

For L&I Staff Use Only

RECEIVED 1/29/2025 SNYS
L&I Apprenticeship Consultant

Teri Gardner 8-14-25
L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Request for Approval of Proposed Standards

TO: Washington State Apprenticeship & Training Council

FROM: Douglas County Public Utility District NO. 1 Apprenticeship Committee

Check the appropriate box:

☒ Committee

☐ Plant

☐ OJT

Occupation(s)	SOC Code	Hours
Lineman	49-9051.00	6000
Wireman	49-2095.00	6000
Meterman	49-2095.00	6000

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

<input checked="" type="checkbox"/> Chair	Date 1/28/25	<input checked="" type="checkbox"/> Secretary	Date 1/28/25
<input type="checkbox"/> Authorized Signer			
Print Name: Chance Landon		Print Name: Tom Goodwin	
Signature: 		Signature: 	

Approved By: Washington State Apprenticeship & Training Council
Signature of the WSATC:
Date:

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Journey Level Wage Rate

From which apprentices' wage
rates are computed

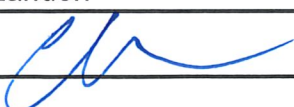

TO: Washington State Apprenticeship & Training Council

FROM: Douglas County Public Utility District NO. 1 Apprenticeship Committee

Occupation:	County(ies):	Journey Level Wage Rate:	Effective Date:
Lineman	Douglas	\$ 61.06	4/1/2025
Wireman	Douglas	\$ 61.06	4/1/2025
Meterman	Douglas	\$ 61.06	4/1/2025
		\$	

Sponsors must submit the journey-level wage at least annually or whenever changed to the Department.

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

<input checked="" type="checkbox"/> Chair	Date 1/28/25	<input checked="" type="checkbox"/> Secretary	Date 1/28/25
<input type="checkbox"/> Authorized Signer			
Print Name: Chance Landon		Print Name: Tom Goodwin	
Signature: 		Signature: 	

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RECEIVED 2/21/2025 SNYS

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Teri Gardner 8-14-25

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Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Apprenticeship Related/Supplemental Instruction (RSI) Plan Review



Program Name Douglas County PUD Apprenticeship	
Occupation Lineman	
Term/OJT Hours 6000 hours	Total RSI Hours 452
Training Provider AVISTA Corporation and Northwest Line Construction JATC	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

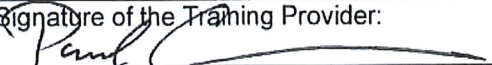
1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
 - a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

<input checked="" type="checkbox"/> Chair <input type="checkbox"/> Authorized Signer	Date 1/28/25	<input checked="" type="checkbox"/> Secretary	Date 1/28/25
Print Name: Chance Landon		Print Name: Tom Goodwin	
Signature: 		Signature: 	

Training Provider Signature

Approved By (Print Name): Paul Gorman	Title: LED Coordinator
Signature of the Training Provider: 	
Date: Feb 4, 2025	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
<input type="checkbox"/> SBCTC recommends approval <input type="checkbox"/> SBCTC recommends return to sponsor	

Program Name Douglas County PUD Apprenticeship	Occupational Objective Lineman
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

- ☒ 12-month period from date of registration.
☐ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Element/Course: Year 1	Planned Hours: 64
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Classroom 40% / Lab 40% / Online 20%	
Provided by: AVISTA Corporation	
Description of element/course: Year 1 Electrical Training Alliance Outside Lineman (online workbooks 1-6) Lesson 1-1-1: How to Study this Course and Achieve Your Personal Goals Lesson 1-1-2: Knowing Your Apprenticeship and Your Responsibilities Lesson 1-1-3: The Attributes of an IBEW/NECA Apprenticeship Lesson 1-1-4: Your Job and the Future It Holds for You Lesson 1-1-5: Safety Awareness-On the Job Lesson 1-1-6: Identify Some Basic Tools of the Trade Lesson 1-1-7: Use and Care of Hand Tools Lesson 1-1-8: Introduction to OSHA Lesson 1-1-9: Hazard Awareness Lesson 1-1-10: Energized and Non-Energized Parts Lesson 1-1-11: Climbing Equipment Inspection and Care Lesson 1-1-12: Fall Protection Lesson 1-1-13: Climber Cutouts Lesson 1-1-14: Climbing Poles Lesson 1-1-15: Pole-Top Rescue Lesson 1-1-16: Bucket Rescue Workbook 1 Quiz	

Lesson 1-2-1: Sexual Harassment

Lesson 1-2-2: Marketing 1

Lesson 1-2-3 The IBEW and its History

Lesson 1-2-4: NECA's Structure and Heritage

Lesson 1-2-5: Shock, Arc and Blast

Lesson 1-2-6: Rubber Gloves and Sleeves, Care and Use

Lesson 1-2-7: Protective Line Devices, Care and Use

Lesson 1-2-8: Working in Confined Spaces/Vault Rescue

Lesson 1-2-9: Safety Meetings, Job Briefings (Tail-Board) Discussions

Lesson 1-2-10: First Aid, Safety and Health

Lesson 1-2-11: Hand Signals

Lesson 1-2-12: Powered Equipment Safety-Compressors and Portable Generators

Lesson 1-2-13: Wood Poles-Inspection and Maintenance

Lesson 1-2-14: Setting Poles and Setting Poles Near or Around Energized Circuits

Lesson 1-2-15: Digging Hole and Trenches

Lesson 1-2-16: Avoiding the Hazards of Drug Abuse

Workbook 2 Quiz

Lesson 1-3-1: Working with Prefixes and Powers of 10

Lesson 1-3-2: The Customary and Metric Systems of Measurement

Lesson 1-3-3: The Circle

Lesson 1-3-4: Area and Volume

Lesson 1-3-5: Measuring and Drawing Angles

Lesson 1-3-6: Right Triangles

Lesson 1-3-7: Blueprint Lines

Lesson 1-3-8: Introduction to Blueprints and Specifications

Lesson 1-3-9: Blueprint Fundamentals

Lesson 1-3-10: Symbols, Conventions and Abbreviations

Lesson 1-3-11: Electrical Drawings and Diagrams

Lesson 1-3-12: Civil Drawings

Lesson 1-3-13: Reading Maps, Plans and Profiles

Lesson 1-3-14: Staking Sheets and Stakes

Lesson 1-3-15: Introduction to Measuring and Leveling Devices

Workbook 3 Quiz

Mid-term Exam

Lesson 1-4-1: How to Solve Basic Algebraic Equations

Lesson 1-4-2: The Electrical Circuit and Ohm's Law

Lesson 1-4-3: Solving Power Calculations

Lesson 1-4-4: Use and Operation of Blocks

Lesson 1-4-5: Slings and Chokers

Lesson 1-4-6: Rigging Tools and Rigging Equipment

Lesson 1-4-7: Guy Types, Guy Strength and Sizes

Lesson 1-4-8: Guy Installation

Lesson 1-4-9: Anchors

Lesson 1-4-10: Line Conductors

Lesson 1-4-11: Crossarms and Attachments

Lesson 1-4-12: Insulators

Lesson 1-4-13: Resistance in Series Circuits

Lesson 1-4-14: Current in Series Circuits

Lesson 1-4-15: Voltage in Series Circuits

Lesson 1-4-16: Power in Series Circuits

Workbook 4 Quiz

Lesson 1-5-1: Mathematics for Parallel Circuits

Lesson 1-5-2: How Voltage Functions in a DC Parallel Circuit

Lesson 1-5-3: Resistance in a DC Parallel Circuit

Lesson 1-5-4: How Current Reacts in a DC Parallel Circuit

Lesson 1-5-5: How to Calculate Power in a DC Parallel Circuit

Lesson 1-5-6: The Principles of Magnetism

Lesson 1-5-7: Magnetic Induction

Lesson 1-5-8: Working with Ratios and Proportion

Lesson 1-5-9: The Electric System

Lesson 1-5-10: Wire Sizes, Types, and Characteristics

Lesson 1-5-11: Stringing Wire

Lesson 1-5-12: Sagging and Tying in Conductors

Lesson 1-5-13: Connecting an Overhead Service

Lesson 1-5-14: Insulate and Isolate ***

Lesson 1-5-15: Insulated Platforms and the Second Point of Contact ***

Lesson 1-5-16: Good Housekeeping

Workbook 5 Quiz

Lesson 1-6-1: Understanding Resistance in DC Combination Circuits

Lesson 1-6-2: How Current Reacts in Combination Circuits

Lesson 1-6-3: How Voltage Functions in DC Combination Circuits

Lesson 1-6-4: How to Calculate Power in DC Combination Circuits

Lesson 1-6-5: Two-Way Radios – Proper Use Procedures

Lesson 1-6-6: Underground Systems

Lesson 1-6-7: Excavation and Shoring

Lesson 1-6-8: Laying Conduit

Lesson 1-6-9: Manholes and Handholes

Lesson 1-6-10: Cable Types

Lesson 1-6-11: Pulling Cables

Lesson 1-6-12: Planning and Design for Underground Systems

Lesson 1-6-13: Baskets, Aerial Lifts, and Platforms ***

Lesson 1-6-14: Grounding and Protective Grounds

Lesson 1-6-15: Taking A Line Out of Service

Lesson 1-6-16: Lockout/Tagout Line Applications

Workbook 6 Quiz

Final Exam

Element/Course: Year 2	Planned Hours: 64
Mode of Instruction (check all that apply)	

Provided by: AVISTA Corporation

Year 2 Electrical Training Alliance Outside Lineman (online workbooks 1-6)

Lesson 2-1-1: This is a National Program

Lesson 2-1-2: Becoming Familiar with the IBEW Constitution

Lesson 2-1-3: Parliamentary Procedure and How It Works

Lesson 2-1-4: Understanding Local Union Bylaws

Lesson 2-1-5: Professional Personal Conduct

Lesson 2-1-6: Absenteeism

Lesson 2-1-7: Working Outdoors

Lesson 2-1-8: Emergency Response

Lesson 2-1-9: Introduction to 1910.269, Electric Power Generation, Transmission, and Distribution

Lesson 2-1-10: Reviewing the Applications of DC Theory

Lesson 2-1-11: Comparing Direct Current to Alternating Current

Lesson 2-1-12: Fundamentals of Alternating Current

Lesson 2-1-13: An Introduction to 3-Phase Systems

Lesson 2-1-14: Understanding How the DC Generator Works

Lesson 2-1-15: Understanding the Design and Function of AC Generators

Workbook 1 Quiz

Lesson 2-2-1: Introduction to Test Instruments

Lesson 2-2-2: General Use Test Instruments

Lesson 2-2-3: Introduction to Transformers

Lesson 2-2-4: Transformer Construction

Lesson 2-2-5: Transformer Information Characteristics

Lesson 2-2-6: Transformer Operation

Lesson 2-2-7: Transformer Polarity/Connections

Lesson 2-2-8: Tap Changers and Tap Changer Operation

Lesson 2-2-9: Transformer: Completely Self-Protected

Lesson 2-2-10: Installing Transformers

Lesson 2-2-11: Single-Phase Transformer Connections

Lesson 2-2-12: Transformer Protection

Lesson 2-2-13: Conducting Transformer Load Checks

Lesson 2-2-14: Specific Hazards Working with Transformers

Lesson 2-2-15: Vectors

Workbook 2 Quiz

Lesson 2-3-1: The Customary and Metric Systems of Measurement

Lesson 2-3-2: The Circle

Lesson 2-3-3: Area and Volume

Lesson 2-3-4: Measuring and Drawing Angles

Lesson 2-3-5: Right Triangles

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Lesson 2-3-9: Symbols, Conventions and Abbreviations

Lesson 2-3-10: Electrical Drawings and Diagrams

Lesson 2-3-11: Civil Drawings

Lesson 2-3-12: Reading Maps, Plans and Profiles

Lesson 2-3-13: Staking Sheets and Stakes

Lesson 2-3-14: Introduction to Measuring and Leveling Devices

Workbook 3 Quiz

Mid-term Exam

Lesson 2-4-1: Introduction to Inductance

Lesson 2-4-2: Voltage Drop

Lesson 2-4-3: Metering

Lesson 2-4-4: Overvoltage Protection

Lesson 2-4-5: Fault Indicator

Lesson 2-4-6: Tower Footings

Lesson 2-4-7: Tower Erection ***

Lesson 2-4-8: Joining High-Line Conductors

Lesson 2-4-9: Sagging Conductors

Lesson 2-4-10: Dampers, Hold Down Weights, and Armor Rods

Lesson 2-4-11: Phasing and Tying in Circuits

Lesson 2-4-12: Overload Capabilities of Electrical Equipment

Lesson 2-4-13: Phase Sequence

Lesson 2-4-14: Back-feed

Lesson 2-4-15: Locating Faults and Restoring Service

Workbook 4 Quiz

Lesson 2-5-1: Introduction to Medium Voltage Cable Power Cable

Lesson 2-5-2: Cable Splicing I — Safety

Lesson 2-5-3: Cable Splicing II — Material and Tools

Lesson 2-5-4: Cable Splicing III — Cable Preparation

Lesson 2-5-5: Cable Splicing IV — Terminations

Lesson 2-5-6: Cable Splicing V — Splicing

Lesson 2-5-7: Cable Splicing VI — Elbows (Separable Connectors)

Lesson 2-5-8: Cable Splicing VII — Grounding Cables ***

Lesson 2-5-9: Cable Splicing VIII — Pulling Cables

Lesson 2-5-10: Test Instruments — How to Use a Megohmmeter

Lesson 2-5-11: Cable Splicing IX — Insulation Testing

Lesson 2-5-12: Cable Splicing X — Introduction to Cable Fault Locating

Lesson 2-5-13: Cable Splicing XI — Underground Troubleshooting

Lesson 2-5-14: Confined Spaces

Lesson 2-5-15: Cable Splicing XII — Manufacturers' Kits

Workbook 5 Quiz

Lesson 2-6-1: Mobile Cranes

Lesson 2-6-2: Boom Capacities and Load Charts

Lesson 2-6-3: Practical Applications — Rigging — Vectors

Lesson 2-6-4: Lifting and Digging Operations

Lesson 2-6-5: Traffic Signal Industry Overview

Lesson 2-6-6: Flagging, Signs, and Barricades — Part I

Lesson 2-6-7: Flagging, Signs, and Barricades — Part II

Lesson 2-6-8: Flagging, Signs, and Barricades — Part III

Lesson 2-6-9: Flagging, Signs, and Barricades — Part IV

Lesson 2-6-10: Introduction to the Manual on Uniform Traffic Control Devices

Lesson 2-6-11: Traffic Signal Hardware and Equipment

Lesson 2-6-12: Underground Installations — Caissons

Lesson 2-6-13: Introduction to Basic Signal Blueprints

Lesson 2-6-14: Introduction to Traffic Signal Cabinets and Equipment

Lesson 2-6-15: Phasing and Traffic Flow

Workbook 6 Quiz

Final Exam

Element/Course: Year 3	Planned Hours: 104
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Classroom 40% / Lab 40% / Online 20%	
Provided by: AVISTA Corporation	
Description of element/course:	
Year 3 Electrical Training Alliance Outside Lineman (online workbooks 1-6)	
Lesson 3-1-1: Almost a Journeyman	
Lesson 3-1-2: Pride in Your Industry	
Lesson 3-1-3: An Introduction to the COMET Program	
Lesson 3-1-4: Productivity	
Lesson 3-1-5: Distribution Circuits	
Lesson 3-1-6: Review of Alternating Current	
Lesson 3-1-7: Alternating Current Theory: Terms and Definitions	
Lesson 3-1-8: Inductance	
Lesson 3-1-9: Capacitors	
Lesson 3-1-10: Distribution Capacitors	
Lesson 3-1-11: Transformers—3-Phase Voltages	
Lesson 3-1-12: Transformers—3-Phase Connections	
Lesson 3-1-13: Transformers—Single-Phase Connections	
Lesson 3-1-14: Transformers—3-Phase Connections II	
Lesson 3-1-15: Troubleshooting 3-phase Banks	
Workbook 1 Quiz	
Lesson 3-2-1: Labor-Management Relations/LMCCs	
Lesson 3-2-2: PPG—Body Currents ***	
Lesson 3-2-3: PPG—Basic Electric Circuits ***	
Lesson 3-2-4: PPG—Grounding History ***	
Lesson 3-2-5: PPG—Equipotential Zone Grounding ***	

Lesson 3-2-6: PPG—Selection of Equipment ***

Lesson 3-2-7: PPG—Installation of Grounds ***

Lesson 3-2-8: PPG—Step and Touch Potential ***

Lesson 3-2-9: PPG—Induced Voltage and Multiple Grounds ***

Lesson 3-2-10: PPG—Truck Grounding ***

Lesson 3-2-11: PPG—Underground Distribution Grounding ***

Lesson 3-2-12: PPG—Grounding in Substations ***

Lesson 3-2-13: PPG—During Construction Activities ***

Lesson 3-2-14: Testing Ground (Earth) Resistance

Lesson 3-2-15: Lightning Protection

Workbook 2 Quiz

Lesson 3-3-1: Applying Rubber Protective Devices ***

Lesson 3-3-2: Live-Line Tools—Introduction, Identification, and Care ***

Lesson 3-3-3: Live-Line Tools—Using Hot Sticks ***

Lesson 3-3-4: Live-Line Tools—Maintenance with Hot Sticks III ***

Lesson 3-3-5: Live-Line Tools—Maintenance with Hot Sticks IV ***

Lesson 3-3-6: Live-Line Tools—Maintenance with Hot Sticks V ***

Lesson 3-3-7: Live-Line Tools—Maintenance with Hot Sticks VI ***

Lesson 3-3-8: Live-Line Tools—Maintenance with Hot Sticks VII ***

Lesson 3-3-9: Live-Line Work Practices—138-kV Insulator and Crossarm Changes ***

Lesson 3-3-10: Live-Line Work Practices—Insulator and Crossarm Changes ***

Lesson 3-3-11: Live-Line Work Practices—Tower Insulator Changes ***

Lesson 3-3-12: Live-Line Work Practices—Helicopter Timber Changes ***

Lesson 3-3-13: Live-Line Work Practices—Special Practices ***

Lesson 3-3-14: Primary Metering

Lesson 3-3-15: Single-Phase Revenue Metering

Workbook 3 Quiz

Mid-term Exam

Lesson 3-4-1: Introduction to Substations

Lesson 3-4-2: Substations—Safety Procedures

Lesson 3-4-3: Substation Construction—Safety and First Aid

Lesson 3-4-4: Substation Construction—Federal Regulations

Lesson 3-4-5: Substation Construction—Print Reading

Lesson 3-4-6: Substation Construction—Making Connections

Lesson 3-4-7: Substation Construction—Function and Types of Stations

Lesson 3-4-8: Substation Construction—Spill Prevention, Containment, and Countermeasure Plans

Lesson 3-4-9: Substation Construction—Foundations

Lesson 3-4-10: Substation Construction—Installing Grout

Lesson 3-4-11: Substation Construction—Underground Power Cables

Lesson 3-4-12: Substation Construction—Grounding/Ground Grids

Lesson 3-4-13: Substation Construction—Steel Superstructure Assembly

Lesson 3-4-14: Substation Construction—Installing Insulators

Lesson 3-4-15: Substation Construction—Installing Control Cables and Devices

Workbook 4 Quiz

Lesson 3-5-1: Primary Fusing/Fuse Principles

Lesson 3-5-2: Reclosers and Sectionalizers

Lesson 3-5-3: Substations—Equipment Identification

Lesson 3-5-4: Substations—Oil Circuit Breakers

Lesson 3-5-5: Substations—Batteries

Lesson 3-5-6: Substations—Oil Care and Filtering

Lesson 3-5-7: Substation—Air Switches

Lesson 3-5-8: Substations—Substation Control Equipment

Lesson 3-5-9: Fault Current

Lesson 3-5-10: Testing For Line Faults

Lesson 3-5-11: Voltage Regulators

Lesson 3-5-12: Step Regulators and Tap Changing

Lesson 3-5-13: Capacitors and Capacitor Switching

Lesson 3-5-14: Power Factor

Lesson 3-5-15: Power Harmonics

Workbook 5 Quiz

Lesson 3-6-1: The Economics of Unemployment

Lesson 3-6-2: Keys to Success—Motivation and Leadership

Lesson 3-6-3: The National Electrical Benefit Fund

Lesson 3-6-4: Introduction to Fiber Optics

Lesson 3-6-5: Fiber-Optic Network Installation

Lesson 3-6-6: Fiber-Optic Network Design

Lesson 3-6-7: Fiber-Optic Cable

Lesson 3-6-8: Alternative Energy Source—Wind

Lesson 3-6-9: Alternative Energy Source—Photovoltaics

Lesson 3-6-10: Extra High Voltage Lines

Lesson 3-6-11: After Apprenticeship

Lesson 3-6-12: Foremanship

Lesson 3-6-13: Soon to Be an Instructor

Lesson 3-6-14: Your Career—Journeyman Responsibilities

Workbook 6 Quiz

Final Exam

Element/Course: 1 st year Lineman Apprentice Climbing and Rigging	Planned Hours: 100
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input checked="" type="checkbox"/> Self-Study	
Classroom 15% / Lab 75% / Online 10%	
Provided by: Northwest Line Construction JATC	

Description of element/course:

Climbing

Rigging

Vectoring

Knots

Basic Electrical Theory

Element/Course: 2 nd year Lineman Apprentice: Transformers / Hotsticking	Planned Hours: 80
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input checked="" type="checkbox"/> Self-Study	
Classroom 15% / Lab 75% / Online 10%	
Provided by: AVISTA Corporation	

Description of element/course:

Transformer Theory

Vectoring Transformer Banks and Connections

Paralleling Transformers

Simulated Hot Work (120 volts)

Hot Sticks

Element/Course: 3 rd year Lineman Apprentice	Planned Hours: 40
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input checked="" type="checkbox"/> Self-Study	Classroom 15% / Lab 75% / Online 10%
Provided by: AVISTA Corporation	
Description of element/course:	
Energized Transmission Work	
Advanced Electrical Theory	
Mock Journeyman Exam	

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

Terry Lowen, Director

Title of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

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Title of Training Provider

Click or tap here to enter text.

Print Name Training Provider

Click or tap here to enter text.

Signature of Training Provider

Northwest Line Construction JATC

Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text.

Organization of Training Provider

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Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text.

For L&I Staff Use Only

RECEIVED 2/11/2025 SNYS

L&I Apprenticeship Consultant

Feri Gardner 8-14-25

L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Apprenticeship Related/Supplemental Instruction (RSI) Plan Review



Program Name Douglas County Public Utility District No. 1 Apprenticeship Committee	
Occupation Wireman	
Term/OJT Hours 6000 hours.	Total RSI Hours 432
Training Provider Chelan County Public Utility District No. 1 Apprenticeship Committee	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

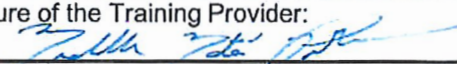
1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
 - a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

<input checked="" type="checkbox"/> Chair <input type="checkbox"/> Authorized Signer	Date 1/28/25	<input checked="" type="checkbox"/> Secretary	Date 1/28/25
Print Name: Chance Landon		Print Name: Tom Goodwin	
Signature: 		Signature: 	

Training Provider Signature

Approved By (Print Name): Natá Pulver	Title: Chelan PUD JATC Training Director/Coordinator
Signature of the Training Provider: 	
Date: 2-10-25	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
<input type="checkbox"/> SBCTC recommends approval <input type="checkbox"/> SBCTC recommends return to sponsor	

Program Name Douglas County Public Utility District No. 1 Apprenticeship Committee	Occupational Objective Wireman
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Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

- ☒ 12-month period from date of registration.
☐ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Element/Course: Year 1	Planned Hours: 144
Mode of Instruction (check all that apply) Classroom 50% / Lab 40% / Online 10%	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Chelan County Public Utility District No. 1 Apprenticeship Committee	
Description of element/course: Year 1 Electrical Training Alliance Substation Wireman (online workbooks 1-6) & Delmar's Standard Textbook of Electricity Lesson 1-1-1: How to Study this Course and Achieve Your Personal Goals Lesson 1-1-2: Knowing Your Apprenticeship and Your Responsibilities Lesson 1-1-3: The Attributes of an IBEW/NECA Apprenticeship Lesson 1-1-4: Your Job and the Future It Holds for You Lesson 1-1-5: Sexual Harassment Lesson 1-1-6: The IBEW and Its History Lesson 1-1-7: NECA's Structure and Heritage Lesson 1-1-8: Avoiding the Hazards of Drug Abuse Lesson 1-1-9: This is a National Program Lesson 1-1-10: Becoming Familiar with the IBEW Constitution Lesson 1-1-11: Professional Personal Conduct Lesson 1-1-12: Absenteeism Workbook 1 Quiz Lesson 1-2-1: Math Basics with Whole Numbers Lesson 1-2-2: Fractions Lesson 1-2-3 Decimals Lesson 1-2-4: Percentages	

Lesson 1-2-5: How to Solve Basic Algebraic Equations

Lesson 1-2-6: Working with Ratios and Proportion

Lesson 1-2-7: Working with Prefixes and Powers of 10

Lesson 1-2-8: The Customary and Metric Systems of Measurement

Lesson 1-2-9: The Circle

Lesson 1-2-10: Area and Volume

Lesson 1-2-11: Current, Voltage and Resistance in a Circuit

Lesson 1-2-12: The Electrical Circuit and Ohm's Law

Lesson 1-2-13: Power in a Circuit

Lesson 1-2-14: What is Electricity

Workbook 2 Quiz

Lesson 1-3-1: Electrical Energy Sources

Lesson 1-3-2: Electrical Switches

Lesson 1-3-3: Conductors, Conductor Resistance and Wattage Loss

Lesson 1-3-4: Introduction to Electrical Devices

Lesson 1-3-5: The Series Circuit

Lesson 1-3-6: Understanding and Calculating Resistance in DC Series DC Circuits

Lesson 1-3-7: How Current Reacts in DC Series Circuits

Lesson 1-3-8: Voltage in Series Circuits

Lesson 1-3-9: How to Calculate Power in DC Series Circuits

Lesson 1-3-10: How Current Reacts in a DC Parallel Circuit

Lesson 1-3-11: Understanding Resistance in DC Parallel Circuits

Lesson 1-3-12: How Voltage Functions in a DC Parallel Circuit

Lesson 1-3-13: How to Calculate Power in a DC Parallel Circuit

Lesson 1-3-14: The Principles of Magnetism

Workbook 3 Quiz

Midterm Exam

Lesson 1-4-1: Introduction to OSHA

Lesson 1-4-2: Responsibility for Safety

Lesson 1-4-3: Personal Protective Equipment

Lesson 1-4-4: Electrical Awareness

Lesson 1-4-5: Energized and Non-Energized Parks

Lesson 1-4-6: Substation Construction-Safety and First Aid

Lesson 1-4-7: Live-Line Tools-Introduction, Identification and Care

Lesson 1-4-8: Fall Protection

Lesson 1-4-9: Baskets, Aerial Lifts and Platforms

Lesson 1-4-10: Substation Structure and Rescue

Lesson 1-4-11: Bucket Rescue

Lesson 1-4-12: Personal Protective Grounding-Grounding in Substations

Lesson 1-4-13: Grounding and Protective Grounds

Lesson 1-4-14: Working Outdoors

Workbook 4 Quiz

Lesson 1-5-1: Identify Some Basic Tools of the Trade

Lesson 1-5-2: Use and Care of Hand Tools

Lesson 1-5-3: Protective Line Devices, Care and Use

Lesson 1-5-4: Good Housekeeping

Lesson 1-5-5: Powered Equipment Safety-Compressors and Portable Generators

Lesson 1-5-6: Powered Equipment Safety-Underground

Lesson 1-5-7: Digging Holes and Trenches

Lesson 1-5-8: Ladders/Step Bolts

Lesson 1-5-9: Ropes, Knots, Hitches and Splices

Lesson 1-5-10: Use and Operation of Blocks

Lesson 1-5-11: Slings and Chokers

Lesson 1-5-12: Rigging Tools and Rigging Equipment

Lesson 1-5-13: Powered Equipment Safety-Digger Derricks

Lesson 1-5-14: Hand Signals

Workbook 5 Quiz

Lesson 1-6-1: The Electric System

Lesson 1-6-2: Introduction to Substations

Lesson 1-6-3: Substation Construction-Foundations

Lesson 1-6-4: Working in Excavations and Trenches

Lesson 1-6-5: Excavating the Trench

Lesson 1-6-6: Laying Conduit/Building Duct Banks

Lesson 1-6-7: Manholes and Handholes

Lesson 1-6-8: Trench Encasements, Backfill and Compaction

Lesson 1-6-9: Cable Types

Lesson 1-6-10: Substation Construction-Underground Power Cables

Lesson 1-6-11: Pulling Cables

Lesson 1-6-12: Installing Cable in an Underground Vault/Manhole

Lesson 1-6-13: Substation Construction-Ground Grids

Lesson 1-6-14: Exothermic Welding

Workbook 6 Quiz

Final Exam

Element/Course: Year 2	Planned Hours: 144
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Classroom 50% / Lab 40% / Online 10%	
Provided by: Chelan County Public Utility District No. 1 Apprenticeship Committee	
Description of element/course: Year 2 Electrical Training Alliance Substation Wireman (online workbooks 1-6) & Delmar's Standard Textbook of Electricity Lesson 2-1-1: Symbols, Conventions and Abbreviations Lesson 2-1-2: Scaling and Dimensioning Drawings Lesson 2-1-3 Single-Line Drawings Lesson 2-1-4: Schematic Diagrams Lesson 2-1-5: Electrical Drawings and Diagrams Lesson 2-1-6: Introduction to Blueprints and Specifications	

Lesson 2-1-7: Civil Drawings

Lesson 2-1-8: Steel Erection Drawings

Lesson 2-1-9: Introduction to Measuring and Leveling Devices

Lesson 2-1-10: Measuring and Drawing Angles

Lesson 2-1-11: Right Triangles

Workbook 1 Quiz

Lesson 2-2-1: Site Layout and Preparation

Lesson 2-2-2: Equipment Foundations

Lesson 2-2-3 Substation Construction-Spill Prevention, Containment and Countermeasure Plans

Lesson 2-2-4: Substation Construction-Grounding/Ground Grids

Lesson 2-2-5: Type of Ground Connectors

Lesson 2-2-6: Boom Capacities and Load Charts

Lesson 2-2-7: Insulated Platforms and the Second Point of Contact

Lesson 2-2-8: Superstructure Assembly and Erection Part 1

Lesson 2-2-9: Superstructure Assembly and Erection Part 2

Lesson 2-2-10: Insulators

Lesson 2-2-11: Bus/Jumpers-Types

Lesson 2-2-12: Bus/Jumpers-Proper Handling, Installations

Lesson 2-2-11: Wire Bus Type

Workbook 2 Quiz

Lesson 2-3-1: Substation Equipment Overview

Lesson 2-3-2: Substations-Equipment Identification

Lesson 2-3-3: Power Transformers

Lesson 2-3-4: Substation-Air Switches

Lesson 2-3-5: Voltage Regulators

Lesson 2-3-6: Capacitors

Lesson 2-3-7: Reactors

Lesson 2-3-8: Rectifiers

Lesson 2-3-9: Protective Equipment

Lesson 2-3-10: Lightning Protection

Workbook 3 Quiz

Midterm Exam

Lesson 2-4-1: Reviewing the Applications of DC Theory

Lesson 2-4-2: Understanding Resistance in DC Combination Circuits

Lesson 2-4-3: How Current Reacts in Combination Circuits

Lesson 2-4-4: How Voltage Functions in DC Combination Circuits

Lesson 2-4-5: How to Calculate Power in DC Combination Circuits

Lesson 2-4-6: Comparing Direct Current to Alternating Current

Lesson 2-4-7: Fundamentals of AC

Lesson 2-4-8: Intro to 3 Phase Systems

Lesson 2-4-9: Understanding How the DC Generator Works

Lesson 2-4-10: Understanding the Design and Function of AC Generators

Lesson 2-4-11: Intro to Inductance

Lesson 2-4-12: Voltage Drop

Workbook 4 Quiz

Lesson 2-5-1: Safety Awareness-On the Job

Lesson 2-5-2: Lockout/Tagout-Substation Applications

Lesson 2-5-3: Introduction to Transformers

Lesson 2-5-4: Transformer Construction

Lesson 2-5-5: Transformer Information Characteristics

Lesson 2-5-6: Vectors

Lesson 2-5-7: Transformer Operation

Lesson 2-5-8: Transformer Polarity/Connections

Lesson 2-5-9: Tap Changers and Tap Changer Operation

Lesson 2-5-10: Installing Transformers

Lesson 2-5-11: Single-Phase Transformer Connections

Lesson 2-5-12: Transformer Protection

Lesson 2-5-13: Introduction to Test Instruments

Lesson 2-5-14: General Use Test Instruments

Workbook 5 Quiz

Lesson 2-6-1: Conducting Transformer Load Checks

Lesson 2-6-2: Transformers-3 Phase Connections

Lesson 2-6-3: Transformer-3 Phase Voltages

Lesson 2-6-4: Specific Hazards Working with Transformers

Lesson 2-6-5: Ferroresonance

Lesson 2-6-6: PPG-Grounding in Substations

Lesson 2-6-7: PPG-Step and Touch Potential

Lesson 2-6-8: PPG-Equipotential Zone Grounding

Lesson 2-6-9: Testing Ground (Earth) Resistance

Lesson 2-6-10: Substation Inspection

Lesson 2-6-11: Substation CT's, VT's and PT's

Lesson 2-6-12: Power Factor

Lesson 2-6-13: Power Harmonics

Workbook 6 Quiz

Final Exam

Element/Course: Year 3	Planned Hours: 144
Mode of Instruction (check all that apply) Classroom 50% / Lab 40% / Online 10%	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Chelan County Public Utility District No 1 Apprenticeship Committee	
Description of element/course: Year 3 Electrical Training Alliance Substation Wireman (online workbooks 1-6) & Delmar's Standard Textbook of Electricity	
Lesson 3-1-1: Almost a Journeyman	
Lesson 3-1-2: Pride in Your Industry	
Lesson 3-1-3 Understanding Local Union Bylaws	
Lesson 3-1-4: Parliamentary Procedure and How it Works	
Lesson 3-1-5: An Introduction to the COMET Program	

Lesson 3-1-6: The National Electrical Benefit Fund

Lesson 3-1-7: Productivity

Lesson 3-1-8: Hazards of Cell Phone Use in the Workplace

Lesson 3-1-9: Labor-Management Relations/LMCC's

Lesson 3-1-10: The Economics of Unemployment

Lesson 3-1-11: Keys to Success-Motivation and Leadership

Lesson 3-1-12: After Apprenticeship

Lesson 3-1-13: Foremanship

Lesson 3-1-14: Soon to Be an Instructor

Lesson 3-1-15: Your Career-Journeyman Responsibilities

Workbook 1 Quiz

Lesson 3-2-1: OSHA 1910.269(u)

Lesson 3-2-2: Arc Flash Compliance

Lesson 3-2-3 Temporary Grounding for Substations

Lesson 3-2-4: PPG-Inducted Voltage and Multiple Grounds

Lesson 3-2-5: Selection of Equipment and Installation of Grounds

Lesson 3-2-6: Vehicle Grounding

Lesson 3-2-7: Applying Rubber Protective Devices

Lesson 3-2-8: PPG-Body Currents

Lesson 3-2-9: Live-Line Tools-Using Hot Sticks

Lesson 3-2-10: Power Quality

Lesson 3-2-11: Substation Voltages

Lesson 3-2-12: Distribution Circuits Overview

Lesson 3-2-13: Substations-Operation and Maintenance

Lesson 3-2-14: Safety in Substations and Switchyards

Workbook 2 Quiz

Lesson 3-3-1: Cable Splicing-Safety

Lesson 3-3-2: Cable Splicing-Material and Tools

Lesson 3-3-3: Cable Splicing-Cable Preparation

Lesson 3-3-4: Cable Splicing-Terminations

Lesson 3-3-5: Cable Splicing-Splicing

Lesson 3-3-6: Cable Splicing-Elbows (Separable Connectors)

Lesson 3-3-7: Cable Splicing-Grounding Cables

Lesson 3-3-8: Cable Splicing-Insulation Testing

Lesson 3-3-9: Cable Splicing-Introduction to Cable Fault Locating

Lesson 3-3-10: Cable Splicing-Underground Troubleshooting

Lesson 3-3-11: Cable Splicing-Manufacturer's Kits

Lesson 3-3-12: Introduction to Fiber Optics

Lesson 3-3-13: Optical Fiber

Lesson 3-3-14: Connectors and Splices

Workbook 3 Quiz

Midterm Exam

Lesson 3-4-1: Power Transformer Principles

Lesson 3-4-2: Power Transformers-Inspection and Tests

Lesson 3-4-3: Power Transformers-Tap Changers and Turns Ratio Testing

Lesson 3-4-4: Transformer Oil Quality/Oil Filtration

Lesson 3-4-5: DC High Potential Testing (Hi-Pot)

Lesson 3-4-6: Insulation Power Factor Test

Lesson 3-4-7: Insulation Resistance Test

Lesson 3-4-8: Power Transformer Temperature Indicator Testing

Lesson 3-4-9: Power Transformer Pressure Relay Testing

Lesson 3-4-10: SF6 Gas-Properties

Lesson 3-4-11: SF6 Gas-Handling

Lesson 3-4-12: Vacuum Bottle Hi-Pot Testing

Lesson 3-4-13: Oil Containment

Lesson 3-4-14-Temporary Substations-Mobile Units

Workbook 4 Quiz

Lesson 3-5-1: Circuit Breaker Operation

Lesson 3-5-2: Circuit Breaker Maintenance

Lesson 3-5-3: New Circuit Breaker Inspections and Tests

Lesson 3-5-4: Circuit Breaker Time-Travel Characteristics

Lesson 3-5-5: Circuit Breaker Time-Travel Testing and Analysis

Lesson 3-5-6: Contact Resistance Testing

Lesson 3-5-7: Capacitors and Reactors

Lesson 3-5-8: Capacitor Bank Maintenance and Testing

Lesson 3-5-9: Voltage Regulators

Lesson 3-5-10: Bus Configurations

Lesson 3-5-11: Bus Connections

Lesson 3-5-12: Bus Welding

Lesson 3-5-13: Infrared Thermography

Lesson 3-5-14: Raptor Protection and Animal Guards

Lesson 3-5-15: Alternative Energy Sources

Workbook 5 Quiz

Lesson 3-6-1: Substation Control Rooms

Lesson 3-6-2: Protective Relays

Lesson 3-6-3: Protective Relays and Transmission Systems

Lesson 3-6-4: Control Equipment

Lesson 3-6-5: Power Line Carrier

Lesson 3-6-6: Supervisory Control and Data Acquisition

Lesson 3-6-7: Short Circuit Analysis-Testing for Distribution Line Faults

Lesson 3-6-8: Metering

Lesson 3-6-9: AC/DC Generators

Lesson 3-6-10: UPS-Uninterruptible Power Supplies

Lesson 3-6-11: Substations-Batteries

Lesson 3-6-12: Substation Battery Testing

Lesson 3-6-13: Substation Battery Chargers

Lesson 3-6-14: Substation, Cell and Charger Replacement

Lesson 3-6-15: Commissioning a Substation

Workbook 6 Quiz

Final Exam

Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

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Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



**Apprenticeship
Related/Supplemental
Instruction (RSI) Plan Review**

For L&I Staff Use Only	
RECEIVED 2/11/2025 SNYS L&I Apprenticeship Consultant	<i>Teri Gardner 8-14-25</i> L&I Admin



Program Name Douglas County Public Utility District No. 1 Apprenticeship Committee	
Occupation Meterman	
Term/OJT Hours 6000 hours/36 months	Total RSI Hours 432
Training Provider National Metering and Technical Services, LLC	

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprentice and assures that:

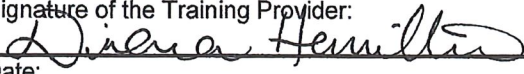
1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliances with WISHA and applicable federal and state regulations.
4. The RSI Plan is maintained, updated and submitted to the Department a minimum of once every 5 years (WSATC Policy 2015-01; rev, 10-21-21).
5. The RSI will be conducted by instructors who meet the qualification of the "competent instructor" as described in WAC 296-05-003:
 - a. Has demonstrated a satisfactory employment performance in her/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
 - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
 - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
6. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, instruction shall be clearly defined.

Signatures on next page

Form must be signed by Committee Chair and Secretary or Program's Authorized Signer

<input checked="" type="checkbox"/> Chair <input type="checkbox"/> Authorized Signer	Date	<input checked="" type="checkbox"/> Secretary	Date
Print Name: Chance Landon		Print Name: Tom Goodwin	
Signature: 		Signature: 	

Training Provider Signature

Approved By (Print Name): Diana Hamilton	Title: Mangager
Signature of the Training Provider: 	
Date: 01/31/2025	

If additional training providers are needed, go to page 4.

SBCTC

Print Name:	Title:
Signature of the Program Administrator:	
Date:	
<input type="checkbox"/> SBCTC recommends approval <input type="checkbox"/> SBCTC recommends return to sponsor	

Program Name Douglas County Public Utility District No. 1 Apprenticeship Committee	Occupational Objective Meterman
--	------------------------------------

Note: The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of Element/Course" field.

Describe minimum hours of study per year in terms of (check one):

- ☒ 12-month period from date of registration.
☐ Defined 12-month school year.
☐ 2,000 hours of on-the-job training.

Element/Course: Year 1	Planned Hours: 144
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Classroom 60% / Lab 40%	
Provided by: National Metering and Technical Services, LLC	
Description of element/course:	
1. Introduction to Metering	NUS Book and Video
2. Basic Parts of Meter	Practical
3. AC Concepts (inductance/reactance, resistive circuits, phasor diagrams, power usage, etc.)	NUS Book and Video, Labs and Practical
4. Principles of Magnetism	NUS Book and Video
5. Math for Metering 1 (powers, trigonometry, power triangle)	NUS Book and Video and Practical
6. Math for Metering 2 (sine, cosine, tangents, power factor, sine waves)	NUS Book and Video
7. Safety in Meter Work (meter socket checks, diversion)	NUS Book and Video Labs and Practical
8. Transformer Board (delta, wye, buck and boost, phasing)	Labs and Practical
9. Watthour Meter Principles 1 (eddy currents, fluxes and meter coils)	NUS Book and Video, Labs and Practical
10. Watthour Meter Principles 2	NUS Book and Video
11. Meter Wiring (Form specified)	Practical and Labs
12. Meter Troubleshooting	Practical and Labs

13. Principles of Accuracy Testing (load box, standards, portable equipment)	NUS Book and Video, Labs and Practical
14. Instrument Transformers (Burdens, VA, current and potential)	NUS Book and Video, Labs and Practical
15. Introduction to Polyphase Systems	Practical

Element/Course: Year 2	Planned Hours: 144
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Classroom 60% / Lab 40%	
Provided by: National Metering and Technical Services, LLC	
Description of element/course:	
1. Review of Electrical Concepts	Delmar and Practical
2. Polyphaser System Voltages	Delmar & Transformer Board
3. Principles of Accuracy Testing	NUS Book and Video
4. Watthour Meter Testing 1	NUS Book and Video
5. Watthour Meter Testing	NUS Book and Video
6. Testing Transformer Rated Meters	NUS Book/Video/Practical
7. Polyphase Systems 1	NUS Book/Video/Delmar
8. Polyphase Systems 2	NUS Book/Video/Delmar
9. Meter Troubleshooting	Practical and Labs
10. Wiring Forms 3-Phase	Meterman Handbook/Diagrams
11. Self-Contained Polyphase Meter Test	NUS Book/Video/Practical
12. Polyphase Transformer Rated	NUS Book and Video
13. Installation Checks and Inspections	NUS Book and Video
14. Customer Relations and High Bill Complains	NUS Book and Video

15. Energy Diversion

NUS Book and Video

Element/Course: Year 3	Planned Hours: 144
Mode of Instruction (check all that apply)	
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Classroom 60% / Lab 40%	
Provided by: National Metering and Technical Services, LLC	
Description of element/course:	
1. Demand Metering Concepts	NUS Book & Video, Meter Handbook
2. Testing & Calibrating Demand Meters	NUS Book & Video, Meter Handbook
3. Reactive Metering Concepts	NUS Book & Video, Meter Handbook
4. Troubleshooting Techniques	NUS Book & Video
5. Introduction to Harmonics	Fluke Tapes, Meter Handbook
6. Distortion Power Factors	Meter Handbook
7. Totalization Metering	Practical & Labs
8. Relay Concepts	Practical & Labs
9. Substation System Simulation	Practical & Labs
10. Automatic Meter Reading	Practical & Labs
11. Electronic Fundamentals	Electronic Book
12. Logic Diagrams	Electronic Book
13. Future of Metering	Practical

Additional Training Providers (if necessary)

Click or tap here to enter text.

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Signature of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Signature of Training Provider

Click or tap here to enter text.

Organization of Training Provider

Commissioners:
RONALD E. SKAGEN
MOLLY SIMPSON
AARON J. VIEBROCK

General Manager:
GARY R. IVORY



Public Utility District

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Teri Gardner 8-14-25
No. 1 of Douglas County


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Committee Selection Process


The Distribution Operations department at Douglas County PUD works together to establish a fair, equitable and transparent recruitment process. An individual from each department volunteered to represent their group.

We had four Employee Representatives and four Employer Representatives volunteer, to compose our Committee.

At our first Apprenticeship Committee meeting, we established our Chairman and Secretary. We discussed our State Apprenticeship Standard Material.



Chair, Chance Landon



Secretary, Tom Goodwin

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L&I Apprenticeship Consultant

Teri Gardner 8-14-25
L&I Admin

Department of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530



Apprenticeship Committee Representative Qualifications

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name of Program

DOUGLAS COUNTY PUBLIC UTILITY DISTRICT NO. 1

Committee Representative Name
Tim B. BeckCommittee Representative Signature
☒ Employer Representative ☐ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Superintendent	Douglas County PUD	08/1991	current
App. Lineman	Orcas Power and Light	1989	1991
Lineman	Heatly Line Construction	1988	1989

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
State Approved Apprenticeship	07/91	Rural Lite	Certification
Bismark State College	1988-1991	Lineman School	Degree

Other Technical Certifications or Licenses Held

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Olympia WA 98504-4530



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Name of Program

DOUGLAS COUNTY PUBLIC UTILITY DISTRICT NO. 1

Committee Representative Name
Shauna Cenotto

Committee Representative Signature

☒ Employer Representative ☐ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
HR Administratr	Douglas County PUD	4/2020	Current
Advanceme Dir.	The River Academy	7/2017	4/2020
Real Estate	Laura Mounter Real Estate	4/2013	7/2017
HR Generalist	Chelan County PUD	7/2001	9/2009

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
Central WA University	1999	Business/Human Resources	BSBA

Other Technical Certifications or Licenses Held

Senior Professional Human Resources

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Apprenticeship Committee Representative Qualifications

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Name of Program

Douglas County Public Utility District NO. 1 Apprenticeship Committee

Committee Representative Name
Brent Darnell

Committee Representative Signature

☐ Employer Representative ☒ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Meterman	Douglas County PUD	01/24	Present
Assi. Sys. Oper	Douglas County PUD	12/18	01/24
Meterman	Douglas County PUD	10/02	12/18
Dist. Helper	Douglas County PUD	05/00	10/01
Warehouseman	Douglas County PUD	06/99	5/00
Meter Reader	Douglas County PUD	11/98	06/99

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
NWTT Apprentice Meterman	10/04	Electrical Meters	Jo.Meterman
Northwest Nazarene University	06/98	Political Science	BA
Wenatchee Valley College	06/96	General	AA

Other Technical Certifications or Licenses Held

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Apprenticeship Committee Representative Qualifications

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Name of Program

Douglas County Public Utility District NO. 1 Apprenticeship Committee

Committee Representative Name
Tom Goodwin

Committee Representative Signature
Tom Goodwin

☒ Employer Representative ☐ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Assistant Super	Douglas County Pud	12/1/24	Current
Networks Forma	Douglas County Pud	5/30/22	11/30/24
Networks Linem	Douglas County Pud	5/15/09	5/30/22
Journey Linema	Douglas County Pud	2004	2009
App Lineman	Douglas County Pud	2002	2004
App Lineman	NWJATC	2000	2002

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
Northwest Line Construction JATC	5/04	Line Construction Maintenance	Journeyman

Other Technical Certifications or Licenses Held

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PO Box 44530
Olympia WA 98504-4530



Apprenticeship Committee Representative Qualifications

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Name of Program

DOUGLAS COUNTY PUBLIC UTILITY DISTRICT NO. 1

Committee Representative Name
Chance LandonCommittee Representative Signature
[Signature]☐ Employer Representative ☒ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Jrny Lineman	Douglas County PUD	09/13	current
Line Apprentice	Southwest JATC	05/10	09/13

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
Southwest JATC	09/13	Electrical (line trade)	certification
Avista Line School/Spokane Comm. Coll.	04/09	Electrical (line trade)	certification
Energy Technology/WVC	06/08	Electrical	certification

Other Technical Certifications or Licenses Held

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Apprenticeship Section
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Olympia WA 98504-4530



Apprenticeship Committee Representative Qualifications

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Name of Program

Douglas County Public Utility District NO. 1 Apprenticeship Committee

Committee Representative Name
Lance Manning

Committee Representative Signature

☐ Employer Representative ☒ Employee Representative (Does not have the authority to hire or fire)

Work Experience

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Line Foreman 2	Douglas County PUD	12/2019	Present
Line Foreman	Douglas County PUD	10/2017	12/2019
Lineman	Douglas County PUD	6/2007	10/2017
App. Lineman	Douglas County PUD	2/2004	6/2007

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
NW Line JATC	06/2007	Journey Lineman Certificate	
Avista Lineman School	01/2001	Electrical Lineman Program	AS

Other Technical Certifications or Licenses Held

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L&I Apprenticeship Consultant*Teri Gardner 8-14-25*
L&I AdminDepartment of Labor and Industries
Apprenticeship Section
PO Box 44530
Olympia WA 98504-4530**Apprenticeship Committee
Representative Qualifications**

The Apprenticeship Committee is responsible for the day-to-day operations of the apprenticeship and training program and operating the program consistent with the standards of apprenticeship. Pursuant to WAC 296-05-009, the Representative listed below shall be familiar with the applicable apprenticeship standards.

Name of Program
DOUGLAS COUNTY PUBLIC UTILITY DISTRICT NO. 1Committee Representative Name
Casey Stump

Committee Representative Signature

Casey Stump☐ Employer Representative ☒ Employee Representative (Does not have the authority to hire or fire)**Work Experience**

Position (most recent first)	Employer / Organization	From (mm/yy)	To (mm/yy)
Wireman	Douglas County PUD	08/17	Present
Apprentice	Douglas County PUD	07/14	08/17

Education History

Name of Training and/or School (most recent first)	Completed Date (mm/yy)	Program of Study	Degree or Certification
NJATC/ Chelan PUD Yrs 1-3	07/17	Substation Tech/Wireman	Journeyman

Other Technical Certifications or Licenses Held

Commissioners:
RONALD E. SKAGEN
MOLLY SIMPSON
AARON J. VIEBROCK



General Manager:
GARY R. IVORY

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January 30, 2025

RE: Douglas PUD Apprenticeship program sustainability statement

To whom it may concern,

Public Utility District No.1 of Douglas County supports and funds the Douglas County PUD Apprenticeship program through wages, training, tuition and meeting expenses.

Please feel free to reach out should any questions arise.

Thank you,

Chance Landon
Program Chair

Tom Goodwin
Program Secretary