ENTERED 05/04/07 BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

AR 514

In the Matter of) Amendment to Vegetation Clearance Requirements) for Electric Transmission Lines over 50,000 Volts.)

DISPOSITION: RULE AMENDMENT ADOPTED

This rulemaking is to correct an apparent error made in Commission Order No. 06-547. In that order, the Commission adopted OAR 860-024-0016(5)(d), which allowed the limited intrusion of small branches and new tree growth in established minimum clearances "provided the vegetation does not come closer than six inches to the conductor." As adopted, this "limited intrusion" provision applies to transmission conductors, as well as distribution lines. The "limited intrusion" provision was only intended to apply to distribution lines.

To correct this, Commission Staff (Staff) proposes a permanent rule change to make the "limited intrusion" provision applicable to only primary distribution conductors that are energized between 600 to 50,000 volts. On March 14, 2007, the Commission filed a Notice of Proposed Rulemaking Hearing and Statement of Need and Fiscal Impact with the Secretary of State to this effect. The Commission also provided notice to legislators specified in ORS 183.335(1)(d), and to all interested persons on the service lists maintained pursuant to OAR 860-011-0001. Notice of the rulemaking was published in the Oregon Bulletin on April 1, 2007.

Staff filed comments on April 16, 2007, in support of its rulemaking filings submitted to the Secretary of State's office. Portland General Electric Company (PGE) filed comments on April 20, 2007, arguing that the limited intrusion provision should also apply to subtransmission lines, energized between 50,000 and 200,000 volts. In addition, we consider the comments made in AR 506, the docket preceding this correction.

A public comment hearing was held on April 23, 2007. At the hearing, Staff expressed a willingness to consider different standards for subtransmission lines. However, Staff argued that such a change was not noticed in this rulemaking, and that only the correction proposed in the notice should be implemented. PGE countered that the policy in effect before the AR 506 rulemaking was implemented in such a way that there was more leniency in the clearances around subtransmission lines. PGE proposed leaving the rule as currently written and making broader changes when the North American Electric Reliability Corporation (NERC) and the Federal Energy Regulatory Commission (FERC) promulgate rules regarding vegetation around transmission lines within the next year. PacifiCorp stated that it had no objection to Staff's proposal, but also recognized the merit in PGE's position.

Conclusion

The correction proposed by Staff will be adopted, as proposed, for several reasons. First, in the policy in effect prior to AR 506, standards applied to three levels of voltage: transmission, primary distribution, and secondary distribution. The dividing line between transmission and primary distribution was 50,000 volts, and intrusion was permitted into the clearance for primary distribution only, and not transmission lines. *See* AR 506, Staff comments, Ex 6, at 2 (May 1, 2006). The Commission relied on the Staff policy in adopting the rules in AR 506. *See* Order No. 06-547, at 5, 6. This supports the proposed correction.

In addition, in the initial docket, phase I of AR 506, Staff originally proposed two categories: ten feet clearance for lines energized in excess of 50,000 volts, and five feet clearance for lines energized less than 50,000 volts. See Public Meeting March 7, 2006, Agenda Item No. 6, Staff report, Attachment C, proposed rule OAR 860-024-0016(5). After workshops, Staff's proposal evolved to include three categories, adding a subtransmission category of 50,000 to 200,000 volts, with seven and one-half feet clearance. See Staff comments, Attachment 1, p 8 (May 25, 2006). PGE made comments, proposing a limited intrusion provision for distribution lines alone, even after Staff had proposed a new subtransmission category. See PGE comments, 10 n 5 (May 25, 2006). That is, even after the subtransmission category was proposed in rule, PGE did not seek to add a limited intrusion provision to that category; it does so now. We will not take this opportunity to revisit the rulemaking in its entirety. Additionally, we implemented a reduced clearance for subtransmission lines by adopting Staff's proposal of seven and one-half feet for lines energized between 50,000 and 200,000 volts, rather than the ten feet of clearance initially proposed. We believe this alleviates PGE's concerns.

Finally, both PGE and Staff referred to new NERC and FERC standards related to vegetation around transmission lines, to be issued within the next year. The proper time to revisit vegetation clearances around transmission lines would be after those standards are issued. For now, Staff's proposed correction should be adopted.

ORDER

IT IS ORDERED that the amended rules set forth in Appendix A, are adopted and shall become effective upon filing with the Secretary of State.

Made, entered, and effective MAY 0 4 2007 Lee Beyer John Savage Chairman Commissioner an Ray Baum Commissioner

A person may petition the Commission for the amendment or repeal of a rule pursuant to ORS 183.390. A person may petition the Court of Appeals to determine the validity of a rule pursuant to ORS 183.400.

APPENDIX A

860-024-0016

Minimum Vegetation Clearance Requirements

(1) For purposes of this rule:

(a) "Readily climbable" means vegetation having both of the following characteristics:(A) Low limbs, accessible from the ground and sufficiently close together so that the vegetation can be climbed by a child or average person without using a ladder or other special equipment; and

(B) A main stem or major branch that would support a child or average person either within arms' reach of an uninsulated energized electric line or within such proximity to the electric line that the climber could be injured by direct or indirect contact with the line.

(b) "Vegetation" means trees, shrubs, and any other woody plants.

(c) "Volts" means nominal voltage levels, measured phase-to-phase.

(2) The requirements in this rule provide the minimum standards for conductor clearances from vegetation to provide safety for the public and utility workers, reasonable service continuity, and fire prevention. Each operator of electric supply facilities must have a vegetation management program and keep appropriate records to ensure that timely trimming is accomplished to keep the designated minimum clearances. These records must be made available to the Commission upon request.

(3) Each operator of electric supply facilities must trim or remove vegetation to maintain clearances from electric supply conductors.

(4) Each operator of electric supply facilities must trim or remove readily climbable vegetation as specified in section (5) of this rule to minimize the likelihood of direct or indirect access to a high voltage conductor by a member of the public or any unauthorized person.

(5) Under reasonably anticipated operational conditions, an operator of electric supply facilities must maintain the following minimum clearances of vegetation from conductors:

(a) Ten feet for conductors energized above 200,000 volts.

(b) Seven and one-half feet for conductors energized at 50,001 through 200,000 volts.

(c) Five feet for conductors energized at 600 through 50,000 volts., except

(A) Celearances may be reduced to three feet if the vegetation is not readily climbable.

(**d**<u>B</u>) Intrusion of limited small branches and new tree growth into this minimum clearance area is acceptable provided the vegetation does not come closer than six inches

to the conductor.

(6) For conductors energized below 600 volts, an operator of electric supply facilities must trim vegetation to prevent it from causing strain or abrasion on electric conductors. Where trimming or removal of vegetation is not practical, the operator of electric supply facilities must install suitable material or devices to avoid insulation damage by abrasion.(7) In determining the extent of trimming required to maintain the clearances required in section (5) of this rule, the operator of electric supply facilities must consider at minimum the following factors for each conductor:

(a) Voltage;

(b) Location;

(c) Configuration;

(d) Sag of conductors at elevated temperatures and under wind and ice loading; and

(e) Growth habit, strength, and health of vegetation growing adjacent to the conductor, with the combined displacement of the vegetation, supporting structures, and conductors under adverse weather or routine wind conditions.

Stat. Auth.: ORS Ch. 183, 756, 757 & 758 Stats. Implemented: ORS 757.035 & 758.280 through 758.286