



Oregon

Kate Brown, Governor

Department of Consumer and Business Services

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[Text of changes](#)

[Federal Register April 11, 2014](#)

[Federal Register September 24, 2014](#)

July 22, 2015

Oregon OSHA – Proposed Changes to Electric Power Generation, Transmission, and Distribution Standard for General Industry and Construction

Public Hearings Scheduled for:

<u>Date</u>	<u>Time</u>	<u>Location</u>
August 27, 2015	10:00 am	Oregon OSHA Durham Plaza 16760 SW Upper Boones Ferry Rd, Suite 200 Tigard, OR 97224
September 3, 2015	10:00 am	City of Medford Lausmann Annex 200 S Ivy Medford, OR 97501
September 8, 2015	1:30 pm	Oregon OSHA Red Oaks Square 1230 NE Third Street, Suite A-115 Bend, OR 97701-4374

In November 2014, Oregon OSHA proposed to adopt Federal OSHA final rules that were published in the April 11, 2014 Federal Register. The proposal included Oregon initiated changes to the federal rule. Three public hearings were held during November and December of 2014 resulting in several written comments and oral testimony before the comment period closed on December 12, 2014. Most of the comments received relate to the two worker rule exceptions.

One commenter suggested that Oregon OSHA consider combining the Electric Power Generation, Transmission, and Distribution standards in Subdivisions 2/R and 3/V into one rule. As a result of the comments received, Oregon OSHA decided not to adopt the rule as proposed in 2014, but to consider an alternative approach.

Two stakeholder meetings were conducted in the first half of 2015 to discuss the comments and develop any changes to the initial proposal. Oregon OSHA chose to merge the Electric Power Generation, Transmission, and Distribution standards in Subdivisions 2/R and 3/V into a new Division 2/RR.

Several other changes are made based on the initial comments received, and the federal OSHA changes from the April 11, 2014 Federal Register, into numerous subdivisions in general industry and construction.

When does this happen: Adoption tentatively will be October 2015

To get a copy: Our web site – www.orosha.org Rules, then Proposed Rules
Or call 503-947-7449

To comment: Department of Consumer and Business Services/Oregon OSHA
350 Winter Street NE
Salem OR 97301-3882
E-mail – tech.web@state.or.us
Fax – 503-947-7461

Comment period closes: September 18, 2015

Oregon OSHA contact: Jeff Wilson, Central Office @ 503-947-7421;
or email at jeffrey.r.wilson@oregon.gov
Ken Langley, Central Office @ 503-947-7454;
Or email at ken.e.langley@oregon.gov

Note: In compliance with the Americans with Disabilities Act (ADA), this publication is available in alternative formats by calling 503-378-3272.

Secretary of State
NOTICE OF PROPOSED RULEMAKING HEARING*

A Statement of Need and Fiscal Impact accompanies this form.

Department of Consumer and Business Services/Oregon OSHA
Agency and Division

OAR 437
Administrative Rules Chapter Number

Sue Joye 350 Winter Street NE Salem OR 97301-3882
Rules Coordinator Address

503-947-7449
Telephone

RULE CAPTION

Adopt Electric Power Generation, Transmission, Distribution standard for general industry and construction, and related changes.

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Hearing Date	Time	Location	Hearings Officer

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

ADOPT: OAR 437-002

AMEND: OAR 437-002, 437-003, 437-003-0115, 437-003-0145, 437-003-0255, 437-003-0355, 437-003-0510

REPEAL: OAR 437-002-0317, 437-002-0138, 437-003

ORS 654.025(2) and 656.726(4)

Stat. Auth.

Other Authority

ORS 654.001 through 654.295

Stats. Implemented

RULE SUMMARY

In November 2014, Oregon OSHA proposed to adopt Federal OSHA final rules that were published in the April 11, 2014 Federal Register. The proposal included Oregon initiated changes to the federal rule. Three public hearings were held during November and December of 2014 resulting in several written comments and oral testimony before the comment period closed on December 12, 2014. Most of the comments received relate to the two worker rule exceptions.

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Several other changes are made based on the initial comments received, and the federal OSHA changes from the April 11, 2014 Federal Register, into numerous subdivisions in general industry and construction.

NOTE: The listing of rules in the Rulemaking Action section is not all rules to be adopted, amended, or repealed. Please use our web site listed below for the complete list of rules for this rulemaking.

Please visit our web site www.orosha.org Click 'Rules' in the left vertical column and view our proposed, adopted, and final rules.

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing the negative economic impact of the rule on business.

/s/Michael D. Wood
Signature

September 18, 2015

Last Day for Public Comment
Last day to submit written comments to the Rules Coordinator

Michael D. Wood 7/15/2015
Printed name Date

*The *Oregon Bulletin* is published on the 1st of each month and updates the rule text found in the Oregon Administrative Rules Compilation. Notice forms must be submitted to the Administrative Rules Unit, Oregon State Archives, 800 Summer Street NE, Salem, Oregon 97310 by 5:00 pm on the 15th day of the preceding month unless this deadline falls on a Saturday, Sunday or legal holiday when Notice forms are accepted until 5:00pm on the preceding workday. ARC 920-2005

STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services/Oregon OSHA

OAR 437

Agency and Division

Administrative Rules Chapter Number

In the Matter of:**ADOPT:** OAR 437-002**AMEND:** OAR 437-002, 437-003, 437-003-0115, 437-003-0145, 437-003-0255, 437-003-0355, 437-003-0510**REPEAL:** OAR 437-002-0317, 437-002-0138, 437-003**Rule Caption:**Adopt Electric Power Generation, Transmission, Distribution standard for general industry and construction, and related changes.**Statutory Authority:** ORS 654.025(2) and 656.726(4)**Stats. Implemented:** ORS 654.001 through 654.295**Need for the Rule(s):**

Employees performing work involving electric power generation, transmission, and distribution, which include line clearance tree trimming, are exposed to a variety of significant hazards, such as fall, electric-shock, and burn hazards, that can and do cause serious injury and death. Federal OSHA estimates that, nationally on average, 444 serious injuries and 74 fatalities occur annually among these workers. Although better compliance with existing safety standards may prevent some of these accidents, research and analyses conducted by OSHA found that many preventable injuries and fatalities could continue to occur even if employers fully complied with the existing standards.

The federal benefits analysis shows, if the final rule can prevent even 10 percent of these fatal and nonfatal accidents, then the benefits of the final rule will exceed its costs. The final rule will likely prevent far more than 10 percent of these fatal and nonfatal accidents (assuming full compliance with the final rule). Accounting for the probability that some accidents will be prevented by the existing rule, OSHA estimates that the final rule will prevent 118.5 injuries and 19.75 fatalities per year (26.7 percent of all fatal and nonfatal accidents). These statistics are taken from the April 11, 2014 [Federal Register](#).

Background

On April 11, 2014 federal OSHA published in the Federal Register their revised Power Generation, Transmission, and Distribution standards in general industry and construction, 29 CFR part 1910.269 and 29 CFR part 1926 subpart V respectively. Federal OSHA also revised its general industry standard for electrical protective equipment and added a corresponding standard for construction along with revising several other related provisions in their standards for general industry and construction. The final rule updated those standards and made the general industry and construction standards consistent.

Oregon has a long history of adopting Oregon specific rules for this industry that in many cases are more protective than the Federal standards. For example, the prohibition of live-line barehanded work is law in Oregon.

Federal OSHA's revised standards in power transmission, and distribution created the impetus for Oregon rulemaking activity. Some of the more significant changes to the standard that will affect Oregon employers in the industry include new or expanded requirements for the following:

- Fall protection for workers working from poles and structures.
- Revisions for calculating incident energy and Arc-Hazard Assessment.
- Host-contractor communications
- Expanded job briefings
- Arc flash protective equipment
- Minimum approach distances (MAD)

Oregon OSHA started the rulemaking process involving numerous stakeholder sectors. Current Oregon initiated rules were evaluated to ensure that they were still applicable and aligned with the new Federal standards. Approximately 138 Oregon initiated rules existed in Division 3/V while only one existed in the Electric Power Generation, Transmission, and Distribution standard in Division 2/R. As a result of that evaluation, it was determined that some Oregon initiated rules were no longer needed as the new federal standard adequately addressed hazards. In some cases Oregon initiated rules were combined.

This proposal merges Electric Power Generation, Transmission, and Distribution standards from Divisions 3/V and 2/R into the new Division 2/RR. This standard will result in crews, who do work involving both maintenance and construction activities in the course of a day, to follow a single rule; thus, simplifying compliance. When possible, standards were changed to be consistent with federal standards as well as with the standards of neighboring states to help employers who work in multiple states in the region to be in compliance while working in Oregon.

Oregon OSHA is proposing a new rule to address helicopter use due to technology changes and an increased use of helicopters in the construction and maintenance of transmission and distribution systems. The proposed standard assigns responsibility for job briefing, the integrity of rigging and safe delivery of cargo, and speaks to the use of personal protective equipment under or in the near vicinity of helicopters. Definitions were added to reflect language that is currently used in the industry.

Oregon's current rules related to the testing of rubber gloves varies from that of other neighboring states as well as within Oregon's own rules between Division 2/R and Division 3/V. This proposal adopts the federal rule language making the testing interval requirement consistent, both across standards as well as with neighboring states since companies are often working in multiple states.

Current rubber insulating glove test intervals:

Jurisdiction	In service/checked out for use	Not in service
Oregon Division 2/R	3 months	6 months
Oregon Division 3/V	60 days	12 months
Idaho/Washington	6 months	12 months
Federal OSHA	6 months	12 months

Documents Relied Upon, and where they are available:

Federal Register, April 11, 2014
https://www.osha.gov/FedReg_oshapdf/FED20140411.pdf

Federal Register, September 24, 2014
https://www.osha.gov/FedReg_oshapdf/FED20140924.pdf

Oregon OSHA Division 3/V, Construction, Power Transmission and Distribution.
http://www.orosha.org/standards/div_3.html#subV

Oregon OSHA Division 2/R, General Industry, Power Generation, Transmission, and Distribution.
http://www.orosha.org/pdf/rules/division_2/div2_r.pdf#page=175

Oregon OSHA Division 3, Construction (full set of rules)
http://www.orosha.org/pdf/rules/division_3/div3.pdf

Oregon OSHA Division 2/I, Personal Protective Equipment
http://www.orosha.org/pdf/rules/division_2/div2_i.pdf

Oregon OSHA Division 2/S, Electrical
http://www.orosha.org/pdf/rules/division_2/div2_s.pdf

Fiscal and Economic Impact, including Statement of Cost of Compliance:

Fiscal and Economic Impact:

Fall protection is one of the areas that changed in the final rule. For example, employees in aerial lifts performing covered work will not be able to use body belts as part of fall-arrest systems and, instead, must use body harnesses.

Table 25 below shows that the new aerial-lift fall protection provision addresses 1.1 percent of all accidents federal OSHA reviewed for this supplemental analysis. Moreover, Table 25 shows that, if compliance with the final rule's aerial-lift fall-protection provision prevents only 1.5 percent of these accidents, then the benefits will meet or exceed the costs.

Excerpts taken from Table 25, Federal Register April 11, 2014

Category of provision	Percentage of accidents addressed by the provision.	Percentage of potential benefits need to break even with costs
Information transfer	28.7	9.2
Job briefing	57.1	1.7
Training	53.7	0.8
Aerial lift fall protection	1.1	1.5
Climbing fall protection	3.7	1.8
Approach distances	35.8	0.8
Arc flash	15.7	18.5

The training provisions act jointly with the new and revised work-practice requirements in the final rule to prevent accidents. The new and revised work-practice provisions necessitate new training, which, in turn, will make accidents included in the training category less likely. Trained employees are much more likely to follow the work practices required under the final rule than untrained employees. Full compliance with the final rule's climbing fall-protection, approach-distance, and arflash provisions would prevent all accidents attributed to these provisions. As discussed earlier, using body harnesses instead of body belts in aerial lifts also will reduce the number of fatalities and the severity of some nonfatal injuries. The training requirements will contribute to this reduction in accidents because those requirements will help ensure full compliance with the final rule's work-practice provisions.

Table 25 shows that compliance with the final rule's training provisions potentially would prevent 53.7 percent of all accidents and that benefits will meet or exceed the costs if the provisions prevent 0.8 percent or more of these accidents. Federal OSHA believes that it is reasonably likely the benefits will exceed the costs because training is essential to assure that employees can follow the other provisions of the standard.

A provision by provision sensitivity analyses was conducted by federal OSHA supporting the conclusion that, given full compliance with the final rule, the total benefits of the final rule exceed the total costs of the rule.

The cost/benefit analysis conducted by federal OSHA indicates an expected annual cost of compliance for the new federal requirements to be \$49.5 million nationally (using a 7% annualization) with a corresponding benefits rate of \$129.7 million.

More detailed information related to the analysis can be found in the Federal Register Vol 79, No. 70. Pages 20318 and 20569 breakdown the specific costs associated with the new requirements listed above. OSHA estimates that nationally compliance with the final rule will result in the prevention of 118.5 injuries and 19.75 fatalities annually.

In addition, existing Oregon-initiated rules proposed to be incorporated into Division 2/RR from Division 3/V create no additional cost as indicated by stakeholders who have developed work practices, procedures, and policies to ensure compliance with the most stringent standard that they were subject to. Oregon OSHA does not anticipate any additional costs to the employer with the proposed language for the two worker rule exception. The proposed rule allows a lone qualified worker to do routine circuit switching, including the installation or removal of a load break elbow, under limited conditions.

Standards related to the use of helicopters are being proposed to address the specific hazards of the industry. Oregon OSHA has allowed the practice of landing workers on towers for a number of years and has identified that FAA rules regulate that activity, as well as other activities conducted with helicopters in the industry. The agency has regulated other helicopter related activities through Division 3/N. The proposed rule will require more specific topics being discussed in job briefings, qualification and training requirements for people doing rigging activities using helicopters, rigging inspection frequency requirements, and requirements related to Human External Cargo (HEC).

Seven companies and approximately fifty workers involved in some type of helicopter activity in Oregon have been identified that could be affected by the proposed rule, NAICS Code 481212.

Due to the nature of the proposed requirements, costs associated with them are variable. Qualification and training requirements could be a one time cost. Regular inspections and job briefing costs would vary greatly depending on the work activity, the size of the crew, the frequency of the work and other factors.

Federal OSHA has determined that the wage for an electric power worker to be \$40.77/hr. with a supervisors wage to be \$50.66/hr. Local industry wages for a pilot are estimated to be \$57.5/hr. To be in compliance with the proposed rule (assuming an employer had not already incorporated these practices into the company's procedures) a two man crew plus a pilot and a supervisor doing helicopter related work would have increased labor costs of approximately \$60 a day. This assumes the employer is conducting a daily job briefing that is 15 minutes longer than the current Federal rule requires. It also assumes that the inspecting of rigging daily will take a worker 15 minutes. A \$300 training cost for a qualified rigger related to helicopters is spread out over 200 days (an approximate equivalent to a full year of work.)

2 x 40.77 (workers) + 50.66 (supervisor) + 57.5 (pilot) x .25 = \$47.40/day
 300 (training cost) divided by 200 working days = \$1.50/day
.25 x 40.77 (cost of inspection) = \$10.20
 Total \$59.10

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):

Costs incurred by Oregon OSHA represent similar costs associated with the promulgation, implementation and administration of a rule.

All state agencies are affected by the rules in the sense that they are employers under the Oregon Safe Employment Act (OSEAct).

The public as a whole will be affected only to the degree that members of the public are employers and employees.

2. Cost of compliance effect on small business (ORS 183.336):

a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:

Oregon employers in the Power Generation, Transmission and Distribution Industry

Employer NAICS	Employers	Number of Employees	Industry Type
221111	112	86,598	Hydro Electric
221112	10	5,090	Fossil Fuel
221114	1	1	Solar
221115	3	29	Wind
221117	4	27	Biomass
221118	2	2	Tidal
221119	9	372	Other
221121	3	18	Transmission
221122	88	5,355	Distribution

75 of the 88 employers with a NAICS of 221122 had fewer than 50 employees.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:

Given full compliance with the final rule, the total benefits of the final rule exceed the total costs of the rule, see summary above.

c. Equipment, supplies, labor and increased administration required for compliance:
Federal OSHA developed quantitative estimates of the potential economic impact of the requirements in this rule on entities in each affected industry. OSHA compared the estimated costs of compliance with industry revenues and profits to provide an assessment of potential economic impacts.

How were small businesses involved in the development of this rule?

One stakeholder in the group represented three utilities that had fewer than 50 employees. Oregon OSHA attended two meetings of smaller public utility districts, co-op's and municipalities to discuss rulemaking issues that affected smaller rural utilities.

**Administrative Rule Advisory Committee consulted? Yes.
If not, why?**

A stakeholder group was first convened in May 2014. A total of 14 meetings were conducted with the group, each lasting approximately 4 hours. An average of 18 people attended each meeting. The stakeholder group consisted of Oregon OSHA Technical staff, large utilities, smaller rural utilities, and contractors that support the industry. Union/labor representatives, apprenticeship program representatives, as well as management were involved. Privately owned utilities as well as consumer owned utilities were represented.

/s/Michael D. Wood
Authorized Signer

Michael D. Wood
Printed name

7/15/2015
Date

Administrative Rules Unit, Archives Division, Secretary of State, 800 Summer Street NE, Salem, Oregon 97310.
ARC 925-2005