13 747:19 747:24,25 753:8 770:5	analysis 668:9	anymore 613:23 728:17 778:7	appointed 572:11	areas 637:10 787:13 788:23 805:1,10
alterations 575:14 751:7 769:13	and/or 562:2,10 568:18 569:1 573:19 576:14 652:11 675:16 676:2 679:11,19 709:7	anyway 728:14 791:24	appreciate 554:21 555:10 560:9 566:19 579:4 599:10 602:13 609:23 610:5 613:13 643:20 679:6 682:12,18 682:25 708:12 725:22 729:25 730:1,2,3 733:10 754:1 758:1 798:5 820:14 822:11 823:14 824:17,24	arguable 562:12
altered 732:11 733:25 736:6 743:17,20 749:4 752:16 754:18 769:25 772:8	angle 659:10	anyways 643:25	applied 572:11	argue 619:2
alternate 753:2	angles 597:19	apart 789:8 809:21	appointing 572:11	argued 715:24
altogether 748:13	Annette 557:25 558:8	Apologies 662:2	appreciate 554:21 555:10 560:9 566:19 579:4 599:10 602:13 609:23 610:5 613:13 643:20 679:6 682:12,18 682:25 708:12 725:22 729:25 730:1,2,3 733:10 754:1 758:1 798:5 820:14 822:11 823:14 824:17,24	arguing 620:18
amazing 564:9 823:13	annual 743:13 753:17 770:18 773:16 776:12	apologize 553:8,15 567:10 629:2 646:18 647:16 704:6 747:10 765:21 777:3	appropriate 570:7 609:21 619:19 628:15,18 632:2 685:16 718:22 770:20	argument 757:25
ambiguity 567:11 594:8 684:22	annually 732:15	appears 685:25 686:3 709:12	approved 595:11 605:3 692:9,22 693:4 698:1	arm 571:8
amend 801:24 804:21 807:18 815:3	annuals 813:9	appendix 761:3		arms 695:3
amended 610:7 647:12 802:8	ANSI 661:6 663:14 673:13 732:21 733:14 786:15 787:14 795:19	applicable 561:6,6 561:7 591:16,22 592:11 661:7,8 673:14,15 755:15 776:2 778:3,6 793:21 804:24		arrange 563:23,25
amending 647:14	ANSI/ASSE 793:24	applicant 567:19 568:11 576:9		arrest 792:13
amendment 557:5	answer 587:18 606:20 608:16 612:5 622:17 631:2 664:12 665:7 669:15 673:18 723:14 728:10 758:16 760:22 778:4	application 607:9 731:25 732:6,11 734:1,2 735:1 736:6 738:7,10,11 738:17 741:14 751:22 752:19 769:15,19,21 770:1,7,8,11,16		article 592:10,10 617:11,11 619:3 641:7

689:20 690:2,6 721:6 732:4,12 737:2 742:25,25 743:4,4,6 745:6,6 745:8 747:16 762:1,1,4,5 765:6 770:2,15 772:10 775:25 777:10,16 779:10 780:20 781:6,19 ASME/ANSI 732:7 732:12 743:9 745:10 747:17 aspect 578:23 579:2 ASSE 795:16,19 assemblies 652:13 assess 770:20 assessment 751:22 assign 569:7 assume 747:21 assuming 663:14 713:1 assumptions 681:8 assure 578:23,24 attach 792:13,14 attached 588:11 700:10 777:11 780:21 783:15 785:1 attaching 805:4 attempt 635:24 636:7 747:3 attempting 662:15 attend 569:7 570:6 570:8 579:13 attendance 559:7 570:16 573:12 574:18 578:14,21 578:21,22 attendees 570:5 Attending 569:3 attention 758:1 audible 826:13	audio 573:12 669:22 677:7 697:23 747:20,22 809:11,17 authored 802:17 authorized 826:6 auto 739:20 752:12 automated 718:24 729:5 automatic 684:4 686:4 automatically 684:10 686:17 719:5 722:5 Auxiliary 711:6 available 562:12 577:13 579:7,15 605:17 655:12 724:2 753:9 810:24 813:16 avenue 557:22 577:17 768:15 aware 587:6,8 696:5 710:22 720:11 awful 790:10	745:6 762:5 back 553:24 556:8 562:1,9,25 565:24 579:1 581:23 587:13 595:21 602:19 603:13 618:8,12,20 620:5 631:16 633:4,4 643:15,23 655:20 680:22 682:12 695:23 702:22 715:6 722:21 730:20,23 731:13 747:3 751:23 756:7 757:17 764:19 767:20 789:13 791:22 800:16 801:7,9 812:19,24 820:11 back-up 722:10,16 723:24 727:17 backed 722:18,19 backup 563:11 684:13,18 685:14 685:15 719:23 720:16,22 backwards 561:16 bad 687:4 747:12 751:20 753:19 799:22 823:20 baffle 651:9 657:19 658:10 baffles 651:14,15 657:6,17,22,24 659:7 bale 700:8 ball 661:2 bar 662:21 791:16 barefoot 561:20 Barnhart 588:5,6 593:5,6,6 609:5,6 609:6 612:21,23 612:23 613:13 614:7,8,8 615:20	615:21,21 618:24 618:25,25 620:2 624:9,15 637:1,2 637:2 690:18,19 692:24,25 763:14 788:2,3,3 805:25 806:1,8 Barnhart's 611:9 barrier 640:4 bars 661:21 664:22 665:3 671:20 based 558:13 566:4 622:9 654:16 basic 745:25 basically 574:4 597:17 631:4,6 673:10 692:25 693:4 699:20 710:11 733:12 746:13 749:3 754:8 760:9 775:23 803:4 806:8 Bates 570:25 747:17 755:12 803:15 818:16 batteries 592:8 617:23,24 battery 584:14 585:13 587:2,24 588:2 590:20 591:9 592:2,2 593:15,16,18 604:8,16,17,19,23 605:9,20,22 607:3 607:7 616:16 617:5,7,18 619:4 619:5 623:4 624:5 624:8 684:18 685:14,15 719:23 720:16,22 721:20 722:16 727:17 bearing 655:7 beautiful 683:3	becoming 661:19 beep 587:11 beginning 616:24 641:13 662:25 820:15 behalf 812:5 behoove 727:18 believe 572:19 612:21 629:1 630:7 635:17 665:13 678:7 685:9,10 697:22 703:11 709:2,5 719:19 723:6 735:13 736:3 741:9 744:5 800:1 801:14 810:7 believing 668:20 675:14 belt 692:22 693:5,6 693:6,6,20,20,22 693:25,25 694:12 694:14,25 696:1 696:17,17 697:6 699:9,11,24,25 700:9 belted 694:5,6 696:14 701:24 belts 692:8,15,19 693:2,3,4,10,12 693:19 694:20 695:13 696:8 697:7 698:23 705:22 beneficial 748:18 benefit 668:9 best 564:7 641:18 656:9 802:9 814:5 better 575:19 580:23 581:1 593:2 594:14,22 599:5 627:1,1 645:2 648:5 655:10 701:2
--	--	--	--	---

711:21 713:16
 732:1 749:22
 773:20 821:23
beyond 645:8 759:3
big 733:18 775:17
 789:24
bigger 682:4
biggest 554:12
 565:25 593:8
 775:21
bind 757:11
binded 757:11
bit 567:8 570:3
 575:19 581:9
 599:7 602:18
 627:6 629:24
 638:20 657:2
 669:3 690:3
 698:24 702:3
 704:12 710:8
 714:13 722:4
 724:8,16 726:17
 726:22 727:9
 749:2 756:22
 780:25 794:23
 801:15 809:15
bitchy 683:7
bite 789:3
bits 667:16
black 633:21
blah 596:10,10,10
 596:10 759:22,22
 759:23 819:2,2,2
blanket 751:12
blindly 703:18
 726:25
block 660:16
blowing 582:5
blue 647:25 765:17
 822:11
board 676:20 776:7
boat 739:2,11
 740:1
Bob 565:2,4,6

577:1 580:16
 618:12 682:14
 683:1 771:5
bodily 635:15
 637:8,9,22
body 777:6
bog 570:10
boiler 636:24
book 714:15
books 751:6 809:7
 813:8
boss 679:6 753:21
bossy 823:1
bottom 671:5,5
 674:5 696:25
 700:10 714:11
 715:7 750:13
 790:17 791:7
bouncing 647:15
bound 757:11
box 585:19 588:25
 805:5,7,10 806:10
boxes 805:1 806:9
 806:10
boy 736:16 785:25
brainstorm 558:4
brake 626:19
 630:14 632:6
 640:23 641:21
 644:16,22 646:11
 649:14
branch 584:16
 585:3,17 586:15
 586:18 588:7,8,9
 590:22 604:10,18
 637:4
branches 574:1
brand 598:12 648:9
 713:3
brave 565:1,6,8,9
 683:2
bravo 573:18
breached 805:17
break 602:11,14,18

643:16,24 695:7
 730:17,20 767:19
 801:1,2,8,9
breakdowns 563:5
breaker 604:21
 607:2
breaks 553:19,21
 563:7,8 643:15
breath 562:25
Brevity 683:3
bring 556:21 559:4
 560:12 714:8,21
 725:19 726:4
 738:6 751:21
bringing 760:17
Brink-- 656:25
Brinkman 642:4,5
 642:5 645:23,24
 645:24 646:14
 647:17 654:12,13
 654:13 657:1,12
 657:13,13 662:6,7
 662:7 663:19,20
 663:20 665:5,6,6
 669:13,14,14
 673:5,6,6 677:13
 677:14,15 690:4,5
 690:5 696:2,3,3
 709:1,2,2 710:19
 710:21,22 712:22
 712:23,23 721:4,5
 721:5 744:1,2,2
 744:10 748:24,25
 748:25 784:2,3,3
 784:13,19 802:25
 803:1,1,10 804:10
 806:6,7,7 810:14
 810:15 812:10,14
 812:14
Bristol 550:18
bronze 692:7
brought 573:17
 576:6 580:15,16
 611:3,12 621:24

625:10 649:18
 702:16 703:16
 714:16 725:16
 727:6 728:15
 732:25 734:25
 737:8 754:17,20
 795:4
brown 646:22,24
 678:19 751:4
 754:8 765:12,16
 790:16,17 795:2
 795:18 796:2
 818:20 824:21
bueno 790:13
build 563:11 655:9
building 561:8
 617:23 634:2,7
 636:22 661:16
 665:18,21 739:12
 743:14,19 751:14
 751:18 752:7,14
 752:15,16,17,20
 752:21 753:8,14
 754:18 755:14
 757:15 758:8,17
 758:18 787:21
 806:11 808:6,8
 814:1 815:10
buildings 752:3
 756:24 757:19
 760:20 794:7
built 656:19 673:20
 701:14 735:3
 752:17 760:2
 789:25
bulk 738:12
bulkhead 769:13
bunch 789:4
burden 751:17
burdensome 576:2
burger 564:7
business 594:19
 751:18 824:25
businesses 573:13

751:20,24
busy 562:24
battered 746:3
by-- 757:11
bypassing 744:20
 744:24

C

c 552:15 568:21
 586:10 599:22
 604:22 607:1,6
 611:5 626:24
 628:22 640:8
 641:4 644:24
 649:16 743:13
 744:3,11,12,12,17
 761:3,13 776:20
 777:6 786:24
 826:1,1
C-103 550:18
c-o-g 693:25
C1 732:10 733:22
 733:24 771:8
C22.1 804:24
cab 677:6 684:21
 684:25 715:5,7
 716:18 771:14
cabinet 802:7
cable 792:12
cables 689:25 695:8
 695:20
calculate 568:25
calendars 562:19
call 610:5 628:10
 652:8,16 677:23
 715:10 722:9
 727:25 753:2
 823:17
called 555:3 627:22
 668:9 732:7
 747:10 791:16
 792:11
calling 777:1
calls 572:20 663:10

camera 789:13	591:4	780:15 804:14	centralized 575:8	566:10 568:10
CAMPBELL	CAPITOL 550:16	cars 597:3 678:22	575:10	570:6 583:10,19
817:12	car 562:1 597:5,6,6	752:12	centrifugal 700:7	594:23 606:4
CAN/CGSB	626:11 636:1	Cary 570:25,25	704:14	610:23 616:13
673:13	638:8 640:13,17	707:12 747:13,17	certain 627:3	625:12 638:16,19
CAN/CGSB-12.1	675:17,18 676:3	755:11,12 803:15	760:10 770:15,16	638:24 642:8
661:7	676:11,17,18	803:15 809:2	788:20,23	651:22 658:24
Canada 746:2	677:5,11,17,19,20	818:15,16,16	certainly 571:2	667:1,20 668:20
Candace 556:25	677:24 678:8	case 570:9 613:4	608:21 685:14	674:20,22,24
557:1 588:22,23	679:1,12,20,21	616:20 657:8	696:9	676:1 679:23,25
594:12,13 607:12	684:1,1,3,3,5,5,8	695:5 730:13	certificate 595:15	680:1,4,7 683:18
607:13 610:16,17	684:11 685:4	749:5 791:13	773:16	685:18,22,24
616:8,9 620:22,23	686:15,16,18	806:4 809:9	certification 616:4	686:13,15,19
622:15,16 629:8,9	687:3 688:11,11	cases 581:12	certified 552:5	687:8,9,15,17
631:12 632:11	689:15,16 690:24	787:16	596:16 616:1,6	689:1 690:8,24
633:10,11 635:10	690:24 691:7,8	casket 797:12,22	826:4,22	691:3,4,6,12,14
635:11 636:10	693:21 696:25	798:20,23 799:4,9	certify 826:7,15	692:20 703:15
637:14,15 646:25	706:25 707:3,6,17	799:12 800:3,5	CFR 592:16 661:6	705:24 706:1,9
647:1 648:20,20	709:8 711:5,9	cast 553:1 610:13	673:13	707:18 708:1,3
656:3,4 662:23,24	712:5,7 716:10	650:1 763:22	chains 689:25	717:6,7,12 721:6
663:24 665:23,24	717:4 718:21,25	816:15	695:8	721:10,13,25
672:8,9 694:8,9	719:2 728:6 729:1	casting 650:2	chair 559:10,11	725:17 726:2
698:4,6,10,11	729:3 752:10	716:25	584:13 585:9	729:7,8 731:5
701:19,20 713:19	753:5	catastrophic	591:20 594:11	733:24 735:18
713:20 722:1,2	care 555:3 564:1,19	697:13	596:15,15,17	736:5,10 739:9
742:2 746:7,8	664:21 728:7	categorized 798:20	598:22 614:2,24	740:2,4,6,8 741:4
748:11,12,22	800:23 825:11	caught 582:16	618:3	741:25,25 742:3,7
749:1,10 750:2,22	careful 613:5	720:10	chairlift 584:24	742:10,12 744:4
755:22,23 756:23	carefully 762:17	cause 588:14,15	585:21 591:5	746:6 747:6
759:17,18 761:23	Carl 570:24,25	644:14,21 649:13	592:3 598:9 607:5	749:16 762:20
764:3	707:11 747:9,16	809:15	715:5	766:14 769:17
Candace's 592:25	755:10,12 803:15	causes 588:11	chairlifts 584:15	771:19,20 772:11
621:23 664:12,14	809:1 818:15,15	caution 656:22	585:13 586:19	772:12,17,19
665:7 698:8	818:16	723:20	590:17,21 591:10	774:1,5,6,10,15
cans 728:9	carried 571:25	CCR 550:15	592:1,9,9 617:15	777:24 779:5,11
cantilevered 695:6	803:21	826:21,22	781:9	779:13 780:2,4,6
cap 710:12	carry 559:21	cell 624:7 723:7,10	chairperson 725:10	782:10,12,17,21
capabilities 692:17	565:13 566:2	723:17	chairs 589:11 595:2	785:4,6,7,13,14
727:12 729:2	737:15,19,23	cellular 719:1	621:12,13	788:2 792:22,24
capability 726:4	741:6 762:18	720:22 721:11	challenge 809:8	796:14,15,23
817:2	820:23,23	723:18 728:8,25	chance 629:10	799:12 806:19,23
capable 684:10	carrying 709:19	central 685:1 719:1	749:12,13 810:24	807:1,3 814:3
686:18 719:6	737:2,12 741:1	721:9 728:8,25	Chancy 564:4	817:3,5,8 820:21
capacity 584:23	764:14 765:1	812:19 813:6,12	change 557:8 566:5	changed 557:7

560:23 578:15 581:22 591:14 603:20 607:16,25 636:19 648:16 653:22 664:1,4,9 672:14 698:24 727:1 752:20 771:4 783:9 788:10 changes 552:25 567:16 574:6,25 581:6 583:12,14 583:23 597:16 600:17,19 601:7 606:22 625:9,20 639:4,18 642:11 642:17,18,20,23 642:25 645:20 649:1 650:3,6,8 650:11,13,14 659:12,18,20,22 659:23,25 660:2 665:13 673:17 674:16 679:8 687:19 696:5 705:16 706:6 717:11 718:12 724:24 725:2,5 726:6 729:12,14 731:4 738:20,22 769:24 776:23 777:7 783:10 784:8,12 814:9 821:1,4 changing 590:16 644:16 665:19 694:13 715:13 735:1 736:7 737:1 771:2 chaos 564:5 chapter 634:1 732:10 775:22 776:5 778:5,9 characters 808:1	charge 604:16 620:9 charger 585:18,20 586:17 588:2 592:2,6 593:16,16 595:4,10 604:17 604:19,23 605:9 607:3,7,22,23 619:5 624:8 chargers 587:24 607:5 612:13 charging 587:10 606:17 chat 575:24 578:12 578:24 613:17 624:3 658:22 727:6 790:9,11,17 820:1 check 635:8 672:17 695:23 checked 608:14 checklists 562:8 checks 755:18 chief 730:5 758:25 chief's 755:12,12 chiefs 607:14 chime 664:18 671:16 756:21 chimed 672:5 824:11 choosing 576:17 circuit 584:16,20 584:22 585:3,17 586:15,18 587:1,3 588:7,8,9,10,10 588:11,13,14,14 590:22 591:1,3,3 604:10,18,19,20 607:2,3 611:5 684:24 685:16 circuits 637:4 677:12 circular 627:25 628:9 631:16	circumstances 728:18 citation 751:8 citations 770:20 cite 751:11,11 cited 778:20 citing 776:12 city 663:13 665:17 696:20 712:17 715:2 719:8 728:3 748:3 756:25 811:22 clarification 571:21 586:16,22 587:16 605:25 606:10,13 609:12 611:10 613:13 645:14 651:4 652:18 653:6 654:22 655:23,24 678:15 679:3,17 685:4,21 688:25 688:25 690:16,17 692:24 693:25 701:18 703:23 707:10,10 711:12 712:22 720:2,3 732:18 733:23 741:22,23 743:24 743:25 745:15 746:6 749:9 758:3 761:8 767:14 770:23 773:24,25 774:1 778:12 781:13,14 784:1,1 788:2 794:18,20 802:24 805:23,24 806:16 808:24,25 809:1 816:8 clarifications 568:22 572:18 573:3 600:14 610:12 625:10 642:14 647:20	650:1 658:21 659:14 662:1 670:7,22 673:25 678:17 705:20 730:8 739:23 748:11 766:11 772:1,3 779:5 784:18 785:2 796:8 797:23 799:6 813:21 816:17,24 821:21 clarified 711:22 799:2 clarifies 586:18 594:9 711:10 clarify 570:13 571:16 578:11 598:19 627:2 628:1 635:12 637:3 666:14 710:16 715:3 718:5 723:6 730:14 746:6 773:20 816:15 clarifying 632:15 641:23 clarity 694:21 classified 676:22 clean 630:10,17 633:13,19,22 638:12 clean-up 631:10 cleaned 581:9 cleaner 592:24 595:13 clear 595:3 610:20 631:1 633:11 637:17,19 642:2 648:2 664:5 672:21 693:22 702:6 710:15 808:14 815:16 826:13 clearance 636:25	651:8,12,19 652:4 653:25 677:21 804:5 clearances 634:10 636:21 640:9 651:10,17 653:16 678:1 cleared 579:17 clearly 586:13 653:14 657:8 720:21 783:19,21 clears 570:22 715:20 Cleary 559:8 581:7 581:8 582:21 594:24,25 597:13 597:14,14 598:20 611:23,24,24 618:4,5,6,6 620:25 658:1,2,2 659:4,5,5 689:17 689:18,18 690:13 694:22,23,23 695:23 697:2,2 700:5,6,6 704:8,9 704:9 710:5,6,6 710:18 714:6,7,7 cliff 573:10 climbing 792:8,15 Cline 602:20 691:10 clip 768:24 close 563:1 750:17 801:4 818:10 closed 646:9 684:6 802:5 closer 556:7 750:5 closet 634:9 635:21 635:25 637:21,25 closets 635:12,18 closing 821:7 clothes 561:17 clothing 641:10 clouding 765:20
--	---	---	---	---

co-worker 643:16	770:6,8,13,19,20	813:14	611:18 615:4,10	560:7 569:4,12,17
coated 693:11	771:15,22 772:9	comfortable 703:7	620:21 627:17	570:10 583:3,8
coating 700:8	772:10 773:13	coming 556:14	634:14 642:14,15	609:20 645:8
code 555:23 557:5	776:5,11 777:21	558:7 587:23	659:15 677:15	662:9 664:17
557:6 589:2	781:19 789:3,22	602:19 627:18	678:15 679:17	694:5 712:19
592:19 593:19	795:5,5 798:25	656:12 666:9	681:15,17,23	721:6 724:20
594:1,4,17,21,22	802:9 806:13	667:25 670:9	685:5,21 686:11	750:3
608:14 610:21	808:20 815:5,7,22	790:20 819:25	690:16 696:4	committees 715:17
611:15 615:2	820:14	comma 741:19	701:17 707:10	721:3 750:4
616:17 619:7	codes 568:22	commend 565:20	716:23 721:6	common 597:21
620:7,19 630:2	581:19 616:11	566:14,20	724:11 726:6	695:10 822:7
633:21 634:2,7	621:19 665:20	comment 555:12	728:20,21 730:8	commonly 732:7
635:2,14 636:8,17	715:12,14 746:16	555:21 557:9	741:24,25 746:5,6	communicate
636:22 637:10	746:17 748:20	565:18 578:7	747:10 749:9	727:22
638:2 642:1,1,6,8	750:14 796:2	588:19 592:23	753:23 758:3	communication
642:10 646:3,18	codified 610:6	594:10 599:1	761:8 765:25	569:9,18 718:18
646:20,21 649:23	611:14 658:8,11	602:20 609:16	771:19 773:24	718:20 719:4
656:5,7,23 657:2	cog 693:19,25,25	611:12 615:14	774:1 775:1	722:5,7 723:2,3
658:23,24 661:17	cogged 695:12	632:10 634:16	776:17 777:5,23	728:23 729:4
663:6 664:3,8	collaborate 611:22	637:6 638:15	781:14 784:1,17	communications
665:18,19,21	collapsible 786:12	645:5 646:16	785:3 792:17	718:23 719:4
666:5,5,12 667:8	787:25 788:13	647:18 649:18	794:18,19 802:25	companies 576:1
671:13 677:16,16	column 583:2	653:7 656:10	805:24 806:16,17	577:11,25 581:20
678:21 685:7,8,12	599:22 610:25	662:8 664:15	808:25,25 814:4	582:13,17 607:4
685:24 686:2,5	776:20 777:6	669:19 672:17	816:1 819:25	621:3
689:11 692:3	797:21	681:3 682:22	822:17 824:5	company 568:18,19
693:14 694:10,13	combat 811:18	686:8 690:14	commercial 586:16	570:21 571:19,22
704:24 713:22,23	come 556:8 562:1	696:13 698:7,8	587:19,22 588:1	571:25 573:19,22
714:3,15 717:2	563:9 564:2 596:8	708:23 712:15	590:18 591:9	573:23,25 575:12
718:16,19,20	616:25 618:7	714:25 721:24	594:5 626:15	576:14,16 577:6
719:2,12 720:6	621:15 623:7,7	724:25 725:1,4,18	628:14,17 629:16	579:25,25 580:10
722:14,23,23,25	633:20 671:24	726:5 727:25	633:20,20 640:20	598:15 653:22
724:1,3 727:19	674:9 701:1 723:1	731:1,3,6 733:11	676:19 677:23	654:1 752:9
728:4,11,14 735:4	725:18 726:5	748:23 749:11	678:11 688:18	808:17,20 815:19
743:11,15,17,19	738:20 760:5	755:4,17 761:9	689:9 694:12,19	815:22
745:12,13,23	763:18 790:18	771:1 782:2	696:7,14 699:18	company's 808:22
746:2,12,12,24	791:20,23 798:10	784:15 790:4	700:13,14 722:11	815:24
747:24 749:6,14	801:7 816:1 820:1	806:1	741:21 777:12	comparing 748:8
751:8,11,22	comes 571:24	commentary	780:18,22 781:4	comparison 559:1
752:15,17,21	613:19 616:21	784:19	781:18 782:6,8	559:2 608:4 821:2
753:8,13 754:18	621:17 622:5	commenter 609:8	783:8,17 784:21	compelling 757:25
754:19 756:3	633:3 685:10	comments 577:2	committee 550:4	compile 574:15
759:14,19 760:5,8	731:6 733:21	587:16 599:23	552:2,6 555:25	complete 583:5
760:16 770:1,3,3	751:7 791:5	609:12 610:15	558:24 559:6,18	667:22 672:22

813:9 826:12	727:23	conformance 684:4	constraints 787:22	652:25 754:6
completely 699:5	concern 558:22	conforming 673:12	constructed 651:12	783:23 799:24
747:14 756:5	559:1,18 570:10	677:21	651:25 657:23	continued 730:15
758:11	570:14 573:5	conforms 661:6	786:24 794:6	continuing 688:12
compliance 585:24	592:25 594:18	confused 573:19	construction 652:1	contractor 569:13
586:4 591:10	595:1,3,12 597:12	663:11 665:25	652:2,24 655:16	569:16,22 571:3
592:14 593:8	633:15 654:14	666:2 708:1 749:1	657:9,22 660:21	571:10,12 572:3
605:5 652:4 657:3	662:12 678:7	750:21 764:3,11	663:1,1 679:4	652:2,12 653:1
657:15 695:15	702:11 721:13,16	confusing 699:16	692:10 794:3,11	654:24 655:3
781:24 808:10,20	724:4 736:8,8	748:7	795:23 796:3,4	contractors 652:9
815:12,22	788:20 820:23	confusion 564:5	contact 553:3	652:21,23,24
compliant 618:15	concerned 587:23	631:19 632:12	558:20,24 559:9	653:21 655:22
618:23 750:11,18	633:14 723:25	633:3 730:14	559:19,21 560:4,5	719:16
789:22 795:7	concerns 556:12,19	734:6	560:11 567:15	contradict 645:9
complied 598:11	559:4,21 560:12	congratulate 599:4	568:15 569:6,10	738:22
613:7	569:25 571:1	congruent 804:16	569:14,23 570:15	contradictory
compliments 823:2	578:12 582:23	conjunction 708:22	570:20 571:4,13	628:8 748:5 750:3
823:3	583:3 594:15	716:1 794:6	572:5,9,11,14	contradicts 794:14
comply 585:2	599:13 645:12	802:22 814:6	573:1,9 575:10,11	contribution
590:22,24 591:6	647:24 703:1,5,21	connect 604:22	575:13,13,16,24	824:23
591:11 593:14	703:24 706:4	607:6	576:11,17 577:4	contributions
615:1,17 622:11	724:22 725:16	connected 554:18	577:10 579:23	730:12
626:17 627:24	727:1 731:12	585:16 586:14	580:22,24 581:25	control 592:5
628:7 631:3,8	820:20 821:3	604:17,18 718:25	583:11,15,20	605:12 635:6
632:22 636:4	825:4	719:20 721:9	726:1 752:8	636:8,9,18 637:4
640:4,21 656:19	conclude 818:18	723:18 728:24	753:11 805:3	637:5,7,8,11,18
732:4,15 743:3	Concluded 825:15	connection 585:15	820:17 821:6	637:18,20,20,21
745:5 749:23	concur 696:8	593:10 617:13	contacted 575:5	637:23,24 638:2,6
759:22 762:4	778:19	720:8 727:11	576:23 577:7	638:6 640:1,1
787:14 793:23	condition 757:19	consensus 801:20	579:24 580:1	676:20 677:12
804:5	conditioning	consider 555:22	contain 641:8,9	684:24 719:23
complying 661:18	629:20	564:18 664:25	contained 732:9	804:4 807:21,21
671:8 781:10	conditions 604:14	694:6	contains 640:3	808:4,4 811:25
786:15	688:14 753:18	consideration	contention 567:8	813:24,25
component 652:6	conducted 778:18	692:19 716:21	contentions 554:13	controlled 684:2
653:3 699:21	conducting 770:18	764:24 814:8	contents 630:5,6	controller 626:13
components 597:25	824:25	considered 637:10	663:8	636:2 638:9
652:16	conductors 592:6,8	637:10 640:4	context 556:14,23	640:16,18 652:7
computer 720:18	confined 675:25	676:24 696:6	683:13 705:15	675:16 676:3,11
computer-aided	676:24 707:8	738:15 770:12	724:13 739:9	676:16 679:11,19
826:11	confirm 690:6	considering 606:16	769:4,11 824:13	704:20 706:25
concentration	807:10	consistent 803:7	contingency 562:10	707:2,16 709:7
824:7	conflict 555:13	constant 710:11	continue 553:23	711:4,6,9 717:3,5
concept 705:21	conform 804:23	711:25	558:5,16 639:22	802:6,7 803:5

804:3,8 807:24
controllers 631:23
 640:7 675:17
 678:21,25 679:20
 707:5 708:25,25
 802:2,3,11,12
 803:25 804:1,7
controls 677:17
 678:8 752:5
 802:16,18
controversial
 818:21
convene 824:19
convened 681:18
convenient 715:9
convention 716:19
conventional
 786:10 787:15
conversate 824:18
conversation 565:5
 578:11,18 599:6
 624:3 638:17
 682:3 702:15,23
 702:24 705:11
 706:2 730:2
 733:15,19 734:21
 735:7,8,15,18,23
 735:24 739:22
 744:15,17,25
 745:1 763:1 766:3
 776:21,24 793:19
 809:19 810:9
 818:9 820:11
conversations
 557:20,21 558:5
 558:10 566:2
 574:17 602:13
 610:7 624:21
 645:12 671:1
 682:10 703:6,8
 704:1 705:15
 724:13,21 725:24
 731:23 733:1
 735:19 767:25

768:6 769:1
 818:14 819:21
conversion 555:24
 556:2
conversions 737:3
converted 737:13
convey 747:4
conveyance 653:17
 654:4 676:23
 739:5 741:18
 743:18 757:13
 770:4 797:16,18
 798:13,15 808:6
 809:23,23 814:2
conveyances
 577:24 584:18
 590:23 604:11
 719:9 739:10,14
 739:15,19 752:4
 770:14 794:16
 797:18 798:14,17
 809:20,24
conveyors 732:2
 733:14
COP 676:20,21,23
 677:10 688:21
 697:3,3
COPs 677:9
copy 568:7 748:16
 807:23 816:4
cord 584:18 585:1
 585:15,20 586:14
 589:11,14 592:1,4
 595:6 604:12,17
 604:25 606:15,21
 612:20 613:2,18
 613:19,20,21
 614:11 617:20
 621:8
cords 606:11,24
correct 568:16
 576:12 597:15
 603:2,17 609:7
 611:10,15 612:19

612:20 620:23,25
 621:10 632:23
 637:8 646:18
 647:10 658:5
 663:16 665:7
 666:23 685:9
 689:19 694:1
 701:3 708:5 713:2
 737:4 763:19
 777:21 795:17
 806:21
correctly 563:14
 568:25 666:22
 673:4 700:1 822:8
cost 668:9,12
cotton 693:6
count 810:17,20
counter-lever
 716:20
counterweights
 786:23
counting 779:15
country 697:14
couple 553:2 576:6
 578:11 582:2,7
 627:10,17 666:16
 669:6 677:15
 696:4 710:3 721:6
 731:18 734:5
 747:11 751:5
 761:9 769:1 788:4
 788:15 811:15
 820:1
course 696:23
 795:10
court 550:18 552:5
 809:12,13 823:15
 826:4,22
cover 585:19
 588:25 594:15
 604:23 607:7,8
 608:17,20 609:7
 611:6,6 613:1
 616:10 622:23

663:21 703:21
 725:15 731:24
 733:3 778:16
 781:21 786:21,24
 787:9,16,18 788:9
coverage 555:7
 594:11
covered 553:2
 554:19 646:2,6,17
 649:21 672:15
 707:16 776:25
covering 744:22
covers 617:11
 663:14 741:21
 786:5,6,17,18
 788:8 792:22,25
 805:4,8
Covid 578:15
Covid-19 751:19
Covington 826:5
CPHs 678:20 795:1
create 631:15 645:7
 648:9 669:11
 678:19 724:14
created 739:17
 751:10
creates 619:15
 628:9 707:7
 743:21 787:19
creating 649:8
 792:25
criteria 622:9
cross 630:22
 633:16 721:22
crossed 589:8
 673:3,19 721:7
 746:11 756:2
crossing 647:7
 721:17
crush 674:10
crushing 674:11
 678:2
CSA 804:24
cumbersome

754:23
curious 810:20
 812:17
current 584:22
 585:5 608:14
 645:11 651:17
 665:20 698:13
 762:11 763:17,25
 764:16 766:17
 770:17
currently 589:5
 592:19 594:16,21
 599:18 645:1
 647:9 660:17
 676:10 696:6
 711:4 714:4 719:3
 720:21 734:16
 739:10 749:14
 756:2 759:19
 760:16 762:22
 763:3,21 764:22
 767:1 779:2,3
 780:24 787:13
 794:15 805:21
 807:11 811:5,15
Curry 557:23
curstory 775:8
customary 652:19
 653:19
customer 720:14
customers 569:16
 580:19 653:23
cut 595:5 612:20
 707:19 712:10
cutting 595:10,18
 613:2,21
cycles 636:17

D

d 551:1 552:15
 568:24 604:25
 640:9 644:13
 647:5,10,21,21
 656:7 658:14

659:4 741:12,13 741:21,23 787:1 788:10 811:23	decided 572:17 725:13 802:14 823:10	581:15	dictates 655:21	576:24 714:21 739:18
D's 742:5	decision 558:13	department 550:1	die 792:1	disagree 631:22
D/C 594:20	566:3 668:25	573:8 605:3,20,23	difference 589:3	disappear 727:14
damage 597:24	734:11 821:18	606:5 611:3	636:8 637:18,20	disarray 564:5
dandy 643:17	decisions 570:17	664:20 698:3,13	637:24 713:25	discern 668:25
danger 612:12	574:16 581:13	720:16 739:13	715:8 770:18	disconnect 587:21
dangerous 674:12	dedicate 638:10	747:4 750:24	781:17	589:12,15 593:10
678:10	dedicated 554:11	751:5,9	differences 823:12	593:17 594:11
darn 561:1	587:1 588:13	dependency 627:25	different 557:25	595:7 605:14,16
data 770:2,3,19	593:18 626:13,14	628:9	563:13,25 564:10	615:5,15,24 616:3
771:15 772:10	631:23 632:4,21	dependent 804:16	573:25 576:6	616:15,18 617:1,4
date 568:21 578:4	634:8 635:17,19	depending 623:8	580:4 597:18,19	617:19,22 618:1,2
655:18 752:18	635:23 636:3,3,16	deploy 791:17	597:19,20 607:3	619:1,8,12,17,20
772:9 773:14	636:18 638:3	described 637:25	614:3 622:3 647:4	619:21,23 620:10
day 550:8 552:1	640:19,20	699:5	647:16 655:6	620:17 621:5,6
558:19 562:12,13	Defiance 739:11	describing 701:25	676:19 696:9,12	622:25 623:7,10
682:17,23 718:23	define 565:22 566:5	702:1	698:16 699:5,11	624:5,12,13,17
719:13 729:3	654:14 714:10	design 563:23	699:12 700:12,19	627:3 631:6 636:4
741:9 779:6 798:3	738:9	591:25 628:10	703:15 705:16	638:1,4 676:12
803:13,16,17	defined 720:21	678:21 700:12	713:22 714:15	711:7 712:3
818:6,15 826:19	771:24	designations	716:7 723:2 744:8	719:24 757:8
days 554:11 555:5	defines 721:19	738:13	750:9 758:7 796:2	disconnecting
569:13 571:4	defining 713:16	designed 608:7	798:18 816:13	584:19 589:9,12
666:18 798:3	definite 762:19	693:23 699:23	differentiate 611:8	589:14,19 593:1
DC 605:10,14	definitely 555:7	732:7 794:3	differently 563:15	604:13 605:11
615:5,24 616:3	609:25 610:2	desirability 619:1	563:21	614:23 622:23
619:2,12	611:14,16 624:16	desire 662:20	difficult 577:21	623:3,4 711:2,5,8
de 612:15,17	766:1 795:9	despite 823:12,12	702:4	716:14 717:4
de-energized	811:17	detail 620:7	difficulties 653:24	disconnects 592:18
605:13	definition 699:8	detailed 646:8	difficulty 809:11	616:15 621:2
dead 798:1	715:23 734:14,16	details 705:3	809:17	623:10,20 626:11
deaf 824:16	736:23 738:9	detector 757:4	diligence 818:13	626:12,16 627:24
deal 775:17	771:14	determination	dimensions 737:8,9	631:21 632:2,22
dealing 623:12	definitions 721:21	735:14	737:16,17,20,20	634:3 636:1 638:8
720:10 792:5	732:23,24 733:6	determined 743:14	738:13	638:8 640:13,14
dealt 580:2,10	734:17,18 735:14	develop 621:19	direct 608:11,15	640:16,17,21
661:22 664:19	735:20,25 738:8	developed 660:20	611:13 727:12	discount 777:4
791:21	degree 659:10	device 791:16	731:4	discovery 743:13
debris 624:7	791:14	805:1,9	directed 622:17	753:17
decades 652:22	degrees 786:11	dials 728:6	773:22	discuss 607:1,8
decide 620:19	delaying 754:22	diameter 661:3	directing 733:7	614:20 618:21
723:21 784:7	delivery 579:16	688:19 692:8	direction 586:2,6	627:12,14 744:9
	demarcation	699:20	820:17	775:9
		diatribe 681:4	directly 575:15	

discussed 614:21 625:13 627:21 712:20 715:13 738:14 811:10	doc 683:15 docket 820:19 document 596:14 644:7 690:11 725:4	652:13,15,16,25 653:3,4 655:6,9 657:23 677:5 684:6,6 710:12 787:15 790:17,18 790:21,21,25 802:6	ducking 555:14 due 787:21 805:20 818:12 dumb 617:13 Dumbwaiters 741:14 dump 608:11,15 611:13 duplex 637:6,12 Dylan 553:3 579:20 588:18 589:21,22 590:12 595:12 596:12,13 598:17 598:17,18 599:5 599:10 600:15,16 602:24 603:1,17 604:1,1 608:25 609:16 610:18 613:15 617:9 670:8 671:3,4,21 673:7,25 674:1 693:9 778:1 784:14 Dylan's 593:23 594:9 597:15	669:20 681:4 705:8 731:2 737:22 758:20 771:1 776:4 809:5 early 818:6 ears 824:16 ease 580:24 726:17 eases 726:22 easier 561:15 566:19 628:20 768:15 easiest 630:21 easily 808:11 815:13 east 560:2,10 easy 577:20 787:6 818:9 824:10 edit 632:12,14,19 646:20 704:3 726:14 edited 585:11 604:2 624:18 725:8 763:2 editing 575:2 576:8 609:20 611:1,18 625:11 703:11 705:23 edition 645:25 654:10 714:1 793:24,25 editions 743:4 745:5 762:4 editorial 606:3 764:25 766:15,19 editorially 671:2 edits 553:4 554:6 567:12,13 569:24 575:18 582:22 583:7,7 590:6 601:3 604:5 625:1 625:13 667:10,22 668:1,4 669:4 674:18 726:13 731:11 745:3
discussing 771:13 discussion 601:20 601:23,25 602:3 639:23 657:6 689:1,4,20 705:1 710:7 712:19 724:5 757:21 816:7 discussions 556:10 606:10 625:9 627:15 672:25 674:17 681:7 682:8 768:13 809:4 dismissal 564:6 dismissed 666:24 822:4 dispute 619:1 620:7 disregard 727:22 disseminate 570:21 573:11 574:5,7 580:9 581:24 582:4,15 disseminated 580:18 disseminating 569:15 573:7 disservice 666:25 668:18 distinguish 770:18 distortion 573:12 669:22 677:7 697:23 747:20,22 distribution 568:13 593:12 dive 732:22 divided 669:23 division 557:24 do-do-do-do 683:19	documentation 585:7,25 586:20 591:18,22 596:14 597:8 777:18 808:14 811:14 815:16 documents 596:3 596:11 808:19 810:4 815:21 doing 561:25 572:9 576:18,20,22 580:1 593:20 595:13 654:19 659:9 682:18 704:5 708:2,7 728:16 751:23 754:14 755:19 756:14 767:10 812:22 813:1,9 Dolgikh 599:3,3 621:22,22 623:24 627:19,19 628:4 632:9,9,24 633:9 694:17,17 713:6,6 715:22,22 727:4,4 737:22,25 738:1,2 738:25 756:20,20 771:10,10 775:12 775:12 dollar 655:5 664:16 665:2 751:25 door 626:20,23,25 634:9,11,19 636:21,22 637:21 638:5 640:25 641:5,20 644:18 644:21,25 649:10 649:13,17,24 651:9,12,13,19	doors 627:7 644:4 644:12,13,17 645:23 646:1,8 647:22 648:16 649:7,9 650:4 651:5,8,11,11,16 651:23,24 652:3,6 652:11,17,20,22 653:15,20,23 654:25 655:9,13 655:15,17,22 660:24 661:14 787:12 doors/frames 653:2 dot 593:14 downside 700:25 draft 567:18 draw 757:7 drawing 587:2 dress 810:5 drift 824:10 drive 693:18 driven 610:8 699:23,25 driving 597:5 644:15,22 649:14 667:20 706:23 707:5 drop 758:22 dropped 783:22 dropping 779:23 dry 707:19 712:10 791:5 Duane 560:11 663:13 665:17 696:20 712:17 715:2 728:3 748:3	E e 551:1 552:15,15 569:3 571:2 583:2 605:10 610:25 640:10 709:4 797:21 826:1,1 e-mail 557:11 559:19 568:2,13 569:19 572:23 681:18 725:3 820:16 821:7,25 825:1 e-mailed 559:2 e.g 786:22 earlier 553:9 554:1 567:4 601:4 617:16 621:1 637:7 650:5	

802:9 814:8	812:1 816:3,11	755:19,21 756:20	else's 816:23	enforce 594:2
educated 558:13	elements 787:22	757:5,9 758:11,18	embedded 695:2	720:17 751:7,8
624:24 625:1	810:2	758:24 759:13,25	emergency 684:13	759:16 776:8
Educating 568:24	Elena 817:11,12,13	760:2,8 765:6	684:18 686:5	enforced 798:25
education 562:4	817:13	771:10,21 775:12	719:6 721:17,19	enforcement
effect 581:21,23	elevator 550:4	787:12 802:1,4,20	729:6 742:24	592:14 751:12
651:20 739:16	552:1 568:14	806:11 808:8	743:2,5,18 745:4	754:22 755:6,8,17
770:4	569:4,12,17,18,20	811:12 815:10	745:7 759:21,24	808:21 815:23
effected 802:21	572:3 580:14,19	819:1	761:25 762:3	enforcing 568:24
effective 570:11	582:13 596:2	elevators 581:17	765:5	750:25 754:25
effort 667:1 823:9	599:4 620:4	617:13 630:8	emotional 564:16	engaged 818:13
824:7	621:23 622:24	631:3 634:5,6,20	emphasize 716:17	824:8
eh 669:3	627:20 628:6	645:17 648:2	employee 563:5	engineer 579:25
eight 562:14,15,16	632:10 635:20,23	651:18 654:16	employees 569:16	580:3
820:5	636:20 640:3	655:14 656:16,18	employers 789:14	engineering 802:16
eighths 695:13	641:8,14,16 651:5	657:3,15 658:4,15	empowered 565:7	802:19
either 561:10	651:23,24 652:7,9	661:19 664:2,16	enact 571:8	enhanced 753:13
596:21 623:7	652:10,12,14,20	669:9 675:20	enclosed 660:22	enhances 700:21
646:7 652:16	652:21,24 653:19	676:8,21 677:23	716:3 805:2	enhancing 661:20
677:18 702:9	653:21 654:24	679:10,11 683:11	enclosure 661:23	enlighten 794:23
716:20 719:1	655:3,4,7,10,13	683:20,23 684:12	675:19 676:10,13	Enrolling 568:13
721:7 727:12	655:15,22 662:14	684:16,23 685:5	679:22 707:4	ensure 616:20
728:24 748:7	662:17 665:9	686:15 688:6	805:14,16	641:18 651:12
749:2,9 773:21	666:6 673:2 674:9	689:9,21 690:22	enclosures 660:22	652:4 678:12
803:12 805:5	675:18,22 676:15	691:6 692:2,12,21	661:5,13,17 665:9	714:20 777:14
807:23	676:16,19 677:2	696:9,15,15	671:7,11 673:11	808:20 815:22
elaborate 657:2	679:1,21 684:20	700:13 706:23	679:2	ensures 808:12
elastomer 693:11	685:10,25 688:17	710:9 711:1,3,11	encoder 692:17	815:14
electric 593:19	688:19 690:7	711:16 713:4	694:25 697:5	ensuring 568:15
684:1 769:22	694:17 695:1	717:1,3 718:18	699:18,19,23	576:11
806:13	696:7,24 698:17	719:22 739:2,20	700:11,17 701:11	enter 662:15 674:8
electrical 557:5,6	699:3,17,19 707:3	740:1 743:2 745:4	701:12,12	entered 589:25
581:16 585:19	707:7 711:19	746:14,15,19	encoders 689:23	entire 609:3 613:24
588:25 595:18	713:6,11 714:22	754:10 756:15	692:15,16 695:11	684:20
605:2,4 608:14	715:4,10,23 716:4	758:21 759:21	encompasses	entirely 700:11
617:12 634:10	716:16,17 719:18	760:7,11 761:5	590:18	entirety 601:19
636:21 641:7	719:19 720:11,25	762:2 769:22	encourage 565:1	entity 808:12,18
644:14 804:4,23	723:11,17 727:4	809:4 810:3	encumbers 727:24	815:14,20
805:13,13,16	727:15,25 738:2	811:11 812:18	encumbrance	entrance 684:3
electrocution	739:4 741:13	eleven 643:16	751:19	entrapment 674:11
805:18	743:6 745:8	eliminate 662:20	endorsements	entry 635:15 637:8
electronic 807:23	746:18,23 749:4	675:24 690:8	669:22	637:9,22
811:8	752:5,9 753:12	781:17	ends 571:17 580:17	environment
electronically	754:16,20 755:16	eliminating 655:19	energy 592:5	554:16 557:16

561:5	742:20 767:10	escorted 813:14	example 580:6	755:8 758:10
equipment 562:7	773:2 774:23	especially 554:12	581:21 614:25	761:5 769:25
563:5 584:19,20	779:17,24 780:13	562:17 581:4	746:19 756:24	772:7 778:3,8,10
584:22 585:4	783:4 785:23	612:13 623:4	examples 581:15	778:17,22,23
589:9,19 591:1,3	793:16 797:7	722:9 818:14	exams 813:10	787:21
593:9 595:19	800:12 807:10,15	essence 607:3	Excel 568:7	exists 751:2
604:13 615:17	810:25 814:22,25	essentially 613:3	exception 584:17	expect 580:1,2
617:12 619:9	817:24 821:16,19	esthetically 661:20	585:2 586:13	801:13
621:1 622:18,21	822:19,22,25	esthetics 664:24	588:23,24 589:1,5	expected 787:17
622:22 632:3	823:5	665:13	590:23 591:6,11	expecting 619:14
636:20,23 640:3	error 805:22	event 553:17	604:11 654:23	expense 808:22
641:7,9,14,18	ESAC 554:8	575:11 685:1	655:2 671:10	815:24
661:15 665:3	558:19 559:6,8,16	686:5	678:23 794:1,13	expensive 655:8
677:17 678:11	559:22 560:7,12	eventually 663:18	795:8 796:12,17	experience 716:5
695:7 715:12,14	570:4,7,15,16	everybody 555:1	796:24	809:3
715:18,19 724:2	572:17,22 573:5	570:21 571:1	exceptions 781:5	expert 681:24
751:9 753:1,5,9	574:9,11,24	578:24 579:12	excessive 634:11	experts 562:5 667:6
753:15 775:14	578:19,25 579:1,6	597:23 603:7,19	exchange 719:2	explain 755:24
777:13 778:18,22	581:14 582:4,8	620:6 643:22	721:9 728:9 729:1	explained 621:1
778:23 780:23	583:4 589:16	700:20 710:7	exclude 598:21	explanation 663:6
781:4,20,21,23	609:20 611:3,18	715:16 730:15,23	760:11	extend 787:4
782:8 783:17	611:22 612:3	734:12 737:4	excluded 732:8	extension 707:15
799:1 802:15	614:21 624:19	746:9 749:19	excludes 781:5	707:21,23
804:23 805:4,9,19	625:2,11,13	763:8 776:7	excuse 608:17	extensive 646:1,16
805:19,21 811:20	638:17,20 639:19	800:14,18 807:11	744:12 797:10	649:20,22,23
erect 794:7	667:24 668:7	823:6,10 824:22	820:12	exterior 605:15
erected 794:2	671:2 702:16,21	everybody's 768:16	execution 564:22	615:6 619:22,24
Eric 789:13	703:2,4,10,20	824:17	executive 821:18	624:13,14,18
Eriksen 552:7	705:1,14,23 706:2	exact 614:1 709:21	exempt 627:22	660:25 669:25
560:23 565:16	723:1 724:10	709:24 713:23	628:6,8 631:18	670:12,18 672:22
570:13 571:16	725:8 726:11	722:25	633:5 634:5	673:20 794:6
574:10,13 578:10	730:6 734:10	exactly 564:9 607:4	794:12	external 614:17
584:6 600:23	736:14 738:21	648:21 656:14	exempted 812:6	621:6
601:15 602:9,11	749:16,25 750:3	666:15 698:25	exemption 596:19	externally 615:23
606:2 624:2 626:4	762:19 763:2,18	701:22 705:15	796:10	616:3 618:9
639:15 643:12	764:24 765:2	768:4	exist 623:22 704:11	extra 563:11,11
650:25 658:22	766:15,18 800:23	examination	753:18 786:8	680:25 701:4
660:11 670:8,17	801:6 810:6,9	769:15,21	788:6	704:10 705:2,4
675:9 680:18	812:8 814:7	examinations	existing 600:1	713:11 727:17
683:3,6 686:22,24	818:23 820:17,22	773:11,14,17	641:21 651:16,18	extrapolate 722:22
687:4,11 688:2	820:24 821:14	777:18	654:15 656:6	extreme 806:2
691:23 706:19	825:4	examined 777:15	657:3,14 658:4,13	extremely 628:15
718:1,11 729:22	escalators 617:14	779:10	658:14 690:10	704:9 806:2
730:23 740:15	741:15	examining 775:24	741:13 752:3	eyes 563:1

F			
f 569:9,15 573:6	819:3,3 823:6	708:3,14,18 724:4	figure 566:8,12
605:14 615:4,22	far 554:13,20	724:8,15 731:10	660:15 702:8
616:14 619:19	557:14 583:2	733:2 734:20,21	fill 812:18,21,24
624:5,10 826:1	610:4 611:19	735:7,8,15,17	813:5
facades 794:7	628:9 635:14	739:12 754:6	fillers 651:9,14,15
facilitators 552:7	649:1 681:2	766:11 768:1	final 638:14
facilities 813:17	702:15 759:9	772:15 774:8	finally 634:19
facility 798:16	768:24 784:9	782:15 783:23	668:5 721:17
facing 786:18	809:15	785:10 789:7	731:19
fact 565:3 628:13	fastened 661:3	793:5 797:20	financial 826:16
628:19 630:18	805:9	801:8,17,20	find 578:1 618:20
633:19 673:21	fasteners 805:3,5	803:19,20 806:21	628:21 672:10
686:2 689:4	805:12	810:10 811:7	709:6 710:23
725:20 740:22	fault 604:20 667:15	816:1 821:11,12	719:10 752:3
741:7,9 744:21	777:1	821:23	806:20 810:25
751:6 757:11	favor 600:19	feeling 576:8	811:5
776:4	744:16 808:21	707:20 726:24	finding 647:2 710:1
factor 696:18	815:23	feels 646:4 739:5	751:8
factory 596:7,10	favors 589:20	744:11	finds 569:20
597:4 612:24	feasible 787:21,25	fees 740:21,23	fine 554:1 567:25
613:1,7	feature 701:13	741:2,7,9	597:8 721:12
fail 709:16 719:4	713:11	feet 605:9 606:17	734:7 798:2
758:9	features 716:18	607:19,21,21,23	finger 748:7
failed 636:13	February 550:7	611:11 692:13,13	finished 777:2
709:11,23 744:6	552:4 736:17	697:8 700:15	fire 559:17 661:15
744:14,21	fed 585:17 586:15	746:20 750:7,10	662:12,15,16
failing 759:15	586:18 656:20	760:9 791:5,6	664:17,20 671:16
fails 684:9 686:16	feds 656:13 658:16	fell 560:24	671:22 674:5
failure 697:13	659:7	felt 567:8 645:12	695:19 696:16
716:12 805:19,19	fee 740:20	666:24 681:22	743:2,5,14,16,17
fair 751:21	feel 554:15 556:9	733:1 801:23	746:16,17,18,20
fairly 654:9	556:16 558:12	821:22 822:15	746:22,23,25
faith 610:6	567:6 569:25	FEO 743:6,7 745:8	749:18 750:6,8,11
fall 662:18 669:10	574:19 575:3,18	745:9 759:25	750:12,17 752:14
674:10 787:19	580:23 600:7,8	765:6,7	752:17,20,21,25
789:7 790:1	601:19,21,25	fiber 693:6	752:25 753:5,6,8
792:13 798:24	602:2 625:1,4,5	field 596:20,22	753:13,15 754:16
824:16	627:12,15 639:1,3	598:1,21 667:7	754:17,19 755:15
falls 726:13 803:22	642:7 649:21	789:13 813:7	756:16,16 757:2,5
familiar 663:16	654:9 666:18	fight 662:15	757:9,12,14,15
694:24 794:22	667:1 668:18	fighter 662:15	758:9,12,18,20
familiarity 693:17	681:18 683:13	674:5 743:2	759:9,14,24 760:3
fantastic 578:14	703:7,12,12,22	fighters 662:12	760:4,12,20
	704:4 707:23	743:5	firefighters 742:24
			743:18 745:4,7
			759:21,24
			Firefighters'
			761:25 762:3
			765:5
			first 577:2 629:23
			638:7 673:6 676:7
			676:7 713:8 744:8
			751:16 754:2
			775:10 803:13,16
			803:17
			fit 788:23
			five 554:9 581:21
			602:14,18 612:14
			612:17 642:1
			643:17,20,24
			655:5,6 656:16,19
			657:16 658:6
			730:11,17 767:19
			767:20 777:9
			780:19 781:18,23
			783:11,18,20
			784:22 800:25
			801:1,7 820:5,9
			fix 630:21 658:25
			789:21
			fixed 612:3 786:7
			786:14,16 787:1
			787:23 788:11,15
			flashing 753:3
			flashlight 561:24
			674:7
			flat 560:25
			flavor 564:7
			flaw 697:15
			flawed 676:7
			flex 563:3
			flexibility 562:10
			606:25 655:17
			flip 617:21,22
			floor 662:18 711:17
			711:18,19,20
			791:6
			floors 675:21

700:18 712:6 716:10 focal 682:5 focus 667:19 focused 716:15 folder 811:13 follow 620:6 671:13 747:6 759:12 follow-up 719:10 followed 626:16 629:17 640:21 773:21 following 585:22 604:13 620:6 652:10 759:11 761:2 786:9 788:7 794:4 follows 604:6 801:25 804:22 807:18 815:4 food 665:21 foot 561:22 606:15 606:21 force 818:7 forcing 593:8 foregoing 826:8,12 forehead 618:16 forethought 562:4 forget 593:14 622:21 forgot 553:14 662:2 745:17 790:5 forgotten 731:18 format 666:23 737:17,21 807:23 formatting 822:4 formatted 822:8 former 605:19 forth 554:18 611:3 611:12 620:5 649:18 667:1 703:10 720:12 725:13 731:12	734:23 821:5 forward 553:12 554:4,23 555:22 555:25 557:12 558:18 559:4,24 560:14 581:11 582:24 623:20 681:12,13 721:3 723:22 724:23 726:5,12,20 740:22 756:13 764:14 765:23 766:7 767:15 816:9 820:16 found 645:1 688:18 726:3 822:9 four 569:11 571:11 571:17 576:1 578:25 581:22 582:7 584:10 636:17 647:16 655:5 656:17,20 657:4,7,17 658:9 659:1 684:11 686:19 719:7 720:15 723:24 739:10 769:13 788:7,7 820:5 frame 651:13 652:13,16 frames 651:11 652:3,7,11 655:6 655:9 Fratella 550:15 552:4 826:4,21 free 550:18 625:5 639:1,3 681:18 754:6 766:11 772:15 774:8 782:15 785:10 793:5 797:21 801:8 821:11 freedom 808:12 815:14	frickin' 563:8 friction 697:6 friendly 632:12,14 632:19 713:15 Friesen 570:1,2,2 573:1,2,2 586:22 586:23,23 592:21 592:22,22 593:4 599:23,24,24 606:18,19,19 609:14,15,15 610:10 614:13,14 614:14 615:8,13 615:13 628:11,12 628:12 641:23,24 641:24 653:10,11 653:11 676:4,5,5 678:3,4,4 685:5,6 685:6 693:15,16 693:16,24 694:1 701:6,7,7 707:13 707:14,14 708:6,9 710:1 712:1,2,2 717:17 718:4,4,8 720:3,4,4 723:12 723:13,13 745:20 745:21,21 750:19 750:20,20 755:3,4 758:4,5,5 785:11 792:2,3,3,9,11 794:20,21,21 798:5,6,6 803:12 front 598:23 677:10 792:12 fruition 566:13 frustration 768:6 frustrations 577:23 FT-1 694:7,18 695:18,20,22 696:1,13,17 fulfilled 569:21 full 562:15,15 586:6 596:22 635:15 637:8,9,22	657:19 658:7,10 688:15 715:5,7 777:11 780:21 781:3,5,7,18,20 782:7 783:15,19 784:5 811:19 821:9 fully 562:13 564:3 716:3 751:5 fun 786:1 823:7 functioning 692:17 functions 713:11 fundamentally 676:7 funeral 798:15,22 funky 747:14 furnish 655:13 furnished 651:25 652:20,22 653:20 further 557:17 601:25 602:3 607:21 609:20 627:6 668:5 675:24 797:20 814:7 826:15 Furthermore 676:16 future 655:14,15 808:20 815:22	GC 653:1 gear 561:22 geez 578:3 general 581:2 652:2,23,25 706:24 719:16 generally 641:11 684:17 generated 755:20 generates 632:13 gentleman 612:18 Gerald 553:16 557:23 558:7 613:17 624:4 658:22 678:18 698:4,6 724:18,18 726:12 727:6 731:8 751:3 755:25 765:11 790:10,14 794:25 818:17 824:19 getting 552:25 553:16 556:7 580:18 581:17,18 581:19 582:13,19 588:13 622:13 654:17 668:14 681:25 689:12,20 756:8 757:17 779:6 789:5 791:20 GFCI 604:21 607:2 608:6,17 611:5 626:24 641:4 644:24 649:16 girls 800:18 gist 581:10 582:1 give 553:13 559:12 562:15 658:6 703:3 714:13 720:6 736:12 753:22 789:22 812:8 816:14,16 821:6,8 824:13
G				
		G 551:1 552:15 gallery 596:1 gals 801:12 garage 635:22,25 739:20 garages 740:19,25 741:3 gate 677:5 gates 661:14 gateway 723:18 gather 668:23 gathering 672:24 gauge 805:6		

given 572:12 628:25 725:1,17 736:9 gives 596:19 655:16 671:10 695:1,10 736:17 760:13 770:19 giving 719:20 glad 793:20 glass 661:5,9,18 663:15,15,21 664:3,9 665:8 666:4,5 669:21,21 670:2,11 671:8,12 671:12 672:23 673:8,12,12,16 glasswork 671:19 glazing 663:21 glorified 716:2 go 552:23 555:2,7 557:11 558:25 560:15 561:19,20 561:25 566:16 567:16 571:2 575:15 578:13 579:1,11 581:11 581:12 590:9,10 590:13 593:2 600:25 606:25 618:20 619:16 625:5,16,22 630:5 630:6,8 639:1 642:22 643:3,4,8 644:10,10,11 650:15 660:3 668:6,7 669:8 672:12 674:4,25 680:2 681:3 683:17,24 691:9 702:22 704:8,16 712:11 717:9 721:15 724:18 727:14 728:14 731:8,18 738:21	742:8 746:10 748:14 749:13 751:13,14 752:2 759:4 760:15 768:7 769:6 772:15 775:3,9 776:9 782:13 785:9,10 789:19 790:25 791:13,19 793:4 796:19 798:22 799:14,16 800:16 801:13,18 806:25 812:24 813:7 816:1 817:6 818:8 819:17,18 820:11,20 823:20 goal 561:14 565:23 565:24 goes 553:25 563:12 585:1 595:19 618:12 633:4 646:21 655:21,24 715:6 716:10 722:16 727:13 769:17 779:19 791:16 going 552:22 553:9 553:17 554:2 555:22,25 556:8 556:14 557:15 560:24,25 561:7 561:20 562:9 563:4 565:23 566:2,3,5,8,10 570:6,22 572:21 574:24 575:8,13 579:2 580:24,25 581:1,11 582:8,16 594:19 597:11 600:2 603:5 610:23 611:17 613:19,22 614:1 619:9 620:5,19 622:2,3,8,25	624:22 625:7 633:19 648:21 653:17 655:8,20 659:11 662:17 663:9 664:23 666:16 668:8,12 669:10,10 673:17 675:11 681:5 682:10,13,20,21 683:9,13 695:9 698:8,12 699:8,12 701:22 702:2,10 702:20,21 703:2,4 703:16,20,21 704:2 711:22 713:22 720:17,21 721:2,3 722:19 723:1,7,25 724:1 724:17,22,25 725:5,7,14 726:10 726:21 728:17 730:19 731:11,17 731:19,22 732:24 733:3 736:15 737:5 738:6,7 741:6 746:9 749:15,17,18 751:13 754:16,19 754:24 755:6,23 756:7,16 757:7,18 757:21,22 758:23 759:8,10 760:18 762:16,23 763:8 763:20 764:24 767:9 768:1,17,21 768:25 769:6,7,8 769:16 771:12 775:7 784:7,14 786:1 788:19 789:7 790:1 793:19 800:16 801:5,6,22 804:18 810:15,17 811:18 815:3 816:1 818:7	818:9,22 819:14 819:18,18,21 820:4 821:14 825:1,6 good 567:21 570:25 577:13 580:15 581:15,15,21 595:13,22 598:2 599:12 600:8,22 600:23 612:1,11 643:22 654:10 662:5 669:1 686:10,10 687:10 695:24 697:11 704:4,23,25 707:13 722:3 730:15 734:24 737:13 745:19 750:23 756:14 757:10 758:24 763:13 764:19 766:4,8 767:3 768:24 770:25 779:17 788:16,25 790:7 791:8,18 800:18 813:11 823:21 goods 641:10 gosh 561:1 800:15 gotcha 568:5 582:16 gotta 555:8 gotten 557:21 Gould 575:23 576:2 608:3,3 634:1,1,18,18 635:2,8,9 636:15 636:15 644:5,7 645:16,16,19 648:1,1,18,18 649:4,4 653:7,7 665:12 683:4,15 685:18,18 686:9 691:1,1 694:3,3	695:17,17,25,25 721:24,24 745:25 745:25 746:3 771:7,7 788:18,18 790:9,10,14,14 795:16,16,20,20 803:24,24 811:22 811:22 819:10,13 gov 579:16 governing 770:13 government 667:7 governor 585:6 586:3,7,9,10 591:15,16 596:5,6 596:9 597:7,11 688:7,8,16,20,22 691:7 692:2,4,18 692:22 694:10,12 694:14,20 696:7 696:17 697:24 698:17,20,21,21 699:1,17,24 700:23 701:10,13 701:24,25 704:13 704:14 governors 688:17 689:5,9,14 690:23 696:22 699:2,3,16 grab 792:14 grain 809:3 810:3 812:5,17 816:22 grandson 730:19 granted 561:11 661:24 702:17 738:12 819:19 grasp 787:17 great 556:13 643:23 667:23 720:19 723:21 727:23,23 753:25 819:5,7 825:8,11 greater 689:8 746:19 Greenbusch
---	---	---	---	--

579:20 588:18 grill 660:23 661:1,2 662:21 670:12,13 670:18,19 673:23 grin 618:16 ground 604:20 grounded 608:4 group 555:19 558:21 559:14,16 690:7 822:16 grouped 640:14,17 grow 682:3 grueling 819:13,15 guard 553:8 guarded 641:19 Guarding 640:8 guess 554:14 579:21 627:21 646:12 669:18 670:9 679:14 699:15,15 708:1 713:20 714:20 750:21 755:16 757:8,16 759:15 775:13 818:17 guessing 615:24 guide 781:8 guidelines 572:8 guru 727:8 guy 789:24 guy's 726:1 guys 553:9,13 554:10,15,17 566:18,20 574:22 599:15 602:15 609:23 610:5,7,25 611:19 625:10 643:19,20,23,23 667:6 668:11 680:22 681:2,4 682:18,21 684:7 698:15,16 704:18 708:17 720:12 724:15 726:20,20	730:13 731:14 733:4 752:25 763:13 767:19,20 767:24 768:8 769:9 779:6 800:18 801:9,11 801:12,20 803:19 803:19 818:7,11 818:13 821:8 823:22 824:6 guys's 822:12 <hr/> H <hr/> H/W 652:24 half 554:1 556:18 590:9 657:6,19,20 659:7 768:23 818:15 hall 652:8,16 hallway 791:11 hammer 768:21 hand 554:24 578:9 583:13,16,21,24 584:1,3 586:3,7 590:7 595:21 599:2 600:5,18,21 601:5,6,10,11,21 601:22 602:2,2,4 602:23 610:13,15 625:15,19,21,24 625:25 634:17 636:13 638:23,25 639:6,8,10,11 642:19,21,24 643:1,6,7 649:5 650:7,9,12,17,20 650:21 658:19 659:19,20,21,24 660:1,2,6,7 662:3 674:23,25 675:2,5 675:6 679:14,24 680:1,6,8,10,12 680:13 682:14 686:8,20 687:8,10	687:16,18,20,22 687:23 690:17 691:3,5,10,13,15 691:19,20 706:7,8 706:10,11,14,16 707:22 708:14,16 709:18 710:4 712:14 714:24 717:13,14,16,17 717:18,20,22 718:6 720:3 724:7 729:8,9,13,15,17 729:18 735:10,17 736:11 737:14,22 738:2,5 740:3,4,7 740:9,11,13 741:5 742:6,7,11,13,15 742:16,17 744:19 744:23 745:18 753:19 761:17 763:23,24 766:16 766:20,25 767:6,7 772:4,12,13,15,18 772:20,22,23 774:5,7,12,14,15 774:18,19 779:12 779:14 780:3,5,6 780:7,8,9 782:11 782:12,16,20,22 782:24,25 785:5,7 785:8,12,13,15,18 785:20 787:18 790:5 793:2,8,10 793:12,13 796:13 796:14,16,18,22 796:25 797:2,4 799:11,13 800:1,4 800:6,8 806:22,24 807:2,4,7,8,11 813:19 814:3,10 814:13,15,17,18 816:18,23 817:4,6 817:9,11,16,17,19 817:20 826:18	hand-powered 769:23 handed 581:3 handle 751:24 handling 682:21 handouts 825:3 handrail 788:13 handrails 787:2 788:12 hands 583:17 600:25 601:2,8 625:16,22 639:2,3 642:22 643:3,4,8 650:16 660:4 674:21 675:1 680:3 687:14 691:9 717:10 742:9 757:10 774:9 782:14,16 785:9,11 793:5 796:20 799:15 807:1,5 817:7 handy 643:17 hang 722:13 happen 561:20 563:4 564:10 572:15 667:4 691:17 700:2 724:17 726:21 730:9,9 738:19 758:22 798:8 happened 579:14 602:24 623:15 697:13 734:7 746:10 happening 575:12 580:17 582:3 616:24 624:3 728:12 happens 559:24 577:20 701:13 757:8 801:21 803:2 happy 560:6 728:4	733:23 734:10 759:2 hard 554:2 565:10 587:21 594:6 595:4 605:1 610:19 613:18 614:10,10 617:20 617:21 647:2 721:10 723:19 807:23 808:10 815:12 819:23 hardened 811:13 harder 819:19 hardship 809:6 hardware 652:3 harmonized 746:2 hash 818:22 hat 722:13 753:3 hatch 787:9,16,18 hatch-type 786:5,6 786:17 788:8 792:21,25 hatches 788:22 Hawks 809:10,11 809:13,16,17,19 813:5 hazard 592:6 605:8 674:10,11,12 678:2 712:9 743:21 787:19 789:6 805:23 hazardous 592:5 675:22 676:15 707:7 hazards 592:12 805:17 head 747:15 762:7 765:15 822:13 heading 630:6,7 648:1 650:5 heads-up 714:13 Health 592:15 hear 560:6 578:2 595:23 703:15
---	---	---	---	--

734:11 747:11
 809:13,16 813:5
heard 624:16
 681:22 696:5
 697:10 711:14
 761:10,22 766:3
 809:5 822:3
hearing 632:20
heat 757:4
heated 768:14
height 657:19,19
 657:20 658:7,10
 659:7 660:23
 787:5 808:2
held 552:2 569:4
 573:20 575:6
 810:12 816:10
help 563:13 564:2
 564:11 565:5
 582:17 612:6,11
 612:18 644:9
 667:2 682:15
 689:19 692:6
 702:22 710:8
 784:11 801:2
 822:13 824:24
helped 612:9 682:6
helpful 579:16
 612:8
helping 824:24
helps 567:17 598:8
 598:16
Henderson 559:10
hereunto 826:18
hey 554:25 566:8
 567:5,9 572:8
 580:8 595:25,25
 609:24 611:8
 628:2 645:6 648:9
 667:1,5 668:11
 669:2 681:11
 682:6 683:18
 703:14 722:14
 724:9,20,23 725:3

725:12,15,21
 726:1,20 731:10
 737:3,13 749:22
 762:7 764:13,19
 765:1,8 766:4,8
 768:8 776:9 801:5
 803:19 816:10
 821:9 822:9,10
Hi 647:1 672:9
hierarchy 802:16
high 657:6 751:25
higher 802:19
highlighted 666:7
 775:5
hinged 786:19
Historically 594:2
hoist 787:8 793:22
 796:5
hoist-less-way
 710:9
hoistless 710:9
hoists 793:25 794:2
 794:12 795:23
 796:3,4,11
hoistway 626:19
 627:6 630:20
 640:2 644:3,12,13
 644:16 645:22
 647:22 648:15
 649:6,8 650:4
 651:23,24 652:1
 652:10,20 653:3
 653:20 660:21,21
 660:22 661:1,4,14
 661:23 662:14,17
 662:18 664:9,23
 666:5 670:3
 672:22,23 673:1
 673:21,22 675:21
 676:9,14 677:25
 688:10 689:6,10
 690:9 695:19
 696:16 711:16
 715:25 716:8,19

hoistwayless 711:3
 711:11 714:22
 715:4 717:1,2
hoistways 653:20
 663:2 664:4 666:6
 695:21 716:3
hold 558:23 575:7
 575:9 576:20
 655:12 718:11
 777:5 791:19
 820:22
holders 582:12
Hollister 700:8
home 561:7 655:5,8
 655:16 661:20,21
 665:1,2 696:24
 798:22
homeowner 652:2
 719:11
homeowners
 612:12 652:23
 661:22 719:17
 722:3
homes 664:16,21
 798:16
honest 557:13
 565:25 643:19
 667:9 725:20
 819:15
honestly 559:5
 765:14 793:18
honey 602:11
hook 758:10
hooked 753:4,6,16
hope 554:20 589:16
 599:5 613:10
 623:23 637:15
 643:23 675:11
 681:4 715:19
 726:17,25 760:12
hopefully 553:21
 554:8,14 558:14
 559:19 564:10,18
 570:22 579:17

690:3 698:9 703:4
 726:21,22 753:24
 757:25 820:24
hoping 610:22
horizontal 652:17
 786:4,6,11,17
 787:16 788:8
 792:21,25
horn 599:11
horrible 791:24
hospitals 555:5
hostage 655:12
hour 554:1 556:19
 720:16 723:24
 728:7 729:3
 768:22 779:7
hours 562:11,13,14
 562:15,16 568:17
 573:13 576:14
 684:11 686:19
 718:23 719:7,13
house 636:24
 662:15 719:24
 739:11 809:22
housed 644:2
 667:17 683:10
 688:5 710:25
 763:4 769:10
 809:25
household 641:10
houses 809:6
how-is-this-going...
 566:17
huge 666:25
humidity 640:10
hurt 790:1
HVAC 628:16
hydraulic 786:23
 811:20

I

i.e 787:22
idea 597:10,10
 609:1,2,4,18,19

609:24,25 611:16
 613:24 665:16
 697:11 720:20
 734:24 750:23
 760:13 771:5
 788:25 789:2
ideas 702:16
identical 607:5
 709:13
identified 605:17
identify 605:17
 737:17,21 770:6
 771:16
idle 571:7
ignore 564:6
ii 568:19 569:10,18
 571:2 605:2 787:8
iii 568:20 605:5
illegal 795:4,12
illumination 684:5
imagine 577:10
 733:16
imbedded 697:5
 699:18
immediately
 576:11
impact 573:13
impacted 569:15
 824:9
impacts 751:19
imperative 556:10
imperial 555:20,24
implement 720:19
 724:5 821:24
implemented
 794:13
implementing
 583:10,14
imply 698:23
importance 570:16
 713:7
important 563:2
 565:10 570:20
 582:5 616:12

617:6 666:4,7,11 671:9 757:20 791:25 822:5 824:24 impose 727:16 781:23 imposed 753:13 impression 607:20 improvements 751:15 improvise 564:5 in-depth 597:18 in-person 554:14 569:3 579:1 768:15 inactive 797:19 inappropriate 755:7 incase 645:22 inch 557:4 688:19 694:25 695:13 704:22 inches 556:2 605:7 626:21 631:6 634:11 636:6 638:1,4,4 641:1 644:19 649:11 699:20 787:4 incline 585:13 590:17,20 591:9 591:25 592:3,8,9 608:15 634:6 inclined 584:13,13 584:14 605:21 781:8,9 include 564:2 606:7 620:13 642:11 652:15 665:8 685:13 732:8 736:24 737:11,16 included 603:8 605:23 617:15 includes 684:24 730:5,6,7	including 597:25 613:25 646:9 684:21 737:20 inclusion 733:13 inclusive 605:21 incorporate 651:4 654:22 655:1 Incorporates 605:19 652:18 incorrect 576:19 801:16 incorrectly 646:19 indicated 623:6 indicates 795:13 indicative 795:3,7 individual 580:6 584:16 585:3,17 586:15,18 588:7,8 588:9 590:22 604:10 indoor 608:23 indoors 608:21 Industries 550:1 587:20 605:3 606:5 611:4,4 industry 597:21 720:9 725:22,23 727:20 812:6 816:22 information 564:24 568:15 569:15 570:19 573:7 574:5 576:12 580:17 581:3 582:14 603:13 607:25 623:21 668:23 700:4 754:1 808:13 815:15 821:11 Informational 688:21 informative 582:19 informed 568:21 infractions 751:10	initial 599:7 609:4 743:7 745:9 760:1 765:7 initially 670:1 732:14 761:13,14 injected 730:4 inoperative 719:21 inside 585:18 593:12 619:20 661:4 670:3 674:7 677:18,25 688:11 689:10,15 690:23 691:7 752:5 inside/outside 661:21 insofar 826:13 inspect 798:9 inspected 621:17 732:13,14 739:16 inspecting 621:16 713:10 inspection 598:9 641:11 653:17 743:13 753:18 776:12 777:9 780:19 783:11 784:22 794:11 inspections 580:21 581:16 582:14 696:24 770:19 773:17 778:16 794:16 inspector 596:3 598:23 599:4 621:23 627:20 632:10 653:16 685:25 694:18 713:7 715:23 727:5 738:2 756:21 771:11,21 775:13 813:14,16 819:2 inspectors 580:20 581:1 582:16	594:3 641:13 684:14 713:18 752:2 776:9 791:2 802:21 inspects 719:8 inspired 599:6 install 575:14 606:14,23 615:17 653:21 654:25 655:22 728:6 732:19 750:11 752:23 770:21 805:11 installation 569:1 587:8 617:12 619:14 651:20 652:6 656:5 661:11 673:16 678:6 713:10 743:8,15 745:9 752:19 757:1,12 757:13 760:1 765:7 770:5 771:17 773:12,18 776:2,11 798:9 804:22 installations 651:11 657:9 694:19 773:6,10 776:5 778:3,6 793:22 installed 584:16 585:14 591:10 604:10 606:12 608:18 651:25 652:9,11,21,23 653:1,15 654:4 696:16 718:21 719:2 721:14 723:8,9 729:1,2 732:3,13 734:4 743:10,22 745:11 747:19 749:4 752:6,16 753:4,16	756:25 792:7 794:1 802:4,12 808:7 814:2 installing 655:4 753:1 788:24 installment 747:23 instance 556:2 688:20 757:18 instances 664:19 787:20 instruction 805:8 instructions 646:8 807:22,25 integral 652:15 805:6 integrity 663:22 intelligible 826:14 intend 751:23 intended 593:7 731:24 794:8 intent 558:15 572:10,25 575:4 587:4,25 609:17 609:23 610:18,21 629:22 637:17,17 645:20 669:16 697:22 698:14 701:23 703:25 712:24 720:5,6 721:11 722:3 727:23 747:1,6 748:14,15,20 749:2,20 756:18 762:8 763:19 768:3 769:9 771:15,20 778:20 778:21,22 779:1 801:14 822:2 intention 722:23 interest 826:17 interesting 578:1 616:2 interests 641:18 interface 652:7
--	--	--	---	--

interim 612:10	695:25 704:4	jobs 722:11 811:14	812:9 813:6,12	556:13,20 557:1,3
interior 670:13,19	item 587:18 615:15	join 555:14 579:3	815:8 816:3 817:2	558:3,7 559:3
interlock 652:15	615:22 624:10	joke 797:24 798:4	Kevin 642:5 645:24	560:3,10 561:12
653:2	689:4	Jon 568:3 580:14	654:13 657:13	561:15,21 562:3
interlocks 652:8,25	items 551:4 558:25	620:4 621:9 624:8	658:3 662:7	563:7,21 564:12
653:1	588:20 628:24	677:2 720:25	663:20 665:6	564:24 565:22
internal 619:5	702:23 751:25	Jon's 606:20	669:14 670:9	566:16 567:7
internet 727:11	iv 605:7	Jonathan 567:21	673:6 677:14	571:5,11,17
interpretation	J	573:16 576:5	689:19 690:3,5	572:10,21 576:20
713:17 794:13		606:9 654:8	696:3 709:2 710:8	577:15,16 578:3,4
interpreting 594:3	j 706:25	672:20 699:7	710:13,21 712:23	579:14 581:19,19
introduction	j-o-n 568:3	754:12 755:5	721:5 744:2	582:8,12 587:24
811:19	jamb 631:7	759:7 760:24	745:22 748:25	594:6 596:7,11
invoices 568:20	Jan 575:22 576:2,4	811:10	784:3 803:1 806:7	597:9,23 600:6
involved 622:20	578:12 608:2,3	judgment 610:5	812:14	606:20 607:14,18
750:4	633:25 634:1,15	junction 805:1,9	key 617:2,2,3	608:4 611:20
involves 592:1	634:18,25 635:9	junior 579:25	kicked 624:4	612:6,16 614:15
IP 722:8,9,15,18,22	635:12 636:14,15	580:3 614:10	kicks 695:2	614:16 616:5,22
727:7,8,10,21,24	637:25 645:15,16	jurisdiction 593:11	kidding 560:24	617:1,18 618:8,13
728:25	647:25 648:1,18	623:8,9 672:2	kids 555:6	618:17,20 620:18
iron 692:4 693:1	649:2,4 653:6,7	jurisdiction's	kill 624:5	621:14 622:16
697:24	665:11 683:16	815:23	kills 676:13	623:14,15,16
irresponsible	685:17,18 686:7	jurisdictions	kind 562:14 571:6	624:25 625:4
739:13	690:25 691:1	671:25	578:5,7 588:20	627:13,20 629:19
isolated 716:22	694:2,3,15 695:16	justification 591:25	610:19 616:10,12	631:25 633:2
issue 567:23 568:6	695:17,25 721:23	681:11	618:15 622:10	643:18 648:10
575:17 576:22	721:24 745:25	justifications	623:1 627:25	653:18 654:14
580:8 593:24	746:3 771:6,7	808:21	629:24 630:9	656:11,22 657:5
594:16 614:9	788:17,18 790:8	K	647:7 654:2 657:4	657:20 663:3,3,7
623:18 624:11	790:10,14 795:15	keep 552:24 556:1	665:16,24 672:25	663:9,18,22 664:1
633:17 659:1	795:16,20 803:23	585:19 587:4	677:19 693:6	664:4,7,17 666:8
674:3,12 686:6	803:24 811:21,22	588:25 620:15,18	699:9,11 711:15	666:17 667:17,24
698:14 734:8	jeans 563:7	704:16 713:21	715:4 727:10	669:1,2 670:2
736:4,9 752:1,2,9	Jo 550:15 552:4	761:23 762:21	734:7 738:10	673:20 677:6,19
754:9 755:7,8,13	702:18 823:15,15	763:10 768:25	748:6,9 750:16	679:1 681:14,20
755:18,20 765:20	826:4,21	777:7 791:25	758:25 760:13,25	681:20,21 685:12
796:5 810:4 822:4	job 561:18,21,23	802:1 812:1,20,25	776:4,7,13 789:5	686:4 692:5
issued 654:23	564:8 566:6,12,18	813:1	kinds 616:10 806:3	693:10 694:13
issues 567:17	575:16 597:8	keeping 626:16	kneel 677:11	696:8,23 698:4,15
575:12 576:6	599:12 668:22,22	719:6 741:15	knew 810:16	698:20 700:8
621:18,19,20	738:21 751:14	764:16 780:23	knock 702:18,19	701:22 702:2
628:19 633:24	808:19 811:16	815:6	know 553:16,25	704:15 705:3
788:4,15	815:21 819:3,3,5	kept 646:9 730:12	554:5,11,15,20,21	710:7 711:14,15
it'll 564:2 630:6	819:7 823:6,18		555:8,20 556:7,9	712:6 714:14,20

715:16 720:14 721:15 724:10,19 724:20 725:5,11 725:21 726:3,15 726:20 728:4,13 731:7,14 732:22 734:23,24 738:15 744:7 746:9 748:15,15 749:6 749:19 752:9,11 752:12 753:2,19 753:24 755:25 756:8,17 757:3 760:21 762:7 765:3,14 767:25 768:5,11,19 771:12 779:5 789:7,24,25 791:15 795:5 798:25 799:18 800:14 801:16 803:19,20 809:6 810:1,3,21 811:16 820:4 822:5 824:8 824:10 knowing 556:7 674:8 knowledge 757:5 known 732:1 797:17 knows 555:1 570:22 724:21 776:24	Labor's 556:20 laboratory 605:2 lack 561:2 732:18 lacking 631:10 Lad 792:11 lad-safe 792:6 ladder 712:7 786:18 787:1,4,7 787:17,23 788:9 788:11,15,21,24 788:25 789:9 790:10,19,19,23 790:23 791:7,8,13 791:15,17,20 792:6,8,13,15 ladders 786:7,8,14 786:15 787:14 788:6,19 789:4,15 789:18 791:4,7,24 793:1 ladies 801:11 laminated 673:12 land 562:18 782:18 landing 651:5,8,10 651:16 652:22 660:24 711:7 712:4 713:16 715:6,7 794:8 landings 652:17 landline 719:12 language 571:10,24 580:22 581:5,9 594:7 599:9 606:4 606:16 612:4 614:5 631:10 632:1 641:22 645:1 646:1,17 649:20 658:12,13 662:9 673:19 712:25 713:2 744:6,8 746:13 747:13 748:5 749:7 787:24 810:19	large 674:3 largely 655:8 larger 573:23 577:6 585:19 Larson 555:10,11 555:17 556:6 latch 792:9 late 693:9 696:23 779:6 latest 555:1 Lathe 589:22,22 590:4,7,9,12,12 590:16 595:20 596:12,13,13 598:17,18,18 599:21 600:18,20 601:7 602:24 603:1,1,5,14,14 603:17,17 604:1 608:24,25,25 613:14,15,15 617:8,9,9 670:8 671:4,4 673:25 674:1,1 693:8,9 777:25 778:1,1 Lathe's 600:16 601:3 Lau 557:1 588:23 588:23 594:13,13 607:13,13 610:17 610:17 616:9,9 620:23,23 622:16 622:16 629:9,9 633:11 635:11,11 637:15,15 647:1,1 647:13 648:20 656:4,4 662:24,24 663:25 665:24,24 672:9,9 694:9,9 698:11,11 701:20 701:20 713:20,20 722:2,2 746:8,8 748:12,12 749:11 755:23,23 759:18	759:18 764:1,3,8 launching 739:2 740:1 law 557:1 751:1,1 755:7,8 lay 677:11 leading 557:13 663:18 787:12 lean 562:25 leaning 677:5 790:24 learn 558:14 learned 824:23 leather 693:5 leave 561:25 596:4 633:24 723:14 748:19 799:18,19 800:17 801:17 leaves 593:25 leaving 748:18 799:22 leeway 720:7 722:4 812:8 left 556:9,11,16,18 558:22 584:9 612:24 613:1,7 778:24 779:2,7 786:19 813:11 820:19 legal 808:11 815:13 legally 613:8 legible 808:1 legislation 557:23 length 605:9 607:19 771:13 leniency 816:22 Leopard 559:25 560:1,9,13 598:7 598:8,25 650:17 663:12,13,13 665:15,16 680:9 696:19,20,20 712:16,17,17 715:1,2,2 728:2,3	728:3 745:15,15 745:17 748:2,3,3 748:22 750:1,2 758:15,16 789:1,2 790:3,5 Leopard's 666:14 Lerch 570:25 747:17 755:12 803:15 818:16 let's 614:17 617:21 622:4,5 667:23 697:17 709:6 726:9 760:14,15 761:1 768:24 letter 744:12 level 572:17 580:3 582:4,8 583:4 625:14 689:23 690:1 695:4,5,10 697:8,11,18 700:16,24 701:4 703:17 704:11,23 705:2,5,14,23 706:3 736:14 787:5,9 liability 802:20,22 liberty 702:10 license 573:1 582:12 licensed 572:3 583:11 652:9,11 655:3 licensing 568:19 lieu 802:18 life 561:6,7 562:16 743:21 757:24 lift 586:14 587:2,25 588:10,12,15 594:5 605:15,16 613:19 614:2,9,9 614:11,24 615:6,7 615:16,23 616:5 619:4,4,5,6,7,10 619:13,15,16,17
L				
L 553:17 581:1 621:23 632:10 713:7 labeled 613:23 653:3 668:22 798:18 Labor 550:1 587:20 605:3 606:5 611:3,4				

619:21,22,24,25	likes 561:19 624:4	629:24 638:20	786:19 787:2,6	looking 579:21
619:25 621:5,6,25	limit 622:11	643:17 657:2	790:19 802:11	598:13 609:24
622:5 624:6,14,18	limited 605:8	667:13 669:3	804:4 805:1,10	622:9 672:13
711:19 716:2,2	606:17 655:5	681:21 690:3	locating 807:22	673:7 682:13
734:3 738:8,10,11	692:12 805:18	694:25 695:2	location 634:3	688:22 689:20
738:16,17 791:14	limiting 701:4	698:24 700:15	688:7 690:22	690:7,11 699:4
798:23,24	line 584:25 591:6	702:3 704:12	812:20 813:7,12	715:17 739:19
lift's 604:15	616:23 617:22	710:8 714:13	locations 585:14	810:25
lifts 578:1 584:13	626:11,16 627:23	715:9 722:4 724:8	813:10	looks 571:24
587:19,21 604:7,9	631:17,21 632:22	724:16 726:17,22	lock 677:19	595:13 627:5
605:21,22 608:16	634:3 636:1,4	727:9,24 736:17	lockable 605:16	647:20 705:2
608:18,19,23	638:1,7 640:13,16	749:2 756:9,21	618:2,10 624:5	708:24 710:3
616:6 617:14	640:21 665:18	768:13,22 779:7	626:20 640:25	718:8 737:6,7
618:12 711:24	676:7 714:11	780:25 790:21	644:18 649:10	741:6 763:6
731:25 732:3,6,11	721:10 723:19	794:23 801:15	locked 646:10	loop 631:16
732:13 733:5	726:13 749:21	809:15 824:10	802:5	looped 573:24
734:1,1 735:2	750:13 757:8	live 578:12 791:25	locking 661:15	lose 595:5,9,19
736:7 741:14,16	787:3 798:25	load 584:23 585:9	locks 791:17	612:19
741:20,21,24	803:22 820:7	586:1,6 591:4,20	logs 778:24 813:8	loss 685:2 805:20
742:5 769:15,19	lines 571:14 669:6	591:23 595:15	813:11,15	lost 582:19 719:24
769:22 770:1,7,11	694:4 762:8	596:20,20,22	long 563:18 578:13	lot 554:11,20
770:12,16 771:3,8	lining 754:14	598:1,6 612:15,17	586:14,17 595:1,2	557:14,17 566:18
772:8 777:15	link 579:3	777:11 780:21	598:4 606:15	566:19 570:18
780:18 781:9,19	list 572:19 618:18	781:3,5,7,18,20	618:8 624:21	571:21 578:14
782:6 783:9	740:20 741:19	782:7 783:15,20	636:25 655:20	580:15,25,25
784:21 794:1,9	751:14 768:19	784:5	662:10 681:21	581:12,12 582:15
795:6,8,12 797:12	803:4	local 671:24	702:14 728:5,9	593:25 597:3
797:22 798:18,18	listed 572:5 605:2	locate 802:2	750:9 766:23	607:16 608:17
798:20 799:4,10	614:9,22 615:15	located 605:15	longer 595:11	616:23 618:13
799:12 800:3,5	615:23 650:6	615:6,15 619:22	615:18 719:11	621:11,12,16
light 626:11,24	799:4	624:12 626:12,13	longest 564:21,23	622:22 629:14
634:21,24 638:8	listen 574:4 681:25	626:14,22,25	look 553:6 556:3	638:18 655:13
640:13,17 641:4	690:15 762:17	631:23 632:3,21	562:21 566:6	656:15,21 663:11
644:24 646:3	listened 724:21	635:17 636:1,2,3	598:13 609:13	666:20 667:10
649:16,21 683:25	listening 565:13	636:23 638:8,9	622:18,19,22,24	668:1,8 681:6,7,8
684:2,2 685:4	672:24 755:11	640:15,19,19	629:10 647:3	682:19 696:24
686:15 687:2	listing 613:10	641:2,5 644:20,25	677:11 702:13,24	701:9 716:8,11
lighting 637:6,12	literally 677:6	649:12,17 675:18	725:7,25 750:5	719:16 724:4
684:9,11,13,25	little 555:4 567:9,9	675:18 677:20	765:9 822:12	731:22 732:25
685:15 686:4,16	570:3 575:19	678:22,25 679:1,2	825:1	734:25 746:16
686:18	577:23 581:9	679:21,22 684:3	looked 563:16	750:12 757:19
lights 635:6 636:1	599:7 602:18	688:9 691:7 707:2	607:17 615:25	768:5 788:18
684:15,21	608:1 618:18	707:3,6,17 711:5	663:8 664:2	789:5 793:19
liked 825:8	627:6 628:8	711:6 717:3,4	790:11	809:20 819:18,19

823:17,18,20
 824:11,23,23
love 779:18 789:2
low 692:14 697:6
lower 583:17
 600:25 601:1,8
 603:8 625:16,22
 639:2,3 642:22
 643:3,4,8 649:5
 650:15 660:4
 674:21,25 680:3
 680:10 687:13
 691:9 717:9,14,17
 742:9 745:17
 767:6 772:15
 774:9,14 782:14
 782:16 785:9,10
 793:5 796:20
 799:15 800:1
 807:1,5 817:7
lowering 819:22
lowering/rescue
 684:19
luggage 641:10
lunch 553:24,25
 554:2 555:13
 556:7 559:19
 675:13 680:21,24
lx 684:7
Lyll 587:17
 593:22 603:22
 608:10 631:14
 634:23 636:12
 654:21 656:1
 657:1 685:23
 687:5 689:3
 713:14 714:24
 723:5 724:6
 778:14 781:16
 812:4 813:3,4
 816:20
Lyll's 714:9

M

m-o-n-e-l 692:6
machine 626:9,13
 626:15 627:2
 628:6,14,16
 629:16,20,25
 630:1,15 631:5,7
 634:8 635:5,14,16
 635:17 636:3,16
 636:18,23,24
 637:4,23 639:24
 639:25 640:4,19
 640:20 641:15
 642:9 644:15,22
 649:14 675:16
 679:11,19 706:25
 707:17 708:8
 709:7 729:5
 752:24 787:12
 789:20 802:15
 804:4 805:5
 807:20 811:24
machine/voicemail
 719:14
machinery 626:9
 630:12,14,18,21
 635:13 637:5
 639:25 642:9
 675:24 807:21
 811:24
machines 675:17
 676:2 678:20,25
 679:20 706:24
 707:2,5 708:24
Madison 553:22
 580:13,14,14
 620:3,4,4,22
 621:9 624:9,22
 677:1,2,2 682:5
 720:24,25,25
Madison's 678:6
mailing 572:19
main 581:10,10
 592:5,7 597:22
 604:15 617:22

626:11,16 627:23
 629:15 631:20
 632:21 634:3
 635:25 636:4
 638:1,7 640:13,16
 640:21 667:18
 711:7,8 712:4
 713:16 719:24
 753:2 757:8
 813:13 822:2
Maine 714:11
maintain 802:5
maintained 739:17
 777:16 778:23
 779:10 807:20
 808:5 814:1
maintaining
 684:11 686:18
 775:24 809:7
maintenance
 620:16 640:9
 719:10 740:24
 769:14 773:11,13
 773:16 776:10
 777:19 778:21
 779:1 780:17
 782:5 783:8
 784:20 788:24
 789:16,19 793:23
 808:3,4,17 810:11
 813:24,25 815:19
major 789:14
majority 590:9
 602:5 708:17,20
 709:22 744:24
 761:20 762:14
 764:19 799:21
 813:11
making 557:24
 558:12 564:18
 574:24 577:4
 578:20 594:19
 595:4,9 610:5
 733:10 752:12

779:19 808:9,19
 815:11,21 819:7
 821:18 825:7
malfunctions 563:6
man 662:4 681:13
 690:15
management
 582:10 797:18
 798:13
manager 564:20
mandate 620:11
mandated 570:8
 686:6 783:21
mandatorily
 653:23
manlifts 769:23,23
manually 585:8
 586:2,7 591:19
manufactured
 735:4
manufacturer
 596:15 598:4,5
 615:14 620:13
 622:20 652:14
 655:7,13 688:20
 697:17 699:22
manufacturer's
 585:7,25 591:17
 615:1 805:8
manufacturers
 618:9,11,14,15,21
 621:3,7 623:2,5
 623:21 655:11
 659:8 685:12
 688:21 689:7
 697:10,16 700:23
 720:11 724:2
 726:2 802:14
March 826:19
Marina 739:12
mark 612:24 613:1
 613:6,6,8
Markings 661:8
 673:14

marshall 664:17
 671:16
Marshall's 671:22
marshalls 559:17
 757:16
Mary 550:15 552:4
 702:18 823:14,15
 826:4,21
match 655:7
matching 805:6
mater 757:23
material 578:1
 618:12 731:25
 732:3,6,11 734:1
 734:1,3 735:2
 736:6 738:7,10,11
 738:16,17 741:14
 769:15,19,22
 770:1,7,11,12,16
 771:3,8 772:8
 786:25 793:22,25
 794:8,9,12 795:6
 796:4,5,11 798:18
 798:24 805:15
materials 561:17
 663:21 787:9
 794:2
matter 562:5
 598:22 667:6
 681:24 757:6
 776:6 795:12
 826:16,17
matters 757:23
McKenzie 595:22
 595:24 596:2,2
 597:2 598:19
 706:8 736:1
 797:23,24 812:16
 812:17 818:25
 819:1,1
MCP 807:20,23
 810:12 811:4,7,8
 811:13,23 812:18
 812:22,25,25

813:8	606:22	702:21 800:23	mental 564:14	minimally 739:6
MCPs 808:9	measurements	820:16 823:16	mention 727:6	minimize 557:19
812:21 815:11	555:21,23,23	meetings 569:4,17	776:4	558:11
816:3,10	737:11	570:8 571:12	mentioned 669:19	minimum 626:20
mean 562:23,24	mechanic 575:25	577:18 578:13,19	711:23 750:22,23	640:25 644:18
563:8 571:7	576:18 577:5	578:19,25 579:1,2	758:20	646:7 649:10
573:20 574:2	580:15 620:5	581:14	merge 639:21	684:5 730:13
576:18 577:21	675:22 676:15	meets 659:10	merged 627:16	732:10 733:22,25
597:3,5 622:2,7	677:3 721:1	Melissa 552:7	639:19	736:5 740:24
629:16,17,18,18	789:13	556:12 557:22	merit 577:5,6	808:1
655:23 666:8	mechanical 628:10	558:3 560:16	mess 578:16 765:2	minimums 759:14
676:21 681:3	mechanical-assist	565:15 567:25	messaging 806:14	minus 612:15,17
699:10 721:19	786:22	569:2 570:12	messy 564:6,7,9	minus 669:18
743:8 745:10	mechanics 568:18	571:15 572:6	met 557:22 604:14	minute 555:4
746:18,21,22	573:19,23 576:15	573:3 578:8	612:24 651:13,19	602:14,18 643:17
747:16,17 755:17	576:17 577:8	580:17 584:4	653:15 657:24	643:24 680:21,22
760:22,24,25	580:20 581:18	600:22 601:13	770:21	680:25 692:13,13
776:6 806:8,9	582:9 707:8	606:1,2 610:9	metal 661:1 692:6	697:8 700:16
meaning 775:18	789:14 813:7,13	611:20 623:25	788:21 791:8	730:17 767:19
means 564:7	813:15	626:2 638:19	methods 720:7	800:25 801:1,8
584:19 587:10	mechanisms	639:13 643:10	metric 555:20,24	minutes 553:22
589:10,12,15,19	794:24	650:23 658:21	556:3,4 557:7	574:8,11,15
593:1 595:9	mechanized 740:19	660:9 670:7 675:7	736:25 737:1,11	577:12,13,14,17
604:13 605:11	740:25 741:3	680:16,21 681:19	737:16,20 738:13	579:6,7,10,15,17
612:24 614:3,18	medical 555:3	682:19 687:10,25	738:13	643:20 666:16
614:23 618:1	meet 613:4,9	691:21 703:3	mic 809:16	680:23 753:22
622:23 623:3,4	615:19 651:7	705:11 706:17	mice 810:2	767:20 774:25
660:15 684:4	653:8,16 654:4	717:24 729:20,24	micro 716:11	801:12 818:5
692:9,23 693:4,4	658:6,16 695:13	740:13 742:18	Microsoft 552:3	minutia 702:14
694:4 696:14	695:14 700:13	772:25 774:21	middle 712:6 809:7	misleading 589:10
698:1 704:20	721:21 724:3	780:11 783:2	Mike 664:13	589:15 614:1
705:22 711:2,5,7	743:11 745:12	785:21 793:14	671:15 697:21	misnaming 715:11
711:8 716:14	746:12,15 747:24	797:5 800:10	699:14 711:13	missed 611:21
717:4 718:19,20	748:20 749:3,5	801:2 807:9,13	714:19 795:22	627:20 673:7
718:23 719:4,4	750:14 760:8	810:21,24 814:6	miles 809:21,21,21	810:18
722:5 723:3	795:4	814:20 817:22	mill 578:2 739:12	missing 588:24
727:22 728:23	meeting 550:4	819:3 820:16	millimeters 661:2	747:20
729:4 775:20	551:6 552:2,19,23	821:25 823:4	692:7 808:2	mistaken 685:8
786:22 787:8	558:4 559:5 565:6	member 573:21	million 655:5	misunderstanding
807:24 826:11	569:12 573:9	members 693:12	Mills 789:11,12,13	586:12
meant 613:7 656:2	574:12,21 579:6,7	729:25 730:5	mind 556:1 560:23	mitigate 564:18
700:13 747:4	579:13 604:23	799:17,20	564:2 698:8	mm 787:5
measure 556:4	614:21 620:8	men 801:12	704:16	modalities 716:7
measured 586:9	653:24 657:7	men's 790:18	mine 765:16,17	model 596:18

modem 727:12	802:10,11 803:25	muddled 748:9	624:15 626:6	712:13,21 713:3
modern 587:7,8	804:3,8	multi-million	628:2,11,25 629:5	713:13,19 714:6
676:21 720:7	mount 696:25	664:16 665:2	629:8 631:12	714:18,24 715:21
modification 758:8	mountains 560:10	multiple 581:25	632:8,19 633:8,10	716:23 718:3,7,14
modifications	mounted 619:18	582:1 666:17	633:25 634:13,22	720:24 721:4,23
618:19 652:19	675:16 676:3,11	677:3 805:17,20	635:10 636:10,14	722:1 723:4,12
659:12	676:17 677:17	811:11	637:1,14 638:14	724:6 728:2,19
modified 603:10	679:12,19 696:22	mute 754:3	639:17 642:4,13	730:16,25 734:12
612:25 613:2,3	706:25 709:8	muted 718:12	643:14,22 644:6,9	736:22 738:19
615:18	711:9	747:12	645:18,20 646:14	739:1 740:17
modify 614:25	move 560:6 582:25	muting 747:9	646:23,25 647:9	742:22 744:10
619:16 659:6	602:5 634:14		647:15 648:3,19	745:19 746:4
784:5	646:15 659:16	<hr/> N <hr/>	648:20,25 649:6	747:8 748:2,10,22
modifying 606:11	666:13 679:18	N 551:1 552:15	651:2 653:10	749:8 750:1,19
module 752:25	701:18 709:22	Naipo 552:8,22	654:7,12,20	751:3 753:21
modules 753:4	712:20 714:2,2	555:9,16 556:6	655:23 656:3,24	754:11 755:2,10
moment 562:23	723:22 729:23	557:10 560:8	657:12 658:1,17	755:22 756:19
614:20	736:23 754:1	565:14,18 567:4	659:2,13 660:13	758:2,15 759:6,17
money 563:12	756:13 765:22	568:2,5 570:12,24	662:4,23 663:12	760:23 761:7
753:1	794:8 796:8	571:15 572:2	663:19,24 664:11	764:2,7,12 765:14
monitor 719:18	802:14 816:9	573:15 574:8,11	665:5,10,15,23	765:22 767:12,23
728:7	moved 641:12	574:14 576:3,25	666:13 670:6,15	771:6,9,18 773:4
monitored 719:13	648:13 711:24	578:8 579:19	670:21 671:14,18	775:3 776:16
monitoring 729:3	713:22 766:15	580:12 581:7	672:3,6,18 673:5	778:11 779:4,21
Montgomery	movement 688:15	582:21 584:8	673:24 674:14	779:25 780:15
583:22 671:21,21	movers 795:6	587:15 588:5,17	675:11 677:1,13	782:1 783:6 784:9
672:4,6	moving 553:12	588:22 589:21	678:3,14 679:6	784:16 785:25
month 559:5,22	554:4,13,22	590:3,5,15 592:21	680:20,25 682:24	788:17 789:1,11
736:14	557:12 558:18	593:4,21 594:12	683:8,16 685:17	790:3,7,11 792:2
months 757:17	559:24 560:14	594:24 595:20	685:20 686:7,10	792:9,16 793:18
moot 672:23	617:14 623:20	596:12,24 597:13	686:23 687:2,5,12	794:25 795:15,21
morgues 798:17	626:6 643:25	598:7,17,25	688:4 689:17	795:25 796:7
morning 567:21	651:2 660:13	599:11 600:4,24	690:4,13,20 691:2	797:9 798:2,12
569:2 571:1	681:12,13 688:4	601:17 602:10,12	691:25 693:8,15	800:14,20,24
motion 803:25	688:13 691:25	602:17 603:3,12	693:24 694:2,8,15	801:11 803:9,14
804:7	706:21 710:9	603:23 606:8,18	694:22 695:16	803:17 804:2
motor 589:13,16	715:13,18 716:9	607:12 608:2,9,24	696:2,19 697:20	806:6,15 807:13
616:15,18 617:24	718:15 731:16	609:5,11,22	698:6 699:6,13	807:17 809:10,14
622:2,7 623:10	739:1 740:17	610:24 612:21	700:5 701:6,16	809:18 810:23
626:18,19 630:13	741:11 742:22	613:12 614:7,13	702:10 705:7	811:9,21 812:3,10
632:6 640:7,23	765:8 768:24	615:4,9,20 616:8	706:21 707:13,20	812:15 813:3,18
641:21 644:16,22	773:5 775:1 783:6	617:8 618:4,24	708:2,12,13 709:6	814:24 815:1
646:11 649:14	804:21 807:17	620:2,21 621:21	709:11,14 710:16	816:23 817:13
697:13 802:1,3,5	MRL 811:11,19,19	622:15 623:25	710:19,24 712:1	818:5,24 819:9,14

821:17,20 822:21	688:3 718:13	621:18 627:15,16	778:12 781:13	new 569:13,23
822:24 823:2	729:23 735:23	631:20,24 633:20	782:3 784:18	571:4,13 575:14
824:4 825:10	740:15 767:11	639:19,21 643:18	785:2 788:2 789:2	584:24 587:7
name 714:10	773:2 774:24	643:24 644:9	794:20 796:8	599:14,15 604:5,6
723:23 771:2	783:4 785:23	645:25 646:12,20	799:6 813:21	618:7 622:4,18,21
named 730:11	793:16 797:7	648:1 649:19	816:8	631:11 639:22,25
narrow 788:22	800:12 807:16	653:12 654:3,17	needing 562:7	648:9 649:8 650:3
Narrows 739:12	811:1,2 814:23	654:18 658:12,25	635:6 739:23	651:3,6,11,24
national 593:19	817:25	664:15,25 666:11	772:3 808:15	654:15,16 656:5
645:3 648:6	nd 737:3	666:14,18 667:10	815:17	657:8,9,22 660:16
743:16 806:13	near 684:3	669:4 670:13,19	needs 557:7 568:7	661:4 665:25
nature 596:6 597:7	NEC 584:17 585:2	678:22 700:20	597:23 601:24	666:2 667:15
608:20 700:2	589:4 591:6 593:8	701:1,1,22 702:5	602:1 605:23	678:5 684:8
nay 583:21,24	593:9,11 594:10	703:14,19 704:13	606:6 607:21,25	685:12 688:12
600:8 601:5,6,16	604:11,24 605:5	704:16 705:4	609:25 611:4,5,13	698:12 701:1
625:6,19,21 626:5	605:18 606:11	706:2 708:10	611:16 612:2	704:22 712:24
639:6,8,16 642:24	607:10 611:8	714:8 721:22	621:11 636:5	713:1,4 724:14,15
643:2 650:13,15	616:11 622:22	722:10,21,21	647:11,12 653:14	731:19 732:10
660:1,3 674:23,25	623:1 634:25	723:23 724:15	653:14 656:19	733:25 736:6
680:6,8 687:16,18	635:3 637:3 641:7	725:24 729:23	666:19 668:1	752:24 753:6,11
687:20 691:13,15	necessarily 606:21	730:8 732:20	675:25 693:23	753:14 763:18
691:17,23 703:7	708:10 716:1	733:3 734:20,20	698:24 699:10	769:20,25 772:7
703:12,24 706:7	723:16 755:20	735:16 736:20	702:15 712:11	778:6 786:4,5
706:10,11,20	necessary 603:6	737:3 744:7	719:20 723:22,24	788:21,24 792:19
717:13,16,17	607:8 608:22	746:25 749:3,5,24	724:4,12 734:21	822:1,10
718:1 729:13,15	611:6,6 646:5	750:4 755:18	735:7,8,18 753:12	newer 749:5
735:17,21 740:7,9	672:16 673:18	756:11 770:17,20	756:9 757:24	NFPA 590:23,24
742:11,13,20	778:4 807:25	770:23 775:22	761:18 762:20	591:10,11 592:10
762:20,21 763:2	808:14 815:16	776:9,10,13	788:10 794:14	592:19 617:10,10
763:10,19 764:4	necessity 778:2	778:17 781:18,21	798:24 810:9	743:14,15,16
764:25 765:8,19	need 553:20 556:16	784:5 788:13,14	811:6 820:8 825:5	804:5,23 805:21
766:7,21,22,25	557:8 561:9,15,22	803:6 804:11	neighborhoods	NFPA70E 804:6
767:5 772:18,20	562:3,21,21	806:4,5 810:19	788:20	nice 599:9 700:15
774:12,16 780:5,6	563:15 564:1,12	821:10	neither 667:8	823:8
780:13 782:18,20	564:18 565:4	needed 564:24	network 719:1	nicer 655:10
782:22 785:14,15	569:25 572:14	577:9 600:11,14	722:8 728:25	night 555:18 567:6
793:8,10 796:23	575:6,8,17 578:21	602:3 614:18	never 572:21	567:12 570:4
796:25 799:16,25	579:10 581:11	620:17 642:8,8	577:25 598:2	674:6
800:4 807:2,4	587:6,13 588:1	645:13 650:1	606:21 608:6	nine 820:5,6
814:13,15 817:9	589:12 594:6	688:25 705:20	612:4 623:13	NIOSH 791:21
817:11,16,17	600:6,7 601:18	712:7 733:1,23	694:11 703:17	nit-picky 668:15
nays 584:7 643:13	606:7 607:2,24	753:11 754:9	705:5 746:25	nitpick 667:12
651:1 660:12	608:13,13 609:9	766:1,2 770:6	750:5 756:16	nods 762:7
675:9 680:19	611:7 618:17,22	772:1 774:1	760:3,5 789:12	nomenclature

701:3 704:17
non-adjustable
 585:22 781:10
non-circular
 693:11
non-code 795:7
non-combustible
 786:10,12,14,25
 788:12 789:9
non-existent
 607:10
Non-fire 661:17
Non-fire-resistive
 671:7,11
non-functional
 588:12,15
non-mandatory
 761:3
non-voting 730:4
nope 745:19 779:18
normal 606:14
 684:8 686:16
 688:13 700:12
 719:3
normally 813:6,14
notation 752:8
 753:10
note 573:10 603:24
 614:15 624:17
 688:21 708:11
 742:25 762:1
 767:13
notes 573:10
 574:18 575:21
 583:2 610:8 611:2
 611:20 615:11
 627:13 638:16
 670:25 674:17
 703:3,5 705:11
 814:4
notice 674:7
noticed 738:5
notify 557:7
notifying 587:11

notion 609:18
 798:8
notions 819:17
number 571:18
 589:6 591:8 596:9
 598:10,16 599:15
 599:18,19 629:2
 630:13,19 631:15
 632:7 644:11
 648:9 653:8
 660:20 663:17
 744:4,11,12
 751:12,12,25
 776:22 779:20,21
 803:4,8 812:11
numbering 788:4,9
numbers 801:6

O

O 552:15
o'clock 554:9
 643:16
oaths 826:6
object 688:13
objective 713:23
observance 716:6
observers 730:2
observing 713:10
obtain 651:10
 657:3
obviously 597:16
 659:9 690:9 771:3
Occupational
 592:15
occupied 562:24
occur 686:1
occurred 826:8
occurs 652:10
October 581:23
 770:10 776:3
offer 816:9
offers 753:15
office 671:22
 813:13

offices 576:1 582:1
official 606:4
officially 557:2
 606:5
officials 667:8
 757:15
oh 561:1 567:20
 572:20,21,22
 576:2 602:12
 610:16 618:4
 623:13 629:5,5,5
 633:1 635:4
 636:14 662:4
 671:18 682:14
 683:19 686:23
 689:2 710:2,4
 742:2 745:16
 746:8 771:5
 777:24 784:2
 785:25 790:8,16
 791:22 797:10
 799:21 800:15
 823:4
okay 555:16 559:12
 559:20,25 565:8
 566:11 572:13
 574:23 590:16
 594:12 595:17,22
 602:19 603:12
 606:2 615:9
 617:15 625:2
 628:7 629:22
 633:8 636:14
 642:15 644:4
 647:17 648:25
 658:20 667:11
 670:2 679:14
 681:11,12 684:1
 686:12 687:5,6
 690:14,20 691:2
 698:23 702:10
 708:13,19 709:11
 709:15,16 710:19
 715:1 723:22

726:9 730:9
 731:19 735:11
 736:2,15,22,25
 737:4,12 739:24
 742:2 746:8
 748:23 761:12,15
 761:15,17 762:9
 762:10,14 763:7
 763:12,14 764:12
 764:13,15,18
 766:13,22,25
 767:4 775:4 776:1
 779:16 792:18
 796:1 798:1
 799:23 803:14,17
 804:17 821:17
old 611:13 721:8
 757:1 758:18
 789:25
older 656:16 761:5
Olympia 550:18
 756:21,25 771:11
omission 805:22
omit 762:13 763:11
 764:9
omitted 757:20
 763:21
omitting 762:11,23
 763:4 764:5,17
 767:17
on-site 596:4
 807:22 809:22,24
 810:4,12 811:14
 812:2 813:11
 816:5,11
once 567:19 568:11
 569:4 576:9
 599:20 612:19,25
 618:20 641:15
 684:15 719:9,24
 726:7,8 787:9
 794:18 816:9,16
 824:21
ones 576:15,19

616:23 617:5
 622:19 623:5,12
 635:14 648:10
 700:12 733:4
 823:1
Oops 644:10
open 560:5 575:20
 579:4,11 586:21
 605:25 634:9
 636:22 645:14
 653:5 661:25
 681:17 682:10
 692:23 697:3
 701:16 704:16
 707:9 713:17
 720:1 739:22
 745:14 773:23
 783:25 786:19,22
 787:10 788:1
 790:20 791:14
 794:17 808:23
 815:25 822:16
 824:17
opened 644:16,23
 649:15 725:4
opening 627:7
 636:20 644:3,12
 645:22 648:15
 650:4 684:20
 786:20 787:3,18
 808:24
openings 646:2,9
 660:23
operable 615:23
 616:4 619:23
 624:14,17
operate 684:23
 692:15
operated 584:14,24
 585:13 586:13
 587:2 590:20
 591:5,9 604:8
 605:20,22 616:16
 617:5,7,18 752:21

operating 684:20 773:16 781:8	804:14,17,18 814:12,14 817:8 817:10,15,16	736:4,9,12,21 738:6 770:24,25 771:5,14	755:14 775:23 777:14	part 559:24 584:12 585:11 587:4 589:8 614:11 615:5 616:4 619:9 619:10,13,15,24 619:25 620:8 630:22 631:8 638:7 644:13 645:12 647:21 651:24,25 652:24 653:18 656:6,7 658:4,14,15 659:4 659:8 661:7,8 662:8,14 663:5 665:12 669:11 671:9 673:13 690:10 697:4 698:5 699:21 713:4 720:8 721:12,13,15 724:20 725:2 727:15 731:14,24 732:4,10 733:22 733:24 738:15 741:12,13,20,23 742:5 744:3,8,14 744:17 752:14 753:19 754:5,15 765:10,10 769:24 771:8 772:5 773:8 773:9 777:8 778:7 780:17,23,23,24 781:2 782:5 783:10 786:4 804:24 810:8 820:14 823:11 824:24
operation 688:14 742:24 743:3,6 745:7 759:22,24 761:25 762:3 765:5	option 787:23 optional 685:13 options 558:1,1 570:3 573:3 586:24 592:23 599:25 606:20 609:15 614:15 615:14 628:13 641:25 653:12 676:6 678:5 685:7 693:17 701:8 707:15 712:3 719:20 720:5 723:14 745:22 750:21 758:6 792:4 794:22 798:7 811:17	outcome 826:17 outdoor 608:20 609:9 611:7 outdoors 608:18 outlet 592:4 608:5 634:21 646:3 649:21 804:25 805:9 806:9,10,10 outlets 635:7 outline 562:2 563:23 outlines 653:13 output 695:6,7 697:15 outside 576:21 582:23 614:18 615:16 618:10 640:2 673:22 676:13,14 688:10 689:6,14,22 690:9 768:25 810:1	owners 641:12 739:15 751:18,18 808:9 815:11 ownership 582:10	<hr/> P <hr/> P 552:15 p.m 680:24 825:15 PACIFIC 550:16 padlock 790:22,24 791:14 page 551:4 769:8 paint 699:4 pandemic 578:17 panel 605:12 677:20 743:17 752:14,24 753:6 753:11,15 panels 644:13 752:23 Paoa 602:9 611:25 644:5 658:22 681:20 682:16 683:4 686:22 730:7 736:21 764:1 765:12 819:2 823:6
operational 640:7 675:23 Operations 743:18 745:4 opinion 608:1 637:13 676:6 696:18 715:11 778:5 opinions 733:6,8 822:3 opportunities 725:9 726:11 opportunity 553:13 725:18 731:3,12 736:9,13 816:14 816:16 820:25 oppose 583:19 opposed 650:11,13 676:24 680:4 685:15 opposite 563:19 564:4 opposition 583:23 601:3,5,6 625:18 625:20 639:4,7 642:23,25 680:7 687:15,17,19 691:12,14,16 706:6,9,10 717:11 717:15 729:11,12 729:14 736:11 740:6,8 742:10,12 772:17,19 774:10 774:14 780:2,4,5 782:17,19,21 785:12,14 793:7,9 796:21,23 800:2,4	order 590:22 615:17 651:16 653:24 ordered 652:13 organization 563:23 582:3 original 567:18 593:25 608:11,19 640:11 645:21 803:3 originally 594:7 603:16 OSG 597:25 598:5 598:21,22 697:10 OSGs 689:22 695:11 OSHA 791:21 Otis 695:20 757:1 ought 556:3 Oury 565:2 576:25 577:1,1 578:8 618:12 682:14,14 682:16,24 733:9 733:10 734:23	over-bearing 578:6 over-estimated 819:23 over-regulating 739:5 797:15 over-travel 688:14 overall 731:21 overcurrent 584:21 591:2 overhead 677:21 overload 588:9 overloaded 555:5 overspeed 585:6 586:3 591:14,16 692:18 701:13 704:14 overspeeds 690:1 695:2,8 697:12 owner 577:11 727:16 751:14	Paoakalani 552:7 paper 812:24 paperwork 562:8 575:25 598:9,14 para 781:10 paragraph 632:5 632:14 689:12 parameters 760:10 760:17 paraphrasing 594:20 746:14 paren 571:1 573:18 park 752:10 parking 740:19,25 741:3	part 559:24 584:12 585:11 587:4 589:8 614:11 615:5 616:4 619:9 619:10,13,15,24 619:25 620:8 630:22 631:8 638:7 644:13 645:12 647:21 651:24,25 652:24 653:18 656:6,7 658:4,14,15 659:4 659:8 661:7,8 662:8,14 663:5 665:12 669:11 671:9 673:13 690:10 697:4 698:5 699:21 713:4 720:8 721:12,13,15 724:20 725:2 727:15 731:14,24 732:4,10 733:22 733:24 738:15 741:12,13,20,23 742:5 744:3,8,14 744:17 752:14 753:19 754:5,15 765:10,10 769:24 771:8 772:5 773:8 773:9 777:8 778:7 780:17,23,23,24 781:2 782:5 783:10 786:4 804:24 810:8 820:14 823:11 824:24 participation 579:5 650:17 730:1 782:15 particular 560:4 596:5,8,17 622:7 629:11 632:13,17 689:12 693:17

694:10 699:22 713:8 723:6 738:8 806:4 particularly 586:25 607:8 720:10 parties 580:9 805:20 parts 605:12 645:11 688:16 697:14 751:5 754:15 party 652:14 826:16 pass 553:7 556:12 560:11 566:4 574:23 583:1 589:17,17 609:23 610:6 625:7 627:11 633:17 648:12,17 653:17 653:17 659:16 667:11,23 670:22 670:24 704:4 708:18 728:20 737:5,24 739:24 749:24 756:11 758:4 762:16 763:5,16 766:12 772:1,1,5 781:12 782:4 799:6,8 801:20 810:8,11 811:1 813:22 814:7 816:25 818:22 passed 554:5 568:11 576:9 597:4 599:17 611:2 625:2 639:19,20 645:10 645:13 648:22 650:5 668:2 679:8 683:12 690:10 702:24 709:3,4,5 724:15,18 734:15	735:22 737:2,6,21 741:7 764:24 766:18 767:15,15 780:25 784:10 801:5 816:10 821:9 passenger 746:15 805:19 passes 566:7 589:18 646:21 651:22 711:20 passing 659:17 672:7 709:15,16 739:25 740:22 741:8 763:1,9,15 763:24 passionate 704:10 775:14 paste 748:16 path 554:4,22 557:12 558:18 581:19 640:9 patience 682:19 818:12 Paul 593:6 609:6 612:23 614:8 615:21 618:25 624:9 637:2 670:10,17 788:3 Paul's 594:16 pay 719:12 Peanut 596:1 peek 790:9 pencil 561:23 people 554:5,6 557:21 561:18 562:6,20 564:15 564:22 565:3,7,8 566:1,9 567:17 572:20,24 574:2 574:17 578:20 579:18 580:23 581:18 582:2,5 587:5,12 606:14	611:15 624:25 629:15,15 663:11 664:15,25 666:15 667:5,5 677:8 681:22 698:17 699:3 703:1,9 704:15 705:14 711:14 719:18 722:9,21,24 725:1 726:18,23 739:7 752:5 753:22 757:8 758:20 763:12 767:12 768:2,4 769:4,10 776:21 779:23 784:11 788:22 795:5 798:12,21 808:15 810:10 815:17 816:14 820:3 821:5 824:11,14 people's 562:19 822:2 perfect 819:12 performed 652:1 777:12 780:22 782:7 783:16 period 747:20 periodic 778:16,18 783:12,18,20,24 784:23 permanent 783:24 808:6 814:2 permanently 584:15 604:9 718:21 721:14 723:8 728:5 729:2 808:1 permissible 651:15 684:9 686:4,17 permit 753:10 798:9 permits 562:8 568:25 569:1	752:7 755:19 permitted 584:18 585:15 604:12 651:19,20 661:6 661:18 670:2 671:7,11 673:11 732:13 permitting 553:7 553:20 610:1 669:21 768:20 794:11,16 Perry 596:2,24 659:24 798:5 813:18 819:1 person 557:24 558:20 559:10 575:8,10 576:23 577:7 580:7 581:24 582:2 592:7 603:25 604:1 633:4 637:16 638:21 667:14,19 668:18 668:25 669:17 682:9 801:15,23 802:10 821:6 822:13 personally 593:2 606:12 623:2 768:11 personnel 562:5 608:7 620:16 679:5 712:9 718:22 787:17 794:11 795:23 796:3 802:1,5,20 808:8 815:10 persons 802:17 805:14 808:9 815:11 perspective 684:23 725:25 pertains 743:2 745:3 759:21	762:2 phase 746:1,1 752:12 757:6,6,6 phone 572:20 663:10 719:12,13 719:15,18,20,22 720:7,12,14,22 722:14,17,18 723:17,18 727:7 phones 624:7 719:11,21 720:20 723:7,10 phosphor 692:7 physical 564:14 805:16 808:5 814:1 816:4 physically 713:9 pick 682:11 picked 730:19 picking 584:9 683:8 picture 674:3 699:4 pictures 791:3 piece 593:9 624:18 661:9 666:7,10 673:15 678:11 699:21 799:1 812:24 pieces 595:18 667:16 695:7 781:21 piggyback 613:16 701:8 755:5 771:1 piles 791:6 pinch 716:9 pits 553:8 608:5 place 569:8 601:18 607:14 612:10 638:15 656:8 657:16 660:16 662:19 678:12 683:5 689:2 698:19 751:16 759:16 782:2
--	--	--	--	---

789:16 791:18 806:21 809:22 826:9 placed 567:13 582:23 585:18 715:14 771:24 773:6,10,12,18 786:2 places 802:18,20 placing 690:21 plain 794:22 plan 553:12 561:8 562:10 654:11 779:1 planning 560:25 561:2,4 563:14,15 563:17 564:13,21 564:22 plans 563:11 plastic 661:5,10 670:11 811:13 plate 711:19 770:3 770:19 771:16 772:10 plates 770:2 772:9 platform 604:7,8 605:21,22 608:16 613:19 614:24 617:14 621:25 622:5 716:1,2,2 781:9 platforms 617:15 794:5 play 595:8 606:23 pleasant 819:20 please 556:20 558:23 559:18 580:8 582:24 583:13,16,21,24 584:1,2,4 590:7 600:14,18,20 601:1,4,6,8,10,11 601:13,21,22 602:1,2,3 610:13	610:15 625:12,14 625:16,19,21,23 625:25 626:2 638:22,24 639:1,3 639:6,7,10,11,13 642:15,17,19,20 642:24 643:1,5,6 643:10 650:7,9,10 650:12,14,20,21 650:23 659:19,20 659:25 660:2,6,7 660:9 674:19,20 674:21,23,24 675:2,5,6,7 679:18,24,25 680:6,7,10,12,13 680:16 681:18 683:15 686:12,20 687:8,9,13,16,17 687:20,22,23,25 689:2 690:17 691:3,5,9,13,15 691:16,18,20,22 692:5 702:18 703:24 705:18,21 705:25 706:4,7,9 706:11,14,15,17 707:22 708:16 709:17 717:7,8,12 717:14,15,17,20 717:21,24 728:22 729:7,9,12,14,16 729:20 735:8,10 735:16,20 736:7 736:10,15 737:14 737:22 740:2,4,7 740:9,11,12,14 741:2,5 742:6,7 742:11,13,14,16 742:18 744:19,22 752:8 754:7 756:10 761:16 762:10,13,17 763:22,23,23	766:11,16,19,24 767:6,7 772:4,11 772:13,14,18,20 772:22,23,25 774:5,7,8,12,13 774:15,18,19,21 777:5 779:8,12,13 780:3,4,6,7,9,11 782:11,12,14,15 782:18,19,22,24 782:25 783:2 785:5,6,8,10,13 785:15,18,19,21 792:18,23 793:2,5 793:8,9,12,13,14 796:12,14,16,17 796:19,22,24 797:2,3,5,20 799:8,10,13,14 800:1,3,6,8,10 801:8 806:17,22 806:24 807:2,3,4 807:7,8,14 813:22 814:3,9,13,14,16 814:18,21 816:18 816:25 817:4,5,9 817:10,15,17,19 817:20,22 820:21 821:4,4,11 822:20 822:23 823:20 824:25 825:2 pleasure 800:21 819:16 plotting 563:24 plug 584:18 585:1 585:15 586:14 589:11,14 592:1,4 595:8 604:12,17 606:23 607:22 609:1 617:20 621:9 623:11 plugged 587:13 588:14 593:12 619:7	plural 775:17,20 point 556:19 557:3 560:4 569:6,7,10 569:14,23 570:20 571:4,13,19,23,25 572:2,4,8,11,13 572:25 573:9 574:20 575:10,16 576:17 577:4,10 577:12,13 578:14 578:18 579:22,22 579:23 580:7,22 580:24 583:11,20 607:9 615:22 616:1 619:6 621:23 624:24 631:2 658:5 659:1 671:5 672:23 674:2 682:1 704:4 716:21 722:12 724:25 725:12 726:7 739:11 749:5 750:15 759:8 760:21 789:6 816:15 820:17 pointed 682:6 pointing 678:18 points 553:3 556:11 567:15 570:14 571:20 575:23,24 580:15 581:25 583:14 716:9 816:8,17 pole 791:12 policies 568:22 policy 605:20,23 607:13,15,17 608:12 611:13 612:7 654:2 655:1 655:21 789:18 poorly 567:9 pop 790:20 popping 558:8	porch 608:18 Portable 794:9 portion 603:8 633:6 716:9 744:3 pose 712:9 730:10 733:3 742:1 776:16 788:1 posed 558:1 600:14 702:25 poses 797:16 position 579:23 695:1 701:11,12 positive 625:5 663:25 694:14 possibilities 716:8 possibility 579:17 659:2 716:12 810:13 possible 558:17 562:17 563:10 567:22 674:18 692:14 703:5 753:25 754:7 824:8 possibly 645:9 668:4 689:13 711:23 725:11 posted 605:10 807:24 811:24 potential 614:15 787:19 potentially 662:18 potentials 716:9 pounds 791:18 power 589:12,16 591:12 592:2,3,6 592:7,12 595:6 604:15 605:11,14 614:3 615:5,24 616:15,18 617:4 617:17,23,24,25 619:2 622:1,6 623:10 624:8 644:15,21 646:10
---	---	---	--	--

649:13 676:13 684:9,10,15,17,19 684:19 685:1,2,11 686:16,18 711:8 716:13 719:3,6,22 719:23,24,25 720:13 721:19 722:16 723:24 727:13 729:6 758:23 powered 623:4 727:7 794:5 practice 695:10,12 pre-assembled 652:15 pre-Covid 578:15 precipitate 805:17 precipitating 592:12 precludes 794:14 preconceived 819:17 preface 670:23 683:18 767:23 prefaced 679:7 683:10 premature 739:13 premise 612:1 638:5,21 preparation 563:22 652:4 prepared 563:10 564:3,23 presence 802:1 present 569:11 605:8 668:23 705:1 743:23 751:14 802:6 presentation 757:21 presented 674:17 699:9 809:5 presenting 592:20 809:8	pressure 710:11 711:25 pretty 574:15 577:19,21 595:3 595:13 597:21 606:24 612:15 624:20 627:9 632:20 653:13 654:10 683:19 698:11 707:19 709:23 733:15 746:12 766:13 768:24 789:5 prevent 657:21 716:12 previous 609:8 648:22 666:20 708:4,4,22 709:19 737:16,24 744:20 748:4 771:21 812:11 previously 627:22 709:23 740:18 pricing 568:24 primarily 555:20 555:24 primary 553:3 556:4 567:15 569:6,7,10,14,23 570:14,20 571:4 571:13,18,20,22 571:25 572:4,8,11 572:13,25 573:6,8 575:9,16,24 577:10 579:22 583:10,14,20 654:25 prior 568:20 571:16 623:16 632:11 645:13 651:20 663:9 683:12,18 702:21 735:19 744:13,16 751:9 770:9	773:15 776:5,11 777:3 821:22 prison-like 661:21 private 584:12,14 585:14 590:17,20 604:7,8 607:9 630:7 634:19 645:16 648:2 651:5 665:1,8 669:8 671:20 683:19,22 686:14 688:6 690:6 808:12 815:14 probably 556:22 602:23 608:12,21 608:22 613:5 648:14 656:9 669:17 678:19 696:18 700:3 702:20 711:21 714:16 731:22 734:6 744:9 756:22 771:4 775:13 800:14 825:6 problem 576:16 589:7 591:24 593:8,13,19 594:3 614:1,12 619:11 619:13,19,21 624:10 630:24 655:19 669:20 682:4 686:1 693:10 697:7 775:21 796:6 808:16 815:18 problems 564:14 564:15,16 619:15 630:23 678:20 728:12 procedural 599:25 procedure 724:8 proceedings 550:5 826:8,9,13	process 569:22 570:11 600:9 666:15,19 681:16 697:25 703:20 705:8,9 726:19 731:15 799:16 proctor 569:8 produced 708:15 product 593:11,12 593:16 612:24,25 613:2,2,3,9 614:22,22 615:1 622:7,11 657:5 production 716:20 products 587:7,8 622:5 professional 768:9 professionalism 768:17 program 554:21 566:7 568:14 569:19,20,22 605:4 667:5 668:7 700:18 725:13,25 726:10 731:5 738:21 739:4 773:22 778:22 programs 808:4,5 813:24,25 prohibited 606:23 786:7 808:4 813:25 project 564:20 pronounce 692:5 proof 805:3,12 proper 653:16 669:21 properly 597:11 605:7 651:18 653:15 proportion 582:6 714:22 proposal 567:14 583:9 584:5,9	589:24 590:1 593:23 594:9 599:7,14,15 600:15 601:14,19 601:24,25 602:3,6 602:7 603:15,24 604:2,3,4 608:12 610:14 614:6 625:8 626:3,7 627:8,12 631:15 632:1,7,17 633:13 638:10,12,23,25 639:5,7,23 641:22 642:8,16,18 643:1 643:11 644:1 645:21 648:22 649:2 650:7,11,24 651:3 659:17 660:10,14,19 674:16 675:8,14 679:18 680:17 682:9,13 683:9,25 686:13 687:2,7 688:1,5 690:7,21 691:22 692:1 706:18,22 708:5 708:22,22 709:3 709:20 710:2,17 710:25 717:1,25 723:7,11 728:23 729:21 731:20 733:24 734:9 736:5,13,23 739:1 739:25 740:14,18 740:18 741:11 742:1,3,19,23 744:4,13,16,18,21 745:2 762:16,25 763:15,17,25 764:18 765:13 766:6,14,17 767:18 769:3,16 771:2 772:5 773:1 773:5 774:3,22
---	---	--	--	---

775:8,10 776:22 779:8 780:12,16 780:25 782:4 783:3,7 784:6 785:4,22 786:2 792:17,19 793:15 793:20 795:2 796:10 797:11 799:9 800:11 801:22 802:22,23 803:2,3,7,23,25 804:15,21 806:18 807:14,18 808:13 810:16 811:1,3 812:11 813:23 814:21 815:3,15 816:25 817:23	protection 584:21 591:2 595:8 806:3 protective 585:19 protector 604:20 protocol 707:8 proud 565:2 823:7 provide 558:19 571:12 621:4 649:22 783:24 787:6,11 821:12 provided 570:19 591:13,19 619:14 636:21 644:14 661:6 670:4 673:12 684:1,16 711:7 718:21 719:23 743:7 745:9 746:25 759:25 760:12 765:7 770:1 772:9 786:21 787:1,8,13 788:11 802:15 provider 808:17 815:19 provides 592:14 646:8 649:23 684:19 719:25 802:16 808:12 815:14 providing 719:7 787:22 proving 819:23 provision 808:11 815:13 provisions 563:22 732:16 prudent 615:2 655:11 public 578:19 579:7 585:20 587:23 588:3,25 620:16 690:10 724:25 725:1,3,18 726:5 731:3,6	739:6 797:16 802:2,4,11,12 803:5 805:1,10,14 publicly 570:18 pull 647:6 805:1,10 pump 608:4 punish 571:8 punitive 582:18 purpose 552:24 573:6,8 588:3,12 631:25 634:5 748:6 769:22 770:8 805:4,15 Purpose/Agenda 551:6 552:19 pursuant 826:6 push 656:12,21 710:15 724:23 pushback 719:16 pushing 552:24 766:7 put 554:25 557:5 582:24 583:9 590:5 593:25 594:7 595:12,21 599:9,13,22 602:22 613:17 617:6 618:16 629:19 630:20,24 631:5 636:13 642:16 655:15 659:20 660:16 662:2,9,12,19 664:6 666:25 668:5,10 669:7 670:1 671:12,25 674:15 675:2 676:12 684:22 686:12 689:23 693:13 697:17 698:19 703:10 704:17 705:18 714:21 716:1,24 723:1 725:13	726:11,19 727:19 731:12 734:9,19 734:23 737:22 748:7 750:6 751:23 754:21 758:19 759:10 761:10 767:13 771:7,11 774:2 775:22 776:13 779:8 780:3 784:22,23 785:3 788:21 789:9,12 790:5,11,16 791:5 801:18 804:13 807:11 810:13 813:21 821:5,25 puts 675:22 676:15 726:17 putting 554:18 574:22 603:10 609:13 610:5 613:21 659:4 663:7 683:5 687:6 700:24 710:10 720:12 724:10 726:18 754:24 775:16 778:2 802:21	613:11 617:10 621:24 622:10,13 622:17 623:23 624:1 628:1 629:15 634:16 641:25 645:25 646:15 647:18 649:2,19 657:10 662:8 664:12,14 665:7 666:14 669:15 673:19 686:8 687:6 690:14,25 693:3 694:16,20 695:17 695:24 696:21 707:11 712:14,24 713:21 715:1 724:7 727:3 733:11 736:2 745:16 748:23 758:6 763:6 765:12 775:11,15 776:16 778:5 790:4 816:14 questioning 646:12 questions 553:14 554:22,23 559:23 560:14 565:1 569:25 586:21 587:15 592:17 599:13,23 600:13 605:25 609:12 610:12,15 625:9 627:10,17 629:14 633:5 634:14,15 641:23 642:14 645:14 647:19,24 649:19 650:1 653:5 658:21 659:14,15 662:1,5 664:25 665:11 670:7,22 673:24 678:15,17 679:17 685:3,21 686:11
proposals 555:19 584:10 599:17 629:10 648:8 666:21 820:4 propose 589:23 658:20 796:9 proposed 594:7 600:17,20 624:10 625:20 632:7 642:18 659:23 734:15 739:3 744:11 761:13,14 764:15 773:7 784:9 787:23 797:13 802:10 806:17 808:16 815:18 proposing 627:11 633:12 653:9 673:11 766:5 proposition 745:2 protect 584:21 588:2 591:2 802:17 805:2,14 805:22 protected 604:20 641:19 661:1	Q q-u-i-e-t-t@tkele... 568:4 quaint 711:15 quantified 668:12 quarter 569:5 656:17,20 657:4,7 657:17 658:9 659:1 704:22 question 560:1 587:18 588:7 594:5 596:25 598:19 599:1,25 602:25 606:13,20 608:16 612:22			

688:24 690:16	567:22 568:3,9	691:3,5,13,15,16	ranging 805:17	644:20,25 649:12
692:23 701:17	573:15,16,16	691:19,20 706:7,9	rarely 635:20	649:17 787:6
702:25 703:23	575:2 576:4,5,5	706:11,14,15	rated 585:8 586:2,6	791:14 821:11
705:18,19 707:9	606:8,9,9 654:7,8	707:22 708:14,16	591:20,23 595:15	reached 568:16
710:3 711:12	654:8 672:19,20	709:18 717:12,16	595:16,16 598:1,1	576:13
716:24,25 720:1,2	672:20 698:7	717:20,21 720:3	598:6 605:1	read 568:1 576:8
722:20 728:20,21	699:6,7,7 710:3	729:7,9,13,15,17	613:18 614:11	580:11 584:4
738:3 739:23,24	754:11,12,12	729:18 735:10,16	694:7 695:18,19	590:13 601:13
741:22,23 743:24	759:6,7,7 760:23	736:8,10 737:14	695:20,22 696:1	603:6,7,9,19
743:25 745:14	760:24,24 761:22	740:3,4,7,9,11,12	696:16,18	626:2 628:21
746:5,5 747:10	762:6 811:9,10,10	741:5 742:6,7,11	rates 634:17	639:13 640:16
748:10 749:9	Quiett's 673:18	742:13,15,15,16	rating 595:5,19	643:10 650:23
758:3 760:22	761:9	744:19,23 749:8	612:19 661:15	656:13 660:9
761:8 766:10,10	Quit 822:19,22	761:16 763:23,24	694:18 752:20	663:5,6 670:15
770:22,23 771:19	quite 636:16	766:16,19,24	rationale 586:12	675:7 680:16
771:25 772:3	700:15	767:7 772:11,13	587:1,3 591:24	681:9,9 686:24
773:23,25 777:24	quote/unquote	772:18,20,22,23	605:19 627:1	687:25 691:22
778:12 779:4	712:6	774:5,7,12,15,18	641:8 645:1 648:4	706:17 717:24
781:13,13 782:2	<hr/> R <hr/>	774:19 779:12,13	652:18 653:18	729:20 740:14
783:25 784:2	R 552:15 826:1	780:4,6,7,9	661:19 667:20,21	742:18 772:25
785:2 788:1 790:8	RAC 712:19	782:11,12,18,19	667:23 668:3	773:9 774:21
792:17 794:17,19	rail 597:25 607:23	782:22,24,25	669:2 670:1	776:20,22 778:10
796:7 797:22,23	rails 700:10 716:19	785:5,6,8,13,15	675:20 676:6,8	780:11 783:2
799:6 802:24	768:10 781:8	785:18,19 793:2,8	681:10 684:12	784:19,20 785:21
805:23 806:15,16	raise 583:13,16,21	793:9,12,13	685:9 688:17	793:14 797:5,20
808:23,24 813:19	583:24 584:1,2	796:13,14,16,18	692:12 703:14	800:10 802:8,10
813:20 815:25	590:7 600:18,20	796:22,24 797:2,3	705:22 711:10	807:14 814:21
816:8,17,24	601:4,6,10,11,21	799:11,13 800:3,6	719:8 732:18	817:22 824:25
818:14 821:20	601:22 602:1,2,4	800:8 806:22,24	741:17,17,19	readily 688:9
823:3 824:5 825:4	610:13,15 625:15	807:2,4,7,8 814:3	743:21 770:6	777:19 810:23
quick 552:23 602:6	625:19,21,24,25	814:9,13,14,16,18	773:20 777:20	824:12
602:14 603:24	638:22,24 639:6,8	816:18 817:4,5,9	781:3 783:19	reading 602:6
609:16 641:25	639:10,11 642:19	817:10,15,17,19	787:11 794:10	630:2 672:25
698:9 730:18	642:20,24 643:1,6	817:20	797:15 802:14	748:8 776:18
740:22 754:4	643:7 649:4 650:7	raised 595:21 599:2	805:13 808:8	777:5 795:3
755:4 756:22	650:9,12,20,21	616:1 658:19	815:10	reads 692:10 711:4
758:17 765:12	659:19,21,25	682:14 686:8	RCW 826:7	719:3 763:21
769:5 790:12	660:2,6,7 674:23	691:11 703:23	RCWs 568:21	ready 727:20
800:25 815:2	674:24 675:5,6	710:4 714:25	re-cap 820:3	real 552:23 564:15
818:9 820:3	679:24,25 680:6,7	717:18 724:7	re-word 599:7	594:3 663:16
quickly 675:12	680:12,13 686:20	738:2 813:19	re-write 728:11,14	698:9 756:22
718:12 754:7	687:8,9,16,18,20	raising 772:4 780:8	re-written 609:3	758:16 769:5
793:20	687:22,23 690:17	ran 698:2 720:12	reach 581:2 626:22	790:12 795:9
Quiett 567:20,21		753:5	626:25 641:3,5	815:2

reality 613:8 641:15 646:7 669:15 realized 789:12 realizing 662:16 really 554:20 557:16 565:10,19 565:22 566:8,11 566:14,19 572:6 572:14 573:6 575:9 577:3 578:6 582:5 589:7 597:18 599:9 610:22 612:8,9,9 612:11 613:13 616:12 617:5 625:3 628:13 629:21 631:1 633:11 646:6 654:17 656:12 664:5 666:3,6 667:19 668:10,11 669:4 672:2 681:4 682:12,18,21,24 696:10 697:10 700:14 702:6 704:17 705:4,10 712:3 715:10 722:12,24 723:21 725:20 728:14 733:7,20 734:8 748:7 750:4 751:20 752:10 757:12 768:10,10 789:3 791:8 801:14 819:24 820:6 822:4,14,14 823:8,21 824:16 reason 581:10 608:19 654:25 662:21 663:3,4 671:22 672:4 681:23 684:25 692:18 712:5	747:8 775:4 776:19 791:24 reasonable 791:9 reasons 712:4 721:16 recall 616:19 657:18 658:16 659:9 664:10 752:12 753:2 757:5 758:12,19 759:9,14 recap 551:14 554:4 599:16 818:1,7 Recategorizing 640:11 receive 599:16 725:2,3 received 569:16,18 receiving 604:16 receptacle 585:17 585:18 586:17,17 604:22 607:6,6 626:24 634:24 637:12 641:4 644:24 649:16 recess 602:16 643:21 680:24 730:22 767:22 801:10 reciprocating 732:1 733:5,14 recognize 796:3 recognizes 751:5 recommend 713:15 812:6 recommendations 681:17,19 recommended 603:22 reconvening 794:10 record 602:21 612:11 767:11 776:21 779:25	783:24 816:13 820:11 records 739:21 808:9 809:22 810:12 812:1,9 815:6,8,11 816:6 817:1,2 recover 751:24 recycle 648:11 red 669:18 756:2,4 773:7,10,13,15,18 773:22 797:19 redrafted 705:25 reduce 651:16 redundancy 716:13 redundant 654:9 654:11 refer 641:14 673:9 reference 609:7 611:1,11 617:10 628:3,4,25 632:24 635:2 646:18,21 647:12 648:14 692:3 702:22 717:2 718:16,19 732:16,21 781:1 795:11 801:6 815:5 822:10 referenced 609:18 647:10 735:4 792:10 804:7,12 812:12 references 608:13 611:15 642:1 658:14 668:17 683:21 738:11 759:12,20 769:18 777:21 803:2 referencing 615:11 631:16 632:13 734:18 referred 606:6 referring 607:18 635:13 693:13	699:1,2 refers 623:1 672:11 738:9,16 reflect 770:3 774:25 reflects 776:14 refocus 682:6 refreshing 643:24 regard 577:8,24 679:18 740:24 regarding 559:24 567:14 568:17 576:14 590:3 594:10 603:24 604:5 610:9 615:10 626:7 627:8,8 632:5 635:5 639:18,23 644:1,2,3 646:16 647:21,22 648:15 650:4 660:19,21 669:8 670:25 671:19 674:18 675:14,16 676:2,3 679:8,9,10,11 682:1,4,7,8 683:11,19,22,25 685:4,22 686:13 686:14,15 688:6,7 690:22 692:1,2,3 705:16,21 706:3 706:22,23 709:24 710:17 711:1,2,14 713:15 714:22 718:17,17,18 725:16 728:23 731:1,2,20,21 733:13 734:22,25 735:18,20,25 737:1 740:19 741:11 742:23 753:22 765:25 769:3,7 772:7 773:5,6 774:3	775:4,6,6,10 776:25 777:24 779:9 781:2 783:7 786:2,3,4 792:17 792:21,24 793:21 795:23 796:10 797:11,12,22 798:16 799:3,9,12 802:23 804:8 810:11 813:23 816:5 817:1 820:21 824:14 regardless 632:3 773:21 805:15 regards 570:4 573:4 635:16 regulate 671:23 regulating 756:11 regulation 592:16 750:10 Regulations 741:13 793:22 reinstate 794:15 reiterate 712:18 715:16 reject 661:2 related 571:3 806:11 809:3 826:15 relevant 701:15 relicensing 568:20 rely 749:16 remain 661:10 673:16 684:15 remains 590:25 592:7 remedy 757:18 759:1 remember 562:17 562:21 598:10,12 617:1 629:12 684:7 695:6 701:3 803:13,20 809:18 REMEMBERED
---	---	--	---	--

552:1	rendered 719:21	791:23 806:2	requirements	663:10 665:9
remembering	rendering 587:24	812:2	567:14 569:21	683:20,23 690:6
562:20	renewal 568:19	require-- 594:19	583:10,20 594:18	residences 585:14
remind 812:10	repair 769:14	required 570:6	594:20 604:24	665:20 671:20
remote 727:9 808:3	793:23 815:5	575:24 584:15,17	605:5 612:25	residential 581:23
813:24	816:5,11 817:1	587:21 590:21	613:4,10 615:19	589:11 590:19
remotely 807:20	repeat 617:4 768:2	592:18 593:10,18	616:5 618:7,19	609:2 612:12
815:8 817:3	replace 584:11	604:9,10 608:5,6	626:10,15 628:14	622:24 626:8
removable 805:11	788:9	618:11 634:24	628:17 629:17	627:22 628:6,15
removal 622:1	replaced 783:12,13	637:11 641:20	631:17,19 632:16	628:16 629:25
647:21 773:15	786:9,25 788:6	651:10 657:19	633:15 640:20	630:3,7,9,10
782:5	789:23	676:12 677:22	649:23,24 651:8	631:3 634:5,6
remove 632:15	replacement 815:6	678:1,9 684:22	651:13 652:5	645:22 648:2,15
639:24 640:23,25	816:5,12 817:1	685:11 688:23	653:25 654:5,15	648:23 650:5
641:2,4 644:13	reply 698:7,9	694:18 695:4	654:16 657:14,24	651:16 652:20
646:10 684:21	reported 826:10	697:9 704:24	658:7 661:16	653:19 654:15
734:2 740:20	reporter 552:5	742:25 746:21	663:23 665:8	655:4 657:14
741:3,9 765:10	809:12,13 823:16	749:19 750:15	669:20 670:11	658:4 661:19
767:9 780:21	826:4,22	757:14 760:21	677:22 695:14	663:1,2 664:2
783:12 788:21	REPORTING	762:1 773:12,13	700:14 706:24	665:19 666:6
801:25 802:2,4	550:16	773:18 779:2	731:23 732:9	669:8 673:2 676:2
803:4 805:11	represent 559:15	781:7 783:13	740:25 748:17	676:4 678:23
807:19	560:3 667:7 703:9	784:24 786:25	759:19 770:9	679:9,10 683:11
removed 592:4	822:16	808:14,18 811:14	773:21 783:22	683:14 684:12,16
603:25 644:15,22	representation	815:16,20	786:16 793:24	685:5,10 686:14
647:11 649:14	559:8	requirement 570:4	804:5	688:6,17 689:5,21
655:25 657:25	representative	573:5 583:15	requires 613:22	690:22 691:6
684:15 716:13	558:23 579:24	585:7 608:23	637:5 689:21	692:2,12,21
735:15 740:23	820:18,22	616:7 623:19	707:8 719:13	694:10 696:9,15
741:7 794:14	representatives	624:11 627:3	759:13	697:23 698:22
removes 586:12	612:6	633:2 634:6,20,25	requiring 573:11	699:17 706:23
622:6	represented 559:14	641:20 654:24	623:9 658:16	711:1 713:4
removing 626:14	559:15	655:2 659:10	661:21 684:14	715:10 716:16,17
632:20 640:15,18	representing	662:11,19 664:3,8	719:15 731:23	718:9,17 719:9
660:24 670:12,18	559:17	666:4 684:13	756:5,6 758:12	720:11 723:11
729:1,3,5 733:5	represents 558:20	689:5,8,13 690:8	rescue 662:16	residentials 630:4
741:2,15 742:4	request 650:12	696:14 722:12	719:25	635:20 671:24
745:3 766:4 774:3	require 616:22,22	729:6 742:25	research 702:22	677:4 694:24
774:11 779:9	619:7 637:9 652:3	743:1,5 745:7	residence 584:13	residing 826:5
780:16 782:6	657:15 673:23	759:23 762:1,2	584:14 590:18,20	resistance 661:15
796:10,12,17,24	686:2 718:16	765:5 778:25	604:7,8 607:9	resistant 661:17
797:10 798:19	719:17 749:18	781:5 792:19	627:2 630:8	respect 615:22
799:9,12,13 800:3	756:16 781:20	802:17,19 812:7	634:20 645:17	respond 577:2
800:5 817:1,2	783:19 789:14	815:7	651:5,23,24	731:6 753:12

responsibility 580:5 582:6,12	705:25	700:22 702:5,9	637:18,20,23,23	745:23
responsible 568:12	rewrite 625:3	703:7 704:17	638:3,10 639:24	rules 571:24 627:23
572:9 573:21	rewriting 614:16	706:21 709:14,21	640:2,4,19,20,20	627:23 653:13
574:1,24 575:6	rewritten 611:14	716:22,25 717:22	707:6 741:18	743:9 745:10
576:10 577:4,16	611:17 613:25	718:8 728:22	752:24 789:20	747:16,18 771:8
578:5 580:9	rickety 789:5	730:20 731:11	790:18 802:15	rumor 578:2
rest 589:1 590:24	Ricky 559:10,12,20	733:21 735:12,21	804:4,4 807:20,21	run 697:6,7 698:12
629:10 630:22	575:23 730:6	737:18 740:5	809:25 811:24,25	727:18
638:11 646:5	rid 594:8 600:9	742:2,8 744:23	room/space 627:2	running 595:1
660:20 666:9	608:23 689:12,20	753:1,1 756:13	rooms 628:6	613:25 674:5
801:13 825:11	721:13,14 761:13	757:3 759:4,11,16	629:21 634:8	720:22 798:7
result 719:21	762:5 784:6	761:19 763:13	635:14,17,19	runs 694:25 697:5
retractable 786:12	797:25	766:12 767:3	636:9,16 637:4,5	700:11,17 701:12
retrofit 657:11	rider 783:21	772:14 775:9,20	637:7 639:25	rush 564:25
revenue 805:20	riding 739:6 758:21	779:20,21 782:13	640:1 641:8,14,14	Russ's 557:3
review 551:11	797:16	784:16 786:1,20	641:15,16 642:10	
553:23 559:22	right 552:22 553:12	788:14 797:9	787:12	S
567:1 574:21	554:25 555:9	799:3 800:9	rope 692:10,15	s 552:15 735:24
589:24 600:6,7,8	556:25 560:13,15	801:11 803:18	694:12,14,20	S.W 550:18
601:19 611:18	561:16,17,17,17	804:2 812:16	697:24 698:21,21	Saf 792:11
690:11 724:11,18	561:22 562:7	818:24 819:11	699:9,11 701:10	safe 589:20 597:6
725:15 726:11	564:17 568:5,8,8	822:24	704:22 792:14	620:16 624:8
731:20 736:20	570:9 571:7,20	rights 570:7,15	ropes 692:2,4,22	719:19,19 791:25
738:20 764:25	581:18 583:8,16	574:3	694:11 696:7	792:10 825:11
766:15,18,19	590:9 594:17	ring 612:18	699:1	safeguards 678:12
775:8 803:18	598:10 599:12	ripped 563:7	rot 791:5	802:19
820:20 825:2	600:15 602:4,24	rise 746:20 750:7	rotting 791:5	safely 561:3 624:6
reviewed 552:25	603:4,12 610:4	750:10 759:13	roughly 709:21	641:19
600:11 604:3	612:4 613:16,17	760:10	768:22	safer 651:17 715:9
624:19 638:20	615:12 617:25	risk 564:12,13	router 720:18	787:11
666:24 671:1	618:4,5 619:24	road 566:17 571:3	727:7,18	safeties 585:8,21,23
685:7 705:12,14	622:9 625:15	rock 823:15,23	routinely 775:24	586:1,5,19 591:19
731:8,8 736:14	629:4 630:25	roof 786:4,5 787:2	777:15	591:22 596:20
820:6,8	631:12 643:2,7	787:5,9,11,13	RPR 550:15 826:21	689:24,24 695:3,9
reviewing 553:5	644:11 646:21	788:19 789:20	Rudder 782:15	697:12,16 700:22
645:9 797:10	647:6 649:6	791:1,9,15,19,21	799:25	704:15 781:10
821:15	650:15 656:3,13	792:21,24	rule 551:11 553:23	safety 551:9 553:14
reviews 558:17	660:3 668:17	room 626:9,14,14	557:4,24 567:1	553:18 560:16,20
revise 801:25	672:18 675:12	626:15 628:14,16	581:22 604:5	565:12 569:4,12
revised 590:1 600:2	678:16 680:1,8,25	629:16,25 630:1	606:22 628:8	569:17 585:6
600:4	683:8 686:11	630:15 631:5,7,23	631:11 634:4	591:16 592:15
revision 766:16	687:1,12 690:18	632:4,21 635:16	645:3 648:5 651:4	596:22 612:11
reworded 605:21	691:8 693:5	635:18,23 636:3,4	656:16,19,20	620:14 621:10
	695:25 697:3,4	636:6,18,19,23	657:4,7,16 738:8	662:21 665:14

674:2 675:24	811:6	screens 647:16	778:17,20 779:2	763:12 767:20
678:12 688:22	says 571:22 589:9	screws 805:5	779:11 780:17,20	768:11,23,25
690:1 695:5 697:9	589:13 594:22	806:12	781:6 786:3	775:9 778:1
697:11,18 700:22	606:16 611:25	search 798:15	797:13 798:10	790:17 791:4
700:24 704:11,23	613:18 617:11,24	searched 736:25	801:25 804:22	800:18,22 801:9
705:5 712:4	619:21 620:19	737:7	807:18 815:4	802:13 804:2,6,24
713:12 721:16	624:12 630:7	Seattle 634:2	sections 607:1	807:21,25 808:10
723:23 732:9	631:18 647:7	788:18 811:22	632:6 651:7	808:16 812:12
743:21 756:14	653:19 658:5,9	second 562:9 618:1	656:14 770:15	815:1,12,18
757:24 769:13	665:18 671:6	619:8 630:11	775:17,18,20,25	816:23 818:8
773:11,14 777:11	676:8 702:14	631:22 656:11	783:14 784:25	819:21 822:25
780:21 781:3,6,7	704:19 713:24	662:13,17 666:3	secured 605:7	seeing 614:19 642:2
782:7 783:16,20	722:14 737:10	711:18 713:9	792:12	655:10 676:14
783:22 784:5	746:13 749:6	736:24 738:14	securely 661:3	698:18 716:6
786:16 789:6,17	750:7 758:14	784:4 801:19	security 805:16	752:2 753:16
789:18 793:24	759:19,20,23	secondhand 581:4	see 553:6 554:24	761:4 775:21
796:6 808:18,22	760:9 788:5,14	seconding 755:16	564:9 567:16	seen 558:6,10
815:21,24	802:13 806:9	seconds 754:4	568:7 571:18	694:11 696:23
safety-wise 620:9	scaffolding 794:7	secrets 808:22	573:17 577:3,25	797:15 820:1
Savaria 711:16	scenarios 627:3	815:24	579:14 580:3,4	segments 669:23
save 580:25	schedule 558:24	section 584:12	581:17 585:7,9	semblance 772:6
saw 595:20 631:10	563:23	585:9,24 586:4,8	586:25 587:13	send 567:22 573:8
672:9 710:4 762:6	scheduled 562:23	586:9,11,25	589:23 590:6,14	574:12,18,20
779:22,23	school 563:18	603:10 604:6	590:15 591:18,20	579:15 599:15
saying 572:20	scope 576:21	607:11 615:1	591:23 593:8	821:13,16,17,25
575:2 593:13	592:10,14 617:11	628:20,22,23	599:1,18 602:15	sending 633:3
597:16 603:14	731:22 733:21	629:1,24 635:5	610:25 614:17	sends 631:16
610:19 619:8,12	734:23	640:1,11,23 641:6	621:18 625:4	sense 630:16 659:6
624:4 627:23	Scott 559:8,19	644:3 645:6 646:3	627:17 628:9	667:21 693:2
628:7 630:1 631:4	597:14 611:24	647:21 648:13	631:24 642:6	714:12 751:2
633:1,5,18,22,24	618:6 620:12	649:8 650:4 652:5	643:20 647:5,8,22	776:15
638:2 656:18	658:2,18 659:5	656:5 658:11,25	653:12 654:3	sent 557:11 572:17
658:23 663:16	689:18 694:23	665:25 666:2	660:15 661:8	572:18,23 574:9
670:10 698:16	695:18 696:21	667:13,16 673:8	667:25 668:9	596:15,17 606:15
701:9 708:6,9,10	697:2 700:2,6	673:18 675:15	672:13 673:8	667:14 668:19,19
713:21 722:4	701:8 704:9 710:6	683:20 689:21	674:6 678:9	769:16 791:2
725:9 738:18	711:23 714:7	707:17 718:10	680:22 681:5	sentence 632:21
747:21,21 749:14	730:6	731:20 732:17,20	703:19 707:18	673:9 748:1 761:1
749:14,22 750:5	scratching 747:15	734:14 739:3	709:6 713:16,25	761:6 762:6,11,13
754:15 756:7	screen 567:12	746:3 770:3	715:23 721:22	762:23 763:4,11
760:3,6,7,15,15	568:1 590:10	772:10 775:16,18	725:12 726:9	763:20 764:5,10
760:16,18 766:21	629:4 731:17	775:19,19 776:1,6	727:11 730:19	764:17 765:4,11
771:22 775:19,23	761:18 764:23	776:8,10 777:10	737:23 751:10	765:18 766:5,9,24
778:9 795:11	769:6 822:19,22	777:17 778:2,2,15	753:2 759:15	767:2,17 784:4

815:8	694:24 695:9	shown 764:23	site 777:19 778:24	581:2 630:23
separate 621:6	697:16 700:15	shows 596:14 725:5	808:19 811:4	662:16 664:10
628:24 632:6	826:18	shunt 629:18 753:3	815:9,21 816:4	702:7 715:17
633:17 641:19	set-up 723:19	757:1,3,7 758:10	817:3	723:6,14 728:9
661:9 673:15	sets 700:9,15,18	758:19 759:10	sits 676:10	734:9 745:22
734:8 755:25	setting 561:13	shut 712:8 715:15	sitting 600:1	758:12,23 789:8
758:11,13 812:24	598:5,6 697:12	shy 683:4	635:22 704:3	794:23
separately 588:21	698:22 765:23	side 556:20,24	726:18 748:8	somewhat 788:10
sequential 569:11	seven 744:4 820:5,9	560:2,10 631:7	situation 675:23	soon 690:19 703:4
Sergey 599:2,3,12	severe 705:23	697:23 728:10	676:15 677:3	753:25
621:21,22 623:23	shaft 695:6,7	786:20 790:21,25	678:10 696:10,12	sooner 798:4
627:18,19 632:8,9	697:15	sides 787:3	754:9 757:24	sorry 576:2 602:12
675:1 694:16,17	share 590:10	sifting 672:25	758:24	606:3 610:25
713:5,6 715:21,22	599:20 725:11	sight 564:6 605:16	situations 753:17	614:24 615:9
727:2,4 738:1	731:17 769:8	615:7	six 607:21,21,22	628:2 634:18
756:19,20 758:25	824:23	sign 575:25 605:10	611:11 646:23,23	636:13 647:15
771:9,10,21	shared 553:4	Signaling 743:17	757:17 820:5	656:2 664:13
775:10,12 777:1	567:11 600:17	signed 641:16	size 570:10 688:18	665:17 686:9
777:22 778:19	601:4 790:10	significant 809:5	805:6	687:4,5 707:12
Sergey's 631:2	shares 567:25	signing 579:22	skip 576:11	708:2 710:2,4
778:5	sharing 567:23	825:5	skipping 744:16	718:6,11 742:2
serial 598:10,16	769:6 822:19,22	silent 616:11 666:5	slack 689:25	745:17 746:3
series 596:16	shatterproof	similar 555:12	slacken 695:8	747:8,9,16 753:21
serious 766:13	663:15	585:16 596:6	slash 626:9	754:2,3 756:22
seriously 797:25	sheaves 640:8	597:6 628:19	sliding 652:17	789:12 790:6
seriousness 823:22	shift 555:3	709:5 810:19	sliver 577:23	791:22 798:1
serve 675:21	shipped 811:16	similarly 733:17	slope 786:11	809:12 817:13
service 569:19	shipping 811:12	simple 693:19	sloped 657:21	sort 557:12,25
572:23 605:1	shock 805:18	712:10	small 669:6 688:19	559:10 575:1
613:18 614:10,10	shoe 563:8	simplicity 593:23	smaller 577:11	624:21 658:12
718:25 719:7,18	shoelace 563:7	simplifies 594:14	smash 674:6	672:1 703:19
721:15 746:16,17	shop 577:5,6	simplify 693:21	smoothly 554:15	726:9,24 765:23
746:18,20,22,23	shopping 751:15	simply 587:13	snapped 697:15	772:6 775:7 789:3
746:25 749:18	short 719:15	single 580:5,24	snow 561:19	801:4,18 803:22
750:6,8,11,12,17	754:15	608:4 746:23	so-called 808:22	804:12 810:7
752:25 754:16	short-sighted 701:5	singular 573:21	815:24	816:21 820:10
756:16,17 757:2	shortly 811:19	sir 616:8 646:23	solid 609:17	821:14 824:10
757:12,14 758:19	shorts 561:19	677:1 685:17	solidifies 565:11	sorts 595:8
759:24 760:3,4,12	shot 744:18	713:3 727:5 738:1	solidly 660:22	sounds 574:4
760:20	show 590:1 644:7	800:21,24 812:15	solve 728:12	624:22 669:7
services 761:25	683:15 684:14	sister 561:18	solves 808:16	692:20 720:6
session 555:15	741:20 804:18	sit 577:18 587:11	815:18	747:14 755:5,13
set 572:7 645:5	showing 784:10	667:12 668:23	somebody 557:7	763:6 765:16,24
669:12 690:2	791:12 801:4	703:18	560:3 577:17	source 591:12

592:13 604:15 605:11,14 614:17 615:5 617:17,25 619:2 684:9,10,19 686:16,18 719:3,5 sources 614:4 724:3 space 626:10 630:12,14,18,22 636:8 637:9,11,18 637:20,22,25 638:2,6 640:2 641:6 642:9 674:8 675:25 676:24 688:15 707:6,7,8 805:14 807:21,21 811:24 spaces 635:6,13 637:5,5 638:7 639:25 640:1 802:2,4,11,12 803:5 spacing 635:6 speak 565:2 577:6 666:16 698:4 700:3 710:13 745:22 795:1 811:11 821:24 speaker 595:25 596:1 629:3,6 683:1 709:9,10,12 748:4 819:11 speakers 620:24 speaking 576:7 628:18 699:22 special 618:18 631:24 634:5 652:3 769:22 specific 633:1 682:2 694:19 716:15,16 725:16 811:3 specifically 598:15 628:5 727:21	731:5 733:2,8 757:7 816:13 823:16,19 specified 635:1 661:8 673:14 specify 646:7 specifying 603:21 speed 585:9 586:2 586:6,8 591:20 595:16,16 598:1 688:7,8,17 690:23 691:7 692:13 700:19 speeds 597:20 692:14 697:6 spelled 654:10 spend 704:2 Spokane 560:3 663:14 665:17 696:21 712:18 715:3 728:4 748:4 750:9 759:1 spoke 565:3 617:16 690:19 705:8 756:23 spoken 706:3 768:9 spot 579:8 677:8 sprayed 752:4 spread 809:21 spreadsheet 568:7 599:19 736:19 springs 786:22 sprinkler 743:15 752:7 755:15 756:25 sprinklers 695:21 752:6,10,18,19 753:14 758:9,17 sprockets 640:8 square 626:21 641:1 644:19 649:11 squared 759:8 staffing 751:17	stage 561:4 564:21 564:22 stages 641:13 stair 587:19,21 589:11 594:5 595:1 596:15,15 614:2 621:11,13 786:13 787:20,24 787:25 788:13 stairs 788:19 stairway 584:13,15 584:24 585:13 590:17,21 591:5,9 591:25 592:3,9 617:15 781:9 786:10 791:12 stakeholder 558:21 559:14,16 667:6 725:10 821:4 822:15 stakeholders 566:9 566:13 666:25 668:13 681:6 724:22 732:19 stand 677:10 stand-alone 628:20 645:2 648:5 663:6 731:24 standard 645:4 646:6 648:6 651:17 655:20 661:9 673:15 731:25 732:6,9,11 732:16 733:25 734:2,3 735:1,3 736:6 737:2 738:7 738:9,10,11,16,17 739:17,18 741:14 743:15 769:15,19 769:21,25 770:7 770:11,16 771:3 772:8 786:15 792:25 standards 569:9	651:19 695:14 732:10 733:22,25 736:5 750:14 standby 719:6 721:17,19 729:6 standing 605:23 657:21 677:10 764:22 790:23 standpoint 677:15 stands 647:10,19 681:12 703:8 732:2 734:16,22 761:11,18,24 764:16 769:21 777:8 780:24 784:25 785:1 star 823:15 stars 823:23 start 569:22 577:9 639:22 665:1,2 731:17 754:25 779:23 788:5 801:8 started 595:2 602:20 679:7 734:6 767:24 769:2 779:22 starting 567:5,19 603:13 starts 683:21 state 550:1 552:5 560:2 568:23 572:3 577:15 592:15 612:5,5 618:15,19 619:12 621:15,17 622:4,8 653:9 654:23 671:21 676:12 682:11 713:9 714:11 719:8 732:15,19 734:4 739:21 751:20 781:22 790:15 793:1 804:9	811:16 824:25 825:8 826:5 stated 609:8 611:8 613:23 626:9 679:7 725:21 735:2 769:12 771:20 777:23 779:3 783:14 810:11 820:15 826:9 statement 589:18 591:24 597:1 602:25 624:1 649:3 665:11 688:25 694:16 727:2 763:7 784:6 statements 720:2 755:13 states 605:11 611:5 615:16 621:12,13 628:5 688:8 761:24 762:19 763:1 771:25 777:8 811:23 stating 645:6 683:25 731:2 747:15 778:5 809:20 stations 652:8 status 752:20 773:7 773:10,13,19 stay 578:4 646:5 818:13 staying 568:21 824:7 stays 756:4 steel 692:4 693:12 697:24 stemming 572:16 stenographically 826:10 step 635:15 stepped 823:11 steps 562:1
---	--	--	---	---

stiff 791:16	815:7	submitting 583:12	supply 585:4 592:1	779:16,20 781:22
stipulations 571:23	string 728:9	603:25 726:6	592:6,8 653:23	795:9 798:12,21
673:3	strongly 620:17	736:4 801:23	684:17 685:1,11	799:2 801:16,21
stop 554:2 566:15	731:10	subpart 769:13	711:8 723:25	806:20 810:19
579:2 585:1	struck 628:23	777:17 797:12	supplying 604:19	818:18 822:2
592:20 626:22	641:21 688:13	799:9,12	support 584:23	825:3
634:21 641:2	798:10 804:11,19	substantial 606:24	591:4 609:4,17,19	surprise 819:21
644:20 649:12,24	structural 663:22	665:13	609:25 611:15,25	surprised 553:15
678:8 760:2,19	710:12 787:22	substantially	613:24 661:13	582:14 798:3
762:5	structurally 670:4	653:22	669:25 749:20,20	survey 751:13
stops 619:6	structure 808:6	subtle 781:17	supported 670:4	susceptible 810:2
storage 641:17	814:1	suffer 808:9 815:11	supporting 670:9	suspect 698:2
story 556:24	struggle 722:19	sufficient 584:23	819:4	723:16
662:13,13 674:4,5	struggling 747:25	591:4 654:6	supposed 576:21	suspension 693:12
760:20	stuck 668:15 712:5	661:13 688:15	723:8 751:16	694:4 696:14
Strafer 554:23,24	760:19	suggest 632:11	806:12	swap 655:17
556:17 774:25	stuff 555:6 565:19	643:15 665:18	sure 553:11 554:3	sway 672:1 795:10
775:3 799:18,22	567:24 573:16	759:3 767:18	555:25 556:21	swing 653:4 655:22
800:17,20,22	574:18 578:5	771:7 800:25	557:3,4 561:16,21	677:4 697:3
straight 738:4	616:24 629:19	suggested 728:16	561:23,24 562:1	Swinging 652:21
strange 693:1	633:21 656:6,21	suggestion 583:7	563:13 564:2,19	switch 593:11,17
strength 661:13	665:3 668:2,15	588:21 714:9	564:23 575:21	605:13 617:2,2,3
stress 564:15	722:8 733:16	738:6 792:4	577:15 578:20	622:1,6 624:5
stretch 730:18	735:9 756:2,4,6	suggestions 558:2	582:1,8 599:21	626:22,24 634:21
stricken 735:25	757:16 768:1,21	582:22 761:10,21	607:19,19 611:14	634:21,24 637:12
744:14,25 765:4	795:4 813:2 820:8	821:21 822:17	611:22 612:18	641:2,4 644:14,20
765:19 766:9	sub-part 776:1	Suite 550:18	615:2,11,25 616:7	644:24 646:10
773:8 782:9	subject 562:5 667:6	suited 645:2 648:5	617:1 618:14,22	649:12,16,24
783:12 784:11	681:24	summarily 666:23	638:18 642:7	676:12 678:8
strictly 795:23	subjects 824:15	822:3	646:16,17,24	684:2 715:15
strike 585:5 631:6	submissions 681:6	summation 573:9	653:25 654:1	switched 654:2
658:23 718:20	submit 638:22	summon 718:22	656:17 662:25	switches 716:11
734:15 739:3	733:24 736:10,13	sump 608:4	663:17 666:14	synonym 563:18
743:1 745:1	825:3	sunsetted 612:7,7	667:18 668:4,14	synonyms 563:16
748:13 756:6	submittal 603:19	super 823:7	668:17 673:4	563:17
761:1 765:17	submitted 584:10	supersedes 778:8	679:3 701:2,14	synopsis 574:6,14
766:24 767:2	589:25 603:7,16	supervisor 575:14	704:17,25 705:10	574:19 821:9
784:4,22,23 795:9	604:1 639:5	575:15 580:21	714:9 715:9 720:9	system 568:13
797:13 804:11	642:25 659:18	596:3,3 819:2	720:19,20 721:18	593:13 604:16
strikes 811:23	667:10 669:1,1	supplied 590:21	723:15,15 726:8	616:16 620:9
striking 628:13	725:8 735:6,9	692:16	726:13 737:4	653:3 684:20
719:5 740:1,23	736:19 769:24	supplier 652:14	738:22 739:7,8	693:18 720:15,23
741:17 781:3,25	777:7 801:15	suppliers 655:9	754:13 768:3,7	722:7 725:3 792:6
794:1 797:22	802:23 822:6	supplies 592:3	769:18 776:19	792:10,11,12,14

797:18 798:14,20
798:24 799:3
systems 651:9
696:11 723:2
727:15 743:16
756:25

T

T 826:1,1
t-shirt 561:19
table 556:9 600:2
630:5,6 663:8
792:14
TAC 558:2 559:7
559:14,16 574:21
583:3 586:21
589:23 590:5
599:6 604:2 606:1
624:25 645:8
666:20 668:24
681:18 702:12
704:6 707:21
724:20 733:4
770:23 781:12
818:10 821:22
824:19
tackling 610:2
TACs 768:12
tag 596:8 773:7,10
773:13,15,18,22
783:22
tagged 797:19
tags 777:9 780:19
783:12 784:23
take 553:21,24,25
561:8,10 562:25
563:24 564:1,21
566:8 574:18
575:17,21 602:14
615:10 619:16
632:17 643:16
654:23 655:2
656:22 666:16
669:24 670:24

675:13 680:21
698:8 701:22
702:7,10 708:21
718:22 724:12,23
728:22 730:17,18
740:21 750:4
751:16 754:25
767:18 790:9
792:19 797:25
800:23,25 801:9
806:18 812:19
813:8 823:20
825:11
taken 550:13
554:20 557:19
567:13 583:2
602:16 607:15
610:24 611:17,19
627:14 638:16
643:21 670:25
674:18 680:24
681:14 703:3
705:12 730:22
767:22 801:10
814:7
takes 564:22
573:12 808:18
815:20
talk 559:3 581:12
622:25 734:20
752:11 755:25
756:1,22 759:8
818:17
talked 556:18
572:22 582:17
613:16 677:9
724:9 820:10
talking 556:1
558:15 561:1
562:6 571:19
589:6 595:23
596:4 606:11
616:14 621:4,5
628:3 629:7 630:3

630:18 635:18,19
635:22 638:6,11
648:4 656:6,15
662:10 663:2,9
665:1 672:21,24
676:9 678:5,7
679:4 682:2
693:11,18 694:10
696:11 698:16,25
699:11,17 701:10
701:10 715:3
722:7,11 723:16
734:13 739:14
758:7 779:22
811:3 824:9
talks 571:18 630:13
637:3 658:13
700:17
tally 584:4 601:13
626:2 639:13
643:10 650:23
660:10 675:8
680:16 688:1
691:22 706:17
717:24 729:21
740:14 742:18
773:1 774:21
780:12 783:3
785:22 793:15
797:5 800:11
801:2 807:14
814:21 817:22
tamper 805:3,11
tamper-proof
806:3,12
tandem 599:8
tape 701:11
task 561:12
Taylor 557:25
TC 656:8,22
team 555:21 823:9
823:13
Teams 552:3
technical 550:4

552:2,6 568:22
572:18 588:19
651:4 652:18
654:22 655:24
technically 787:21
789:17
technologies 701:1
technology 704:23
teeth 693:21 789:22
Tel 550:18
telecab 711:15
telephone 718:25
719:1 721:9 728:8
728:24,25
tell 556:23 615:22
620:12 623:8
630:3,4 654:16
664:10 722:10,24
723:8 759:2 789:8
telling 623:22
722:20 776:7
temp 575:25
Temperature
640:10
tempered 663:15
temporarily 723:9
794:2,5 795:13
ten 658:15
tend 701:20
tendency 641:13
tension 726:22
term 711:15 773:8
terminology 734:14
770:10 774:4,11
terms 567:11
test 568:11 576:10
596:19 684:14
713:7 716:6 777:9
777:11 779:10
780:19,22 781:7
781:23 782:7
783:12,16,18,21
783:22 784:23
807:25

tested 586:1,5
591:23 596:6,7,9
596:18 597:6,7,11
598:11,22 777:16
testing 585:6,21
586:10,19 591:17
596:17 597:15,21
597:23 598:3,15
598:21 605:2
769:14 775:24
781:18,20 783:24
812:23 813:2
tests 596:16,18,22
596:22 597:18
773:11,14,17
777:18 778:15,16
778:18 780:17
781:4,6 782:5
783:8,13,20 784:5
784:20,24 793:23
text 640:11,18
649:1 651:6
692:25
thank 554:10,17
555:9,11 556:5,6
556:25 557:10
560:8,13 565:12
565:14 566:17
568:5,8 570:11,14
573:3,14 576:3,25
578:8 580:12
581:6,7 582:21
583:17,17,24
584:3,6,8 587:14
588:4,16 590:8,10
590:12 593:2,4,20
593:21 594:12
595:20,22 596:22
596:24 597:13
598:7,17,24,25
599:2,10 600:3,24
600:24 601:1,7,8
601:12,17,24
602:4,12,15,19

603:11,22,23	687:12,12,14,20	774:20 775:3	598:2 603:20	725:7,11 726:14
606:18 607:12	687:24 688:4	776:17 778:11	609:3 613:24	726:15,24 727:14
608:9 609:4,11,21	689:17 690:4,5,14	780:1,6,10,15	614:19 615:12	727:22 736:19
609:22 610:9	691:8,10,17,25	782:1,13,14,22	616:14 630:11	738:8 746:17
611:9 613:12,14	693:7,14,23 694:2	783:1,6 784:12,16	631:22 636:18	751:11,15 752:6
614:6,7,13 615:2	694:21 695:16	785:8,9,16,25	646:2,11 649:20	756:1 758:7
615:8,20 616:7,8	696:3 697:20	788:3,16 789:11	655:25 656:9	761:21 766:2
617:8 618:3,24	699:6,13 701:6,15	790:3 792:16	666:3 667:18	768:19 791:25
620:1,2,21 621:21	705:6,7 706:4,5	793:3,4,10,18	668:19 669:17	792:1 798:8 806:3
622:14 623:24	706:12,16,21	794:24 795:13,20	674:1 682:2,5,9	821:23 822:12
624:15 625:15,17	707:19 708:11,20	796:1,18,20,25	683:3 685:13	823:17,18 824:9
625:22,25 626:6	709:24,25 710:1	797:4,9 798:4,11	700:7 702:9	824:11,14,18
628:10,11,24	710:19 712:1,11	799:14 800:6,9,21	703:19 712:8	think 556:4 557:20
629:8 631:12	712:13,15,21	800:24 803:9	722:13 731:1	558:14 560:11
632:18 633:9,10	713:5,12 714:18	806:25 807:4,12	733:20 750:21	561:5,10 563:15
633:25 634:13,22	714:23,24 715:1	807:13,17 810:21	752:23 754:23	563:20,21,22,22
635:10 636:10	715:20 716:22	811:21 812:2,3,15	757:10 758:11,13	563:25 564:12
637:1,13,14	717:8,9,10,14,16	813:17,18,20	775:7 777:2 806:8	567:5 571:17
638:14,25 639:2,8	717:22 718:3,7,7	814:10,10,15,20	810:10 811:2	577:9,12,19,19
639:11,17 642:3,4	718:14 720:24	814:24 817:6,7,14	818:21	578:6 580:6,22,23
642:5,12,13,21	721:4,22 722:1	817:17,21 818:11	things 553:2 554:4	581:8 582:5,19
643:2,3,7,8,14,19	723:4 724:5,7	818:23,24 819:6,8	554:19 556:22	583:22 592:25
644:8,9,10 645:19	728:1,18,19	819:9,10,21,24,25	558:3 559:13	593:1,7,13,24
646:13,14,23	729:10,15,18	820:1 821:17,18	561:3,4 563:4,9	594:8 598:2,14
648:18,19 649:5	730:13,15,16,20	822:25 823:5,8,9	564:10,16,17,19	599:8 601:23
650:10,15,16,22	730:24,25 735:21	823:22 824:5,15	566:1,7 570:19,23	609:2,17,20
651:2 653:9 654:6	736:1,2,20,21	824:22 825:7,7,10	572:6,14,16	612:10 616:2
654:12,20 656:3	737:18,23,25	825:12	574:25 578:11,15	619:13,21,22
656:24 658:1,17	738:23,25 740:5,9	thankful 823:19	578:18 579:9,18	620:5,8,14 622:17
659:13,22 660:3,8	740:13,17 741:7	thanks 555:9	582:11 587:19	624:20,23,24
660:13 662:22	741:10 742:8,9,13	578:16 635:8	594:15 597:23	628:15 629:22
665:5,10,15	742:17,22 745:24	671:20 698:5	607:16 609:23	631:9,15,19
669:14 670:5,6,21	746:4 748:22,25	700:4 711:25	611:21 616:13	634:10 635:5,24
671:13,14,18	751:2,3 754:5,10	771:5 789:10	624:16 627:14	636:5 642:8,11
672:3,6,18 673:7	754:11 755:2,9,10	792:8 800:18	636:24 639:20,21	653:21 654:4,5,18
674:12,14,21,25	755:22 758:1,14	819:3	647:24 648:3	655:11 656:12
675:1,3,6,11	759:4 761:20,20	that's 734:8	657:25 663:10	662:21 664:5,18
676:25 677:1,13	762:14 763:14,14	their's 557:8	664:24 667:9,13	666:3,10 669:15
677:14 678:3,13	766:20 767:3,8,12	699:23	681:9,21,25 682:7	670:1 673:17
678:14 679:12	767:19,21,24	thereof 826:17	693:22 696:5	674:12 678:5
680:1,3,9,14,20	768:5,16 769:2	they'd 628:24	699:12 702:17	682:5,20 685:16
680:23 681:1	771:6,17 772:14	thing 555:17 578:5	703:15 705:10	685:24 686:6
682:24 683:16,16	772:15,20,24	578:16,17 586:24	715:20 716:11	689:4,19 693:13
685:16,17,20	773:4 774:7,8,16	587:10,12 588:10	721:12 724:14	697:10 700:21

701:5,9,21,23	557:13 576:1	616:16 618:8	736:5 741:13,20	701:24,25 704:21
702:2,3,5,8 705:3	581:21 589:6,7	625:24,25 629:7	741:24 742:5	training 562:4
705:4 712:4,10,11	612:14,16 620:24	635:21,21 641:11	773:8	685:25
713:8,11 714:8,9	627:4,5 636:17	641:17 647:2	titled 604:7	transcribed 724:12
714:12 715:11	642:1 651:24	651:20 655:15	TK 811:12	826:10
716:12,21 720:8	656:16,17,19,20	662:10 667:12	today 552:24 555:1	transcript 550:5
720:19 722:22	657:4,7,15,17	674:6 678:7 680:8	555:12,13 582:24	574:20 702:20
723:20 725:21	658:6,9 659:1	704:3,6 719:9	583:5 594:23	705:13 826:12
728:11,13,17	694:25 695:13	722:11 725:6,14	622:18,19 664:8	transcription
733:12,12,21	699:20 714:14	730:23 732:14	748:20 749:17	826:11
734:5,23 735:10	739:11 756:24	733:17 737:1,8	768:24 803:10	transfer 684:10
746:10 747:3,5,19	769:24 772:6	738:20 739:16	815:2 821:7	686:17 719:5
749:2,23 750:3,22	773:9 780:24	743:10,11,13,19	Toll 550:18	transferred 722:6
761:23 762:8	788:7 797:17	743:22,22,23	ton 682:20	transmitted 718:24
764:8 765:22	798:3,14 808:2	745:11,13 747:18	tools 561:16 562:7	729:4
776:12 778:4,16	818:5 820:5	747:23,24 750:9	770:20 787:8	transparent 661:23
778:19,20,24,25	three-quarter	750:13 751:21	805:11	trapped 757:9
779:18 788:8	581:22	753:7 757:9,13	toot 599:11	758:23 805:20
789:21 800:9	threshold 684:5	768:20 770:4	tooth 695:12	travel 675:21 676:9
803:3 806:1,12	throw 612:1 643:17	771:12,16 773:24	top 657:21 659:10	712:7
809:15,18 810:8	680:21 739:14	776:2 782:20,25	677:5,11,17,20,24	traveling 692:14
810:16 819:4	752:13 792:4	789:10 799:1	678:8,22 679:12	695:20
821:8,10	throwing 656:8,23	816:7 818:10,21	688:11 689:15	treatment 631:24
thinking 555:18	733:11	821:8 822:6 824:6	690:24 691:7	tremendous 809:3
563:14,20 564:11	thrown 666:21	824:12 826:9	696:25 700:10	tried 558:3 578:15
570:3 662:17	thumbs 763:11	timer 567:25	706:25 711:17	668:17 823:21
third 584:10 627:5	Thursday 552:4	643:17 680:22	716:10 751:1	trip 629:18 753:3
652:14 662:13,18	775:1	times 582:7,7 592:1	755:7 765:15	757:1,3,7 758:10
801:19	Thyssenkrupp	609:19 666:17	787:6 791:11	758:19 759:10
thought 557:16	580:6,10	677:3 730:7	topic 560:16 565:12	tripped 585:8
589:2 616:13	ticket 751:25	731:18 747:11	757:20 759:3	588:15 591:20
665:22 679:13	tie 792:7	811:11	total 799:21	tripping 586:2,7,8
681:20 764:9	tight 653:25	timing 693:20	totally 620:24	605:8
776:17 777:2	Tiller 692:10	tin 728:9	686:24	trips 704:15
793:18 795:18	time 553:7 554:11	tip 551:9 553:14	Touching 721:1	troublesome 720:8
799:22 809:4	556:7 557:19	560:20	town 758:22	true 558:15 661:14
819:18	558:8,24 562:8,11	tips 553:18	track 580:5 597:25	698:3 795:24
thoughts 554:19	562:18,24,25	tired 753:16	612:11 643:15	trumps 665:14
564:1 670:5	563:11,18 565:7	title 572:12 584:12	771:22 813:1	trust 564:16 581:3
thread 805:6	580:25 582:15	590:16 626:8	tracked 814:5	703:20 724:10
threat 571:6,7	583:4 595:2	639:25 648:16	traction 694:19	726:18
797:16	600:12,21 601:10	676:1 679:9	811:20	trusting 703:9
threatening 571:9	601:11 602:11	712:25 733:21,22	traditional 698:20	try 556:15,23
three 554:11	607:14 610:1	733:24 735:1	699:3 700:7	566:15 677:11

702:7 703:2	588:1,20 589:6,6	595:5,11,19 609:6	647:6,13 662:11	unnecessary
710:23 728:11	591:8 592:18	612:18,19,23,24	673:4 689:10	586:24
749:21 754:3	611:22 614:3,3	613:1,9,22 614:8	705:24 716:4,5	Unpaid 568:20
755:24 768:21	627:4,8 628:24	614:9,22 615:15	724:19 727:8,9	unplugged 587:11
821:7 822:12	629:1 630:13,19	615:19,21,23	747:7 754:13	587:12 588:2
trying 561:13 562:2	632:5 640:12	618:25 637:2	755:14 763:17	unplugging 585:20
564:8 566:3,15,16	666:18 669:23	788:4	767:16 768:12	587:5,23 589:1
574:23 578:22	672:12 675:21	ultimately 580:4	784:12	624:7
620:15 621:19	685:12 699:12	unable 712:8	understands 554:3	unrelated 588:20
628:1 631:9 636:5	735:11 736:17	unanimous 775:1	582:3 734:12	unsafe 753:17
637:19 638:22	737:6,7 746:1	unavailable 805:21	739:8 746:9	754:9 808:19
655:1 656:21	748:9 751:12	unavoidable	776:19	815:21
660:15 667:8,19	752:6 753:22	555:13	understood 575:20	unusable 587:25
667:22 668:20,25	754:5,15 755:25	unclear 570:5	599:8 635:14	update 555:10
672:10 677:10	756:24 757:6	629:22 748:17	667:5	579:10 736:24
681:9,10,24 686:3	758:7 780:23,24	underlined 647:25	undo 791:14	737:11,16 752:14
700:1 702:13	781:5 788:7 796:2	666:1,8,10 712:25	unexpected 563:9	777:20
704:3 712:9	820:5	822:11	unfortunately	updated 553:5,5
715:16 723:10	two-way 718:18,20	underneath 713:5	555:12 702:18,19	568:15 576:12
725:23 728:11	718:23 728:23	791:6	737:10 800:15	743:19 752:18
753:21 755:24,25	729:3	understand 553:11	ungrounded 592:5	753:9 769:19
762:9 781:17,24	type 554:16 557:15	554:5,6 556:14,22	592:7	806:19
790:24 794:15	585:22 597:14,20	572:24 587:6	UNIDENTIFIED	updates 570:18
795:10 797:25	598:3 689:24	593:7 609:24	595:25 596:1	updating 741:23
822:14 824:7	693:12,20 694:12	618:11 628:21	629:3,6 683:1	792:22
turn 614:19	695:3,9 697:16	638:21 662:20	709:9,10,12	upgrade 750:15
turned 617:3	698:17 699:1,2	664:15 666:15,19	819:11	755:15,16
641:17	700:22 704:20	668:3,5,11 669:5	uninterrupted	upper 603:9 674:4
Turner 553:4	715:12,13,18	698:14 702:11	562:15	UPS 684:17,25
567:11 579:19,20	716:16,17 723:19	703:13,14 705:4	union 577:6	719:23,25 720:13
579:20 580:12	732:3,3 739:10	705:15 738:12	unit 587:5 595:10	721:20
588:17,18,18	741:18 781:10	739:7 750:24	596:6 598:11,14	use 584:18 585:15
662:1,2 784:13,14	798:15,16 809:24	758:9 763:8,13	606:17 616:21	586:16 589:14
784:14,20	816:13	766:9 767:12,14	676:13	604:12 608:8
turning 624:7	types 621:20 655:6	768:4,8 769:4,9	units 584:24 586:16	609:9 611:7
turns 613:9	694:4 711:24	769:16 776:21	591:5 598:16	651:13,15 657:24
tweak 704:12	739:19 770:13,16	798:13,21 816:2	606:15 616:23	659:7 692:14
tweaked 724:16	typical 653:4	understandable	617:7 629:20	693:5 723:10
tweaking 609:10	typically 560:2	704:18	Universal 684:17	736:23 788:12
twenty-- 557:3	608:7,19 634:7,8	understanding	685:11	789:15,15,24
775:4	677:19	557:20 568:25	unlock 790:24	794:3 808:3
two 569:11 571:11		571:6 581:20	unlocking 787:18	811:15 813:24
577:21 585:11	U	589:3 600:5 607:1	unmute 754:6	user 580:18 587:25
586:25 587:18	UL 559:17 593:6	631:20 636:9	unmuted 809:14	usually 577:22

utilization 593:9	804:25 806:19	virtual 578:13,16	626:2 627:11	740:14,21,22,22
utilized 585:23	807:19 808:3	578:17,22 579:2	633:17 634:14	741:1,2,5 742:1,6
586:10 651:10	813:23 815:6	virtually 554:12	638:15,23,25	742:8,11,13,14,15
utilizing 584:25	verified 585:6,21	569:3 709:13	639:6,8,9,10,10	742:17,18 744:7
	585:25 586:5	visible 661:10	639:11,13 642:16	744:19,21,23,24
V	591:17 808:11	673:16 777:11	642:17,19,21,24	745:2 749:12,15
vacation 561:8	815:13	780:21 783:15	643:2,5,6,10	749:24 754:5
vague 693:13	verify 596:5	785:1	650:2,2,8,9,10,13	756:3 758:4 759:4
valid 572:4	versa 795:7	vision 726:14	650:14,20,21,23	760:18 761:11,17
valuable 822:6	version 573:10	visiting 553:1	659:16,17,19,21	761:19 762:10,14
value 558:10 681:5	592:24 594:14,22	visits 719:10	660:1,3,6,7,10	762:15,16,20,21
721:18 749:7	597:17 600:3,15	visualize 699:19	670:23,24 672:7	763:5,9,9,10,15
822:15	600:16 647:3	voice 722:8,8,15,18	674:15,19,20,23	763:23,24 764:4
values 736:25	658:3,11 825:2	722:22 727:6,7,10	674:25 675:8	764:21,25 765:19
737:1,11	versus 555:20	727:21,23 728:25	679:18,24 680:1,6	766:6,6,7,12,17
variances 661:24	596:20	void 613:6	680:8,12,13,16	766:20,20,22,25
variety 641:9	vertical 570:2	voids 613:8	686:13,21 687:7,9	767:4,7,11 772:2
vdc 684:24	573:2 586:23	VOIP 719:1 720:13	687:10,16,18,20	772:5,12,13,18,20
vehicles 641:10	592:22 599:24	720:14,15 721:11	687:21,23 688:1	772:21,22,24
verbiage 553:5	605:20 606:19	728:8	690:21 691:4,5,13	773:1 774:2,6,7
584:25 585:3,12	609:15 614:14	volt 614:23	691:15,17,18,19	774:12,15,18,20
589:13 594:1	615:13 628:12	voltage 584:25	691:19,20,22	774:21 775:1
599:5,21 626:16	641:24 653:11	591:6 594:20	701:18,22 702:2,4	779:8,13,14 780:5
630:11 633:1	676:5 678:4 685:6	605:17 616:23	702:7 703:7,12,13	780:6,8,9,12
640:14 647:23	693:16 701:7	805:15	703:18,24 705:18	782:2,4,11,13,18
649:7 660:25	707:14 712:2	volume 557:14	705:21 706:1,4,7	782:20,22,24,24
661:4,12 669:3	720:4 723:13	819:20	706:10,11,13,14	783:1,3 785:4,5,7
675:17 679:20	732:1 733:5,14	voluntarily 657:4	706:16,17 707:22	785:8,14,15,18,20
680:4,5 683:13	745:21 750:20	voluntary 773:6,8	708:10,17,18,20	785:22 792:19,23
684:8 686:12	758:5 786:14	773:22 774:3	708:21 709:15,17	793:3,8,10,11,12
688:10,12 692:8,9	787:15 792:3,6,8	volunteered 559:9	709:18,19,22	793:13,14,14
698:1 701:2 704:1	794:21 798:6	559:10	716:24 717:1,7,8	796:8,9,13,14,16
706:11 708:19	vetted 553:1 737:3	vote 553:1,7 583:1	717:13,16,20,22	796:18,21,22,25
709:20,24 711:3,3	vetting 622:3,21	583:1,9,13,16,18	717:24 718:12	797:1,2,4,5 799:7
717:6 723:2	623:15	583:21,24,25	728:21,22 729:8,9	799:8,11,14,21,25
724:14,15 731:25	vice 559:11 795:6	584:2,4 590:5	729:13,15,16,17	800:4,6,7,8,10
732:5 743:1,8	videoconferencing	599:14,14 600:2,4	729:18,21 730:10	803:6,6,10 804:9
744:22 746:11	552:3	600:5,7,15,19,21	733:7,13,17	804:13,15,19
749:20 756:9	view 556:11,19	601:5,6,9,13,18	734:19 735:8,10	806:18,23,24
758:14 761:11,24	579:21 590:2	601:22,23 602:5	735:11,11,17,20	807:2,4,6,14
762:19 763:3,18	816:15	609:13 610:14,19	736:11 737:12,14	810:17,20 813:21
772:6 782:6 783:9	viewing 579:12	610:23 624:24	737:15,24 738:4	813:23 814:4,10
784:18,24,24,25	807:22	625:1,5,8,12,14	739:9,24,25 740:3	814:13,15,16,17
786:5 802:3,4	violating 789:18	625:19,21,23,24	740:4,7,9,11,13	814:18,18,21

816:15,25 817:4,6 817:9,11,14,16,17 817:18,19,21,22 817:24 voted 583:22 588:21 600:25 601:1 604:3 612:3 625:16 639:1,2 642:22 675:2 680:2,9,15 687:13 691:9 705:9 717:13,17 729:10 730:11 733:4,12 733:13,17 737:5 740:19,20 744:3,5 744:6,13,18 764:9 764:13 767:5,17 772:14 774:9,13 780:3 785:11 793:4,5 800:2 803:5,21 814:11 816:3 817:7 votes 601:8 625:17 643:2,4,9 687:14 691:10 717:9 735:11 737:19 763:22 764:14 767:4 772:16 774:8 780:1 782:13 785:9,17 796:19 801:3 voting 570:7,9,15 574:3 602:23 606:3 610:18,20 610:21,22 649:7 650:19,21 660:5 669:24 675:4,5 680:11,13 691:1,2 701:23 702:6 703:25,25 706:15 707:24,25 708:3 709:19 717:19 718:5 726:23,25 728:13 729:25	730:1 740:10,12 742:3 762:17,18 762:21,25 763:2,3 763:16,19,22 764:11,21,22 766:21 767:6,8 768:4 772:23 780:9 785:19 799:17,20,25 800:2 804:20 VPL 609:2 617:19 617:19 618:3 710:11 VPLs 612:13 VRCs 732:1,7,19 732:25 733:2,13 734:13,18 735:15 735:25 <hr/> W W 634:3 WA 550:18 WAC 551:11 552:25 557:4 558:5,17 567:1 571:16 584:11 590:3 592:24 600:16 602:7 604:4,5 605:19,24 613:22 622:11 624:11 626:7,17 627:8,21 628:2,4 628:4,21 629:2,2 629:11 632:22,24 634:4 639:23 640:22 641:22 644:1 645:2 646:4 648:9 649:22 651:3 655:1 656:7 656:8 658:14 659:17 660:17,19 668:6,10 674:20 675:15 679:18,23 683:10 686:13,20	687:19 688:5 690:21 692:1 693:14 710:25 714:4,21 717:12 718:17 725:16 731:21 732:8,20 732:24 734:1 735:4 736:7 738:23 739:2,4,15 740:1,23 741:4,12 742:23 750:24 754:21,24,25 756:3 759:11,19 760:16 761:1,6 762:12,21 763:4 764:5,10,16 766:22 767:1,16 769:3,10,20 770:9 770:11,12,17 771:24 772:7 773:5 774:4 776:23 779:12 782:9,21 783:7 786:2 792:20,23 793:21 794:12 796:11 797:11,13 797:23 798:19 799:13 800:3,5 801:24 806:19 821:1 822:9 WACs 568:22 Wade 570:2,14 573:2 586:23 592:22 599:24 606:19 607:18 609:15 610:18 614:14 615:13 628:12 641:24 653:11 676:5 677:9 678:4 685:6 693:16 701:7,21 702:1 707:14 712:2 718:4 720:4 721:1 723:13	727:20 745:21 750:20 758:5 792:3 794:21 798:6 Wade's 577:12 587:18 608:16 wait 559:12 725:19 734:11 736:24 waiters 617:13 waiting 682:17 walk 705:5 711:18 730:18 789:8 walked 752:24 walks 617:14 wall 619:18 788:25 want 553:11,13 554:3,17,17 555:22 557:10,11 557:18 558:5,11 564:9,25 565:20 566:6,9,11,11,14 566:19 570:13 571:2 576:7 577:2 577:7 578:20,23 578:24 579:14 592:23 611:25,25 612:2 617:4 619:12 620:10 627:14 633:11,16 642:2 646:15,17 664:21 667:3,4,17 667:18 668:14 669:8 670:23 671:25 673:4 681:1,3 683:13,17 693:5 694:21 695:18 698:19,22 700:2 703:13 704:15,25 705:5 710:14,16 713:7 714:4,10 716:21 719:12,18 725:1 726:8 731:4 739:7 739:8 750:22	754:12,21 756:10 756:21 759:1 763:10 765:2,2,3 765:9,9 767:23 768:3,7,7,16 771:14 776:18 779:16 781:22 784:7 790:1 794:25 795:1,9,12 797:17 798:12,21 799:1 816:13 818:11,17,18 819:5 820:3 821:13 823:5,10 823:16 824:15,21 wanted 557:2 577:1 578:10 579:5 598:18 599:4 602:21,22 606:25 607:7 614:20 615:10,11 630:17 635:11 637:3 662:24 663:17 669:12 671:4 679:2 682:16,22 692:21 712:18 714:7,13 723:19 726:19 730:14 731:14 751:4 771:22 792:4 819:20 wanting 688:10 717:21 wants 630:24 734:9 wardrobe 563:6 Warning 605:12 warranty 595:9 washing 636:24 Washington 550:1 552:5 557:4 572:4 592:15 618:14,17 618:20 619:12 620:11 622:4,8 676:11 732:15
--	--	--	--	--

734:4 739:11	620:8 643:19	731:19 737:13	welcome 565:16	672:22 673:1
781:22 790:15	651:21 682:11	749:15,17,17,22	643:22 814:25	wire 595:4,10
793:2 825:8 826:5	683:24 714:14	751:1,13 752:2	well-covered	692:15 700:9
wasn't 553:8	731:12,19 736:12	753:16 754:13,21	806:13	704:22
627:22 637:15	765:17 768:20	754:22,24,24	went 555:19 557:25	wired 584:16
648:7 660:17	769:2 774:2 775:7	756:7,13,15	581:23 618:8	587:21 594:6
662:8 681:16	797:10 801:9	757:21 758:6	697:17 738:4	595:6 604:9
757:14 795:2	815:1 818:22	759:9 760:18	weren't 554:7	617:20,21 728:6
822:7	821:12,16,17	762:9 763:8,9	666:24 695:22	wiring 617:12
watched 730:3	we're 552:22	764:4,11 768:1,14	822:3	619:3,4,6,10,17
water 752:4,13	553:12 556:6,8,13	768:17,18,21	what-have-you	619:25 804:23
watts 684:17	556:13 557:2,18	773:4 775:7,19,23	727:13	wish 584:1,2
waving 737:23	558:15 560:23	779:6 781:24	whatsoever 653:13	601:11 687:21
way 554:14 556:3	562:18 570:8	784:7 789:17	676:23 700:25	706:13 729:17
564:25 568:9	573:11 574:1,3	800:15 811:18	WHEREOF	732:19 742:16
572:24 574:21	575:13,20 582:12	824:8	826:18	774:17,18 780:7
576:9 578:13	582:13,14 603:13	we've 554:19	whichever 661:7	782:23 793:11
579:11 580:11	606:16 610:8,20	565:22 594:16	673:14 804:24	797:1,3 800:7
590:13,18 593:2	610:20 613:25	610:3 616:13	Whitney's 700:8	807:6,7 814:16
593:20 595:13	614:16 617:7	623:18 624:20	wholeheartedly	817:19
599:11 622:12,12	620:5,15,19 621:5	645:10 658:10	594:9	wishes 767:4
623:7,14 625:3	621:15,19 622:9	664:20 668:12	wide 695:13	withdraw 603:15
630:4,25 672:1	622:21 624:22,23	679:8 699:12	wife 555:2	603:18
674:4 676:17,22	625:7 627:23,25	724:9 744:5 755:6	wifi 727:12	WITNESS 826:18
682:21 692:25	628:7,13 630:18	767:25 768:23	willing 589:24	WMP 776:9
693:13 698:19	631:18 633:14,19	769:1 779:20	590:2,6	wohlschlager
699:8 703:8,22	638:6,10 647:7,14	820:9 822:8	willingness 822:12	587:16,17,17
715:24 716:2,20	647:20 649:7	wear 792:13	824:17	593:21,22,22
727:11 728:4	654:1,1 655:4,10	wearing 561:21	Wilson 664:12,13	608:9,10,10
734:18 748:18,19	656:15 660:15	weather 563:6	664:13 665:10	631:13,14,14
751:17 761:2	663:2 667:18	website 568:14	671:14,15,15,19	634:22,23,23
762:12 767:1	668:2,14 669:5,10	579:8,10	697:20,21,21	635:4 636:11,12
771:22,23 775:3	676:9 678:5,7,9	weeds 681:25	699:13,14,14	636:12 654:20,21
781:24 789:8,9	681:8,9 682:7,10	week 557:16 598:9	711:12,13,13	654:21 656:1,1,24
791:10 819:23	682:13 683:8	702:20 821:12,14	712:13 714:18,19	656:25 657:1
826:15	687:2 698:17	821:16 825:6,11	714:19 795:21,22	685:22,23,23
ways 563:13 564:11	699:9,15,16 701:9	weeks 557:13	795:22 796:1	689:2,3,3 707:24
701:9 794:4	701:10,22,23	736:18	Wilson's 698:7,9	713:13,14,14
we'll 553:9,19,21	702:2,3,6,13,19	weight 798:1	wind 739:14	723:4,5,5 763:5
553:23,24 554:1,4	703:25,25 704:2	weights 597:20	window 662:13	774:13 778:13,14
554:8 556:15,21	708:2,3,7 715:3	598:23,24 777:12	673:20,21 674:3	778:14 781:15,16
556:21,23 582:25	718:15 722:7,11	780:22 782:7	windows 660:25	781:16 812:3,4,4
600:5,7,7,9	722:25 723:9	783:16	665:3 669:25	813:4,4 816:19,20
602:14 603:3	724:1,10 728:11	weird 580:1	670:12,14,18,20	816:20

women 801:12	652:1 660:23	write 636:7 667:8	639:2 642:17,19	663:20 665:6
wonder 671:16	661:1,2 662:21	678:23 754:23	642:21 650:8,9,10	667:13 669:6
745:22	670:12,13,18,19	755:7 757:12	659:19,21 674:19	671:15 685:24
wonderful 643:24	673:23 675:23	789:6,23 810:18	674:21 679:24	687:11 689:18
wondering 589:25	676:17 677:5,24	812:23	680:1 686:21	690:6 694:3,9
672:14 723:9	677:25 681:2,7	writing 648:8	687:9,10 691:4,5	697:21 698:11
748:12 794:23	682:20 685:12	731:13 732:2	703:13,18 705:10	699:7,14 700:6
wood 781:8 791:4	704:5 705:3 707:7	751:1 754:21	706:1,4 707:23	701:20 709:12
wooden 786:7	712:8 719:11	written 553:16	709:18 717:7,8,13	710:21 711:13
787:13 788:19	722:15,17,19	567:9 607:17	718:5 726:23	713:6,20 714:19
789:4,15 791:3,7	725:6,9 730:15	614:5 619:20	729:8,9 735:8,10	715:22 722:2
word 563:19 622:3	738:7 794:3,6	622:12 629:24	735:11,12 737:14	733:10 737:6
630:10,21 648:23	819:20 823:20	630:25 654:5	737:19 740:3,5	744:2 749:1 751:4
704:11 708:8,24	824:12 825:5,7	666:22,22 681:10	741:2,5 742:6,8	755:11,23 759:7
723:20 734:2	worked 612:9	681:14 693:1	744:19 761:17,19	760:24 764:19
worded 700:1	696:10 710:12	698:19 713:25	762:10,14,18,25	770:25 771:10
wording 591:14	821:23 823:13	714:1 724:1,12	763:9,16,23,23,24	774:23 775:8
669:16 673:10	worker 555:3	728:5 746:24	764:9,21 765:8,19	784:3 785:11
686:25 698:24	802:21	748:19 756:11,15	766:6,17,20	790:12,16 795:22
699:10 702:5	workers 678:13	762:12,22 764:22	767:11 772:12,13	806:7 809:14,19
721:7,8 749:16	working 562:19,19	765:2 766:18,23	774:6,7,9,13	810:15 812:5
760:25 776:14	576:13 579:9	767:1 778:21	779:13,14 780:1,3	818:16,20 824:21
words 563:25 564:4	620:10 641:6	779:1 781:6,25	782:11,13 785:5,7	year 578:25 582:7
693:10 722:25	675:25 676:19,22	810:7	785:8 792:23	582:7 658:23
823:21	677:4 678:11	wrong 563:12	793:3,6 796:13,14	743:11,19 745:13
wordsmith 704:12	690:7 702:12	595:24 647:3	796:16,18 799:11	745:13 747:24
756:12 757:22	819:16 823:7	736:3 819:23	799:14 800:2	751:16,23 752:17
wordsmithed	workplace 562:13	822:9	806:23,24 807:15	753:13 770:4,7,21
608:22 611:7	works 705:2 724:9	wrote 646:19 682:9	814:4,10 817:4,6	771:16,22 777:9
612:2 622:13	726:21 802:22	723:15 748:15	817:14	780:19 781:18,23
761:16 766:1	world 563:24	www.capitolpaci...	yeah 552:23 567:21	783:11,18,20
wordsmithing	577:24	550:24	577:1 578:10	784:22 817:7
610:1 700:21	worried 566:1	<hr/> X <hr/>	581:8 588:6	years 596:7 603:20
749:25 756:10	664:22 726:16	x 626:20 641:1	590:15 594:13,25	623:19 695:12
761:12,14,19	worries 662:4,4	644:18 646:7	598:12 599:3	714:14 728:15
812:7 816:21	690:20 790:7	649:10 677:6,6	603:3 608:11	734:6 752:15
work 553:23 555:4	worse 791:1,1	xx 660:15 713:1	610:17 615:21	791:10 811:15
557:14 558:17	wouldn't 580:2	<hr/> Y <hr/>	621:22 627:19	yeas 584:7 601:15
559:3 561:2,6,16	617:4	yea 583:13,16,22	629:21 631:15	626:5 639:15
562:6 564:23	wow 560:24 599:25	600:7,19,21 601:1	632:9 633:10	643:13 650:25
565:24 568:17	777:24 823:17	601:22,23 625:12	635:11 645:24	660:11 675:9
573:24 576:22	wrap 753:24 754:4	625:14 638:23,25	646:22 647:5,13	680:18 688:2
583:5 597:11	822:13	wrinkle 618:16	648:20 654:8,13	691:23 706:19
618:13 621:2,3			657:13 658:2	718:1,13 729:22

740:15 742:20
 773:2 774:23
 780:13 783:4
 793:16 797:7
 800:12 814:22
 817:25
yellow 820:7
yeses 785:23
yesterday 553:14
 556:1 557:12
 567:24 573:17
 584:9 589:10
 599:6 603:22
 682:1 803:11,12
 825:1
you,sir 694:2

Z

Z97 663:21
Z97.1 661:6 663:14
 673:13

0

0 584:7 718:13
 767:11,11 773:2
 774:23 783:4
 785:23 793:16
 797:7 800:12,12
0.125 808:2
00060 650:24
0011 736:23
0016 775:10 777:7
 779:9 780:12
 781:1
0017 793:21 796:10
0018 740:18,18
0018is 741:8
0025 731:20
0026 741:11 742:1
 742:3,19
0027 780:16 782:4
 783:3
0028 567:7,14
 583:9 584:5

0030 797:11 799:9
 800:11
0032 739:2,25
 740:14
0033 742:23 745:2
 762:17,25 763:15
 763:25 766:6,14
 767:18
0034 744:13,18,21
0037 626:7 627:8
 627:12 628:18,22
 638:15,23 639:5,7
 639:14
0043 769:3 772:5
 773:1
0044 567:6
0050 584:10 601:19
 601:24 602:1,3,6
0052 651:3,3
 659:16,17,24
 660:10
0053 604:4 610:14
 625:8 626:3
0056 783:7 784:18
 785:4,22
0057 602:7 603:2
 603:15,18,24
 797:6
0058 660:14,19
 670:23 672:7
 674:16 675:8
0059 627:8,13,14
 639:23 642:16,18
 643:1,11
0060 628:18,20,24
 629:4 643:25
 644:1 649:2 650:2
 650:3,12,14
0061 675:14 679:18
 680:17 709:7
0062 682:13 683:9
 683:17,25 686:13
 687:2,7 688:1
0063 688:5 690:21

691:22 704:19
0064 692:1 705:19
 705:21 706:1,18
0065 706:22 708:22
0066 710:2,17,25
 717:1,25
0067 718:15 728:23
 729:21
0076 801:22,23
0078 786:2 792:18
 792:19 793:15
0096 810:16
0098 804:21 806:18
 807:14
0099 807:18 813:23
 814:21
0100 815:3 816:25
0109 601:14
02605 600:16
027 660:19
02700 629:12 663:7
02700(d) 647:2
027000 647:6
02710 656:4
027xx 665:25

1

1 567:19 568:11
 573:18 584:14
 585:16 590:20
 601:15 604:8,11
 626:5,5,11 639:15
 640:2 651:7
 675:10 691:23
 706:19 707:2
 718:1 732:6
 742:20 773:11
 777:9 780:13,19
 783:11 784:22
 786:10 793:17
 794:5 807:15
1:30 553:20
10 550:7 552:4
 555:19 658:4

660:11 680:18
 729:22 760:2,19
 775:16,20,20,25
 777:17 778:2,3,15
 778:17 779:11
10.2 783:14 784:25
10.3 777:10 780:20
 781:7 783:15
 785:1
10.3.1.1 586:8
10.3.1.2 586:9
10.3.3 586:11
10.4 585:10 795:5
100 817:23 820:13
103 820:12,13
107 773:5 774:3,22
108 820:4
109 599:20 600:15
 604:3
10th 559:6
11 775:16,19,20,20
 775:22,25 776:1,5
 776:6,8,10 777:17
 778:6,9,20 779:2
 779:11
11:00 553:19
110 641:7
110.22 605:18
12 596:18 597:18
 605:8 606:15,17
 606:21 607:19
 760:19
12.1 673:13
12:00 553:24
12:06 680:24
12:30-ish 553:24
1201 661:7 673:13
13 683:20 743:15
 797:12 799:9,12
15 553:22 643:13
 744:6 809:6
150 791:18
16 661:6 673:13
 721:7,25 775:8

811:1 821:2
17 650:25 706:19
17.1 669:22 671:6
 695:14 710:10,15
 714:20 821:2
17.3 658:3,11,15
 757:22
18 581:24 675:9
 688:2 807:15
18-02 651:4 652:19
 655:24
18.1 559:2 591:21
 591:21,23 597:17
 617:10 710:10
 711:24 775:25
 778:3 781:19,25
 821:3
18080 739:4
19 685:19 691:23
 721:7,25 740:15
 814:22 817:24
 821:2
1910.147 592:16
1950 760:2
1963 751:9
1987 743:3,9 745:5
 745:10,23 746:16
 746:17,19,22
 747:16,18 750:14
 750:18 754:17,19
 759:14,22 760:5,8
 762:4
1st 770:10 776:3

2

2 569:20 584:7,17
 585:2,5,13 586:13
 590:23 591:7,9,11
 626:18 628:22
 639:16 640:13,23
 651:15 688:2
 732:12 740:15
 742:21 744:6
 786:12 794:9

797:8 811:2 814:22,23 817:25 817:25 2.1.1 672:13 2.1.1.2.2(e) 661:18 671:8 672:11,12 673:9 2.1.1.3 745:23 2.1.1.8 745:23 2.14.7.2.2 684:4 2.4.7 677:21,22 2.7.6.3.2 802:13,23 803:2 2.7.6.4 807:25 2.8 804:22 2.8.2.1 804:22 20 597:17 658:11 764:14 779:22,24 779:25 780:13 785:23 200 746:2 2010 612:10 2015 636:15 658:3 2016 642:2 651:7 651:21 656:15 672:10,11,12 2017 591:18,21 821:3 2018 629:13 634:7 634:19 636:22 770:10,14 776:3 794:13 825:2 2019 642:1,6,10 645:25 649:19 653:8 654:10 656:15 664:5 665:8,12 671:6 672:10,14,15 685:7 713:24 714:1 818:21 825:2 2020 591:19,21 608:5 658:8,25 821:3	2022 550:7 552:4 824:18 826:19 2022.0096 811:1 2083 550:15 826:22 21 626:4 718:1,13 773:2 793:16 211.3 743:9 745:11 747:16,18 749:3 211.8 743:9 745:11 747:18 749:3 22 601:15 639:15 742:20 774:23 783:4 797:7 23 584:6 635:5 2300 786:3 2300(4)(b) 748:13 23000 767:1 23000(4)(b) 763:10 763:20 764:17 765:3 23605 769:7,8,12 769:14 23606 774:11 23701 775:6 24 556:2 557:4 562:11,13 605:7 614:23 631:6 634:11 635:5 636:6 638:1,3,4 677:6 684:24 718:23 719:13 728:7 729:3 799:17,19 800:9 800:12 2401 550:18 2460 631:2,4,8,16 631:18 632:13 24780 797:14 25 692:7 746:20 750:7,10 760:9 767:11 25th 736:17 2605 590:3 600:11 27 663:7 775:8	2700 630:9 639:18 645:11,21 647:3,6 647:23 648:13,19 649:8 660:16 667:17 669:6,9 676:2 679:8 683:18,21 713:4 2700xx 669:7 27027xx 683:21 2705 645:7 648:14 28vac 684:24 29 592:16 296-96 770:9,17 786:2 296-96-00700 732:24 296-96-0175 801:24 296-96-02460 626:17 627:21,24 628:5 632:25 640:22 296-96-02605 584:11 600:16 602:8 296-96-027 674:20 675:15 679:19 686:14 688:6 690:22 692:1 711:1 718:17 296-96-027-- 660:19 296-96-02700 626:7 627:9 639:24 644:1 645:2 296-96-02710 659:17 296-96-05000 731:21 296-96-05010(2)) 732:8 296-96-18010 739:4	296-96-18080 739:2 296-96-20010 740:24 296-96-2300 741:12 792:20 296-96-2300-(4)(b) 742:23 296-96-23000(4)(b) 762:12,22 766:23 767:1,16 296-96-23605 769:3 296-96-23606 773:5 774:4 296-96-23701 783:7 296-96-24301 793:21 796:11 296-96-2460 632:22 296-96-24700 797:11,14 296-96-2610 604:4 296-96-2700 683:10 296-96-5000 735:5 <hr/> 3 3 550:8 552:1 585:21 591:16 601:16 641:6 651:23 661:2 688:19 718:2,13 740:16 769:25 773:3,16 777:18 780:14 783:5 786:14 3.11.3 742:25 743:1 745:3 746:13 759:20 762:1,2 3:00 553:20 3:17 774:25 3:55 798:2	30 634:1 680:21,22 680:23 692:13 697:7 754:4 801:12 3020.6 634:2 34 744:4 352-2054 550:18 36 626:21 641:1 644:19 649:11 677:6,6,6 787:4 360 550:18 37 631:15 3rd 826:19 <hr/> 4 4 650:25 688:3 761:6 766:5,9,24 767:3 786:17 807:16 4:06 801:9 4:10 555:1,7 4:40 554:2 4:49 825:15 40 692:13 697:8 400 605:6 406.8 607:11 406.8(B) 604:24 607:10,18 611:9 406.9(B) 609:7 611:10 407-0148 550:18 <hr/> 5 5 643:13 651:1 675:9 691:24 785:24 5.28.010 826:7 5.3 695:15 713:24 5.3(b) 713:24 5.3.1.1 670:9 671:6 5.3.1.12.5 688:8 5.3.1.12.8 692:3 5.3.1.13.1 694:3 5.3.1.19.5 711:2,4
---	---	---	---	--

714:1,3 717:2	617:17,25 619:2	596:13,21 597:15		
5.3.1.20.1 718:19	619:10	597:16,16 598:20		
5.3.1.6 646:19	675 801:18	603:21 781:11		
5.3.1.6.1 640:6		9.9.3/ASME		
5.3.1.6.2 640:7	7	591:18,21		
5.3.1.6.4 640:9	7 660:11 680:19	9:30 553:19		
5.3.1.6.5 640:10	732:4	9:55 602:17		
5.3.1.6.6 646:1,22	70 590:23,24	90 569:13 571:3		
649:20	591:10,11 592:10	900 787:5		
5.3.1.7.2 651:7	592:19 617:10,11	96 812:12,14		
652:5	659:10 804:24	98 804:21		
5.3.1.8.3 651:8	805:21	98502 550:18		
652:6	72 743:16	99.9 641:16		
5.3.6.3 640:8	75 700:15			
50 684:6	76 661:2 801:8			
5000 732:20	804:20			
52 593:14	77 803:4,8 804:15			
53 665:12 692:3				
550 684:17	8			
552 551:6	8 729:23 811:2			
56 775:8	8.11.1.8 807:22			
560 551:9	8.6 801:25 807:18			
567 551:11	815:4			
59 632:1	8.6.1.2.1(d) 807:19			
5fc 684:7	8.6.1.4.1(b) 815:5			
	8.6.11.15 801:25			
6	802:9			
6 626:20,20 641:1,1	8.9 770:3 772:10			
643:12 644:18,18	8:30 552:3			
646:7,7 649:10,10	8:45 553:22			
692:7 706:20	800 550:18			
729:22	818 551:14			
60 632:7 644:11	824 551:16			
786:11	8th 559:6			
620 619:3 635:5				
620.1 592:10	9			
617:11	9 660:12 661:8			
620.23 637:3	680:18 744:6			
620.41(A) 604:11	804:24			
620.51(A) 584:17	9.9.2 585:24 586:4			
585:2 586:13	586:19 591:19,22			
590:23 591:6,11	595:15 596:14,21			
620.52 590:24	597:16 598:20			
591:12 592:11,20	603:21			
	9.9.3 585:8 595:14			