

CONCISE EXPLANATORY STATEMENT

Chapter 296-96 WAC, SAFETY REGULATIONS AND FEES FOR ALL ELEVATORS, DUMBWAITERS, ESCALATORS AND OTHER CONVEYANCES.

Public Hearings: June 29 & June 30, 2021

Adoption: August 31, 2021

Effective: October 1, 2021

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I. Purpose of Rulemaking

The purpose of this rulemaking is to adopt amendments to the elevator rules that update and clarify existing rules, increase fees, and make housekeeping and other changes.

This rulemaking is necessary to give stakeholders the opportunity to provide input and recommendations on changes to the elevator rules and to propose changes based on recommendations from a Technical Advisory Committee (TAC) and the Elevator Safety Advisory Committee (ESAC), prior to the next code adoption cycle.

A fee increase of 5.08% (FY 2020 fiscal growth factor) is necessary to support operating expenses for inspections of conveyances and other Elevator Program public safety activities.

A. Background

The Elevator Program's rulemaking process includes an opportunity for public proposals, review and recommendation of all proposals by a TAC, the ESAC, and the public hearing process. Washington's elevator stakeholders have the opportunity to review the rules and make recommendations to the Department of Labor & Industries (L&I) regarding adoption of the rules.

The TAC for this rulemaking consisted of 21 industry experts and interest group representatives appointed by L&I.

The ESAC advises L&I on all rule changes and participated in the rule development process. The ESAC consists of 7 industry representatives: Registered General Contractors; Building Owners and Managers; Licensed Elevator Contractors; City of Seattle; Registered Architects and Professional Engineers; Owner-Employed Mechanics Exempted from Licensing; and Mechanics Licensed for All Work.

Stakeholders and other interested parties receive notices of rulemaking via GovDelivery (which consists of approximately 1,600 industry members) throughout the rulemaking process. The agency's website also has rulemaking information posted online.

B. Summary of the rulemaking activities

On January 22, 2019, L&I filed a Preproposal Statement of Inquiry (CR-101), WSR 19-03-162, to initiate this rulemaking.

Between February 1 and February 28, 2019, L&I accepted proposals from stakeholders for changes to the rules. We received 57 proposals from stakeholders.

Between February 1 and March 15, 2019 (deadline extended), L&I solicited letters of interest from stakeholders to participate on the TAC.

On April 15 and 16, 2019, a two-day TAC meeting was held to review proposals at the L&I Tukwila Office and Ramada Inn in Tukwila, Washington. Eighteen TAC members (2 non-voting) participated in the process. The TAC provided recommendations to L&I on the proposals.

On May 21 and May 22, 2019, the ESAC reviewed and provided recommendations on proposals at a “special meeting” held at the Tukwila L&I Office.

On July 23, 2019, L&I withdrew the Preproposal Statement of Inquiry (CR-101), WSR 19-15-124, for rulemaking filed on January 22, 2019, due to additional requests from stakeholders for changes to the rules that were outside the scope of the rulemaking.

On October 22, 2019, L&I filed a new Preproposal Statement of Inquiry (CR-101), WSR 19-21-154, which expanded the scope of the rulemaking to include the additional proposals from stakeholders and to consider the fee increase.

On April 8, 2020, the draft rules (Version 1 – 4/8/20) were shared with ESAC members for review and feedback.

On February 19, 2021, the draft rules were published online (Version 1 – 2/10/21).

On May 18, 2021, L&I filed the Proposed Rules (CR-102), WSR 21-11-082.

On June 1, 2021, L&I filed a continuance of the proposal (CR-102), WSR 21-12-089, to correct the public hearings location information.

II. Changes to the Rules

WAC 296-96-00910, Elevator Mechanic License Categories

- Subsection (4)(c) of this section was changed back to the original rule language regarding special purpose elevators. Based on a recent audit, we discovered that essential stakeholders affected by this change were not a part of the rule development process and the proposed rule is problematic. It could cause work interruptions for some businesses.

III. Comments on proposed rule

The purpose of this section is to respond to the oral and written comments received through the public comment period and at the public hearing.

A. Comment Period

The public comment period for this rulemaking began on May 18, 2021, and ended on June 30, 2021.

L&I received one written comment outlining four concerns for this rulemaking.

B. Public Hearings

A Public hearing was held virtually and telephonically on June 29, 2021, at 9:00 a.m., six people attended the public hearing. Two people elected to provide testimony on the proposed rules.

A public hearing was held virtually and telephonically on June 30, 2021, at 9:00 a.m. Four people attended the public hearing. One person elected to provide testimony on the proposed rules.

C. Summary of Comments Received and Department Response

Below is a summary of the comments L&I received and L&I's response.

General Comments	Department Response
I have been an elevator mechanic for about 25 years, and partial owner of Inland Elevator since it was formed in	Thank you for your comments. The estimated average cost of \$500 per elevator in the Cost Benefit Analysis is based on the industry standard. The estimate includes the cost of the code compliant switch assembly, appropriate conduit and wiring, and

2010. I am submitting my written comments regarding the proposed rule changes to WAC 296-96. I would like to address car top stop switches and car top handrails.

According to section 2.1.1 of the cost benefit analysis the stop switch addition is estimated to cost \$500 each resulting in a total of about \$1,000,000. Section 3.1.1.2 indicates that the department expects to reduce injuries by 25% with the addition of the stop switch and the car top handrail. I do not believe either of these estimates are reasonable. Based on my recollection of a similar situation some years back when the state required elevator owners to re-locate their pit stop switches by about 18", combined with current market conditions, I would estimate that this work will cost between \$1,500 and \$2,000 for each switch. Additionally I do not believe that the addition/re-location of the car top stop switch will prevent a single injury. If a mechanic wishes to verify operation of a stop switch which is not within reach while standing in the hall he will simply hold the hall door open, which has already proven itself functioning as it just stopped the elevator, access the car top, hit the stop switch, exit the car top, shut the door,

installation. The estimate does not account for company markups, such as time and materials as part of a maintenance contract or other additional costs.

The estimated 25% reduction in worker injuries was not attributed solely to the addition of the stop switch and the car top handrail. The total number of reduced accidents was estimated based on the historical accident rates and frequencies from L&I internal data and National Electronic Injury Surveillance System (NEISS) data, and the overall effect of the new rule as a whole on the accident reduction after consulting with L&I technical experts for this rule. We were not able to estimate and distinguish this effect for each safety factor. We understand your concerns and we are very aware that this estimate involves a certain level of uncertainty.

The rule change applies to commercial elevators with front and rear openings manufactured prior to 1996. Elevators that have front and rear openings are inherently wider and longer, which makes a workaround of holding the door and reaching for the stop switch a very risky and unsafe endeavor. Providing a stop switch for rear openings has been an American Society of Mechanical Engineers (ASME) code requirement for all new installs since 2007, because of the safety factor. Adopting the requirement in rule is critical for public safety to help alleviate any possibility of this becoming an issue. I cannot speak to all accidents within the state, but this is a more proactive move that coincides with the current installation standard for these conveyances.

Car top handrails are also going to be required on hydraulic and electric traction elevators, as the ASME has required for years. The need to mitigate falling off elevator car tops is a life safety issue. The additional requirements will include addressing lower refuge heights and toe boards that get in the way.

<p>and verify the elevator does not operate. Additionally, if a mechanic wishes to verify stop switch operation he can also secure the elevator, lock out/tag out the disconnect, access the cartop, activate the switch, restore power, and verify operation.</p>	
<p>As a mechanic, it is my opinion that the location of the stop switch has no impact on safety, it's just not an issue.</p>	<p>The ASME has made this a requirement for a number of years due to the safety it affords mechanics, inspectors, and first responders. This simply makes the few front and rear opening elevators in the state with one stop switch, and older elevators with out of reach stop switches safer. There is no reason to continue keeping an unsafe condition unsafe. Please refer to the "Elevator Industry Field Employees Safety Handbook", which the elevator industry is following, in section 8.1 "Hoistway Access Safety (Car Top Access/Egress) p.57.</p>
<p>According to all elevator accidents investigated by L&I up to 2017, the overwhelming majority of injuries, some of which were severe, are directly caused by poor performing equipment. Most are due to control issues when leveling or re-leveling. Generally speaking, newer equipment will have far better performance in this area. The injuries that stand out the most involve the elderly tripping over the sill because the elevator stopped some distance out of the level with the landing, which can be hard to see, and they break bones when they hit the floor. It is my sincere belief that the department must prioritize its focus such that the replacement of older controls can be done as efficiently,</p>	<p>L&I is currently presenting the ASME A17.3 enforcement plan for the ESAC (Elevator Safety Advisory Committee) and stakeholders to approve. This will involve doing a survey of all older equipment and notifying all building owners of affected items and correction dates starting January 1, 2022 statewide.</p>

<p>quickly, and cost effectively as possible. Irrelevant tasks such as the two I am addressing today redirect our very limited resources away from what matters to that which I believe clearly does not.</p>	
<p>It would be very helpful if the state could provide details regarding all accidents which it believes are the result of a stop switch which is not accessible while standing in the hall. Providing details regarding all instances where mechanics were injured due to the lack of a handrail would be helpful as I believe there will be no measurable impact on safety, and could actually increase accidents. If handrails get too short they start to become more of a tripping hazard. In fact, it would be absolutely fantastic if we could see all accident reports with sufficient detail the we, as the people directly responsible for elevator safety, would have full knowledge of the circumstances and could be actively involved in preventing future injuries. The public should be able to see them as well.</p>	<p>Thank you for your comments. A list of all elevator related accidents, including the causes is available to the public. For copies of these records, you can submit a public records request through the L&I Public Records Unit. The form is available online at https://lni.wa.gov/agency/public-disclosure/. The intent of the rule change is to prevent possible accidents on a specific conveyance and its configuration from the standards put forth by ASME on new installs.</p>
<p>I would like to speak about the rules. I looked at the -- in particular, the stop switch addition on the car top, and-- I guess I want to comment on -- The addition of a car top stop switch, when I look at the accident reports, I don't see</p>	<p>Thank you for your comments. The total number of reduced accidents was estimated based on the historical accident rates and frequencies from L&I internal data and National Electronic Injury Surveillance System (NEISS) data, and the overall effect of the new rule as a whole on the accident reduction after consulting with L&I technical experts for this rule. Due to the lack of data, we were not able to estimate and</p>

<p>any accidents associated with that. Now, I don't know if I see all the accidents. I've got what -- from 2004 to 2017, but I don't see anything that has anything to do with a car top stop switch. So I'm wondering how the addition of a car top stop switch can be calculated to reduce accidents by a certain amount. So I just don't understand how that would work. And I also disagree with the cost. I don't believe it will be \$500. I think it will be more. Thank you.</p>	<p>distinguish this effect for each safety factor. We understand your concerns and we are very aware that this estimate involves a certain level of uncertainty.</p>
<p>I'm having a hard time just finding the rules that are under consideration at this time. I thought there would be a review for this hearing, but I guess not. So I'm behind the curve on this.</p>	<p>Thank you for your comments. Public hearings are an opportunity for public comment on proposed rules and does not include rule reviews. The elevator program's rulemaking process includes an opportunity for review of the draft rules by a Technical Advisory Committee (TAC) of industry experts and the Elevator Safety Advisory Committee (ESAC). These meetings are open to the public. A copy of the draft rules and review meeting transcripts are available on the agency's website. We encourage anyone interested in meetings, rulemaking and policy changes at L&I to sign up for regular email updates at https://public.govdelivery.com/accounts/WADLI/subscriber/new?topic_id=WADLI_41. Information about rulemakings is also available on L&I's "Rulemaking Activity" page and the program's "Laws, Rules, & Policies" page.</p>
<p>Thank you and all the members of the Department for conducting the public hearing process on the proposed rule book yesterday and today and welcome the opportunity to briefly provide some views on this and want to acknowledge at the outset that we've had an opportunity earlier in the process to provide technical and other suggestions</p>	<p>Thank you for your comments. We understand the value of the QEI certification for our inspectors. Currently the state of Washington has an ever increasing number of inspector II's, two-thirds that have received their QEI Certification and as the senior staff retire, new staff typically elect to certify quickly. The state hiring of inspector II's job postings mention that QEI certification is preferable but current state Human Resources and employee Union contract policy does not require it.</p>

<p>from the stakeholder perspective and have welcomed the process that the State has managed in the context of the development of rule. I want to acknowledge at the outset the Department's acceptance of stakeholder proposals from NEII concerning handrails and the location of equipment in the hoistway. We're grateful for the accommodation and the consideration by the Department in assessing those stakeholder requests, and we believe that they will, as I believe you concur, that they are additive and protective of safety and the public interest, and so we're grateful for their inclusion in the proposed rule. As a matter of just general policy, I note that the State continues to sort of exclude QEI certification throughout the rule. We'll continue to advocate on behalf of broad QEI certification both in Washington and throughout the country, understanding that there are some limitations that may prevent adoption of the certification in the context of this rule, but we would like to continue to work with the State in the future on that -- on that subject.</p>	
<p>The most serious thing that I wish to raise today is on the questionable alternative testing and maybe provide sort of an alternative to be considered in whether or not alternative testing should</p>	<p>Alternative testing is a new methodology allowed by the ASME code. However, there is no clear direction on what the process entails and it is at the contractor's discretion to create a process that falls within alternative testing. The Elevator Program does not have the staffing or the experience to review every elevator contractor's proposed means of alternative testing to ensure it is a safe procedure for workers</p>

be permitted in some form in the state of Washington. Currently the proposed rule prohibits the use of alternative testing as is recommended by ASME 17.1. We understand some of the issues that have been raised in relation to alternative testing, but most of the injuries and many of the injuries and that occur in the industry are in the manner of strain, sprains, cuts, and abrasions. And in many cases those are as a result of the handling of the weights associated with testing, either the rated load test or test on brakes. And in those contexts, you know, a 2,500-pound car at full rated load, that's 2,500 pounds of weights, or for a brake test, that's over 3,000 pounds of weight. And rather than sort of treating this as a potential sort of binary exercise, whether it's fully authorized or not, we'd like to suggest that maybe the State would wish to consider as an alternative means on alternative testing to authorize it but have the methodology subject to approval by the State. That way there would be a pathway for elevator contractors to provide for alternative testing as a means to test elevators pursuant to the rule, but that in order to have surety over the process and the methodology because in some cases those might be of some either concern or -- I don't want to say

and the riding public. We need to have more conversations with stakeholders to gain a better understanding of what is needed and the expectations, prior to taking a position or issuing guidance. This can be explored through the Elevator Safety Advisory Committee (ESAC). In order for L&I to consider adopting this portion of the code, we will need to ensure all companies and mechanics are aware of this new method and perform the utmost vetting with all stakeholders.

The state is aware that using test weights has always been part of the elevator industry standard practice in setting up working loads on hydraulic elevators and essential alterations on electric traction cars. Alternative testing will not change the ongoing safe working practices of the elevator industry on training their employees to work safely.

<p>controversy, but concern by a regulator, we think if you have sort of perhaps direct sort of access to and discussion with and approval of a methodology, so that in these instances you have surety about the process that's going to be used, perhaps that would be a useful bridge in the development and furtherance of alternative testing as a way to be adequately protective of the safety of a workforce as well as the public but also reduce the risk of these -- these types of injuries to the workforce moving around weights of -- weights of that size.</p>	
<p>The last thing I'd like to sort of highlight is the -- on fire alarm initiating devices and the testing thereon that is required. No argument really sort of with the one-year requirement to do the testing, but we'd like to seek some sort of clarification -- don't know whether it's appropriate in this context -- but clarification on how that is intended to be tested. There are a number of different ways in which it can be tested. My assumption in reading the language is that it would be tested with the embedded context and the like that are provided for within A17.1 and that one year test is simply an annual test to make sure that the system kind of works. It's the way I kind of read the</p>	<p>The requirements of testing the FAID's (Fire Alarm Initiating Devices) is found in the National Fire Protection Agency (NFPA) 72 and is performed by the fire alarm testing companies. The ASME required testing of Phase I and Phase II key switches is covered in ASME A17.1 Section 2.27.</p>

language. Others have read it potentially with a little bit more of ambiguity. I think it would be useful at some point to clarify how the testing regime will work on that point. So absent any questions -- and this was intended to be a brief statement, but absent any questions, that's our full sort of observations on the draft rule. Again, we have appreciated the dialogue with the Department over the years, and I'm sympathetic to and respectful of the difficulties that you and everyone else has had in the development of the rule caused by the dislocations during the COVID emergency, but we think on balance this is a very well-crafted sort of rule. Again, we have some continuing observations and issues with the aspects of it, particularly with regard to alternative testing, and would urge some consideration of the suggestion we've made for those provisions. And with that, I'll give it back.