

ITEM NO. 2

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: April 21, 2009

REGULAR X CONSENT _____ EFFECTIVE DATE _____ NA _____

DATE: March 31, 2009

TO: Public Utility Commission

FROM: Jerry Murray

THROUGH: Lee Sparling and JR Gonzalez

SUBJECT: AR 528: Summary of Arc Flash Reports Filed by Electrical Utilities in response to Order 08-599. Informational only.

STAFF RECOMMENDATION:

Staff recommends that the Commission recognize the filed reports from Oregon's 39 electric utilities as a commitment by Oregon's electrical utilities to be compliant with the Arc Flash Protection Rule by January 1, 2010, per Commission Order 08-599.

DISCUSSION:

On December 23, 2008, the Commission ordered a twelve-month delay of the effective date for National Electrical Safety Code (NESC) Rule 410.A.3 (commonly known as the "Arc Flash Protection Rule"). In allowing the delay, the Commission ordered that all Oregon electric utilities file reports by February 26, 2009 regarding their progress in achieving compliance with Arc Flash Protection Rule effective January 1, 2010.

On December 30, 2008, Commission Staff (Staff) sent out a questionnaire with five questions to each of Oregon's 39 electric utilities. All electric utilities responded, stating that they basically planned to be compliant with the Arc Flash Protection Rule by the new effective date of January 1, 2010.

By January 1, 2010, all electric utilities will have implemented key items to achieve compliance with the Arc Flash Protection Rule. They are:

Item 1. Finish required facility assessments/analyses for arc flash hazards and exposure levels;

Item 2. Complete electrical employee training on arc flash hazards and mitigation;

Item 3. Provide arc flash protection clothing to electrical employees **OR** as an alternative provide lists of acceptable arc flash clothing options to electrical employees so that employees can purchase their own protective clothing; and

Item 4. Implement specific or unique mitigation measures to reduce arc flash exposure to electrical employees.

On Item 1 Staff's survey indicated that over sixty percent of Oregon's electric utilities will have their arc flash assessments of facilities completed by June 30, 2009. This is six months ahead of the new effective date. The remaining forty percent of utilities indicated that they should have their assessments completed by the effective date of January 1, 2010. Some of the smaller utilities are waiting for consulting engineering firms to complete the assessments.

With respect to Item 2 approximately fifty percent of Oregon's electric utilities will have their employees trained on arc flash protection and mitigation techniques by mid-year 2009. The remaining fifty percent plan to have their employees trained by year-end. Because of continuing industry progress in protecting electrical workers, several electric utilities expressed that their arc flash training will be an ongoing effort in the foreseeable future.

For Item 3 Staff's survey revealed that ninety percent of Oregon's electric utilities will be providing arc flash clothing to their electrical employees by year-end 2009. Three utilities are undecided about whether to provide arc flash clothing to their electrical employees. These three are waiting for union negotiations to be completed or management approval. The four utilities that have not already committed to providing the clothing will be providing lists of optional protective clothing that the employees can purchase directly to protect themselves.

On Item 4, the electrical utilities listed various mitigation measures that they individually are taking to reduce arc flash exposure to their employees. Some of the items listed are included in two separate categories:

- o Improved Facility Safeguards (such as change out 480 volt meters with 120 volt meters with potential transformers, improve substation breaker relay schemes,

replace protective fuses with faster breakers, and improve signage on equipment)

- Work Practice Modifications (such as operate substation breakers remotely, de-energize high arc flash exposure equipment when being worked on, and increase work distances between substation equipment and employees)

From the completed questionnaires, Staff believes that all of Oregon's electric utilities are on track for achieving compliance with the Arc Flash Protection Rule. Staff believes that the twelve-month extension was appropriate for utilities to develop and implement quality arc flash protection programs for their field employees and contract workers. Staff will continue to promote compliance with the Arc Flash Protection Rule in its audits and reviews with Oregon's electric utilities.

PROPOSED COMMISSION MOTION:

This is an informational presentation. Staff recommends no further Commission action on this matter.