Oregon
John Kitzhaber MD, Governor

Department of Consumer and Business Services
Oregon Occupational Safety & Health Division (OR-OSHA)
350 Winter Street NE, Room 430
PO Box 14480
Salem, OR 97309-0405
Phone: 503-378-3272
Toll Free: 1-800-922-2689
Fax: 503-947-7461
www.orosha.org

Text of changes
Federal Register April 11, 2014
Federal Register Sept. 24, 2014

November 3, 2014

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

Public Hearings Scheduled for:

Date	**Time**	**Location**
November 25, 2014	10:00 am	Associated General Contractors (AGC) Board Room 9450 SW Commerce Circle #200 Wilsonville, OR 97070
December 3, 2014	10:00 am	City of Medford/City Hall Alba Room 411 West 8th Street Medford, OR 97501
December 8, 2014	11:00 am	Oregon OSHA Red Oaks Square 1230 NE Third Street, Suite A-115 Bend, OR 97701-4374

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 OSHA started the rulemaking process involving numerous stakeholder sectors. Current Oregon-initiated rules were evaluated to ensure that they were still applicable and align with the new federal standards. Approximately 138 Oregon-initiated rules existed in Division 3/V while only a few existed in Division 2/R. This proposal incorporates Oregon initiated rules found in Division 3/V into 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 the hazards. In some cases, several Oregon-initiated rules were combined. This process of consistency between general industry and construction standards allows work crews who do work involving both maintenance and construction activities in the course of a day to follow substantially similar rule requirements.

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. Hazards have not been adequately addressed. 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.

When does this happen:	Adoption tentatively will be January 2015
To get a copy:	Our web site – www.orosha.org Rules, then Proposed Rules Or call the Oregon OSHA Resource Center at 503-947-7453
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:	**December 12, 2014**
Oregon OSHA contact:	**Jeff Wilson, Central Office @ 503-947-7421;** **or email at jeffrey.r.wilson@state.or.us**

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		OAR 437
Agency and Division		Administrative Rules Chapter Number
Sue Joye	350 Winter Street NE Salem OR 97301-3882	503-947-7449
Rules Coordinator	Address	Telephone

RULE CAPTION

Adopt changes to Electric Power Generation, Transmission, and Distribution standards in general industry and construction.

Hearing Date	Time	Location	Hearings Officer
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December 8, 2014	11:00 am	Oregon OSHA Red Oaks Square 1230 NE Third Street, Suite A-115 Bend OR 97701-4374	Sue Joye

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

RULEMAKING ACTION

ADOPT: OAR 437-002, 437-003, 437-003-3333

AMEND: OAR 437-002, 437-002-0317, 437-003, 437-003-0115, 437-003-0145, 437-003-0255, 437-003-0355, 437-003-0510

REPEAL: OAR 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

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.

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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 the hazards. In some cases, several Oregon-initiated rules were combined. This process of consistency between general industry and construction standards allows work crews who do work involving both maintenance and construction activities in the course of a day to follow substantially similar rule requirements.

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. Hazards have not been adequately addressed. 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.

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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

December 12, 2014
Last Day for Public Comment
Last day to submit written comments to the Rules Coordinator

Michael D. Wood — 10/15/2014
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

Secretary of State

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, 437-003, 437-003-3333

AMEND: OAR 437-002, 437-002-0317, 437-003, 437-003-0115, 437-003-0145, 437-003-0255, 437-003-0355, 437-003-0510

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

Rule Caption:

Adopt changes to Electric Power Generation, Transmission, and Distribution standards in general industry and construction.

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)

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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_osha_pdf/FED20140411.pdf

Federal Register, September 24, 2014
https://www.osha.gov/FedReg_osha_pdf/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 arcflash 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 added to Division 2/R 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.

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 that 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 x40.77 (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 a meeting 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 on May 14th. A total of 12 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.

<u>/s/Michael D. Wood</u>	<u>Michael D. Wood</u>	*<u>10/15/2014</u>*
Authorized Signer	Printed name	Date

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