

FISCAL NOTE FOR NON-CAPITAL PROJECTS

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Legislation Title:

AN ORDINANCE relating to the Seattle Electrical Code amending Section 22.300.016 of the Seattle Municipal Code, adopting the 2014 National Electrical Code with Seattle amendments, and adopting by incorporation of specific portions of the 2014 Washington Administrative Code Chapter 296-46B (Washington State Electrical Rule); and repealing Sections 2-34 of Ordinance 122970.

Summary of the Legislation:

This legislation adopts the 2014 Seattle Electrical Code, consisting of the 2014 National Electrical Code and portions of the Washington Electrical Code with Seattle amendments to both. The Revised Code of Washington (19.28.010) requires that Seattle's code have "an equal, higher, or better standard of construction and an equal, higher, or better standard of materials, devices, appliances and equipment" than those required as minimum standards under the State Code. This legislation accomplishes that goal.

Background:

In 2011, the State of Washington chose to not adopt the 2011 National Electrical Code (NEC). The State Electrical Code continued to be based on the 2008 NEC with State amendments; and State amendments are adopted in Washington Administrative Code 296-46B (WAC rules). The last time the Seattle Electrical Code was amended was in 2008. Most of the amendments in this legislation are carried forward from 2008, including incorporated WAC rules. However, some technologies such as electric vehicle charging have changed in the last six years and technological changes are reflected in this legislation. Seattle adds amendments to the NEC and adopts portions of the WAC on a triennial cycle (2011 was an exception). Attached is a list of the most significant proposed amendments.

X This legislation has financial implications.

Appropriations: *Not applicable*

Fund Name and Number	Department	Budget Control Level*	2014 Appropriation	2015 Anticipated Appropriation
<i>Not applicable</i>				
TOTAL				

*See budget book to obtain the appropriate Budget Control Level for your department.

Appropriations Notes: *Not applicable*

Anticipated Revenue/Reimbursement Resulting from this Legislation:

Fund Name and Number	Department	Revenue Source	2014 Revenue	2015 Revenue
ELECTRICAL INSPECTION	PLANNING AND DEVELOPMENT	U15700/U2353	\$0 - \$13,000	\$0 - \$54,000
TOTAL				

Revenue/Reimbursement Notes:

In this legislation, Section 80.51 expands the detailed list of requirements for electrical permit submissions in an effort to improve submittal quality. A new subsection C, Incomplete Submittals, is added drawing attention to the Fee Subtitle wherein Table D-14 for SMC 22.900D.150 provides that hourly charges may be imposed for additional review time. Less than 4% of the plans reviewed in 2013 were of such poor quality as to warrant this additional fee. However, the inordinate amount of review time required for these poor plans slowed the movement of all plans through the review queue. The incomplete submittal fee may be charged to the applicant, upon approval by the reviewer's supervisor or manager, for ongoing intake reviews at the normal DPD hourly rate. This hourly charge places the quality control burden on the applicant.

The Electrical Program has a streamlined intake- and review-process to move submittals quickly to permit issuance. The Program does not have intake staff providing quality-control screening or pre-application conferences. As a result, electrical plan reviewers perform an initial, and comprehensive, intake review of the entire electrical project. When necessary, the reviewer generates a comprehensive list of missing details to guide the applicant toward a successful resubmittal. At times, despite the comprehensive list of corrections, the second submittal is still too incomplete or inadequate to allow a full review and permit issuance. Repeated intake review slows the flow of approved plans and impacts the high level of service the Electrical Program strives to provide.

Total Regular Positions Created, Modified, or Abrogated through this Legislation, Including FTE Impact: *Not applicable*

Position Title and Department	Position # for Existing Positions	Fund Name & #	PT/FT	2014 Positions	2014 FTE	2015 Positions*	2015 FTE*
<i>Not applicable</i>							
TOTAL							

* 2015 positions and FTE are total 2015 position changes resulting from this legislation, not incremental changes. Therefore, under 2015, please be sure to include any continuing positions from 2014.

Position Notes: *Not applicable*

Do positions sunset in the future?

Not applicable

Spending/Cash Flow:

Fund Name & #	Department	Budget Control Level*	2014 Expenditures	2015 Anticipated Expenditures
<i>Not applicable</i>				
TOTAL				

* See budget book to obtain the appropriate Budget Control Level for your department.

Spending/Cash Flow Notes:

Not applicable

Other Implications:

- a) **Does the legislation have indirect financial implications, or long-term implications?**

No

- b) **What is the financial cost of not implementing the legislation?**

The cost of plan review time for low-quality submissions will continue to be absorbed by the Department and may be passed to all customers through increased fees rather than paid by the low-quality submitter.

- c) **Does this legislation affect any departments besides the originating department?**

No

- d) **What are the possible alternatives to the legislation that could achieve the same or similar objectives?** The alternative is to adopt the National Electrical Code and the Washington State Electrical Code amending the National Code. These codes set a minimum standard for electrical installations and Seattle's code sets a higher minimum standard.

- e) **Is a public hearing required for this legislation?**

No

- f) **Is publication of notice with *The Daily Journal of Commerce* and/or *The Seattle Times* required for this legislation?**

No

- g) **Does this legislation affect a piece of property?**

No

- h) **Other Issues:**

None

List attachments to the fiscal note below:

Attachment 1: Summary of new amendments to 2014 Seattle Electrical Code

ATTACHMENT 1 TO FISC

Summary of New Amendments to 2014 Seattle Electrical Code

Highlights:

- 1) It has long been the practice of the Seattle Electrical Code to adopt portions of the Washington State Electrical Code, also known as WAC rules (WAC 296-46B). This Code incorporates various WAC rules which accounts for much of what appears to be “new” amendments. Each amendment is followed by the WAC rule number in an Informational Note. This WAC incorporation eliminated a few conflicts between the two sets of regulations.
- 2) All requirements for coordination are standardized (selective coordination) throughout the Code. The 2008 Seattle Electrical Code provided an exception to the selective coordination rule that established a threshold of 0.10 second when the system is designed by a professional engineer on stamped drawings. This cascading of protection has worked well since 2008 and is applied consistently throughout the new proposal. These amendments are found in the following sections: 517.30, 620.62, 645.27, 695.3, 700.28, 701.4, 701.27, and 708.54.
- 3) All references to section numbers of the various City codes, such as the Seattle Building Code, are changed to chapter numbers. The Seattle Electrical Code is on a different adoption schedule and other code section numbers are subject to change during the Electrical Code cycle.
- 4) 80.51(B)(h) This section was edited to provide submission requirement clarity and will improve the plan review process. Renewable energy systems have fewer submittal requirements for smaller systems. For other projects, the list of items required on plans was clarified in order to improve the review process. There is no substantive change.
- 5) 80.51(C) This new section makes provision for charging additional hourly fees for plan review time necessitated by incomplete submissions. In some cases, basic information is not provided requiring plan reviewers to stop their plan review, write a correction letter which may be multiple pages long, and start over again when the corrected plans are returned. Some plans continue to be incomplete and require a multitude of correction letters and phone calls are required before the plan review can be completed which is costly for both the building owner and the City.
- 6) 210.52 added a paragraph to clearly state that reach and clearance distances for ADA accessible dwelling units are required.
- 7) 215.13 This section was edited to clarify the requirement that electrical feeders may not pass through one dwelling unit and into a separate dwelling unit to provide power a unit’s electrical panel. The requirement continues from the 2008 code and allows feeders to be routed through walls that are adjacent to the exterior of the structure or through walls that are adjacent to common areas. In doing so, each tenant or

occupant can access their feeders within their own unit. Because structural life expectancy is 50-75 years and, over time, uses change, this provision ensures that changes can be accommodated without a complete structural rewiring.

- 8) 220.57 When this section was added to the electrical code in 2008, electric vehicles were uncommon and the technology was still evolving. Experience guided these changes and these recommendations continue to ensure that future additions of electric vehicle charging stations will not overload the electrical system of a structure.
- 9) 250.50 A new section was added to clarify current practice requiring that grounding electrodes be inspected before being encased in concrete.
- 10) 404.13 Clarifies the requirements for use of two-way interlocking isolating knife switches by adding a definition.
- 11) 500.5 An item was added to clarify our current practice in below grade sumps in garages. A hazardous locations exists were flammable liquids and gasses accumulating below grade may be ignited when an electric sump pump is activated.
- 12) 620.21(A) Elevators - An item was added to allow flexible metal conduit or liquidtight flexible metal conduit to be used in 6 ft lengths in limited locations within elevator hoistways.
- 13) 620.21(B) Escalators - Class 2 Circuit Cables section was edited to ensure damage protection for cables (which may, for example, be used for LED lighting)
- 14) 620.26 This is a new section which requires that all branch circuits serving elevator equipment, such as lighting, originate in a panel located in the elevator machine room where the overcurrent devices are located.
- 15) 625.27 This section was amended to apply to all occupancies not just residential. The section requires that designers think about the future installation of electric vehicle charging stations and plan space for the required panelboard overcurrent protection devices or space to place a new panelboard.