



Cost-Benefit Analysis

Electrical Safety Standards, Administration, and Installation, Chapter 296-46B WAC

July 2019

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Introduction

Administrative Procedure Act Requirements

The Administrative Procedure Act (APA) requires that, before adopting a significant legislative rule, the Department of Labor & Industries (department) must analyze the probable costs and benefits of the rule, and determine that the benefits are greater than its costs, taking into account both the qualitative and quantitative benefits and costs.” [RCW 34.05.328(1)(d)]

RCW 34.05.328(5)(c)(iii) defines a "significant legislative rule" as a rule, other than a procedural or interpretive rule, that:

- Adopts substantive provisions of law pursuant to delegated legislative authority, the violation of which subjects a violator of such rule to a penalty or sanction;
- Establishes, alters, or revokes any qualification or standard for the issuance, suspension, or revocation of a license or permit; or
- Adopts a new, or makes significant amendments to, a policy or regulatory program.

Under certain circumstances, a rule or rule component is exempt from this requirement.

Adopted Rules

The department initiated rulemaking on September 4, 2019, to revise Washington Administrative Code (WAC) 296-46B – Electrical Safety Standards, Administration, and Installation rules to align them with 2018’s Engrossed Substitute House Bill 1952 regarding an appeal process to the electrical board for decisions issued by a city, make housekeeping changes, adopt the 2020 National Electrical Code (NEC) to be effective (tentatively) July 1, 2020, and accept proposals from stakeholders. Stakeholder in the electrical industry were invited to submit proposals for additions and/or revisions to WAC 296-46B.

The department established a Technical Advisory Committee (TAC) of industry representatives to give input regarding the department and stakeholder proposals. Based on TAC input and further consideration by the department, a first draft of the proposed rules were reviewed by the Electrical Board at their meeting, Thursday, January 31 in Tacoma. Based on the Electrical Board’s input, the department finalized the proposed rules.

Probable Costs and Benefits of the Adopted Rule

Most of the adopted amendments are not significant legislative rules and are exempt from the cost-benefit analysis requirement. The adopted rules considered significant legislative rules are as follows:

WAC 296-46B-215(1), Wiring and protection – Feeders, 002 Minimum rating and size

- Rule Overview

Add new language specific to other than one- or two-family dwelling feeders rated up to 400 amperes, requiring an identification plate if the feeder conductors have a lesser ampacity than the equipment rating that they terminate in or on.

- Rule Cost/Benefit Analysis

Cost of one identification plate is estimated at \$20 on each feeder that qualifies. This type of feeder is very seldom used, maybe 30 per year statewide, for a total estimated cost of \$600 per year. The benefits are improved electrical safety for feeders as already required for services. Large feeders have the same potential for overloading as services.

WAC 296-46B-230(6), Wiring and protection—Services, 042 Service conductor - Size and rating.

- Rule Overview

Adds an exemption from the identification plate requirement for one- or two-family dwelling feeders rated up to 400 amperes where the feeder conductors have a lesser ampacity than the equipment rating that they terminate in or on.

- Rule Cost/Benefit Analysis

Cost saving of one identification plate, estimated at \$20, on each feeder conductor that qualifies. This type of feeder conductor is used approximately 60 times statewide. The benefits are the reduction in regulatory requirements where not necessary for public safety and the cost savings of \$1200 per year.

WAC 296-46B-440, Fixed electrical space heating equipment, 014 Disconnecting means.

- Rule Overview

Retitles the section to “Air conditioning and refrigerating equipment”. Amends the acceptable variance from the NEC code and rule requirements for disconnecting means for one- and two-family dwelling units. The current rule allows an outside disconnecting means for split system HVAC/R system where the outside unit's disconnecting means is lockable, disconnects the indoor unit(s), and an indoor disconnecting means is not required by the manufacturer. The amendment adds the requirement that the outside disconnect identify the location of all indoor units. The acceptable variance from the NEC under this rule, codified in 2017, was initially allowed under department policy as stated in the November 2013 Electrical Currents newsletter. The acceptable variance method under policy in 2013 included the requirement to identify all indoor locations, however, the language was not in the rule when adopted in 2017.

- Rule Cost/Benefit Analysis

This rule allows a variance from the NEC requirement and so it a cost savings in general. The costs associated with adding the location of the indoor locations to the disconnect is \$20.00 per identification plate. The benefits include cost savings associated with the variance alternative are the reduction in regulatory requirements where not necessary for public safety.

WAC 296-46B-920(2)(f)(iv), Electrical/telecommunications license/certificate types and scope of work, Specialties, HVAC/refrigeration systems

- Rule Overview

Adds an exemption from the scope of work limitations for the HVAC/refrigeration specialty electricians described in WAC 296-46B-920(2)(f)(v) and (iv) related to the restriction from installing line voltage controllers or disconnect switches external to HVAC/refrigeration equipment. The exemption allows an HVAC/R specialty electrician to replace a disconnect switch mounted on HVAC/R equipment when doing a like-in-kind replacement.

- Rule Cost/Benefit Analysis

Cost savings to customers for not requiring an additional 01 or 02 electrician and separate permit to replace a gas furnace with the disconnect switch mounted on the existing furnace. For HVAC/R specialty electricians, it expands their scope of work and does not add costs. Having certificated electricians helps to ensure electrical installations are safe.

WAC 296-46B-940(17), Electrician/certificate of competency required, Reciprocal agreements between Washington and other states

- Rule Overview

Adds language to allow reciprocal agreements. This language was previously removed from the chapter 296-46B WAC in 2009. RCW 19.28.231 authorizes the department to enter into reciprocal agreements with other states providing for the acceptance of such states' journey level and specialty electrician certificate of competency or its equivalent the states requirements are equal to Washington's standards.

The adopted rule adds eligibility requirements as similar to Oregon's reciprocal certification requirement but does not allow for reciprocity for master electrician certificates. Eligibility requirements include those necessary to demonstrate equivalency with Washington's requirements and also require the individual have held the reciprocal state's certificate for a period of at least one year. The adopted rule also identifies circumstances when reciprocal certification is not permitted and includes language consistent with Washington's requirements and where the individual was a resident of the state of Washington at the time the examination was taken in the other state.

- Rule Cost/Benefit Analysis

Cost savings to customers due to greater supply of electricians. For individual applicants, the adopted rule results in a cost savings by being able to get certified in Washington without having to take the certification exam. Having certificated electricians helps to ensure electrical installations are safe.

WAC 296-46B-940(14), Qualifying for master, journey level, specialty electrician examinations, Experience in another country

- Rule Overview

Adds a new section specific to Canadian Red Seal electricians who seek certification in Washington. The adopted rule streamlines the process of verification for Canadian Red Seal electricians who received equivalent training and experience to that required in Washington.

- Rule Cost/Benefit Analysis

Cost savings to customers due to greater supply of electricians. For individual applicants, the adopted rule results in a cost savings by streamlining the verification process under the current rules. Having certificated electricians helps to ensure electrical installations are safe.

Cost-Benefit Determination

As described above, many of the changes subject to the cost-benefit analysis requirement will result in a cost savings to customers and individuals seeking certification. For those changes where costs are associated, the benefits include increased electrical safety. In total, the probable benefits of this rule are likely much greater than the probable costs.