BEFORE THE PUBLIC UTILITY COMMISSION

OF OREGON

AR 506

In the Matter of a Rulemaking to Amend)	COMMENTS OF OREGON PUC
and Adopt Permanent Rules in OAR 860,)	STAFF ON DIVISION 24
Divisions 024 and 028, Regarding Pole)	PROPOSED RULES.
Attachment Use and Safety.)	August 22, 2006

Before the Public Utility Commission of Oregon

AR 506, Division 24 Rulemaking Comments by Commission Staff

August 22, 2006

PURPOSE AND RULE RECOMMENDATIONS

Staff submits these comments after the resubmission of the Statement of Need and Fiscal Impact Statement. Staff makes reference to the previous informal process in this rulemaking and the previous comments and exhibits that have been submitted. Staff also attaches the written notes that Bob Sipler utilized as a basis for his oral presentation at the June 1, 2006 Hearing. See Staff Exhibit 1. All references to the specific rules recommended by Staff in these comments are based on the version titled "Staff Proposed Rules Post-Workshop (Revised 5/23/06)."

Two changes were proposed at the hearing which Staff continues to recommend. These are the "Effective Dates" section added to Rule 0011 as (3)(a) and (b), and the single word change in Rule 0011(2)(a). Staff is willing to recommend one further change to Rule 0016(5)(c)(B) by changing the word "eighteen" to the word "six." Staff believes this change will address most of the remaining concerns raised by several operators. The revision incorporating these three changes and used with the revised Secretary of State filing is attached as Staff Exhibit 2 and is dated July 5, 2006. No other changes are recommended for the Division 24 rules.

FISCAL IMPACT STATEMENT

Verizon previously asserted that the Commission issued the Notice of Proposed Rulemaking (Notice) with inaccurate statements contained in the Fiscal Impact Statement (FIS). Verizon's previously-stated claim of "staggering" costs resulting from the rules is based on misunderstood, unsubstantiated, or out-of-date information. Here are the correct facts.

(1) Portland General Electric's (PGE) claim of additional vegetation management costs is unsubstantiated and inaccurate. PGE vegetation clearance requirements are specified in the Service Quality Measures Agreement and in an additional Stipulated Agreement that were submitted in

Staff's first round comments as Staff Exhibit 11. The Commission policy entitled "Tree to Power Line Clearances" was also attached to these first round comments as Staff Exhibit 6. A careful and fair comparison of these requirements with Staff's presently proposed Division 24, Rule 0016 does not indicate any overall increase in requirements. Staff discussed at the hearing the concept of "roughly equivalent standards" when the present policy is compared with the proposed rules. In fact, the proposed rules decrease these requirements in some areas. Examples are the elimination of the one foot clearance for service and secondary voltage (<600 volts) conductors and cables, and the reduction of clearances from ten feet to seven and one half feet for transmission lines between 50,000 and 200,000 volts. This "roughly equivalent standard" applies to all Oregon electric supply operators. In PGE's case, the additional standards it previously agreed to specify a higher requirement than the proposed rules. One stipulated agreement resulted from a repeated failure to meet vegetation clearance safety standards in the past. The additional standards include specific cycle lengths, maintaining full compliance with the policy as interpreted by Staff, eliminating inadequate clearances from readily climbable trees, prevention of any "interference" as specifically defined, and semi-annual reporting requirements.

- (2) The Oregon Department of Forestry comments referred to in Verizon's comments were submitted earlier in the rulemaking process and Staff believes were based on the requirements for communication operator vegetation management (OAR 860-024-0016(8)) that has since been proposed to be moved from Division 24 rules to Division 28 rules. This change should have addressed most of the concerns expressed by this commenter and others concerned with the preservation of the urban "forest." It is important to remember that the early comments from one person within the Oregon Department of Forestry, based on urban concerns, have been greatly tempered by a second and significantly different comment submitted by a Oregon Department of Forestry manager whose focus was on power line-related fire prevention in suburban and rural areas.
- (3) The repeated example used by Verizon, related to the \$12.7 million per year additional costs, was addressed in Staff testimony at the June 1, 2006 hearing and is included in the notes (Staff Exhibit 1) under Rule 0012. The substance of Staff's rebuttal is that this was an extreme and unrealistic estimate. Most significantly, the costs of system repairs found during routine operator inspections is not an additional cost caused by the proposed

rules. These are a continuation of existing costs of repairs from existing inspection programs presently being performed by most Oregon operators.

Verizon is aware of these inspection and correction program requirements and their costs. It reported to the Commission in 2001:

- ✓ Approximately 543 poles changed out in 1995-6 in Portland;
- ✓ \$550,000 spent in 1997 in the PGE common service areas;
- ✓ Inspection and pole change outs in 1997 with City of Bandon;
- ✓ Douglas Electric Cooperative joint system audit and corrections (2000);
- ✓ Coos-Curry Electric pole transfer backlog clean –up project (2000); and
- ✓ Aggressively pursuing opportunities to work with other pole owners.

See Staff Exhibit 3 (e-mail from Mark Simonson of Verizon to PUC, included is "Verizon's Pole Inspection Policy").

The significance of this reporting by Verizon is to demonstrate that regular maintenance and NESC compliance inspections and repairs are an ongoing part of normal upkeep of the utility systems operated by responsible communication and electric supply operators. While the proposed rules do provide application specifics for Oregon utility operators, these are not new responsibilities or costs. Most of the underlying requirements are already in existence in Oregon Rules as NESC editions adopted in OAR 860-024-0010 and as interpreted by the Commission. The Commission has the existing authority to make safety related decisions in Oregon as the "administrative authority" of the NESC and under ORS 757.035. The Commission has used the existing safety policies within its orders and stipulated agreements, confirming the validity of these administrative interpretations. (See Staff Exhibit 11, First Round Staff Comments for PGE SQM Stipulation adopted under OPUC Order 97-196, June 4, 1997, and PGE Stipulated agreement, Jan. 5, 1999.)

- (4) Verizon also commented on the prior FIS statement regarding exact financial impacts for all utility operators. The difficulty in determining "The exact fiscal and economic impact for every operator" (as explained in the Notice) has more to do with:
 - the large number of operators and variety of operational practices,

- the existing contractual differences and variety,
- differences in construction and maintenance standards,
- different and potentially changing operator attitudes and practices related to utilizing sanctions as allowed in OAR 860-028-0120 through 0240, and
- the potential effect of existing program agreements between individual operators and Staff during the phase-in of the new rules.

The fiscal impact evaluation has more to do with a comparison of life (with all of the variables) under the present laws and policies and enforcement, and life (with all of the variables) under the present laws, the proposed rules, any future policies, and continued enforcement.

(5) There have been some claims that the requirement to repair National Electric Safety Code (NESC) violations has changed or has no substantiation. In this proceeding, the implication is that the requirement is for a higher standard (more rapid repair required) than in the past. In fact, the opposite is true. The traditional NESC two-tiered approach to repairs (life endangering defects corrected immediately / other code non-compliances corrected promptly) have seen only changes that have extended code non-compliance correction deadlines. As seen in the following documents, the correction deadline has gone from repair within one year, to "find it this year and fix it the next," to this rulemaking that allows correction within two years of discovery and a five percent extension into the third year, plus the waiver provision. Staff has had a consistent approach to violation correction over the years and this can be demonstrated by several documents found as Staff Exhibits 4 and 5, and in additional references as noted below.

Staff Exhibit 4 is Commission Order 94-531 which addresses NESC violations by U S West Communications, Inc. (Qwest). On page 5 of 12 in Appendix A there are specific inspection and correction stipulations given in the paragraph on lines 4 though 22. A quote from lines 10 through 14 reads; "with any public safety hazards corrected as soon as possible but no later than thirty (30) days after discovery, and all other violations corrected no later than twelve (12) months after discovery." This order was the result of an extended investigation of U S West's construction and maintenance practices undertaken because of extensive serious NESC violations found by Staff on their system. (See also Order 93-1842, included in Exhibit 4).

A second reference is contained within the Service Quality Measure Agreement adopted in Commission Order 98-191 for Pacific Power and Light (PacifiCorp). This document was attached to Staff's first round comments in Exhibit 5. In Exhibit 5, page 38 under "Measure X2", I. INSPECTION AND REPAIRS, 2. Required Interval, is this requirement, "10-year cycle, 10% annually with no individual year falling below 8.5%. Repairs or replacement completed promptly. Repairs are designated "A" (immediate hazard), requiring correction within 30 days, or "B", requiring correction within approximately one year but in no case extending beyond the calendar year following the year of discovery." This reference also indicates the reasonably consistent correction deadline found acceptable by the Commission.

Another reference is found in the recommended rules contained in the Staff Report titled "The Battle for the Utility Pole and the End-Use Customer" (Staff Exhibit 5). This report or "white paper" was widely distributed to the industry in 2003 with a request for comments. Extensive comments were received and posted on the Commission web site. In attachment D of that report on page D-5 in (5) is a proposed rule that reads: "Each operator must correct violations of Commission safety rules found during inspections and activities in sections (3), (4)(b) and (4)(c) in a prompt manner, not to exceed 12 months from the time of discovery." (Section (4)(b) in the white paper refers to the 2-year electric operator safety patrol, and (4)(c) refers to the detailed facilities inspection program).

As demonstrated in these references, the proposed rules contain significant Staff compromise, in order to accommodate operator flexibility in managing corrections in an economical manner. The proposed rules under consideration in this docket constitute a lesser standard than demonstrated in the past, rather than a greater or more expensive requirement.

(6) Staff also would emphasize another significant difference between the positions of Staff and the OJUA, regarding repairs. Staff's proposal is intended to allow for the possibility of coordinated work between the respective operators, and for completing those repairs in the most economical and timely manner. This approach is focused on achieving compliance. The proposals from the OJUA seem to be aimed at living with NESC violations for extended periods of time, rather than achieving compliance. Under the current OJUA proposal, which acknowledges that there are many existing NESC violations, it is possible that an operator could

delay inspection of their system until the 10th year. Then, at least some of the violation repairs could be delayed for 10 years. This means that at least some existing violations could remain uncorrected for 20 years.

The claims by Verizon, OJUA, and other operators that requirements and costs under the proposed rules will be significantly higher are inaccurate and unsubstantiated. Staff has supported the need for the rules and their practicality at all stages of the comments.

CLOSING GENERAL COMMENTS

Staff believes the purpose of this rulemaking is to formulate needed clear and reasonable safety rules that are roughly equivalent to present (though less formal) policy requirements, and to ensure that the rules contain no escape clauses that would make the standards contained within the rules meaningless or unenforceable. The rules as presently proposed by Staff accomplish this purpose.

The claims that the proposed rules are onerous and expensive are not true. Staff can think of no clearer indication of this than to use the examples of PacifiCorp and Idaho Power, who perform inspection and vegetation management programs in other states they serve that are similar to Oregon programs, even though not required. They clearly see the practicality and value of these programs. Some Idaho Power practices, such as repairing all NESC violations in the year of discovery, exceed both the present and proposed rule requirements for the inspection and correction program. Additional perspective regarding excessive unaffordable costs being placed on attaching operators by pole owners is offered in the one-page Staff Exhibit 6, titled "Piggybacking on Poles."

The Edison Electric Institute submitted testimony to the Senate Committee on Commerce, Science and Transportation regarding the investor-owned-utility perspective on joint-use pole attachments on Feb. 14, 2006. This 10-page document is attached as Staff Exhibit 7. This organization represents electric utilities that serve 71 percent of all U.S. customers and this testimony gives an insightful perspective from pole owners.

A final document gives a consultant's perspective on joint-use issues from Tom Magee of Keller and Heckman LLP that was published in Transmission

and Distribution World magazine in 2004. The article considers Federal Communications Commission rulings related to rates, access, safety and reliability. The five page article is attached as Staff Exhibit 8.

Staff's Division 24 Recommendation

Staff recommends the Commission adopt the attached rules in Staff Exhibit 2 titled "Staff Proposed Division 24 Rules, (July 5, 2006)." These rules are the earlier version dated 5/23/06, with the three changes detailed in the first section of these comments. These rules contain the needed elements to achieve reasonable and enforceable utility safety. Commission Staff recommends not accepting any of the other changes proposed.

June 1, 2006 AR 506 Hearing Division 24 Proposed Rules

Good Morning Judge Smith and Interested Parties to the AR 506 Rulemaking. My name is Bob Sipler and I am a staff witness.

Staff has a proposal for a wording change that addresses when the inspection areas will have to be designated, and when the inspections within those designated areas will start. Other than those two changes, and another word change that I will mention later, Staff is not recommending any further changes the rules titled "Staff Proposed Rules Post - Workshop (Revised 5/23/06)." This recommendation is not made lightly and a great deal of deliberation occurred before this decision was made.

I will go through the rules section by section and limit my comments to arguments or proposals raised recently. I do not intend to repeat earlier written comments.

Rule OAR 860-024-0001 - No further changes to definitions are recommended.

<u>Rule OAR 860-024-0011</u> – Other than the beginning dates mentioned earlier, Staff is recommending no further changes except for a clarifying word change in rule (2)(a). The second word "annual" should be changed to "entire". This will clarify the intent and agree with the following sentence.

The recommendations by OJUA for this section have significant shortcomings that will serve neither this industry nor the PUC.

- 1. Staff's proposal for an orderly inspection coverage of small portions of Oregon's utility systems is replaced by the OJUA with two 5-year inspection periods. There is no requirement other than to report at the 5-year point, and to inspect the entire system before the 10-year deadline, possibly in the final year. This plan would undermine any predictability in inspection programs. In fact, almost all requirements for these essential safety programs have been removed. The Commissioners indicated that they wanted annual inspection amounts to be "required" not "recommended". This proposal is going in the opposite direction.
- 2. The <u>requirement</u> to inspect designated geographic areas in even annual amounts has been removed. This is a concept that OJUA has endorsed and tried to develop for years. Staff's proposal is a pathway to provide opportunities for operators to voluntarily work together to improve efficiencies and effectiveness in quality NESC inspections. Staff believes the coordination of inspections by designating annual geographic areas is essential to achieving improvements in NESC compliance.
- 3. The OJUA has proposed yet another restriction to the Commissioners ability to shorten an inspection cycle
- 4. OJUA proposes only using its website to "provide" notice of intent to "inspect" 0011(1) (c), and in 0011(2) (b) a "timely notice of the designation of the annual geographic area to all owners and occupants." These notices are for voluntary or "discretionary" purposes only. Staff believes this requirement to use only the OJUA website is very inappropriate. The electric operator should be able to utilize any appropriate method, including maps or hard copy to notify its occupants. Many operators do not belong to

the OJUA and should not be required to utilize this site. While this could be one of many options, it should not be a requirement.

While the OJUA has many reasons why Staff's proposal for system inspections will not work, be assured that this 5-year + 5-year voluntary approach would be inadequate in its ability to move toward NESC compliance, and to provide any meaningful level of accountability for utility operators. Staff believes its proposed rules will be an improvement to existing inspection programs that most operators are already performing.

<u>Rule OAR 860-024-0012</u> – The OJUA has refined its proposal somewhat but has failed to address its open-ended and arbitrary nature.

There is still a 3 tier approach where the operator will decide how dangerous an NESC violation really is and then place it in one of 3 repair categories; "imminent danger," "no imminent danger," and "little or no foreseeable risk of danger." These categories, except for imminent danger, are not clearly defined and the NESC violations that could be placed in them under certain conditions have not been agreed upon. Interestingly, the "little or no foreseeable risk of danger" category allows twice the time to correct (10 years) as does the "no imminent danger" category (5 years). Past proposals also allowed the lowest level of hazard category to defer correction only where all affected operators agreed. This proposal requires only a "majority" of affected operators to agree. This change would require some operators to work under conditions that they believe are unsafe.

Staff continues to reject this arbitrary approach. The NESC defines what level of safety is acceptable. Violations must be corrected unless waived by the administrative authority.

Where the code does not give exact correction times, the administrative authority can make that determination. Staff believes its proposal is reasonably paced, cost effective, and will move us towards the goal of NESC compliance. Staff recommends no changes to rule 0012. This would include any proposed change to the waiver rule.

Verizon included a comment in its second round testimony (page 3, top paragraph) which indicated that Staff acknowledged in the workshops and in its power point "that the cost of only one of its proposed rule revisions would be \$12.7 million per year for ten years." This is inaccurate for two reasons. First, the super high estimate given was an unrealistic worst case scenario meant only to illustrate that even if figured this way, the costs per customer per month was 60 cents. The more realistic, but still high estimate is more like \$5.7 million per year or 27 cents per customer per month. This figure would include bringing all Oregon systems into compliance by all operators during that ten year period. Secondly, these are not additional or new costs caused by these rules. These are costs to do inspection repairs for existing programs that will be continued under the proposed rules. See the note below also.

Note: The NESC corrections as required in Staff proposed Rule 860-024-0012 will not apply to Portland General Electric and Pacific Power and Light Company for an extended period of time (through 2016 and 2014 respectively at present) because the stipulated Service Quality Agreements exceed these requirements. These two utility operators serve approximately 75% of Oregon electric customers.

Rule OAR 860-024-0016

In the vegetation clearance rule, as in other parts of these rules, there are big arguments about the "exceptions" or the escape clauses. Examples are 1) With the rule that allows the Commission to shorten inspection cycles, there has been a constant effort to make this next to impossible by adding layers of requirements that must been proven. 2) Now, there is an attempt to make the inspection program requirements into two 5 years blocks of vague voluntary guidelines. 3) The correction of violations as proposed by OJUA always has a third category that allows NESC violation correction to be put off indefinitely, or in the latest proposal for up to 10 years. In each case, the intended requirement can be ignored because there is a way to avoid that standard. These are major areas of concern because they can make it difficult to enforce what was intended to be reasonable rules. The same concept is true of the vegetation clearance rule. We have had little discussion about the intended specifics where a certain number of feet of clearance is required for different voltage lines. Instead, we have had extensive comments about how to define a readily climbable tree, the wording of the instrusion exception, removing "interference," and now establishing a "compliance sampling method" and "threshold requirements for compliance" that would limit Staff's ability to do its job. Incidentally, there is an escape clause imbedded in this proposal where compliance is only required for 90 – 95% of the sample (see page 11, PGE second round comments). Staff does believe that this proposed new auditing requirement for Staff is beyond the scope of this rulemaking.

It has been Staff's intent to carefully bring existing policy requirements over into rules without major changes in intent. This means that the rule would be roughly equivalent to existing requirements, and hopefully would be clear as to intent. This is true for the vegetation clearance rules in 0016, despite claims of monumental changes. The clearance

requirements of sub-transmission (50,000 volts through 200,000 volts) and for secondary (below 600 volts) lines have both been reduced. Other clearances remain the same as the policy.

The major area of argument is the exception clause. In this area, Staff believes that the proposed rule (revised 5/23/06) provides clear and unambiguous wording that provides an intent that is roughly equivalent to the policy. A partial quote of the policy does not show this intent clearly. Under policy section 2b, Primary Distribution Lines, the 5' and 3' clearances are specified (along with a "readily climbable" definition). Then, this explanatory and exception section follows:

Trees should be trimmed to the extent that this designated minimum clearance area will be kept free of new tree growth until the next scheduled trimming cycle. If the trimming cycle is other than three years, as may be needed for fast-growing tree species or where limited trimming is permitted by the tree owner, appropriate records need to be maintained to insure timely trimming is accomplished.

Intrusion of limited small branches and new tree growth into this minimum clearance area can be tolerated so long as it does not contribute to a safety hazard to a person climbing the tree or cause interference with the conductors.

This policy statement makes it clear that the clearance zone should be free of vegetation including "cycle busters." There is an intrusion clause, but it is somewhat ambiguous. The clause does require personal safety clearances for a person climbing the tree and no "interference" at minimum.

Staff believes that the proposed exception (B) is roughly equivalent and is clear as to the intent. The 18 inch minimum clearance follows the pattern of the rule's other required clearances by using a "rule of thumb" or simplified standard, rather than a complicated formula to describe an acceptable remaining clearance for the infrequent intrusions. This exception in Staff's proposed rules reads:

(B) Infrequent intrusion of small new vegetation growth into these minimum clearance areas is acceptable provided the vegetation does not come closer than eighteen inches to the conductor.

For those electric utility operators who have been complying with the intent of the policy, there should be no increase in costs under these proposed rules. The claim that the proposed rules present a much higher standard comes from a limited source and simply is not accurate. Most other operators are maintaining adequate clearances and some have stated that they do not anticipate increased costs under the proposed rules. Staff has seen no substantiation to support the one claim which represents an increase of approximately 50% of current annual vegetation management program costs.

Conclusion

In conclusion, Staff recommends the rules it has proposed as revised on 5/23/06, except for the "effective date" addition to rule 0011 and the single word change noted in (2)(a) of this same rule ("annual" to "entire"). The rules have undergone a significant amount of change, and for the most part are better because of it. Everyone has had to compromise, analyse, and re-think these issues. These rules must be understandable, fair, practical, and enforceable. While there are some changes, such as the designated annual geographic area inspection, for the most part the rules are roughly equivalent to standards that have been in place for many years.

AR 506 Staff Proposal

Add to Staff Proposed Rules Post-Workshop (Revised 5/23/06) OAR 860-024-0011:

(3) Effective Dates

- (a) Section (2)(a) of this rule is effective January 1, 2007
- (b) Section (1)(b) of this rule is effective January 1, 2008

STAFF PROPOSED DIVISION 24 RULES, (July 5, 2006)

860-024-0001

Definitions for Safety Standards

For purposes of this Division, except when a different scope is explicitly stated:

- (1) "Commission Safety Rules" mean the rules included in OAR Chapter 860, Division 024.
- (2)(1) "Facility" means any of the following lines or pipelines including associated plant, systems, rights-of-way, supporting and containing structures, equipment, apparatus, or appurtenances:
- (a) A gas pipeline subject to ORS 757.039;-or
- (b) A power line or electric supply line subject to ORS 757.035; or
- (c) A telegraph, telephone, signal, or communication line subject to ORS 757.035.
- (3)(2) "Government entity" means a city, a county, a municipality, the state, or other political subdivision within Oregon.
- (4) "Material violation" means a violation which: (a) is reasonably expected to endanger life or property; or (b) poses a potential safety risk to any operator's employees or to the general public.
- (5)-(3) "Operator" means every person as defined in ORS 756.010, public utility as defined in ORS 757.005, electricity service supplier as defined in OAR 860-038-0005, telecommunications utility as defined in ORS 759.005, telecommunications carrier as defined in ORS 759.400, telecommunications provider as defined in OAR 860-032-0001, consumer-owned utility as defined in ORS 757.270, cable operator as defined in ORS 30.192, association, cooperative, or government entity

and their agents, lessees, or acting trustees or receivers, appointed by court, engaged in the management, operation, ownership, or control of any facility within Oregon.

- (6) "Pattern of noncompliance" means a course of behavior that results in frequent, material violations of the Commission Safety Rules.
- (7)(4) "Reporting Ooperator" means an operator that:
- (a) serves 20 customers or more within Oregon; or
- (b) is an electricity service supplier as defined in OAR 860-038-0005 and serves more than one retail electricity customer.

Stat. Auth.: ORS 183, ORS 756, ORS 757 & ORS 759
Stats. Implemented: ORS 756.040, ORS 757.035, ORS 757.039, ORS 757.649, ORS 758.215, ORS 759.005 & ORS 759.045
Hist.: PUC 2-1996, f. & cert. ef. 4-18-96 (Order No. 96-102); PUC 9-1998, f. & cert. ef. 4-28-98; PUC 23-2001, f. & cert. ef. 10-11-01

<u>860-024-0011</u>

Inspections of Electric Supply and Communication Facilities

- (1) An operator of electric supply facilities or an operator of communication facilities must:
- (a) Construct, operate, and maintain its facilities in compliance with the Commission Safety Rules.
- (b) Conduct detailed inspections of its overhead facilities to identify violations of the Commission Safety Rules. The maximum interval between detailed inspections is ten years, with a required inspection rate of approximately 10 percent of overhead facilities per year. An operator may seek a waiver from the Commission of the approximately

10 percent of overhead facilities per year requirement for good cause shown. This inspection must cover the geographic area designated in subsection (2)(a) of this rule by the operator of electric supply facilities within the planned year. Operators of communication facilities are required to inspect, either jointly or independently, the same geographic area designated by the operators of the electric supply facilities during the same designated annual period. Detailed inspections include, but are not limited to, visual checks and practical tests of all facilities, to the extent required to identify violations of Commission Safety Rules.

Where facilities are exposed to extraordinary conditions or when an operator has demonstrated a pattern of noncompliance with Commission Safety Rules, the Commission may require a shorter interval between inspections.

Exception: Occupants who are required by the detailed inspection system in this rule to inspect more than 15% of their total Oregon facilities in a single year may appeal to the Commission for an alternate plan.

- (c) Conduct detailed facility inspections of its underground facilities on a ten-year maximum cycle, with a recommended inspection rate of 10 percent of underground facilities per year.
- (d) Maintain adequate written records of policies, plans and schedules to show that inspections and corrections are being carried out in compliance with this rule and OAR 860-024-0012. Each operators must make these records available to the Commission upon its request.
- (2) Each operator of electric supply facilities must:
- (a) Designate entire geographic program areas to be inspected pursuant to subsection (1)(b) of this rule within its service territory. The annual

coverage areas for the entire program must be made available in advance and in sufficient detail to allow all operators with facilities in that service territory to plan needed inspection and correction tasks.

Unless the parties otherwise agree, operators must be notified of any changes to the established annual geographic area designation no later than 12 months before the start of the next year's inspection.

- (b) Perform routine safety patrols of overhead electric supply lines and accessible facilities for hazards to the public. The maximum interval between safety patrols is two years, with a recommended rate of 50 percent of lines and facilities per year.
- (c) Inspect electric supply stations on a 45 day maximum schedule.

(3) Effective Dates

- (a) Section (2)(a) of this rule is effective January 1, 2007
- (b) Section (1)(b) of this rule is effective January 1, 2008

Stat. Auth.: ORS Ch. 183, 756, 757 & 759

Stats. Implemented: ORS 757.035

Hist.: NEW

<u>860-024-0012</u>

<u>Prioritization of Repairs by Operators of Electric Supply Facilities and</u>
<u>Operators of Communication Facilities</u>

(1) A violation of the Commission Safety Rules that poses an imminent danger to life or property must be repaired, disconnected, or isolated by the operator immediately after discovery.

- (2) Except as otherwise provided by this rule, the operator must correct violations of Commission Safety Rules no later than two years after discovery.
- (3) An operator may elect to defer for a third year corrections of no more than 5 percent of violations identified during the operator's detailed facility inspection each year. Violations qualifying for deferral under this section cannot reasonably be expected to endanger life or property. The operator must develop a plan detailing how it will remedy each such deferral. If more than one operator is affected by the deferral, all affected operators must agree to the plan or the violation(s) may not be a part of the third year deferral.
- (4) For good cause shown and where equivalent safety can be achieved, unless otherwise prohibited by law, the Commission may for a specific installation waive the requirements of OAR 860-024-0012.

Stat. Auth.: ORS Ch. 183, 756, 757 & 759

Stats. Implemented: ORS 757.035

Hist.: NEW

<u>860-024-0016</u>

Minimum Vegetation Clearance Requirements

- (1) For purposes of this rule:
- (a) "Readily climbable" means vegetation having both of the following characteristics:
 - (1) 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
- (2) 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) Clearances may be reduced to three feet if the vegetation is not readily climbable.
 - (B) Infrequent intrusion of small new vegetation growth into these minimum clearance areas 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

Hist.: NEW

Accident Incident Reports

860-024-0050

Accident Incident Reports

- (1) As used in this rule:
- (a) "Serious injury to person" means, in the case of an employee, an injury which results in hospitalization. In the case of a non-employee, "serious injury" means any contact with an energized high-voltage line, or any accident incident which results in hospitalization. Treatment in an emergency room is not hospitalization.
- (b) "Serious injury to property" means:
- (A) Damage to operator and non-operator property exceeding \$25,000100,000; or
- (B) In the case of a gas operator, damage to property exceeding \$5,000; or
- (C) In the case of an electricity service supplier (ESS) as defined in OAR 860-038-0005, damage to ESS and non-ESS property exceeding \$25,000100,000 or failure of ESS facilities that causes or contributes to a loss of energy to consumers; or
- (D) Damage to property which causes a loss of service to over 500 customers (50 customers in the case of a gas operator) for over two

hours (five hours for an electric operator serving less than 15,000 customers) except for electric service loss that is restricted to a single feeder line and results in an outage of less than four hours.

- (2) Except as provided in section (5) of this rule, every reporting operator shallmust give immediate notice by telephone, by facsimile, by electronic mail, or personally to the Commission, of accident incidents attended by loss of life or limb, or serious injury to person or property, occurring in Oregon upon the premises of or directly or indirectly arising from or connected with the maintenance or operation of a facility.
- (3) Except as provided in section (5) of this rule, every reporting operator shallmust, in addition to the notice given in section (2) of this rule for an accident described in section (2), report in writing to the Commission within 20 days of the occurrence. In the case of injuries to employees, a copy of the accident incident report form that is submitted to Oregon OSHA, Department of Consumer and Business Services, for reporting accident injuries, will normally suffice accident incident for a written report. In the case of a gas operator, copies of or leak reports submitted under 49 CFR Part 191 will normally suffice.
- (4) An accident report filed by a public or telecommunications utility in accordance with ORS 654.715 cannot be used as evidence in any action for damages in any suit or action arising out of any matter mentioned in the report.
- (5) A Peoples Utility District (PUD) is exempt from this rule if the PUD agrees, by signing an agreement, to comply voluntarily with the filing requirements set forth in (2) and (3).

(6) Gas operators have additional incident and condition reporting requirements set forth in OARs 860-024-0020 and 860-024-0021.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the office of the Public Utility Commission.]

Stats. Implemented: ORS 654.715, 756.040, 756.105, 757.035, 757.039, 757.649, 759.030, 759.040 & 759.045

Hist.: PUC 164, f. 4-18-74, ef. 5-11-74 (Order No. 74-307); PUC 3-1981, f. & ef. 6-4-81 (Order No. 81-361); PUC 21-1985, f. & ef. 11-25-85 (Order No. 85-1130); PUC 12-1989, f. & cert. ef. 8-11-89 (Order No. 89-946); PUC 4-1992, f. & ef. 2-14-92 (Order No. 92-234); PUC 1-1998, f. & ef. 1-12-98 (Order No. 98-016); PUC 3-1999, f. & ef. 8-10-99 (Order No. 99-468); renumbered from OARs 860-028-0005 and 860-034-0570; PUC 23-2001, f. & ef. 10-11-01 (Order No. 01-839)

WALLACE John

From: Sent: mark.simonson@verizon.com Friday, January 05, 2001 1:44 PM

To:

john.wallace@state.or.us

Cc:

bill.fisher@verizon.com; ken.faircloth@verizon.com; mike.bevis@verizon.com;

ron.henley@verizon.com

Subject:

Compliance Update - Verizon

John -

As I promised in our telephone discussion of January 2, the following is a brief update of what Verizon Northwest has been doing regarding facility inspection issues. As discussed, this update will suffice in place of the formal discussion meeting that you are having with each of the major pole owners in Oregon:

Inspections - Verizon will continue working with PGE and the other Portland area pole owners to coordinate facility inspections. Since 1995, Verizon has been working with PGE on the FITNES and pole change-out program.

Approximately \$550,000 alone was spent in 1997 on correcting NESC code violations in the PGE common serving areas. In addition, in 1995, Verizon changed out 243 substandard poles in the Portland metro area and approximately 300 in 1996. We continue changing out deteriorated poles as necessary.

- In 1997, Verizon worked with the City of Bandon to inspect and change out all substandard poles in our mutual serving area. Verizon inspected 557 poles.
- In 2000, Verizon conducted a complete audit of our facilities on Douglas Electric Cooperative poles (approximately 500 poles), correcting all NESC code violations found on them.

- In 2000, Verizon agressively worked to clean up a pole transfer backlog in the Coos-Curry Electric common serving area.

These are only a few examples of what Verizon is doing. Verizon has been agressively pursuing opportunities to work with other pole owners in pole inspection and treatment programs in our common serving areas; inspecting and replacing substandard poles and correcting code violations. In addition to stepping up the effort to inspect and correct, Verizon is augmenting its formal reporting process to receive credit for the effort it has been putting forth. Verizon's ICGS mapping system is capable of capturing information required regarding facility inspections. Processes are being developed to capture the information consistantly.

On November 28th, Verizon convened an Inspection Compliance Planning Meeting in our Beaverton HQ facility. Representatives from our Customer Operations, Construction, Engineering, Staff Support, System Support and Regulatory groups participated. As a result of this meeting, Verizon has committed to adding two full time employees to facilitate the OPUC facility inspection and reporting requirement. This is in addition to formallizing inspections that are already being done as part of our BAU engineering and construction process. Training and tailgate sessions are being conducted to ensure that outside employees understand NESC codes and pole attachment requirements. Our quality inspection processes are being reviewed to ensure that all violations are documented and corrected.

As you can see, Verizon's facility inspection program is in the process of evolution. With the full support evidenced by our upper management team, I can confidently say that Verizon will be in compliance with the OPUC's inspection standards in the near future.

If you have any questions, give me a call. If I don't talk to you before, I'll touch bases with you at the Portland Pole Owners meeting on the 18th.

Mark Simonson Specialist - Easement/ROW Verizon Northwest Inc. Phone: 425/261-6820

AR 506 Division 24 Staff Exhibit 3/Pg. 2

April 9, 2001

17933 N.W. Evergreen Pkwy P.O. Box 1100 Beaverton, OR 97076



Mr. Jerome Murray Program Manager. Oregon Public Utility Commission 550 Capitol Street N.E., Suite 215 Salem, OR 97301-2551

Dear Mr. Murray:

Subject: VERIZON'S POLE INSPECTION POLICY

Verizon Northwest Inc. (Verizon) is submitting the attached pole inspection policy in compliance with the Oregon Public Utility Commission's staff policy regarding line inspection requirements for utility operators. That policy delineated that each utility operator have clearly written policies and work practices for its line inspection policies.

If you have any questions concerning this matter, please call Dean Randall at (503) 629-2285.

Sincerely,

Fred Logan

Director - Regulatory and Governmental Affairs

FL:ckw

Attachments (3)

VERIZON - OREGON OSP FACILITIES INSPECTION POLICY

1. Purpose

To ensure Verizon OSP facilities in the State of Oregon are in compliance with the National Electrical Safety Code (NESC), and safe for use by Verizon, other users and the public.

2. Scope

This policy applies to all Verizon OSP facilities used for electric transmission or telecommunication purposes within the State of Oregon.

3. Coordination and Notification

- a. Verizon will issue written or electronic notification to other joint users when actions are required to bring their facilities into compliance.
- b. Verizon will notify other utilities when unauthorized joint use is discovered.

4. Construction/Customer Operations Responsibilities

- a. Construction and Customer Operations will build all new plant in compliance with Verizon practices and ensure compliance with the NESC. Construction projects will be inspected by journeyman technicians and management personnel per the established Construction Quality Assurance Operational Review program (QAOR). New service installations will be inspected per the established Service Installation QAOR program.
- b. Construction will annually inspect a minimum of 10% of the Verizon owned poles in the State of Oregon. The inspection process will ensure that all poles and contacts are within NESC specifications and safe for use by Verizon and other contacting Joint Use Utilities.
- c. To ensure compliance with the NESC on foreign owned poles, Verizon is establishing cooperative agreements with the pole owners to receive copies of their pole inspection reports that indicate Verizon NESC violations. Verizon Construction and Customer Operations receives these inspection reports via Verizon Engineering, coordinates the correction of NESC violation and informs engineering when corrections are completed.

d. Construction and Customer Operations will correct routine deficiencies. When a work order is required deficiencies will be forwarded to engineering. Construction will track the deficiencies, and coordinate with engineering to ensure corrections are completed in a timely manner.

5. Pole Inspection Specifications

- a. The pole Inspection process will include.
 - 1) Pole structural integrity tests.
 - 2) Separation from electrical and other telecommunication contacts per NESC.
 - 3) Vertical ground clearance per NESC.
 - 4) Climbing space and climbing hazards.
 - 5) Ground fault protection (bonding and grounding).
- b. Inspection Administration will include
 - 1) Pole tagging for record purposes.
 - 2) Inspection and pole/contact data base input.
 - 3) Document foreign contacts.
 - 4) Follow-up to ensure resolution.

6. Engineering Responsibilities

- a. The OSP Engineering department will maintain the records to document pole inspection history and to issue program reports.
- b. Engineering Joint Pole Administration receives inspection reports from other utilities and forwards to Construction for resolution.
- c. When required Engineering will prepare work orders to replace defective facilities or to complete other work to bring facilities into NESC compliance.

7. Ongoing Awareness

All Verizon employees should remain alert in their daily work to observe facilities conditions that may create an unsafe condition for workers or the public. When unsafe situations are observed, employees shall correct the situation or report it to their supervisor for resolution using the Plant Condition Report procedure – per Field Operations Bulletin 01-003.

8. Inspection Records

Verizon will maintain records to track the inspection process:

- a. Construction will maintain a database of pole inspections, date inspected, inspector, nature of deficiencies, and date corrected.
- b. Engineering will maintain ICGS records indicating when Verizon poles were inspected.
- d. Engineering will prepare and submit the required reports to communicate overall inspection progress.

ORDER NO. 94-531
ENTERED MAR 28 1994

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 640

In the Matter of Violations of the National)	•	
Electrical Safety Code by U S WEST)		ORDER
COMMUNICATIONS, INC.)		
)		

DISPOSITION: STIPULATION ADOPTED

On December 20, 1993, the Commission issued Order No. 93-1842, instructing Commission staff to commence an investigation of U S WEST Communications, Inc.'s (USWC) overhead line system. The investigation was intended to address and eliminate National Electrical Safety Code (NESC) violations and safety hazards posing a threat to public health and safety. The order set forth specific analyses and examinations which staff was required to conduct. The order also instructed staff to determine corrective measures to be taken by USWC and whether monetary penalties should be pursued.

USWC, in cooperation with staff's investigation, developed a specific plan to eliminate the excessive NESC violations (on USWC's overhead line system in Oregon) and to resolve other related safety matters. Staff concluded that the terms of the plan, if executed in a thorough manner, would eliminate the safety problems that gave rise to this investigation docket. Thus, the plan became the basis for a stipulated agreement entered into by staff and USWC. Paragraphs 2 through 12 of the stipulated agreement describe specific actions which USWC agrees to perform in order to resolve the safety problems addressed by the investigation. Staff determined that, so long as USWC complies with the terms of the stipulated agreement, staff would not recommend monetary penalties at this time. Staff's conclusions and recommendations are contained in a written report attached hereto as Appendix A. Staff's report also summarizes and includes the stipulated agreement with USWC.

At its March 22, 1994, public meeting, the Commission considered and adopted staff's report and the stipulated agreement.

ORDER

IT IS ORDERED that US WEST Communications, Inc., shall comply with all the terms and conditions of the stipulated agreement attached hereto as Appendix A.

Made, entered, and effective MAR 2 8 1994

Joan H. Smith

Chairman

Ron Eachus

Commissioner

Roger Hamilton
Commissioner

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-14-095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-13-070(2)(a). A party may appeal this order to a court pursuant to ORS 756.580.

ITEM NO. _____

PUBLIC UTILITY COMMISSION OF OREGON STAFF REPORT PUBLIC MEETING DATE: March 22, 1994

REGULAR AGENDA X CONSENT AGENDA EFFECTIVE DATE

DATE:

March 9, 1994

utá)

TO:

Mike Kane via Bill Warren and Jerry Murray

FROM:

Bob Sipler, PUC Electrical Safety Analyst

SUBJECT:

Investigation into U S WEST Communication, Inc.'s Safety

Violations (UM 640)

SUMMARY RECOMMENDATION:

Staff recommends that the Commission utilize the attached stipulation which has been agreed upon by U S WEST Communications, Inc. (USWC), and PUC Safety staff to issue a PUC order requiring USWC to accomplish the tasks and meet the deadlines specified in this document.

DISCUSSION:

Pursuant to PUC Order No. 93-1842, PUC staff has completed its investigation into USWC's overhead line safety programs and the required National Electrical Safety Code (NESC) compliance. USWC has developed an action plan (the attached stipulation) that should eliminate the excessive NESC violations presently on USWC's system in Oregon.

The investigation by PUC staff included the items stated in the above order in Item 2, a through f. The items in the attached stipulation, if executed in a thorough manner, should eliminate the problems which caused PUC staff to initiate this investigation.

The attached stipulation requires:

- (1) Specific stepped-up maintenance programs.
- (2) The coordination of inspection and maintenance work with joint-use electric utilities.
- (3) Specific deadlines for inspection, testing, and replacement of substrength poles.
- (4) Prompt correction of public safety hazards as they are found.
- (5) Updating of construction standards and maintenance procedures.
- (6) Good faith negotiations to transfer pole ownership or maintenance program responsibility to the electric utilities on joint-use poles that support high-voltage lines.

March 9, 1994 Page Two

(7) Regular reporting of program progress to PUC staff.

No financial penalties are recommended at this time. However, if USWC cannot demonstrate compliance with the stipulation, then staff will recommend fines as allowed under ORS 757.990(1). It will be crucial for USWC management to have both project leadership and internal auditing to assure both timely completion and quality assurance for this multiyear project.

STAFF RECOMMENDATION:

Staff recommends that the Commission issue an order requiring USWC to comply with the terms of the attached stipulation. Staff further recommends that should USWC not substantially comply with these terms for the duration of the agreement, fines be pursued as allowed in ORS 757.990(1).

17:/230HH

Attachment

```
BEFORE THE PUBLIC UTILITY COMMISSION
 1
 2
                                OF OREGON
 3
                                  UM 640
   In the Matter of the Investigation )
   into safety violations on U S WEST )
                                                 STIPULATION
 5 Communications overhead lines.
6
        On December 7, 1993, the Public Utility Commission of Oregon
7
   ("the Commission") opened a comprehensive state-wide investigation
   pursuant to ORS 756.515, regarding the safety and maintenance of
   U S WEST Communications, Inc.'s (USWC) overhead lines.
10
        WHEREAS USWC and Staff are mutually desirous of resolving the
11
12
   issues in PUC docket UM 640,
        NOW THEREFORE, the parties STIPULATE AND AGREE as follows:
13
        <u>Definitions</u>
   1.
14
        Α.
              Lines:
                         Cables,
                                  wires, right-of-ways,
                                                           supporting
15
              structures, and associated equipment used to transmit
16
              communication signals or supply electricity.
17
              Public Safety Inspection: Systematic inspections to
        В.
18
              identify public
                                safety
                                         hazards
                                                   and right-of-way
19
              encroachments that can be seen during a drive-by patrol.
20
              (See Attachment 1, PUC Line Inspection Policy.)
21
              Detailed Inspection: Systematic inspection intended to
        C.
22
              identify and correct all NESC violations on utility
23
                      This includes identification and evaluation of
24
              marginal items that could fail or create a safety
25
              violation before the next detailed inspection and repair
26
Page
        UM 640 - STIPULATION
```

- 1 cycle. (See Attachment 1, PUC Line Inspection Policy).
- 2 D. USWC: U S WEST Communications, Inc.
- 3 E. NESC: The 1993 edition, or subsequent editions adopted
- 4 by Commission rule, of the National Electrical Safety
- 5 Code.
- 6 F. sub-NESC Poles: Poles that do not adhere to the
- 7 minimum strength requirements for NESC compliance.
- 8 G. Public Safety Hazard: Defects that could reasonably be
- g expected to endanger life or property.
- 10 2. All probable NESC violations cited by PUC Staff in 1993 and
- listed on Attachment 2 will be corrected no later than March
- 1, 1994, with the following exceptions: 1) C93-11 (#160, 16w,
- and 16aa-16ag) which will be completed be April 30, 1994, and
- 2) C93-20 (#2a-2d and 2f-2i) which will be completed by March
- 15 31, 1994. USWC will provide written confirmation within seven
- 16 (7) days of completion of each of the outstanding probable
- 17 violations.
- 18 3. USWC will complete a "public safety inspection" of all USWC
- lines throughout the state in 1994. This inspection shall
- locate and correct all low pole steps (lower than 8 feet),
- 21 missing guy markers, hanging drops, and other public safety
- hazards. All violations found during the inspections shall be
- corrected by December 31, 1994. USWC shall provide a written
- 24 summary report of the project results to Staff by March 31,
- 25 1995.
- 26 During this inspection, USWC shall identify and record

Page 2 UM 640 - STIPULATION

1	÷	all incomplete pole transfers for follow-up action. Line
2		transfers and pole removals shall be completed within six
3		months after discovery.
4	4.	USWC shall perform a "detailed inspection" of all USWC lines
5		throughout the state. This inspection is to be completed by
6		December 31, 1998, with a minimum of 20 percent completed
7		during each of the first four years. This inspection includes
8		all lines except those which were "detail inspected" since
9		1988. The correction of all NESC violations found during this
10		inspection are to be completed by December 31, 1999, with any
11		public safety hazards corrected as soon as possible but no
12		later than thirty (30) days after discovery, and all other
13		violations corrected no later than twelve (12) months after
14		discovery. Marginal items that could fail or create a safety
15		violation before the next detailed inspection and repair cycle
16		must be recorded and evaluated so that repairs will be
17		completed before reasonable safety margins are exceeded.
18	5.	USWC will test all company-owned wood poles for compliance
19		with NESC strength requirements by year-end 1998. Pole
20		testing shall be in accordance with generally accepted utility
21		industry standards. Prior testing since 1988 can be utilized
22		if appropriate testing methods were used.
23		Where any "prior testing" is used, a legible copy of the
24		inspection records shall be submitted to the appropriate
25		electric utility within ninety (90) days of the Commission's
26		adoption of this Stipulation.

Page

UM 640 - STIPULATION

1	During this testing program, at least 20 percent of USWC
2	poles shall be tested annually, excluding any poles that have
3	been tested since 1988. Poles with high-voltage lines
4	attached that are more than 30 years old shall be prioritized
5	for early testing.
6	USWC shall replace all sub-NESC poles within twelve (12)
7	months of discovery. Poles previously documented as sub-NESC
8	shall be replaced promptly within twelve (12) months after
9	execution of this Stipulation.
10 6.	All inspections shall be performed in accordance with the PUC
11	Line Inspection Policy. The above inspections and testing
12	shall be conducted by company or contract personnel that meet
13	the PUC's standards on Inspector Qualifications. (See
14	Attachment 1, PUC Line Inspection Policy).
15 7.	USWC will engage in good faith negotiations to reach a
16	reasonably fair agreement for the sale or transfer of
17	ownership of all its poles statewide that support high-voltage
18	supply lines to the electric utility that owns or operates the
19	attached power lines by December 31, 1994.
20	As an alternative, USWC will engage in good faith
21	negotiations to reach a reasonably fair agreement for
22	contracting with the respective electric utility for pole
23	testing and maintenance. The pole testing schedule specified
24	in any such contracts will comply with No. 3 above.
25	In cases where an equitable sale or pole maintenance
26	contract cannot be negotiated, USWC shall conduct the pole
Page	IN 640 - STIDII ATION

UM 640 - STIPULATION

testing stipulated above and promptly notify the respective electric utility of the testing results and sub-NESC pole conditions.

Negotiations for sale or transfer of ownership of poles or negotiations of maintenance contracts in no way diminish USWC's on-going responsibility under the terms of this Stipulation to inspect and repair poles.

USWC will coordinate with EWEB, Pacific Power, Portland General Electric, and other electric utilities to eliminate existing NESC violations and conflicts on joint-use pole lines operation, construction, interfere with the that When USWC maintenance of electric lines and right-of-ways. discovers an NESC violation during inspection or testing that requires electric utility assistance, it shall, within thirty (30) days of discovery, notify the respective electric utility of the safety violation and location. USWC will perform the necessary follow-up with notified utilities ensure compliance repairs of USWC violations meet the stipulated Violations communicated to USWC by joint-use deadlines. electric utilities shall be promptly responded to so that any public safety hazards are corrected as soon as possible but no later than thirty (30) days after discovery, and all other violations corrected no later than twelve (12) months after notification.

25 9. USWC's construction standards and work practices for all new overhead construction will be revised to comply with the

Page 5 UM 640 - STIPULATION

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

8.

- currently adopted edition of the NESC. The standards and practices will be revised within ninety (90) days of the adoption of this Stipulation by the Commission, and covered with all employees who are involved in the construction and maintenance of lines within sixty (60) days thereafter.
- For all new construction and during all future aerial 6 shall install electrical grounding company 7 work, the conductors and connectors to effectively ground the guy wires. 8 Utilizing the through-bolt for grounding and bonding guy wires 9 and messengers will not be used. 10
- 11 10. USWC will update and implement by March 31, 1994, a revised
 12 overhead inspection, testing, and maintenance manual that
 13 focuses on NESC compliance. The manual shall contain company
 14 policies, inspection and maintenance standards, pole testing
 15 and treatment standards, electric utility coordination
 16 procedures, and repair priority information.
- 17 11. USWC will provide the PUC with a proposed six year schedule 18 for public safety and detailed inspections within thirty (30) 19 days of the adoption of this Stipulation by the Commission.
- USWC will submit an annual report by March 31 of each year to 12. 20 the PUC demonstrating compliance with the above items starting 21 on March 31, 1995 and ending March 31, 2000. 22 updates of progress will also be provided to the PUC Staff 23 within fifteen (15) days of the end of each calendar quarter 24 until the Order adopting this Stipulation is substantially 25 Included in the Quarterly reports will be any resolved. 26

Page 6 UM 640 - STIPULATION

1		anticipated specific repairs that will not meet the stipulated
2		deadlines.
3	13.	Staff recommends that no fines or other penalties be levied
4		against USWC at this time.
5	14.	The parties recommend that the Commission adopt this
6		Stipulation in its entirety. The parties have negotiated
7		this Stipulation as an integrated document. Accordingly, if
8		the Commission rejects all or any material part of this
9		Stipulation or Plan, or adds elements to this Stipulation,
10		each party reserves the right to withdraw from the
11	···	Stipulation, upon written notice to the Commission and the
12		other parties within fifteen (15) days of rejection.
13	15.	The parties agree that this Stipulation in no manner binds the
14		Commission in ruling in this docket. The Stipulation in no
15		manner restricts the Commission's exercise of its discretion
16		in this or any other proceeding.
17		
18		(halls 7 600) - 2/18/90
19		Charles L. Best Of Attorneys for U S WEST
20		Communications, Inc.
21		
22		Kimberia R. Cobiais 2/23/94
23		Kimberly Cobrain Of Attorneys for Oregon
24		Public Utility Commission Staff
25		
26		

Page

UM 640 - STIPULATION

OREGON PUBLIC UTILITY COMMISSION

REQUIREMENTS FOR LINE INSPECTION BY UTILITY OPERATORS

1. Purpose

The purpose of this policy is to clarify the line inspection requirements of ANSI-C2, National Electrical Safety Code (NESC), as interpreted by the administrative authority. Specific reference is made to NESC Rule Nos. 012, 013, 121, 214, and 313.

In order to ensure that overhead and underground lines are kept in a safe and relatively trouble-free condition, Utility Operators must make a thorough inspection before a new installation is put into use and at sufficient intervals thereafter. Intervals are determined by considering: age and condition of line, previous inspection and maintenance programs, soil and environmental conditions, weather, and quality of line materials, workmanship and design. Inspections should be preventive in nature and intended to effect repairs previous to failures.

2. Scope

This policy applies to the inspection by Utility Operators of all electrical supply and communication lines, both overhead and underground.

3. Definitions

<u>Lines</u> - Those conductors, rights-of-way, supporting structures, and associated equipment used to transmit electric supply energy or communication signals. (Such lines include electric supply, telephone, cable television, and similar utility lines.)

<u>Utility Operator</u> - Any person, company, utility, or municipality, pursuant to ORS 757.035, who is involved in the construction, operation, or maintenance of electrical supply and signal lines.

4. Written Policies and Standard Practices

Each Utility Operator should have clearly written policies and work practices for its overhead and underground line inspection programs, including: new installation inspections, on-going cyclic inspections of existing lines, and the utility's record keeping system that will keep track of code violations that are not promptly corrected.

5. Inspection Responsibilities

Each Utility Operator shall conduct the applicable inspections listed in a, b, and c below. Inspections b and c shall be done at such intervals as experience has shown to be necessary in accordance with good practice for the given local conditions. Also, each Utility Operator shall conduct sufficient management quality assurance checks to make sure that these inspections are being properly conducted.

a. Inspections of New and Repaired Installations

Each new line installation shall be closely checked and corrected for compliance with the NESC before being placed into service.

Requirements for Line Inspection by Utility Operators (continued)

b. Public Safety Inspections

Public safety inspections are intended to identify hazards and right-of-way encroachments that can be seen during a patrol. These inspections should include all overhead lines and other accessible equipment. For electric utilities, the maximum cycle length should not exceed two years. Substations are normally inspected monthly.

c. Detailed Facility Inspections

Existing lines should be carefully inspected on a cyclic basis so that all associated equipment, hardware, right-of-way, and structures are thoroughly examined.

Maximum cycle length for electrical lines and overhead communication lines should not exceed ten years. For older lines (25 years or more) and lines with special concerns, a more frequent inspection may be appropriate.

These precautionary inspections are intended to identify NESC violations, defects, and deterioration of the lines which must be corrected in order to maintain future safe and reliable service. Serious consideration should be given to the repair/replacement of marginal items that might fail before the next detailed inspection.

6. Qualified Inspection Personnel

Inspections listed in Item 5 above shall be conducted by qualified personnel who have an extensive practical knowledge of the NESC and the Company's Construction Standards. The Utility Operator is responsible to provide its inspection personnel adequate inspection training for the types of facilities inspected.

7. Ongoing Utility Awareness

In addition to a, b, and c listed in Item 5 above, Utility employes should constantly be alert, in the normal course of their daily work, to observe conditions that may create a hazard for line workers or the public. Defect reporting and correcting should be a continuous undertaking by the Utility Operator's construction and operating staff.

8. Inspection Records

Each Utility Operator shall maintain a record system for keeping track of NESC deficiencies found and reported. At minimum, this record system should include:

- Maps—showing locations of past and planned inspections;
- b. Completed Inspection Forms—showing itemization and location of deficiencies found, date, inspector, and inspection type; and
- c. Work Orders—showing projects backlogged for future completion.

(Issued Nov. 1987; Revised Nov. 1989)

Attachment 2

1993 PUC Cited Probable Violations to U S WEST Communications

Report No.	PUC Issue Date	District/Location
C93-01	2-25-93	Medford
C93-02	2-25-93	Roseburg
C93-06	3-02-93	Portland
C93-00	4-30-93	Portland
C93-09	6-03-93	Portland
· · ·	6-08-93	Klamath Falls
C93-11	8-17-93	Portland
C93-13	8-18-93	Roseburg
C93-14	10-14-93	Portland
C93-15	9-01-93	Pendleton
C93-16	• • • • • • • • • • • • • • • • • • • •	Eugene
C93-17	9-21-93	Bend
C93-18	9-23-93	-
C93-19	10-19-93	Veneta
C93-20	11-05-93	Eugene

ORDER NO. **93-1842**ENTERED DEC 20 1993

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 640

In the Matter of Violations of the National)	
Electrical Safety Code by U S WEST)	ORDER
COMMUNICATIONS, INC.)	

DISPOSITION: INVESTIGATION ORDERED

At its December 7, 1993, public meeting, the Public Utility Commission of Oregon (Commission) considered a staff report concerning certain electrical safety hazards posed by telephone poles and overhead lines maintained by U S WEST Communications, Inc. (USWC) in its Oregon service territory.

The staff report attached to this order details a history of widespread and serious violations of the National Electrical Safety Code (NESC) involving USWC's overhead lines. In May, 1992, staff cited USWC for excessive safety violations within a 16-square mile area in Portland, including numerous deteriorated poles, low pole steps, and delayed pole transfers. See PUC Report C92-03. During the following 18 months, staff discovered numerous other NESC violations on USWC overhead lines throughout the state. In June, 1993, staff cited USWC for excessive low pole steps, delayed pole transfers and downed wires and cables in Klamath Falls. See PUC Report C93-11. In October, 1993, staff cited USWC for inadequate guy wire grounding in Portland and for excessive low pole steps and structural strength problems in Eugene. See PUC Reports C93-15 and C93-20.

In its report, staff cites continuing concerns regarding the thousands of USWC-owned poles which support high-voltage lines. Staff documented extensive problems with such poles in Portland in 1992 and Eugene in 1993, indicating that USWC's testing, and maintainence program may be inadequate. Further, staff recommends that the Commission investigate and require USWC to remedy safety hazards relating to low poles steps and inadequate guy wire grounding practices. Low pole steps provide an opportunity for children and others to climb poles and are particularly hazardous when the poles support high-voltage wires. Improper grounding methods also pose similar safety hazards. In correspondence dated August 9, 1989, staff requested that USWC alter its guy wire grounding methods to comply with NESC requirements. Staff's position was reiterated in PUC Report C93-15, noted above. USWC has not changed its guy wire grounding methods in response to that report.

ORDER NO. 93 - 1842

USWC has cooperated with staff to correct problems in specific locations cited by staff and has expressed a willingness to work with staff to make changes to their inspection and maintenance programs. However, the pervasiveness of the problems indicate a need for a comprehensive, statewide investigation, rather than a piecemeal approach. Staff believes that USWC has not dedicated sufficient personnel and resources to conduct adequate inspection and maintenance programs. This perception is strengthened by the results of a recent consultant study which recommended that USWC establish and implement a consistent pole inspection and testing program for its entire statewide system. See Clapp Research Associates report, October 25, 1993.

For the reasons set forth above, the Commission finds that the staff request to initiate an investigation pursuant to ORS 756.515 should be adopted.

IT IS ORDERED that:

- 1. Pursuant to ORS 756.515, the Commission shall commence an investigation of USWC's overhead line system to eliminate NESC violations and safety hazards which pose a threat to public health and safety.
- 2. The recommendations made by staff at the December 7, 1993 public meeting, and attached as Appendix A of this order are adopted. The investigation in this docket shall include, but is not limited, to the following:
 - a. Analysis of PUC reports and USWC responses regarding safety violations, together with staff recommendations for appropriate corrective action;
 - b. Examination of USWC practices and policies regarding safety patrols, detailed inspections, timelines to complete repairs, pole testing and treatment, system grounding, and joint-utility pole transfers;
 - c. Evaluation of existing joint pole agreements and practices to determine the effectiveness of such agreements to insure compliance with NESC requirements;
 - d. Analysis of the need for mandated pole ownership or maintenance program responsibility by the electric utility when high-voltage lines are attached to a joint-use structure;
 - e. Determination of corrective measures to be taken by USWC and the monetary penalties, if any, which should be pursued under law;

ORDER NO. **93-1842**

f. Any other matter necessary to insure compliance with applicable NESC and Commission requirements.

Made, entered, and effective DEC 20 1993

Joan H. Smith Chairman

Ron Eachus Commissioner

Commissioner

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A party may appeal this order pursuant to ORS 756.580.

AR 506 Division 24 Staff Exhibit 4/Pg. 18 ITEM NO.

PUBLIC UTILITY COMMISSION OF OREGON STAFF REPORT

PUBLIC MEETING DATE: December 7, 1993

REGULAR AGENDA X CONSENT AGENDA EFFECTIVE DATE

DATE:

November 24, 1993

TO:

Mike Kane

VIA:

Scott Girard, Bill Warren, and Jarry Murray
Bob Sipler and Jim Stickles

FROM:

SUBJECT:

Excessive Safety Violations on U S WEST's Overhead Lines

SUMMARY RECOMMENDATION:

Staff recommends that the Commission open a comprehensive statewide investigation pursuant to ORS 756.515, regarding the safety and maintenance of U S WEST Communications, Inc., overhead lines.

DISCUSSION:

PUC staff recommends this investigation because U S WEST continues to have an excessive number of National Electric Safety Code (NESC) violations on its overhead lines throughout Oregon. The violations generally include: structural strength problems, low conductor clearances, low pole steps, inadequate grounding practices, blocked climbing spaces, uncompleted and slow pole transfers, and deferred/ unfinished maintenance and other safety issues. Not only are the violations making their telephone lines unsafe, they are creating serious safety problems for the electric utilities and other jointpole users that share the same structures and right-of-way.

These problems may have been exacerbated during the last two decades by U S WEST's direction of going to an underground system. This could have lead to a decreased emphasis on overhead line engineering, construction, and maintenance. PUC staff recognizes some advantages in the burial of communication lines, but U S WEST appears to have lost sight that under Oregon law it has to maintain its thousands of miles of overhead lines and poles throughout Oregon to NESC standards. Staff's belief is that U S WEST is deficient in outside plant maintenance, perhaps because the company has not dedicated sufficient management, engineering, and operating personnel in Oregon to keep up with the day-to-day installation and maintenance workload, catch up with its deferred maintenance and, in some cases, remove abandoned facilities on the system statewide. In essence, the safety problems are widespread and serious. Consequently, staff believes that a systemwide and comprehensive, rather than piecemeal, investigation is needed.

November 24, 1993 Page Two

Evidence that supports staff conclusions about the extensiveness and the seriousness of the violations is well documented in past PUC inspection reports. These reports are available for review. Some of the most recent reports that highlight these problems are itemized below:

Review Report C93-20 -- Citing excessive low pole steps and structural strength problems (Eugene, October 1993).

Review Report C93-15 -- Citing inadequate guy wire grounding (Portland, October 1993).

Review Report C93-11 -- Citing excessive low pole steps, delayed pole and Video Tape transfers and downed wires/cables (Klamath Falls, June 1993).

Eugene, Klamath Falls, Portland, and other communities have or recently have had entire neighborhoods or areas that have not received necessary NESC maintenance. For example, PUC staff cited U S WEST for excessive safety violations found within a 16-square-mile area in Portland. The violations involved serious deferred maintenance, including numerous deteriorated poles that supported high-voltage lines. Low pole steps and delayed pole transfers were other serious problems cited. In response, staff in its letter and Review Report C92-03 (dated May 13, 1992) cited U S WEST's inspection and maintenance programs as inadequate. In the letter staff warned that comprehensive "systemwide" (in Oregon) improvements were needed or formal Commission action could result.

In the last 18 months, PUC staff have been continuing to find excessive numbers of NESC violations on U S WEST overhead lines throughout the state. Staff's perception is that U S WEST does not have the resources and personnel in place to deal with the magnitude of the problem. Although U S WEST has generally been cooperative with PUC staff in correcting specific cited locations, they have not provided the management-initiated programs and direction necessary to correct systematic problems on their overhead lines and poles on a statewide basis.

A recent consultant study prompted by PUC staff in cooperation with PGE, PP&L, and U S WEST confirms staff's conclusions. The study concluded that U S WEST is not "systematically" inspecting its overhead lines and poles in all service areas. The report further concluded that U S WEST is inspecting on a time available basis which could result in some areas going uninspected for too long. The consultant further recommended that U S WEST establish and implement a consistent pole inspection and testing program for its entire statewide system (see Clapp Research Associates report, dated October 25, 1993).

U S WEST owns thousands of poles throughout the state of Oregon that support high-voltage lines. Pervasive problems documented in Portland in 1992 and in Eugene in 1993 indicate that U S WEST is not adequately inspecting, testing, and maintaining these poles. The potential to have a life-threatening hazard is very obvious when a weakened pole is combined with high-voltage lines.

November 24, 1993 Page Three

Another critical safety issue is the low pole steps that U S WEST has been slow to remove. Pole steps below the 8-foot level can provide an opportunity for children and others to climb the poles. This can be dangerous under any circumstances, but is particularly hazardous when the pole's facilities include high-voltage lines. After repeated citations to U S WEST, staff is still finding neighborhoods with numerous low pole steps. Again, staff believes this calls for a systematic investigation and remedy.

A final safety issue that staff would emphasize is system grounding. Grounding is crucial to personal safety because harmful voltages that can accidentally occur on the conductors, messengers, and guy wires of the communication system are quickly drained away through many low-resistance paths to the earth.

An overhead communication system exposes the public to a potential of elevated voltage where guy wires come down to the ground. The NESC requires that guy wires "be effectively grounded if attached to a supporting structure carrying any supply conductor of more than 300 V or if exposed to such conductors" (Rule 215C2). The code further requires the method that must be used to accomplish the grounding. Early citations for improper guy grounding resulted in an August 9, 1989, letter to Esther Nelson of U S WEST Communications in which staff gave six reasons for insisting that the company alter its guy grounding standards and methods to comply with the NESC. This stance has recently been reiterated in PUC Review Report C93-15 (October 7, 1993). To date, U S WEST has not changed its construction standards to comply with the NESC on this issue.

In summary, the continuing and recurring issues relative to U S WEST's inspection and maintenance programs indicate that the problems are systematic and not being resolved. Staff believes that to address these problems immediate executive management direction is needed. Staff believes a comprehensive and systematic investigation is necessary to adequately address the safety concerns discussed above. Staff would prefer to work closely with U S WEST in identifying and resolving these concerns so that an acceptable level of safety for its overhead lines and poles is achieved.

STAFF RECOMMENDATION:

Staff recommends that the Commission open an investigation that would include, but not be limited to, the following:

- Analyzing existing information in PUC reports and company responses regarding safety violations and staff "recommendations" to determine what remaining corrective action is needed.
- 2. Examining existing U S WEST practices and policies regarding:
 - a. Safety patrols
 - b. Detailed inspections

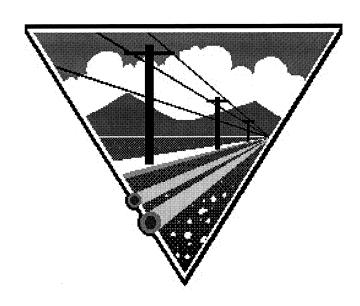
November 24, 1993 Page Four

- c. Appropriate repair deadlines
- d. Pole testing and treatment
- e. System grounding
- f. Joint-utility pole transfers
- 3. Evaluating current joint pole agreements and practices to determine their effectiveness in providing adequate NESC compliance.
- 4. Analyzing the need for mandated pole ownership or maintenance program responsibility by the electric utility when high-voltage lines are attached to a joint-use structure.
- 5. Determining appropriate statewide corrective action steps and completion dates.
- 6. Determining if monetary penalties, under the provisions of ORS 757.990(1) should be pursued against U S WEST.

6/11/1542GG

The Battle for the Utility Pole

and the End-Use Customer



A PUC STAFF REPORT

Additional copies of this report may be obtained at website: http://www.puc.state.or.us/safety/pole.htm

Utility Safety and Reliability Section of the Public Utility Commission of Oregon

Jerry Murray and Bob Sipler

December 15, 2003

The Battle for the Utility Pole and the End-Use Customer A PUC STAFF REPORT*

By Jerry Murray and Bob Sipler December 15, 2003

TABLE OF CONTENTS

The White Paper	
Executive Summary	1
• Introduction	2
• Public Rights-of-Way (ROW)	4
Underground Rights-of-Way	5
• Utility Poles and Aerial Lines (The Overhead (OH) Infrastructure)	7
Recent Overhead Infrastructure Progress	10
Current Pole Attachment Disputes	11
Oregon PUC Authority	13
Oregon PUC Safety Organization	14
• Conclusions	14
• Recommendations	16
Attachments (for additional details)	
• Attachment A: Recommendations for the OJUA	A-1
Attachment B: Possible Recommendations for Legislature	B-1
Attachment C: Suggested Safety Rule Making Actions	C-1
Attachment D: Suggested New and Amended Safety Rules	D-1
Attachment E: Pole Joint-Use Principles	E-1
Attachment F: Pole Joint-Use Historical Events	F-1
Attachment G: About the Authors	G-1
Attachment H: Drawing: Pole Joint-Use Zones	Н

NOTE (*) - The Oregon PUC Commissioners have not reviewed this report.

EXECUTIVE SUMMARY

Telecommunications competition and open access are encouraged because experience has shown that customers benefit from new services and technologies and lower costs. Opportunities abound for those operators who can thrive in this new environment. Behind the scenes though, the industry is struggling with crowded utility rights of way, rapidly increasing infrastructure, and antiquated utility interaction methods. Most of the new facilities are installed on utility poles, rather than underground, because it is faster and less expensive. In some cases the hurry-up world of competition does not include careful engineering, permission to attach facilities, code compliant construction and maintenance, and paying for costs that other utilities incur. These problems are not unique to Oregon, but are a nationwide issue.

The current disputes before the PUC over the joint-use of poles, though not in the public eye, are significant in their potential impact. One current case could have a financial impact of over \$60,000,000 in sanction fees alone. Pole attachment contracts are being called into question as to being fair, just, and reasonable. Allegations of fraudulent charges and improperly withheld fees have been made. When thousands, or even hundreds of thousands of poles are involved, these amounts can be large. Safety actions and multi-year inspection and maintenance programs could be determined to be inadequate. In one case, the removal of an entire telecommunications system from an operator's poles was allowed. Needless to say, decisions of this magnitude can dramatically affect a utility company and its customers.

This report does bring a focus on Oregon's industry and issues jurisdictional on a state level. Because of this perspective, there is an emphasis on safety issues and on rules and regulations that influence our operators. This means that the National Electrical Safety Code is the required standard for line construction, operation and maintenance. The benefits of competition must not come at the expense of injured utility workers or unsafe conditions for the public. From this base, issues relating to rights, duties, responsibilities (for both pole owners and occupants), contracts, public interest, fairness, incentives, and cooperative efforts can be worked out. The industry and regulators must find solutions promptly if we are to prevent future problems and if we are to have a say in our future.

Inside this report is an analysis of past historical events and developments, a discussion of present challenges, disputes, and conflicts, and proposals for consideration in shaping this industry's future. Specific recommendations include a continuing focused safety role for the OPUC with the consideration of rules to clarify operator roles and responsibilities, five key projects for the Joint Use Association (OJUA), and six items that should be considered as legislative proposals. Attached also is a list of basic principles for the joint use community and an illustration of a utility pole and its joint-use safety zones.

This paper is hopefully the start of another needed PUC-industry collaborative process to find solutions to continuing pole joint use issues. The OJUA, operators, and other interested parties are encouraged to comment on this report and to participate in anticipated follow-up actions.

INTRODUCTION

Utility poles are such a common element in our communities that we hardly notice them unless something goes wrong. It is hard to believe that utility poles are currently a focal point of change and controversy. Are they part of the new competitive utility world or just a relic of the past that should have been done away with years ago? One thing is for certain – how the Commission and the operator industries address utility pole issues, will impact the future of these poles.

Utility poles and the rights-of-way are important components of utility systems that deliver both electrical and telecommunications services to customers. What's changed is that the market for telecommunications services - including traditional telephone voice and data transmission and enhanced information/entertainment services - is growing as a result of a technology-driven explosion along with increasing customer demand for those services. Utility poles are especially important to new operators (i.e., competitive telecommunications providers) because they provide the least-cost means for capturing new telecommunications customers and their expanding communications needs.

The federal government has enacted national regulations encouraging competition (especially the Federal Telecommunications Act of 1996) and rapid deployment of new telecommunications services by competitive operators. These regulations require nondiscriminatory access to utility rights-of-way, both pole lines and underground conduits for operators, incumbents and entrants alike. For purposes of this paper, the term "operators" will be collectively used to mean electric utilities, telephone utilities, cable television operators, telecommunications carriers or providers, or any entity or person that installs or operates electrical supply or communication lines on the rights-of-way or on utility poles. In this competitive time, it is important that requirements and standards be consistent and straightforward for all operators that use the rights-of-way.

Because of growing controversies associated with the shared use of utility poles, the 1999 Oregon Legislature in House Bill 2271 (see Section 9, Chapter 832, OR Laws 1999) gave a mandate to the PUC. That directive required the PUC to "... establish a task force consisting of utility pole owners and occupants to advise the Commission on policies and regulations for accommodating changes in the ... industries while maintaining safe and efficient utility poles, attachment installation practices, and rights-of-way." Operators who demanded less expensive pole attachment rates initiated this bill. It was opposed by pole owners who needed tougher sanctions to prevent trespass and unsafe conditions on their poles. A compromise was reached with lower attachment rates given to responsible pole occupants, and pole owners were given better sanctions to go after irresponsible occupants. Since enactment of this bill, much progress

has been made with respect to improving safety, efficiency and cooperation on utility poles. However, serious issues still remain, and some major disputes are coming to the PUC for official resolution by the Commission.

Without a doubt, Oregon has been experiencing a revolution, as has the entire nation, related to overhead line attachments to utility poles. Like all revolutions, the outcome is important. Some parties will realize advantages, and others will be disadvantaged. However, it is certain that things will change. Some things have to change. The Oregon Public Utility Commission (OPUC) will be playing a central role in setting policy and protecting the safety, efficiency and viability of Oregon rights-of-way and its utility poles. Actually, this will be a continuation, as we have been deeply involved in this effort for years.

Two PUC dockets, UM 1087 and UM 1096, are currently focusing on watershed issues that will influence the future of utility poles, their owners, and those that attach lines to them. Prior industry and governmental decisions and policy (including laws, rules, and contracts) have brought us to this situation. It is no accident. Since Oregon has chosen its own pathway with respect to the shared usage of poles, we do not have a lot of applicable precedence from other states to build on. We will have to use sound principles and build on past successes to arrive at the safe and efficient utility systems that we want for Oregon's future.

This paper explores three areas:

- What are the historical events that have brought us to this point?
- What future events will lead to resolution and the best system, and what should the pace of that change be?
- What should be done now to set the stage for the future and to emphasize safety and efficiency for today's needs?

Electric and communication lines in Oregon have been required to comply with the National Electric Safety Code (NESC) since 1923. Many operators have taken code compliance seriously. But unfortunately, some operators have not been diligent with certain aspects of this code, and it is now creating safety and economic hardships for them and other operators. Today's competitive pressures and the crowding of facilities on utility poles have brought NESC compliance to the forefront, and this emphasizes that NESC compliance is a primary responsibility of every operator. This national safety standard must continue as the minimum level of safety that we will accept for all operators.

Recently, some operators have questioned various aspects associated with NESC compliance. We make the case that this national standard has established a firm foundation in the past and will serve us well in the future. It has been the bedrock of utility line safety and has allowed various operators to compatibly share the same poles and aerial space. The NESC, more importantly, is the right focal point for making decisions now. Further, we firmly believe that

the time has come for safety rulemaking efforts that will reinforce and clarify NESC standards so that all operators clearly understand what is required in Oregon to comply with these minimum safety standards.

PUBLIC RIGHTS-OF-WAY (ROW)

The public ROW is a scarce and invaluable resource for Oregon's citizens. This ROW is basically owned by "WE THE PEOPLE" and is necessary for transportation and utility services for the long-term public health and welfare of Oregonians. It is critical that this resource, and the utility facilities on it (including utility poles), be managed so that safety, efficiency, accessibility, and viability are protected. This need was affirmed by the enactment of House Bill 2271 in the 1999 Oregon Legislature.

The nation's public utility commissions were created in each state in the early years of the twentieth century to bring order and stability to the then emerging electric power, telecommunications, natural gas and other transportation industries. The purpose of these commissions was to bring efficient economic investment in services needed by the public and to prevent unsafe facilities and unnecessary duplication of high cost infrastructure on the ROW. In fulfilling this purpose, commissions gave specific utilities monopolistic rights to serve in specific areas (i.e., allocated territories) associated with a specific type of utility service (e.g., natural gas, electric or telephone). These utilities were given the opportunity to collect reasonable rates of return for their investments. In turn, these utilities were also obligated to comply with safety, service and financial responsibilities. In short, utilities were required to provide safe, adequate service at reasonable cost. This is basically reflected in ORS 757.020, which we consider to be the PUC's primary mission.

One of the obligations of Oregon's electric, natural gas and telecommunications industries is to comply with the PUC's safety rules. In the case of electric and communication industries, these system operators were required to comply with the National Electrical Safety Code (NESC) for the construction, operation and maintenance of their lines and facilities. The NESC has been the minimum legal standard for electric and communication lines since 1923. The NESC has served as an outstanding standard in the past in getting Oregon's 40 electric utilities, 35 telephone utilities and a multitude of other operators to work and cooperate safely together on the ROW. Likewise, the natural gas operators are required to follow the federal gas pipeline regulations. The Oregon PUC's philosophy has been to adopt national standards/regulations without deviations. This has made it straight forward and fair for all operators, and especially for multistate operators (e.g., Idaho Power, PacifiCorp, Qwest, and Verizon) that do business in Oregon. This legal requirement is backed up by the Oregon PUC's active administration and enforcement of these safety regulations. We routinely conduct field inspections and program reviews of operator facilities and records to assure compliance with the Commission's safety rules. We believe that the Oregon PUC is the guardian of operator safety regulations and codes, and these

standards, when followed, are the guardians of the Oregon public, utility workers and the ROW itself.

Other factors are constraining how operators use the ROW. Property lots in cities and suburbs have gotten smaller, causing smaller utility easements. Likewise, the locations where operators can install facilities are becoming more congested and restricted because of the increased number of operator lines. Moreover, increased governmental regulations, as well as environmental and aesthetic expectations, are requiring operators to communicate and coordinate better with each other and with governmental agencies in both installing and maintaining their facilities on the ROW. These result in increased complications and costs for all operators who must share the ROW. Consistent safety compliance becomes more critically important as congestion and competition increases.

The ROW has changed in the last 30 years from a stable, regulated environment with limited participants to a setting of numerous participants, competition, changing ownerships and ever changing business goals. As the ROW environment continues to evolve, operator managers and engineers are challenged to adapt to new competitive business models, to manage change and obtain the highest levels of performance from the work forces and the assets in their charge. Despite these pressures, the safety and maintenance of all of the facilities sharing the ROW are, and will always be, a crucial aspect that cannot be neglected. As competition grows on the ROW, new safety and business accountability processes need to be developed to ensure the long-term safety and practical usage of the ROW.

UNDERGROUND RIGHTS-OF-WAY

In the late 1960s, with the advancements in plastics and cable insulations, electric and telephone utilities began installing more and more lines underground. Underground lines are better from a number of aspects because they are aesthetically more pleasing and are less subject to storm damage and vehicle collisions. They had the promise of being safer and more reliable than overhead lines. Some cities began to create ordinances requiring that all new residential utility lines be installed underground. The trend was for more and more neighborhoods and communities to have all utility facilities installed underground. Consequently, the management and engineering of utility poles and aerial lines were pushed to lower priorities. For a while it seemed that utility poles would become a thing of the past.

This trend to go underground created hardships, especially for the piping utilities (i.e., natural gas, water and sewer), which primarily had the underground ROW to themselves before the 1960s. With more utility facilities going underground, excavators were more at risk for hitting underground utility facilities. Without question, the addition of electric and telephone lines underground led to more and more excavator injuries and damage associated with underground utility facilities.

Because of the competition for underground ROW space and the need to prevent injuries and damage, Oregon's utilities, contractors, engineering consultants and governmental agencies in the early 1970s cooperatively created the Oregon Utility Coordination Council (OUCC). From this effort, 12 regional Utility Coordinating Centers (UCCs) were organized across the state, each with somewhat different standards for handling excavation notification and damage prevention. These regional UCCs were relatively successful in getting excavators and utilities to work better to get underground lines accurately located and marked. Utilities, contractors, excavators and utility customers all benefited from this cooperative effort. Avoiding damage to underground facilities during excavation work is truly a win-win situation.

In 1987, the enactment of House Bill 2051 standardized the utility locate marking and excavator notification/care responsibilities across the state. This was a tremendous improvement. Oregon excavators and utilities now had basically one standard (and not 12) to follow. House Bill 2051 was a cooperative effort by Oregon's utility and contractor (excavator) industries. Major benefits were again achieved by the state in this industry cooperative effort.

With increased deployment of underground facilities, primarily by new competitive operators in the 1990s, the frequency of damage to underground utility facilities increased again. In response, the Oregon Utility Notification Center (OUNC) was created by the 1995 Oregon Legislature. The Center was created as a state agency and was governed by the Oregon's utility industry it served. Its purpose was to set standards (i.e., rulemaking), to promote industry education and cooperation and to carry on enforcement activities with direct penalties assessed to persons and entities that violate OUNC rules. The OUNC has been a great success. Today, Oregonians have one telephone number to call for marking and excavation notification to utility facility operators. All underground facility operators are required to register with the Center. The standards for underground ROW damage prevention are consistent across the state. Utilities, operators and contractors know what is expected of them and that there are consequences for non-compliance.

Because of the OUNC, the costs for constructing and maintaining underground facilities may have slightly increased for some utilities, operators and contractors. But more importantly, the excavation workers, public and the underground utility facilities are far safer than in years past. Moreover, Oregon has a great platform for the safe and efficient deployment of additional underground facilities in the future. It should be emphasized that the creation of the OUNC took more than two decades and was the result of a cooperative long-term statewide effort by the utilities, contractors and governmental agencies.

It should be emphasized that the OUNC and its safety regulations augment (and do not detract from) the Commission's safety rules in OAR Chapter 860, Division 24. Despite the OUNC's safety regulatory responsibilities, the PUC is retained as the administrative and enforcement authority over its safety rules, which include the NESC and the federal pipeline safety regulations. The OUNC improves inter-operator communications and coordination so that

underground operators can maintain their facilities in a safe condition in compliance with Commission's safety rules.

UTILITY POLES AND AERIAL LINES (The Overhead (OH) Infrastructure)

The history of the OH Infrastructure has followed closely with the overall ROW issues covered in the previous two sections. The one commonality is that all utility poles, aerial lines and facilities must comply with a single safety standard, the NESC (ORS 757.035 and OAR 860-024-0010). All operators in Oregon engaged in electric supply or telecommunications services, whether they are pole owners, occupants or government entities, are required to comply with this national code. The underground ROW operator industries may have different safety codes/regulations to follow, but the OH Infrastructure has just one standard. This has been a significant advantage for Oregon's OH Infrastructure as well as the state's electric supply and telecommunications operators. The NESC is indisputably recognized as the minimum safety standard across the nation by the majority of PUCs and many federal agencies (including the Federal Communications Commission, USDA Rural Utility Service, Department of Energy and various military departments).

It should be emphasized that the NESC is not just for installation or construction safety, like most state and local building codes. It is a construction, operation and maintenance minimum requirements standard that operators must comply with on an ongoing basis, not just at the time of construction, but for as long as the operator's facilities are in existence. Once lines and facilities are installed, operators must self-police their facilities to make sure that code compliance is achieved and always maintained. Section 1 and Rules 121, 214 and 313 of the NESC set forth these responsibilities, which have been in effect since the inception of the NESC before the 1920s.

In the pre-1965 years, utility pole attachment coordination was simple. In most cases, an electric utility and a telephone utility shared a pole. Because these utilities mostly shared the same customers and often were both PUC regulated, simple practices were developed to apportion pole costs and responsibilities. Further, both electric and telephone utilities generally had local managers, engineers and crews in cities and communities that worked together and resolved issues as they arose.

In the post-1965 years more operators began making attachments to utility poles. First came local cable television operators who installed lines in rural communities and areas with poor antenna reception. Since they were seen as a community service, they received favorable federal regulations that promoted expansion at relatively low pole attachment rates.

Since the late 1980s, utility deregulation and an emphasis on competition and expanded telecommunications services have brought more and more operators to the OH Infrastructure. Cable television is now a premium entertainment service available in most areas, but to some

degree still receives favorable treatment because of its past status. New telecommunications operators offering enhanced information and entertainment services recognized that installing lines overhead was less expensive and faster to deploy than going underground.

It was a rarity twenty years ago to see more than three operators on a pole. Today, in Portland, there are places that have eight different operators with facilities attached to the same pole. The complication of responding to an emergency when this type of facility is damaged in the middle of the night is easy to imagine. In reality, it may be much simpler to deal with that emergency than to patiently work with all the operators when the pole change out is done as routine maintenance. Each occupant has a contract or agreement with the pole owner that may have different provisions from the other occupants. Notices must be sent. Permits may have to be obtained. Safety compliance and engineering details must be carefully integrated. Crew work must be coordinated. Inspections must be done by each operator and finally by the pole owner. Records of the communications, work orders, inspections and permits must be recorded and kept. Mapping details must be changed.

Now imagine what happens when a communication has inaccurate information, a wrong date, a crew installs something incorrectly or there is a dispute over who should pay for something. Another concern is the non-availability of resources (e.g., qualified engineers, crews, contractors, or finances) to resolve hazards and non-compliance issues promptly. This can become very complicated. And, do not forget that what is at stake here is not just the appearance of the final complicated structure, but the safety of all who will work on, live or travel near this pole, especially when it is assailed by ice, windstorms, vehicle collisions or other extremes.

Even Oregon's larger established operators can have problem areas. They may be pinched financially as in the recent economic downturn. Operators are increasingly using contractors to carry out their line construction, operation and maintenance work. Sometimes contractors lack the knowledge or resources to fully comply with the safety and coordination responsibilities necessary. Contractor management oversight by some operators also appears to be lacking. Some operators do not have the managers, or qualified professionals, to effectively oversee their own employees or contractors, to ensure work complies with Commission safety rules and their own contracts. In the past, pole owners basically saw pole attachments as a nuisance and liability. The low attachment rates that were federally mandated were not seen as an incentive by pole owners to provide good pole management services. Pole attachment transaction records and facility records (including maps) were not maintained by all parties. Today's needs are not being met because of some of these practices, both past and present. Fortunately, this is not the case with all operators and pole owners. Many are making significant changes to their organizations to adapt to present needs and are bringing innovation to the joint-use community.

The PUC Staff's focus on facility safety gives us a unique look at the great new world of competition. While most of us are delighted with the new products, services and competitive pricing, PUC's Safety Staff also frequently sees a negative side. New competitive operators need

to concentrate on survival. This means lines have to be quickly deployed and a significant number of customers have to be signed up with as many services as possible. In some cases rapid deployment means that wires, cables and equipment must be run so that an interested customer can be hooked up without delay. Twenty years ago, many industry experts thought that most facilities would be underground by now. This obviously has not happened, and it is because underground deployment is too expensive and too slow. The marketers and innovators that drive successful competitors may not also have a long term focus on the engineering and maintenance requirements of a system intended for many years of service in a crowded ROW. Contractors usually do the construction. Often they want to get the wire up, get paid and proceed to the next job. Some installations cost more to bring up to code than it recently cost to have them installed. In a couple of cases, entire systems are being removed. Contracts are hastily signed with pole owners, and attention to details, requirements and costs are lacking. Later, the violations and disputes arrive.

The PUC's safety inspections over the last few years continue to show that operators are creating excessive NESC violations on new line jobs, and inspection/correction programs are less than desirable. Some of the more frequently found violations include: inadequate clearances between electric and communication lines (endangering communications line workers), insufficient vertical line clearances above streets and driveways for trucks and tall vehicles, lost climbing and working space around poles (so that linemen cannot safely climb them or work on facilities) and neglected poles and facilities that have not been promptly removed or transferred when replaced.

For an uncomplicated view of a utility pole and its joint-use zones, see Attachment H.

In general, the number and density of violations across the state indicate that there needs to be an accelerated effort by all OH Infrastructure operators to correct NESC violations. Staff believes that some sort of statewide coordinated catch-up project, such as a five-year comprehensive effort, by all operators across the state may be needed to bring safety to an acceptable level. During this clean-up effort all NESC violations need to be corrected, and the work must be coordinated among all operators in each area. This effort could possibly exclude those electric utilities and pole owners that can demonstrate that they have had an effective ongoing NESC inspection/correction program coordinated with their pole occupants since January 1, 2000.

In addition, we need solutions to a number of continuing issues that impact joint-use safety and cooperation. Some of these issues could involve:

- Thorough ongoing inspection/correction programs by each operator to ensure NESC compliance.
- Effective and consistent vegetation clearance programs by each operator to ensure that lines, poles and equipment have adequate vegetation clearances.
- Facility ownership identification for poles, lines and equipment.
- Uniform requirements for mapping and facility documentation by all operators.

- Operator certification with minimum performance standards, notification and emergency response responsibilities established.
- Certification or licensing requirements for engineers, supervisors and workers that would include NESC testing.
- Plans, maps, records and documents associated with the above programs and efforts need to be available for PUC Staff review.
- Development of a swift and less formal dispute resolution process than currently available with the PUC to resolve safety and operational disputes between pole owners and occupants.

It should be emphasized that each operator with lines and equipment on the OH Infrastructure needs to be responsible and accountable in making sure that its facilities comply with the NESC on an ongoing basis. This applies to every electric supply or telecommunications operator. Furthermore, it is crucial that each pole owner be an effective administrator for assuring corrections of the NESC violations and resolving conflicts on its poles. Unfortunately, some operators are alleging neglect by some pole owners in carrying out their administrative functions and in other cases alleging abuse and/or profiteering by the pole owners.

RECENT OVERHEAD INFRASTRUCTURE PROGRESS

The 1999 legislature ordered, in House Bill 2271, the Commission to lead an industry task force to improve pole joint-use safety and efficiency. This difficult process was carried out. We partnered with all participants in the industry to create consensus (really, they ALL agreed) sanction rules and rental reduction rules for responsible pole occupants. These rules were set out in OAR chapter 860, Division 028. PUC Staff helped to develop an industry organization called the Oregon Joint-Use Association (OJUA), out of the original Task Force, to continue the work of improving pole attachment coordination and cooperation across the state. This organization is also tasked with being advisors to the Commission on this subject. The OJUA has been making progress in promoting pole joint-use standards, education and cooperation.

The OJUA has an important role in:

- Improving communications and dialogue between the industries that use the OH Infrastructure.
- Developing statewide pole attachment standards including new attachment permitting and notification guidelines.
- Educating telecommunications operators and their employees/contractors on the NESC.
- Resolving disputes between pole owners and occupants on an informal peer group basis.
- Developing identification standards for utility poles, aerial lines and equipment as to operator ownership, including pilot projects.
- Advising the PUC about new regulations that are appropriate for addition to the PUC's pole attachment rules (OAR 860, Division 028) or for legislative action.

PUC Staff sees the OJUA as a success in bringing pole owners and occupants closer together to work out important issues in a peer working group setting.

It should be emphasized that the operator industries and the PUC had been working to improve line safety and NESC compliance long before the enactment of House Bill 2271. Some of the more notable accomplishments include:

- The issuance of the PUC's Tree Trimming Policy in the early 1980s. It set agency policy for maintaining adequate vegetation clearances away from aerial electrical lines to ensure NESC compliance and to address rising injury trends.
- PUC's Line Inspection Policy, originally issued in 1987 and again after House Bill 2271, clarified operator self-policing responsibilities associated with inspections and follow-up action necessary by all operators to ensure NESC compliance.
- PGE, Qwest (then US West), Verizon (then GTE), Comcast (then TCI) and PP&L in 1994 joined the National Joint Utility Notification System (NJUNS), which resulted in electronic communications between pole owners and occupants related to pole transfers, new pole permits, and other notifications. The number of operators using NJUNS across the state continues to grow. (NJUNS is currently an invaluable e-mail and database system that records communications between pole owners and occupants.)
- The issuance of PUC Pole Joint-Use Policy developed in 1996 by the PUC Pole Joint-Use Working Group, in which pole owners, occupants and associations participated.

For a more exhaustive list of PUC related activities, refer to Attachment F.

PUC Safety Staff believe that the bulleted policies or standards above should be considered for encoding into PUC administrative rules. These standards were developed with the overhead operator industries years ago, and they have withstood the test of time and trial. These policies have been the foundation for numerous PUC safety orders and Staff enforcement actions.

CURRENT POLE ATTACHMENT DISPUTES

Where we are today is the result of careful deliberation, debate, discussions, compromise, policy development and rulemaking. The PUC's pole attachment rules, adopted in response to House Bill 2271, were drafted in an open setting with full industry involvement. However, two key elements are forcing some issues now. First, PUC Staff has been able to step up NESC enforcement efforts with Oregon electric and telecommunications operators over the last four years. Both clear NESC expectations and program accountability are forcing some operators into polarized positions. Most now are making good efforts to be safe operators within the joint-use community. A few are looking for ways to get out of their responsibilities, requirements and agreements. Secondly, the two-year phase-in of the PUC sanction rules is over (OAR 860-028-

0240). Many pole owners now feel free to start using sanctions to force irresponsible operators to follow laws, rules and agreements.

Pole Joint-Use disputes are coming to the forefront in a more formal setting in two dockets (PGE vs. Verizon in UM 1096 and Central Lincoln PUD vs. Verizon in UM 1087). These dockets involve disputes by the parties on a number of issues. A partial and informal list of the issues is included below:

- 1. Contract disputes.
 - a. What are fair, just and reasonable contract terms?
 - b. When a contract is disputed or canceled between existing operators, at what point are sanctions for "no contract" reasonable?
 - c. Should a "default contract" be required during the duration of a contract dispute?
 - d. Should any interruption of ROW operational work be allowed during the dispute?
- 2. NESC safety violations.
 - a. Is the dispute hindering compliance with the NESC or the correction of NESC violations?
 - b. Is there a breakdown of communications and cooperation between the operators in the dispute leading to unsafe conditions?
 - c. When should the Commission issue emergency orders or rules to protect joint use-safety and cooperation during disputes?
 - d. Should some disputes or portions of disputes be fast-tracked by PUC Hearings for safety purposes?
 - e. How will claims of inadequate safety and operational programs be handled as part of the case?
- 3. Unpermitted pole attachments (This is a safety issue and may also be a trespass issue).
 - a. What is the applicability of pole attachment contract versus applicability of sanctions rules in a contract cancellation dispute?
 - b. Can a pole owner deny permits and access to a pole when a contract is canceled or in a contract dispute?
- 4. Denial of rental reduction.
 - a. Can the parties in the dispute provide adequate evidence justifying this denial?
- 5. Annual pole attachment rates charged by a pole owner.
 - a. Are the rates fair, just and reasonable?
 - b. Has the non-disputed portion of the rates of the pole rent been paid without delay?
- 6. Application of PUC sanction rules in pole attachment contract negotiations?
 - a. Are the sanction rules being used to force or unduly influence contract negotiation outcomes?

- b. Is PUC rulemaking needed to revise pole attachment rules to clarify this issue?
- 7. Government Entity Exemptions.
 - a. Should a consumer-owned utility be exempted from sanctions as a government entity?
 - b. Could exemptions create an unfair advantage / disadvantage for some operators?

Staff is hoping that Commission orders related to these dockets will resolve some key issues between pole owners and occupants, so they can go on with their business in a more orderly and safe manner. We believe these initial decisions will greatly influence future attitudes and actions for all of us in this industry.

One of the key concerns of these dockets is the slowness of these proceedings. The disputing parties need to cooperate in promptly resolving safety violations and other issues. Disputing parties need to make sure that their respective managers, engineers and field crews are working on a cooperative basis to ensure that joint-use safety and operational conflicts are promptly and adequately resolved. The flow of ROW work must continue, even when disputes occur. If not, all joint-users, and even the public, can suffer negative impacts. PUC safety rules should be enhanced to make sure this flow of work continues and that pole attachment disputes do not disrupt safety-related actions.

OREGON PUC AUTHORITY

The PUC has broad and comprehensive safety authority with respect to safety and NESC compliance associated with electric supply and communication lines. ORS 757.035 gives the PUC authority to set appropriate safety standards that are in the best interest of the public and operator workers. Our exercise of authority is somewhat limited by the cumbersome process required to impose penalties allowed in ORS 757.990 and by PUC resources. The PUC's safety rules associated with operator safety are included under Oregon Administrative Rules, Chapter 860, Division 24. The Commission should consider expanding existing safety rules to include important Staff policies. This is important so Oregon electric and telecommunications operators have clear requirements.

With respect to the PUC authority over pole attachments, the PUC has been given the legislative authority to set rates, terms and conditions for pole attachments by statute (see ORS 757.270 et. al.). However, the PUC has limited authority in this area in that the Commission generally can only act upon complaint. Pole owners and occupants can agree to their own rates, terms and conditions and disregard Commission attachment rules if they chose. These choices become an issue for the pole joint-use community when disputes develop and contracts are canceled. The PUC's pole attachment rules associated with shared use of utility poles and conduits are included under Oregon Administrative Rules, Chapter 860, Division 028. For any additions or modifications of these rules, the Commission needs to work closely with the OJUA.

OREGON PUC SAFETY ORGANIZATION

The agency's safety enforcement organization and practices were developed during traditional utility regulation and a stable utility climate, with a dependence on a significant degree of cooperation. The only way the current system has been able to operate is if operators "self-police" their own construction, operation and maintenance in compliance with the NESC. Staff focus is to review operator inspection and safety programs, to make sure the compliance is achieved. The PUC has limited accountability tools, especially with non-regulated operators. The situation with traditionally regulated utilities (like Idaho Power, PGE, PP&L, Qwest and Verizon) is somewhat better and in some cases is augmented with Service Quality Measures. If the current safety organization becomes less effective in maintaining NESC compliance, additional measures to help the PUC safety organization should be implemented. Such measures could include more rulemaking to clarify operator inspection requirements and enhanced PUC enforcement and certification capabilities.

CONCLUSIONS

Oregon and the nation have encouraged deregulation and competition on the ROW and on utility poles, allowing more operators to share the same facilities and spaces. In any industry where an uninformed public is at risk, safety standards and compliance are critical. Two complex industries that have been deregulated are the airline and natural gas industries. With the deregulation of both of these industries, the federal government created more rigorous safety regulations and enforcement organizations to facilitate the new competitive environment. The federal government has not focused on safety in the deregulation of the electrical power and telecommunications industries. Consequently, each state is responsible for policing the safety of its ROW and utility poles. National leadership is lacking, so each state's PUC must take the central role of policing the safety of its ROW and poles.

The National Electrical Safety Code is a solid national standard, and it has been the minimum legal standard in Oregon since the early 1920s for the construction, operation and maintenance of operator lines. Without this national standard, we would have chaos on utility poles. ROW safety cooperation between operators will continue to be complicated, especially when there are so many operators sharing the same poles. Support for this code's standards is critical.

We appreciate the nation's need to modernize telecommunications services and the need for competitive operators in some instances, but in any competitive environment it is important that clear enforceable standards be established to set the boundaries of conduct by participants. This is especially true with respect to safety. We believe the NESC already provides the fundamental boundaries needed for the safety of our electric and telecommunications lines and facilities. However, certain NESC matters (such as in line inspection/compliance, joint-use coordination, tree trimming, facility identification, and operator organizational responsibilities) need to be

made more clear and specific to ensure safety for Oregon in this new competitive ROW environment.

Installing and operating electrical and telecommunications lines on the ROW requires the operators to have organizations that include managers, engineers, crews and other resources that are committed to and are qualified to carry out ongoing NESC compliance associated with their facilities and operations. This responsibility is important not just for the compliance of new installations, but for all existing installations as well. The owner of a utility pole is the "landlord" and is ultimately the responsible party for the pole's safety. It is imperative that the owner be an active leader in enforcing the Commission's safety rules and its contracts over its own employees and contractors and other occupants on the pole. Pole owners must take this responsibility seriously. If not, the resulting conditions could end up being a safety hazard.

It needs to be emphasized that each operator is responsible for the safety compliance of its own lines and facilities. This requires vigilant inspection and compliance actions by each operator to make sure its lines are kept safe, compliant and maintained. Further, in a crowded and competitive ROW, it is critical that operators communicate, coordinate and cooperate with one another about safety and operational matters on a continuous basis.

ROW and operator safety is an important oversight responsibility of the Commission. The PUC's organization should be strengthened to better focus on safety, as it will become a growing issue in the future. If pole attachment conflicts continue to escalate, other solutions will be needed for both safety and pole attachment oversight activities.

The Commission should consider encouraging the establishment of a governmental third-party administrator that would set pole joint-use standards, resolve inter-operator disputes, and carry out related administrative and educational duties. This third party could be set up similar to the Oregon Utility Notification Center (OUNC), perhaps called the Oregon Joint-Use Board. It should be a board consisting of representatives from pole owners, pole occupants, government entities, PUC and other interested parties. The Board should be given state agency rulemaking, registration (or certification), and enforcement authority and responsibilities over operators that use utility poles, anchors, conduits and other shared ROW facilities. The Board's authority should be similar to that given to the OUNC by state statute as set out in ORS 757.542 et. al. and as reflected in OAR Chapter 952. The Board should be given responsibility for the creation and maintenance of Oregon Administrative Rules, Chapter 860, Division 028. In this scenario, NESC enforcement would remain a PUC function and we would administer Division 24 rules.

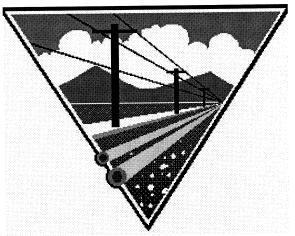
RECOMMENDATIONS

Our overall recommendation is to strongly consider safety rulemaking (i.e., converting policies into OARs), to be cautiously watchful of the current pole attachment developments, and to continue working with the OJUA where we can. However, the Commission should be prepared to take more aggressive steps should pole attachment developments move toward decreased safety or unfair joint-use conditions. Encoding of existing Staff and Commission Policies into Administrative Rules needs to be considered a priority by the Commission.

- 1. The PUC needs to stay focused on NESC safety inspection and compliance. All electric utility territories need to be inspected on at least a two-year repeat basis. Regulated electric utility territories need to be inspected on at least an annual basis because of their larger territories and their reliability and service requirements with the PUC.
- 2. PUC Staff believes that the Commission should consider adoption of new rules in the near-term that augment and clarify certain key NESC rules that some operators ignore. Staff's proposed rules are covered in Attachment C and Attachment D. Industry meetings and formal rulemaking should be pursued on this matter as soon as possible. Responsible operators will experience little or no change to their operations as these policies are made into administrative rules.
- 3. PUC Staff believes that pole owners need to be required by a Commission safety rule to perform their administrative duties in ensuring the safety and maintenance of their joint-use poles. This rule should require pole owners to establish and maintain joint-use construction standards, standard procedures, communication methods, and appropriate records. These rules should become effective on or before January 1, 2005. These responsibilities are already basically covered in Item 8 in the PUC's Policy entitled, "Safety Provision of Joint-Use of Poles." The proposed rules are further detailed in 860-024-0013 in Attachment D. Alternatively, pole owners must sell the poles to a responsible operator willing to do this work, or have a third party administrator perform these functions.
- 4. PUC Staff believes that the OJUA needs to focus its efforts in the following areas: (1) development of a standardized pole attachment contract, (2) development of a recommended joint-use standards manual, (3) promotion of a statewide coordinated joint-use safety project, (4) continued NESC training, education, and manager / worker certification, and (5) recommendations for Commission rulemaking that would improve pole attachment cooperation. These focus areas are better covered in Attachment A. PUC Staff also needs to continue serving in an advisory capacity to the OJUA

- 5. It is recommended that PUC Safety Staff should continue to participate in Commission pole attachment dockets, such as UM 1087 and 1096, and to submit testimony and advice on safety requirements and fair operator interaction.
- 6. Pole owners and occupants as well as the PUC should consider the need for legislation to improve the regulation of pole attachments. A possible legislative proposal could include the development of an Oregon Joint Use Board. It would be a state agency that governs pole attachment practices statewide, including, but not limited to, standardize contracts, certification of operators and workers, better dispute resolution/enforcement mechanisms, inter-operator communications and record keeping, operations of NJUNS and other administrative functions. See Attachment B for possible legislative proposals.

SAFETY & EFFICIENCY



FAIRNESS & ACCOUNTABILITY

ATTACHMENTS

- 1. For more detailed information on Report Recommendations, see Attachments A, B, C, and D.
- 2. For information on safety, ROW, and contract principles applicable to pole attachments, see Attachment E.
- 3. For more information about pole joint-use history in Oregon, see Attachment F.
- 4. For information about the authors, see Attachment G.
- 5. For a drawing showing an uncomplicated utility pole and its safety zones, see Attachment H.

Attachment A

OPUC Staff Recommendations for the Oregon Joint Use Association

The following are priority items that the Oregon Joint Use Association (OJUA) should work or continue working on:

- 1. Development of a Standardized Recommended Contract. Rationale: Pole owners and occupants continue to disagree on specific contract obligations, rates, terms and conditions in many areas. This has caused conflicts and issues between owners and occupants. Changes in rules and regulations along with increased numbers of operators and infrastructure are making older agreements obsolete. This will help create more uniform, fair and realistic agreements in this changing environment. This contract may be used in place of cancelled contracts between pole owners and occupants until both parties agree to a permanent contract.
- 2. Development of an OJUA Standards Manual. This manual would set guiding policies and practices for Oregon pole owners and pole occupants in making and maintaining attachments on poles. It should focus on safety and operation life-cycle responsibilities and work flow activities necessary for a pole attachment to be on a pole. Rationale: Pole owners and occupants do not agree on some basic, ongoing responsibilities necessary for attachments. Consequently, conflicts and disputes between pole owners and occupants have arisen and will continue to develop until parties agree and carry out their obligations based on sound principles and policies. OJUA has made a good effort in recommending policy associated with attachment permit and notification responsibilities. Other agreements on sound principles and policies should be pursued through the OJUA.
- 3. Promotion of a Statewide Coordinated NESC Compliance Catch-up Project. Rationale: Accelerated inspection and correction programs are needed to ensure NESC compliance. Many operators, both owners and occupants, have not paid enough attention to NESC and PUC safety policy compliance in the past. Consequently, there is a lot of catch-up work that needs to get done so that poles are safe and efficient with respect to facility joint-use. All NESC non-compliant items need to be corrected during this project. Poles, lines and equipment need to be identified as to ownership during this effort.
- 4. Continued Training and Education to Promote NESC Safety Compliance and Pole
 Attachment Cooperation. Rationale: Some parties (operators and contractors) are not
 educated and sometimes not even aware of their NESC safety and attachment contract
 responsibilities associated with constructing and maintaining attachments. Problems will
 continue until there is a uniform expectation by all pole owners and occupants that all parties
 will follow through with their NESC responsibilities. OJUA operator and worker
 certification and testing for NESC competency should be pursued as part of this effort.

Attachment A

5. Recommendations to the PUC for the Adoption of Additional OAR Chapter 860, Division 028 Rules to Help in Pole Joint-Use Cooperation. Rationale: There is a need to create clear rules, standards, and contracts so that pole owners and occupants can work better together, both safely and cooperatively. The OJUA has an important industry role in getting operators to develop sound principles and policies that are appropriate for Oregon.

Attachment B

Possible Recommendations for Legislative Proposals

The following are possible legislative proposals that may be pursued by the OJUA or the PUC in the upcoming legislative session, if the opportunity arises.

- 1. The Reorganization and Prioritization of Existing Pole Attachment Statutes for integration under one "Rights of Way" heading in ORS Chapter 758. Rationale: There are over 18 separate statutes scattered in Chapters 757, 758 and 759 related to pole attachments. These statutes are sometimes duplicated, confusing and difficult to interpret, integrate and prioritize. In this age of utility competition and ROW constraints, these statutes should probably be reviewed in total by a PUC-industry task force consisting of pole owners, operators, cities and members of the public. The industry and PUC needs better direction related to pole attachment rights, duties, and sanctions of both the pole owners and occupant.
- 2. <u>Statewide Standardized Pole Attachment Contracts</u> with fairly uniform rates, terms and conditions for all pole owners and occupants with exceptions provided upon show of good cause. Rationale: There are more than 40 major pole owners in the state with various contracts and pole attachment processes that are subject to change with minimal notice. Operators need better standards and stability to operate their facilities and utility services.
- 3. <u>Develop a Mandatory Mapping and Database System</u> that can be accessed by pole owners and pole occupants. Rationale: Inaccurate facility and transaction records have led to reduced safety and cooperation between pole owners and occupants. Need accurate records for entities to show that safety obligations and contracts are fulfilled in a prompt safety-conscious and businesslike manner.
- 4. <u>Certification of Operators</u> (both pole owners and occupants) that attach to utility poles. Rationale: Conflicts continue to arise as to who is authorized and qualified to make attachments. Further, some occupants are difficult to contact for routine, emergency, administrative, and safety business purposes. This would require the establishment of a statewide directory of operators, including their administrative, emergency and safety contacts. Also, a de-certification process for irresponsible operators could be also needed.
- 5. <u>Simplified and Timely Dispute Resolution/Enforcement Processes</u> to resolve pole owner and occupant complaints. Rationale: Operators need centralized and speedier processes so that pole disputes and violations are promptly resolved.
- 6. <u>Establish an Oregon Joint-Use Board (OJUB)</u> as the governmental third party that is industry run to carry out the above functions. Rationale: Oregon Utility Notification Center (OUNC) has been a success for underground ROW cooperation. A governmental third party, like the OUNC, may be needed to govern utility poles and overhead attachments.

Attachment C

Suggested Safety Rule Making Actions

For possible encoding into OAR Chapter 860, Division 024 (under ORS 757.035)

- 1. Adopt PUC Staff Line Inspection Policy into PUC Administrative Rule.
 Rationale: Some operators have not given enough attention to their inspection/correction responsibilities required by the NESC to the detriment of other operators and the public. This has resulted in excessive numbers of NESC violations, conflicts and inefficiencies. All operators must comply with their "self-policing" inspection/corrections responsibilities as required by the NESC and interpreted by PUC policy. These rules are necessary, to clearly require all operators to perform their inspection and compliance responsibilities at time of construction and on an ongoing maintenance basis.
- 2. Adopt PUC Pole Joint-Use Policy into PUC Administrative Rules.
 Rationale: This policy was formally adopted by the Commission on February 18, 1997 with the understanding that if pole attachment issues and disputes continued, the policy would be put into administrative rules. Pole attachment disputes have escalated; this policy needs to be adopted into official PUC rules.
- 3. Adopt PUC Staff Tree Trimming Policy into PUC Administrative Rule.
 Rationale: Some operators have not maintained adequate vegetation clearances as required by the NESC and OPUC policy. Non-compliance has resulted in forest fires, injuries to children and the public, electrical outages and loss of climbing/working space around poles and facilities. Deferred maintenance related to inadequate tree trimming is expensive and time-consuming to resolve. This rulemaking should help to eliminate "boom and bust" fluctuations in this work.

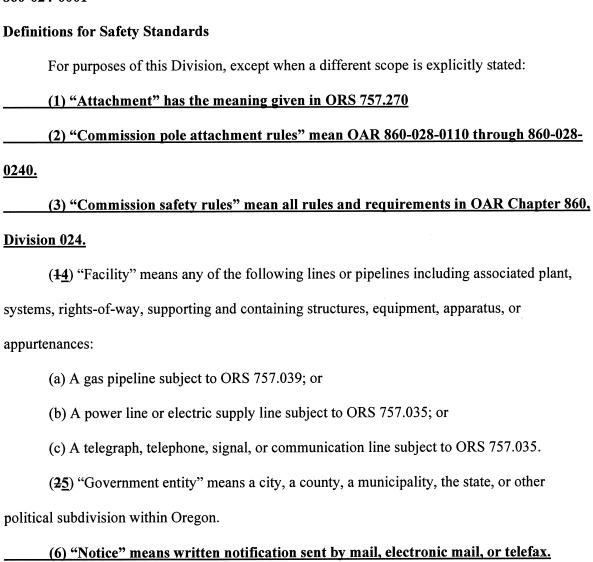
[Note: The above policies can be viewed at — http://www.puc.state.or.us/safety/electric/elecpol/e-pol-mp.htm]

- 4. Adopt OAR Rules Requiring Ownership Identification of all poles, lines and other major facilities on utility poles.
 Rationale: Lack of clear identification of poles, lines and equipment has led to confusion and misidentification of facilities by pole owners and occupants, as well by PUC Staff.
 Operators need statewide regulations and a plan with firm deadlines to ensure identification is completed statewide in a timely organized manner.
- 5. Revise OAR 860-024-0005, involving Maps and Records, to be Applicable to All Operators (and not just regulated utilities).

 Rationale: Operators need to keep sufficient maps and facility records to construct, operate, maintain, and identify their facilities. Further, these maps and records must be readily available to PUC Staff upon request.

NOTE: For purposes of the amendments to OAR 860-024-0001 and OAR 860-024-0005, <u>underlining</u> means additions to be made to existing PUC rules and strikeout (strikeout) means delete. Note that rules including OAR 860-024-0011 and thereafter are all recommended new rules; bolding and underlining is not added for the convenience of the reader.

860-024-0001



(7) "Occupant" means any licensee, government entity, or other entity that constructs, operates, or maintains attachments on poles or within conduits.

- (38) "Operator" means every person as defined in ORS 756.010, public utility as defined in ORS 757.005, telecommunications utility as defined in ORS 759.005, telecommunications carrier as defined in ORS 759.400, telecommunications provider as defined in OAR 860-032-0001(10), consumer-owned utility as defined in ORS 757.270, association, cooperative, or government entity and their agents, lessees, or acting trustees or receivers, appointed by court, engaged in the management, operation, ownership, or control of any facility within Oregon.
- (9) "Owner" means a public, telecommunications, or consumer-owned utility that owns or controls poles, ducts, conduits, or rights-of-way. Where a supporting structure is jointly owned by two or more operators, the owner with the higher voltage facilities is presumed to be responsible for the pole.
- (10) "Pattern" means a pattern of behavior that results in a material breach, or in frequent or serious violations of Commission safety rules.
 - (411) "Reporting Operator" means an operator that:
 - (a) Serves 20 customers or more within Oregon; or
- (b) Is an electricity service supplier as defined in OAR 860-038-0005 and serves more than one retail electricity customer.

[Note: Also correlate definitions in Division 028 to reduce redundancy.]

860-024-0005

Operator Maps and Facility Records

- (1) Each <u>utility shall operator must</u> keep on file current maps and records of the entire plant showing size, location, character, and date of installation of major plant items.
- (2) Upon request, each <u>utility shall operator must</u> file with the Commission an adequate description or maps to define the territory <u>or areas</u> served. All maps and records which the Commission may require the <u>utility operator</u> to file <u>shall must</u> be in a form satisfactory to the Commission.

860-024-0010

Construction, Operation, and Maintenance of Electrical Supply and Signal Lines

- (1) Every operator-shall must construct, operate, and maintain electrical supply and communication lines in compliance with the standards prescribed by the 2002 Edition of the National Electrical Safety Code approved June 14, 2001, by the American National Standards Institute.
- (2) Except as specifically provided, nothing in Divisions 024 and 028 is meant to create a lower standard or lower level of responsibility than that set forth section (1) of this rule.

NEW:

860-024-0011

Inspections and Compliance of Electric Supply and Communication Facilities

- (1) Each operator must construct, operate and maintain its entire plant and system in compliance with OAR 860-024-0010 and Commission safety rules.
- (2) Each operator must train its employees and must require training for hired contractors in the applicable Commission safety rules necessary for the covered tasks that a person will perform related, but not limited, to design, construction, inspection, operation, and maintenance.
- (3) Each operator must inspect its lines and facilities in such a manner and with such frequency as is needed to ensure a reasonably complete knowledge of their condition and compliance with Commission safety rules at all times. The operator must keep records of all safety violations found that are not immediately corrected.
 - (4) In addition to section (3) of this rule, each operator must:
- (a) Inspect and correct all new construction, alterations, or modifications for compliance with Commission safety rules before the installation is put into service.
- (b) Perform routine patrols of overhead lines and accessible system facilities for hazards to the public. The maximum interval between patrols is two years for all facilities. The maximum interval for electrical station inspections is monthly, not to exceed 40 days.
- (c) Conduct detailed inspections of all lines and facilities on a cyclical basis so that each line segment, structure, enclosure, and other facilities are inspected at a minimum of once every

five years. Detailed inspections are close visual checks of all lines, structures, clearances, equipment, hardware, and appurtenances including the surrounding rights-of-way. Where the operator has conducted the detailed inspections necessary and can demonstrate a pattern of compliance, the cycle length may be extended to 10 years. Facilities older than 20 years and facilities with exposure to extraordinary conditions or with extraordinary requirements may require more frequent detailed inspections.

- (5) Each operator must correct violations of Commission safety rules found during inspections and activities in sections (3), (4)(b) and (4)(c) in a prompt manner, not to exceed 12 months from the time of discovery.
- (6) Each operator must maintain written policies, plans, schedules, and records to show that it is carrying out the above inspections and corrections. Upon request, each operator must file with the Commission and pole owner, if applicable, an adequate description of program, plans, and schedules that cover the operator's inspection and correction programs. All policies, plans, schedules, and records that the Commission may require the operator to file must be in a form satisfactory to the Commission.
- (7) Each pole owner must maintain a unique tag on each pole or structure so that authorized occupants, employees, and Commission staff may readily identify the individual pole and its owner. Where the pole tag is missing or illegible, the pole will be presumed to be owned by the electric utility or entity with the highest voltage facilities attached, until otherwise determined.

(8) Each occupant must tag each attachment on a pole so that the pole owner, authorized occupants, employees, and PUC staff may readily identify the owner of the facilities. If an attachment on a pole is not tagged or illegible as to the responsible operator, it will be presumed to be owned by the pole owner until the responsible occupant is determined.

NEW:

860-024-0012

Duties of Pole Owners

- (1) A pole owner must construct, operate, and maintain each and all poles in a safe and serviceable condition in compliance with Commission safety rules at all times.
- (2) An operator that owns jointly used poles must publish and keep current a safety standards manual covering owner and occupant joint-use matters including standards, procedures, schedules, and arrangements established in section (3) of this rule. Copies of these documents must be made available to occupants, the Commission, and members of the public upon request at no charge. This safety standards manual must remain in force by the pole owner and all occupants even upon pole attachment contract cancellations or disputes. The purpose of the manual is to ensure compliance with the Commission safety rules at all times.
- (3) An operator that owns jointly used poles must perform all of the following to ensure that each pole complies with the Commission safety rules at all times:

- (a) Establish and maintain joint-use construction standards that show typical configurations for attachments on poles so that poles and structures are safe and serviceable;
- (b) Establish and maintain standardized procedures for conducting and recording communications between the owner and occupants associated with permits, routine work, emergencies, and other coordination activities; and
- (c) Establish and maintain standardized procedures to be followed by the owner and occupants in the permitting and notification for new attachments on poles and in the replacement and abandonment of poles.
- (d) Make safety arrangements with each pole occupant to coordinate design, construction, alteration, operation, maintenance, inspection, and other safety-related activities.
- (e) Conduct inspection and corrections programs as covered in OAR 860-024-0011 in coordination with occupants to prevent and correct NESC violations on all poles whether caused by the owner, occupants, other parties, or outside forces. Each pole owner must adopt plans and specific schedules for coordinated detailed inspections, tests, and repairs for the cyclical and systematic coverage of all poles.
- (f) Give each occupant 61-days notice before modifying an existing facility that does not comply with Commission safety rules. Upon justification, less notice may be provided for conditions involving eminent or serious hazards, emergencies, and modifications that are beyond the reasonable control of the pole owner. Where justified, each occupant must bear the costs and perform other responsibilities as covered in Commission pole attachment rules.

(g) Respond promptly to notifications or complaints by pole occupants and take appropriate corrective actions to ensure all poles comply with Commission safety rules at all times.

NEW:

860-024-0013

Duties of Pole Occupants

- (1) A pole occupant attaching to one or more poles of a pole owner shall:
- (a) Have a written agreement with the pole owner that specifies general safety conditions for attachments on the poles of the pole owner;
- (b) Have a permit issued by the pole owner for each pole on which the pole occupant has attachments:
- (c) Comply with the pole owner's safety standards manual covered in sections (2) and (3) of OAR 860-024-0012; and
- (d) Construct, operate, and maintain attachments in compliance with Commission safety rules.

NEW:

860-024-0016

Vegetation Clearance Requirements for Electric Supply and Communications Facilities

- (1) The requirements set forth in this rule provide the specifications for communication and electric line clearances from trees and other vegetation to provide for safety and reasonable service continuity to the public and utility workers and to prevent forest fires caused by electrical supply lines.
 - (2) Definitions for purposes of this rule:
- (a) "Readily climbable" means having sufficient handholds and footholds to permit an average person to climb easily without using a ladder or other special equipment. Factors limiting climbability include a tree trunk without branches for a height of eight feet or more above any accessible surface, dense branching that prevents climber penetration, or vegetation of insufficient strength to support the weight of a person at any point the lines can be directly or indirectly accessed;
- (b) "Interfere" or "interference" means any flow of electricity from the conductor to the vegetation through direct contact or arcing, any effects upon the tree from the electric field surrounding the conductor, or any abrasion of conductor, equipment, or vegetation caused by contact;
 - (c) Voltages are nominal, phase-to-phase;
 - (d) Lines mean conductors, cables, equipment, poles, and supporting structures; and

- (e) Trees mean any type tree, trees, or vegetation.
- (3) Each electrical supply operator must trim or remove trees away from electrical supply lines that interfere or may interfere under reasonably anticipated conditions.
- (4) Each electrical supply operator must trim or remove trees to limit the likelihood of direct or indirect access to a high voltage line by a member of the public or any unauthorized person.
- (5) Under all reasonably anticipated operational conditions, an electric supply operator must maintain the following minimum clearances to the following lines:
 - (a) Ten feet for lines energized at voltages greater than 50,000 volts;
- (b) Five feet for lines energized at voltages of 600 through 50,000 volts, except clearances may be reduced to three feet if the tree or vegetation is not readily climbable.
- (c) One foot for lines energized with less than 600 volts. Less clearance may be allowed for insulated lines that are not experiencing insulation damage from occasional contacts.
- (6) In determining the extent of trimming required to maintain the clearances required in section (3) of this rule, the electric supply operator must consider at minimum these factors for each line: the voltage; location; configuration; and sag of conductors at elevated temperatures and when conductors have any reasonably expected accumulation of ice. In addition, the electric supply operator must consider the growth habit, strength and health of trees and vegetation growing adjacent to the line, with the combined movement of the vegetation, supporting structures, and conductors under adverse weather conditions.

- (7) Each pole owner must trim or remove trees to allow utility workers safe climbing access to poles and lines.
 - (8) Each electrical and communication operator must trim or remove trees:
- (a) That may contact, or are likely to contact, any part of the operator's lines which could cause a safety hazard, reduce reliability, or inflict damage or stress to that part or any other jointly used facilities.
- (b) That may restrict utility workers safe climbing and work space access to poles, equipment, and lines.
- (c) That are unstable, both alive and dead, which are leaning toward the line and which would strike the line when falling.
- (9) Each electrical and communication operator is responsible to perform routine inspections and keep appropriate records to insure that timely trimming is accomplished to keep the designated minimum clearance areas free of vegetation at all times. These records must be made available to the Commission upon request.
- (10) In maintaining the clearances as required by this rule, each electrical operator must implement pruning practices as set forth in OAR 860-024-0017.

A PUC STAFF REPORT ON THE UTILITY POLE Attachment E Pole Joint Use Principles (Existing or Needed)

In understanding and applying these principles the safety, health, welfare, and rights of the public, customers, communities, environment, and commerce must be taken into consideration. The below principles are not exhaustive. Others may see other critical principles or how some principles can be integrated into one.

Safety and Health Principles (Highest Priority)

These involve the <u>minimum safety</u> and health needs of everyone (all individuals). People would include members of the public, customers, all workers, line workers and other operator employees/contractors. The following safety principles involve the minimum requirements of operators in Oregon necessary for the management, design, installation, and maintenance for lines and attachments to utility poles and structures. Any PUC rules adopted related to the "S" principles would be included in OAR Chapter 860, Division 24, entitled SAFETY STANDARDS. PUC could adopt rules and make orders related to these principles as allowed and authorized by ORS 757.035, ORS 757.020, and ORS 757.990.

- S1. The NESC It's the Law. The National Electrical Safety Code (NESC) is the minimum lawful standard in Oregon for the construction, operation, and maintenance of electrical supply and communication lines, poles, equipment and other facilities. NESC compliance is mandatory at all times.
- S2. <u>PUC Authority.</u> The PUC is the administrative and enforcement authority over NESC standards and compliance throughout Oregon. Besides NESC compliance, PUC has the power to order additional requirements "for the protection of the health or safety of all employees, customers, or the public" over any entity that owns or operates electric supply and communication lines. It does not make any difference how the entity is organized (e.g., city, PUD, cooperative, or investor-owned).
- S3. <u>Sanctions and Penalties.</u> The PUC has the direct authority to require electric and communication operators to remove or cease operating their lines. The PUC has the authority to assess monetary penalties upon operators that do not comply with the NESC and Commission safety rules.
- S4. Operator Safety Duty. Each operator, including each pole occupant and owner, is responsible for the safety of its own lines including attachments on poles and structures at all times.
- S5. <u>Pole Owner Duty.</u> A pole owner is responsible for ensuring the safety and NESC compliance of its poles at all times.
- S6. <u>Qualified Employees</u>. Each operator shall employ employees that are trained in NESC and Commission safety rules for required safety tasks. Employees include workers, managers, inspectors, engineers, and contractors.
- S7. <u>Safety agreements.</u> Pole owner and occupants shall have safety agreements and arrangements necessary to ensure the continual safety of each pole related to structural strength, clearances, grounding, access, climbing space, working space, facilities identification, and other factors. Safety agreement disputes shall not interrupt the safe and

- efficient use of the ROW, and must be resolved in a prompt and responsible manner by all the parties concerned.
- S8. Operator Inspections of Construction Work, and New and Existing Installations. Each operator shall inspect all of its poles, lines and attachments at necessary intervals to ensure that the operator has reasonably complete knowledge about their condition and maintains compliance with the NESC and PUC's Inspection Policy at all times.
- S9. <u>Tree and Vegetation Clearances</u>. Each supply and communication operator shall maintain adequate tree and vegetation clearances to its lines, poles, and equipment. Considerations include accident prevention, reliability, structural integrity, facility visibility for inspections, worker accessibility (both climbing and working spaces) and other factors.
- S10. Operator Identification. Pole owners and occupants shall label (or tag) each attachment, pole and equipment item to facilitate identification of the responsible operator. Authorized workers, inspectors, and engineers of all joint-use parties including PUC Staff must be able to identify the operator of the facilities.
- S11. <u>Maps and Records.</u> Each operator shall keep accurate and current maps and records for all major facilities items (including pole, lines, enclosures, equipment, etc.) for the ongoing safe management and operation of its facilities.
- S12. <u>PUC Safety Policies Binding.</u> PUC Safety Policies for electric supply and communication operators and lines are binding. These include the inspection policy, entitled "Line Inspection Requirements for Operators"; the joint-use policy, entitled "Safety Provisions for Joint-Use Poles"; and the tree clearance policy, entitled "Tree to Power Line Clearances." They are policies posted at the PUC Web site (www.puc.state.or.us/safety/electric/elecpol/e-pol-mp.htm).
- S13. Safety Standards Manual. Each pole owner should have a safety standards manual that addresses owner-occupant communication procedures so that permits, work, and emergencies are properly communicated and documented. The manual needs to also cover joint-use construction and maintenance standards necessary to ensure adequate safety related to structural strength, clearances, placement of attachments, grounding, access, and other mutual coordination considerations. This manual needs to be made available to pole occupants, PUC Staff and the public upon request without charge. Manuals should be made available to all occupants and interested parties upon revision. (ORS 757.035 and ORS 757.020)

PUBLIC INTEREST PRINCIPLES (High Priority & Complexity)

These are necessary for public necessity, welfare, and convenience. This is an area that is legally very complicated with both federal and state laws, involving various rights, obligations, needs and wants of many parties. One principle not included below could be the mandatory placement of lines underground in corridors and areas where there is already excessive overhead congestion and conflicts.

Federal laws set the basic principles for attachment nondiscriminatory access. The federal requirements are covered in Section 224 of the Communications Act of 1934 that was revised in 1978 and 1996, including FCC related orders. Oregon law establishes pole attachment

responsibilities under ORS 757.035, ORS 757.270 through 757.270; ORS 759.650 through 759.675, ORS 758.035; and ORS 758.020.

- P1. Public Interest. The public rights-of-way (ROW) belongs to "WE THE PEOPLE." All operators on the ROW have a fiduciary responsibility to cooperate with each other and to install, operate, and maintain their poles, lines, and other facilities in a SAFE and EFFICIENT manner on the ROW. It requires the TRUST and COOPERATION of all operators. This was emphasized by 1999 Oregon Legislature in House Bill 2271.
- P2. PUC Authority to Set Rates, Terms and Conditions. The PUC has the authority to set the rates, terms and conditions for pole attachments in the public interest. In doing so, the PUC shall consider the interests of the customers of both the pole owner and the occupant. This authority is pre-empted by the pole owner and occupant contracts that are deemed just, fair and reasonable until determined otherwise after complaint. (See ORS 757.285, ORS 759.655, and ORS 758.035.)
- P3. Access. A pole owner shall allow public utilities, telephone utilities, cable television operators and telecommunication service providers certified in Oregon to make attachments to its poles. The pole owner can deny access only on the basis on safety, reliability and operational concerns. (Refer to Federal FCC regulations.)
- P4. <u>Non-Discrimination and Preferential Treatment.</u> Pole owner rates, terms, and conditions of access shall be uniformly applied to telecommunication carriers and cable operators that have or seek access. FCC also does not preempt state or local regulations where applied consistently and uniformly over the jurisdictional area, like NESC and OSHA safety compliance. (Refer to Federal FCC regulations and orders.)
- P5. Reserve Capacity. A pole owner can not reserve capacity or space on its facilities, unless such reservation is consistent with a bona fide near-term development plan that requires a need for the space or capacity. Pole owners need to reserve adequate spaces to ensure that line workers can climb and work on facilities safely, without impediment or obstruction per NESC. Owners can also reserve space for emergency provisions. (Refer to Federal FCC regulations and orders.)
- P6. <u>Loaned Space</u>. A pole owner that is not a telecommunications utility may recover rented spaces from occupants if the utility needs the space for the provision of its core utility service. (Refer to Federal FCC regulations.)
- P7. Permits. An operator shall obtain permission from the pole owner before making or modifying an attachment to a pole line and shall comply with its contract, permit, and Commission safety rules. (OAR 860-028-0120)
- P8. Fair Rates and Cost Recovery. All pole attachment rates shall be just, fair and reasonable. The pole owner can and should charge a just and reasonable fees for attachments that provide cost recovery to the owner of not less than the additional (i.e., incremental) costs of providing for the attachments nor more than the fully allocated cost of the space provided for the attachments. Examples of incremental costs would include pre-construction survey, engineering, inspection, make-ready and change-out in preparing poles by the pole owner to receive attachments. (Authority: ORS 757.270 to 757.290 & 757.287; Rule: OAR Chapter 860-028-0110)

- P9. <u>Betterment Costs.</u> Pole owners shall not charge any portion of make ready or alteration costs to a pole that is attributable to correcting existing violations, unless the occupant has caused a portion of the violation. (Refer to Federal FCC regulations and orders.)
- P10. Improper Use of Sanctions. A pole owner shall not apply pole attachment sanctions to existing attachments for "no contract" or "no permit" to force a revised contract on an existing occupant. More importantly, contract cancellation shall not terminate ongoing mutual safety agreements or operational programs conducted between pole owner and occupant to ensure NESC compliance at all times. (Authority: ORS 758.400 to 475; Rule: OAR 860-028-0220)
- P11. Third Party Arbitrator. The PUC is the third party that will arbitrate pole attachment disputes in Oregon.

Implementing the following principles would require state legislative action and funding. Authority is already probably available to PUC under ORS 757.035. However, the agency's resources would be insufficient to handle such an ongoing program.

- P12. Operator Certification. All overhead line operators, both pole owners and occupants alike, need to be certified by or be registered with the PUC. PUC funding and resources are needed to support related activities. Operators need to be certified for safety, access, work, and emergency provision purposes. (Certification or registration could be accomplished similar to ORS 757.557(1) for operators of underground facilities or ORS 759.020 (for competitive telecommunication service providers).
- P13. Mandatory Inter-Operator Communication and Recordkeeping System for Pole
 Attachments. Unless justified otherwise, all pole owners and occupants shall
 communicate with each other using a single statewide notification system. Database
 records of communications should be made available for dispute resolution. Such system
 could be National Joint Use Notification System (NJUNS) or another system with more
 comprehensive database and reporting capabilities.
- P14. Statewide Mandatory Pole Attachment Standards Manual for Pole Attachments. Unless justified otherwise, all overhead operators shall comply with this manual, which would contain provisions for joint-use construction standards, standardized communication and recordkeeping procedures, model contract, listings of certified pole owners, occupants, and contractors including contact persons. Such a manual could be kept current and Internet accessible for overhead operators and the public.
- P15. Occupant Sanctions to Pole Owners. For occupant facilities that are clearly tagged, pole occupants may sanction pole owners when the pole owner incorrectly sends violations of Commission safety rules to the occupant. (Would require state legislation and funding)

Pole Attachment Contract Principles

Pole owners and occupants must operate under agreements and usually enter into private contracts to reach appropriate safety, operational and business agreements related to pole attachments. Specific authority for private contracts is covered in ORS 757.285 and 759.670.

- C1. Private Contract. Private contracts between pole owners and occupants are deemed just, fair, and reasonable, unless challenged. Remember; certain conditions (e.g., NESC compliance) are not optional. (Authority: ORS 757.285 & 759.670)
- C2. <u>Contract and Permit Disputes.</u> Where contracts and permits are disputed and can not be settled in a timely manner, a complaint should be filed with the OJUA for mediation, or the PUC for arbitration.
- However, beware of the following contract pitfall areas:
- C3. <u>Adverse Public Interest.</u> Upon complaint, Commission can override contracts when they are determined by the PUC to be adverse to the public or customer interest. (Authority: ORS 757.285 & 759.670)
- C4. <u>Contract Duress.</u> Pole owners shall not threaten or use "no contract" or "no permit" sanctions for existing attachments to force revised contracts. (Refer to OAR 860-028-0220)
- C5. <u>Standardized Contract.</u> Upon complaint and Commission determination that a pole attachment contract is adverse to public and customer interests, PUC could order a standardized or default contract be put into place between the parties.

Further Comments and Questions to Ponder About

The above principles generate 100 more questions, concerns and unending debate. What are the specific rights and duties of the pole owner, pole occupant, operators, utilities, cities, and counties, state agencies and the OPUC with respect to pole attachments and utility facilities on the ROW. A big issue not covered well so far is WHO PAID, WHO PAYS NOW, and WHO PAYS IN THE FUTURE? Who pays for:

- Safe and reliable utility and operator facilities?
- Responsive customer and public service?
- Pole management and administration?
- Accurate and up-to-date facility records on poles and the ROW? And facility identification?
- Competent superintendents and supervisors who must manage pole facilities?
- Skilled and safety-conscious workers?
- Operator's professionals including engineers, accountants, economists, mediators and attorneys who are experts about pole and ROW issues and conflicts?
- Standards, training, and enforcement necessary for NESC compliance?
- Dispute, mediation, arbitration and regulatory leadership?
- Damages to poles and the ROW (tangible and intangible) that are caused by operators, owners and/or occupants, that can no longer pay or go bankrupt?
- Regulatory and/or court hearings?

A PUC STAFF REPORT ON THE UTILITY POLE Attachment F Pole Joint-Use History

History and trends indicates:

- 1. Oregon's industries have been leaders in electric supply and communication lines innovation.
- 2. The NESC has been the minimum design, construction, operation and maintenance standard for these lines since 1923. The Oregon PUC has been active in enforcing this code.
- 3. PUC Staff have issued policies and conducted considerable education related to NESC inspection, compliance and joint use coordination focusing on NESC responsibilities by operators.
- 4. The Portland D-11 Clean-up Project of 1992 prompted closer look at pole joint-use coordination and cooperation. The follow-up October 25, 1993 report by (Allen) Clapp Research Associates called for more focus to NESC enforcement and joint-use cooperation (see conclusions and recommendations).
- Since the D-11 Project, PUC Staff has been focusing considerable efforts with industry groups and on safety policies, education and enforcement to encourage improved joint-use cooperation.

1890. Nation's first long-distant transmission line built from Willamette Falls to Portland, Oregon (12 miles). Oregon becomes a leader in electrical line construction and operations.

1900 – 1920. The 20th century began with unsafe and congested utility poles that were often times over crowded and had inadequate strength. The century also began with many competitive electric and communication providers and persons using the same poles and on both sides of the street. These operators were in the business of electric supply, streetlight, telephone, telegraph, and signal ventures. Trends showed ever-increasing injuries to children, members of the public, non-utility workers, and utility workers, as well as property. Urban areas, streets, and pedestrian areas became unsafe and disrupted. Farmers were injured by low lines in rural areas.

Safety organizations and campaigns were launched to resolve the worsening injury trends. Focus was put on a quest to find an acceptable minimum safety standard that everyone could agree with and commit to. The focus turned to the US Department of Commerce (Bureau of Standards) to develop a national standard. Initially the needs were for an operation and maintenance standard. Soon after, emphasis was given to construction in addition to operation, and maintenance. See volumes no. 1 and no. 2, National Electrical Archives available through the Institute of Electrical and Electronic Engineers, Inc.

- **1914.** First edition of the National Electrical Safety Code (NESC) was adopted as Circular of the Bureau of Standards No. 49, issued on August 1, 1914. (Available at same source above)
- **1923.** Oregon PUC adopts 3rd Edition of the NESC in PUC Order 922. Oregon is one of the first states to adopt the code into PUC regulation as the minimum safety standard for electric and communication lines.

- **1934.** Section 224 of the Federal Communications Act of 1934 (later revised in 1978 and 1996) and Federal Communication Commission (FCC) orders set joint-use and commerce obligations for the sharing of poles by telephone and electric utilities.
- **1954.** First cable television (CATV) system installed in nation, in Astoria, Oregon
- **1965.** Oregon Statute (ORS 654.715) requires utilities to report accidents to the PUC and gives the PUC authority to investigate utility accidents.
- **1970.** CATV networks were being installed on widespread basis throughout Oregon
- **1971.** Oregon Statute (ORS 758.035) gives PUC authority to regulate joint-use occupancy on poles and along roads.
- **1972.** PUC Safety Section established, which included analysts who could inspect electric supply and communication lines for NESC compliance related to routine inspections, accidents, major outages, and property damage.
- **1973.** Oregon Statute (ORS 757.035) gives PUC authority over all electric supply and communication operators including their lines, pole and facilities throughout the state.
- **1978.** Section 224 of the Federal Communications Act of 1934 revised by Congress on this year and related FCC orders require that CATV lines be allowed to attach to utility poles basically on a cost plus versus market-based rates for space used.
- 1979. Oregon Statutes 758.400 to 758.475 authorizes the PUC to establish electric service territories to eliminate unnecessary duplication of electrical facilities on utility poles and on both sides of the street. (This was eliminating competitive "commonuse" of electrical lines on distribution poles.)

A PUC STAFF REPORT ON THE UTILITY POLE Attachment F – Pole Joint-Use History

- **1979.** Oregon Pole Attachment Statutes (ORS 757.270 through 757.290) authorize the PUC to develop pole attachment regulations basically in conformance the Federal Communication Commission regulations.
- 1982. In cooperation with Oregon Utility Safety Committee, PUC Staff issues Tree Trimming Policy to all electric utilities. The policy set minimum tree trimming standards to prevent injuries to children and persons climbing trees and to ensure that adequate safety clearances are maintained between vegetation and energized electrical lines.
- **1982.** PUC Safety Staff shift focus to evaluating electric operator safety programs in addition to inspecting operator facilities.
- **1984.** AT&T broken up. AT&T was a strong supporter of the NESC and its compliance, especially related to joint-use of poles. AT&T's safety standards are classics today in promoting compliance to the NESC.
- 1984. PUC Pole Attachment Rules (Orders 84-278 and 84-608) adopted. PUC certifies to FCC that it will take over pole attachment regulatory responsibilities over poles owned by public utilities, telephone utilities, and consumer owned utilities.
- **1984.** PUC Safety Section was given NESC compliance responsibilities over telephone companies without additional staffing. This responsibility previously belonged to PUC's Telecommunications Division.
- **1986.** PUC (1/5) Line Inspection Policy issued to all electrical and communication operators.
- 1987. After extensive review and comment by the OUSC, PUC Staff issues (2/10) Line Inspection Policy in September to all electrical and communication operators. This policy clarified NESC inspection requirements with standards and schedules for periodic utility inspections.
- **1988.** Commission and PP&L agree to a 10-year NESC inspection/correction program to cover entire system per recommendations set out in PUC Staff Safety Report E88-01.
- **1989.** Oregon High Voltage Act (ORS 757.800 through 757.805). This act required that unqualified workers keep at least 10 feet away from overhead high voltage lines.
- **1990.** PGE's dual distribution system (4kV) in Portland cleaned-up after prompting by PUC staff.

- 1992. PUC Safety Staff cite large area in Portland with unsafe poles and inadequate joint-use cooperation. Primarily PGE, PP&L and Qwest facilities were involved. This prompted "Portland D-11 Clean-up Project" which required that the entire area be made NESC-safe before the next storm season.
- **1992.** PP&L's dual distribution system (4kV) in Portland cleaned-up after prompting by PUC staff.
- 1993. PUC cites West Oregon Electric Cooperative in June with excessive tree interference systemwide. PUC Commission Order 93-807 requires the co-op to obtain adequate tree clearances as set forth in the PUC's tree trimming policy by end of the year.
- 1993. In response to Portland D-11 Project, PUC prompts PGE, PacifiCorp and Qwest to investigate their pole maintenance and joint-use programs for NESC compliance. Clapp Research Associates issues report on October 25, 1993, calling for improved NESC enforcement and joint-use coordination between pole owners and occupants.
- 1993. Significant area in Eugene found with pole structural violations and poor joint-use coordination involving EWEB and Qwest systems. Commission Order 94-531 issued to Qwest to bring system up to NESC compliance within 7 years.
- 1994. PUC Safety Staff called together a Joint-use Pole Working Group to work on pole attachment standards and communications. Representatives of the electric utilities, telephone utilities, and CATV industries attended. Two positive outcomes materialize, which include NJUNS and PUC Pole Joint Use Policy.
- 1996. As a result of above working group, PGE, Qwest, Verizon, Comcast, and PP&L become the first members of the National Joint Utility Notification System (NJUNS) for conducting intercompany communications over the Internet related to pole joint-use activities. All records of communications are data based by the system.
- 1996. Congress revises Section 224 of the Federal Communications Act of 1978, which is now entitled the "Telecommunications Act of 1996." This Act allows competitive telecommunication providers access to the ROW and on utility poles on a non-discriminatory basis.
- **1996.** PGE Service Quality Measures (SQMs) ordered by Commission to ensure customer service, reliability and safety in Enron Merger. The SQMs evaluate performance so that safety, reliability, and customer service are not degraded.

A PUC STAFF REPORT ON THE UTILITY POLE Attachment F – Pole Joint-Use History

- **1996.** PUC cites PacifiCorp with excessive tree interference in Corvallis. PUC Order 96-074 requires the company to obtain adequate tree clearances as set forth in the December 15, 1995 memorandum of understanding and the PUC's tree clearance policy.
- **1996.** PUC cites Lane Electric Cooperative in July with excessive tree interference systemwide. PUC Order 97-029 requires the co-op to obtain adequate tree clearances as set forth in the PUC's tree clearance policy by March 31, 1997.
- 1996. Western blackouts initially caused by tree interference in Idaho and Oregon brings focus to the safety and reliability of the western transmission power grid. BPA and other electric transmission operators focus harder on making sure their transmission lines are adequately and routinely trimmed to ensure adequate clearances at all times.
- 1997. Commission issues Pole Joint-use Policy to all electrical and communication operators on February 18, 1997. The understanding was that these would be encoded into PUC safety rules if substantial improvement in pole joint-use cooperation was not achieved.
- 1998. PUC Safety Staff called Portland Pole Owners Working Group together to meet regularly to focus on better inter-utility communications through NJUNS and to develop standardized safety practices for pole attachments by Portland pole owners, where practical. Participants included representatives of PGE, PP&L, Qwest and Verizon. This industry group propelled NJUNS to be more widely subscribed to throughout their service areas around the state. This was a success. The focus on safety standards development failed to materialize noticeable results from Staff's perspective.
- **1998.** Commission orders PacifiCorp SQMs in AFOR stipulations (revised in Scottish Power merger).
- 1999. Enacted House Bill 2271 required PUC to convene PUC-industry task force to establish rules to ensure the safety and efficiency of Oregon's poles and ROW. The legislature mandated that the PUC develop rules for rental rate reductions for responsible occupants and sanctions for occupants with no contracts or permits and violations to Commission safety rules.
- 1999. PUC Electric Safety Unit hires additional safety analyst to perform NESC inspections and activities. Increased enforcement focus has been given to NESC compliance related to "detailed inspection/correction" program compliance by electric and communication operators.

- **2000.** PUC adopts pole joint-use sanction rules and rental reduction rules, and establishes Oregon Joint Use Association in Order 00-467 as mandated by House Bill 2271.
- **2001.** Oregon statute (ORS 758.280-758.280) give electric utilities greater authority to carry out necessary tree trimming actions to safeguard power lines against tree interference in emergencies and to reduce utility liabilities if ANSI standard tree trimming practices are followed.
- 2003. Senate Bill 784 submitted by Cable Telecommunications Association fails to pass. This bill would have allowed licensees to recover costs from pole owners that cause them to perform unjustified inspections and work.
- **2003.** All pole attachments, including those existing before House Bill 2271 and Order 00-467, are subject to PUC sanction rules.
- **2003.** Two pole attachment disputes are filed with the PUC. One is between PGE and Verizon (UM 1096) and the other is between Central Lincoln PUD and Verizon (UM 1087). PGE is asking for relief up to \$60,000,000 in this case.
- **2003.** A white paper is requested detailing pole jointuse issues, including the past and current situation as well as possible recommendations as to where the Commission should consider going in the future on this matter.

A PUC STAFF REPORT ON THE UTILITY POLE Attachment F – About the Authors

NAME:

Jerome (Jerry) A. Murray PE

EMPLOYER:

Oregon Public Utility Commission

TITLE:

Program Manager of Utility Safety and Reliability Section

ADDRESS:

PO Box 2148

Salem, Oregon 97308-2148

PROFESSION:

Professional Electrical Engineer, Licensed in Oregon and Washington

EDUCATION:

Bachelor of Science, Electrical Engineering

University of California at Davis, Davis, California

30 quarter units towards Masters in Business Administration

Utah State University, Logan, Utah

EXPERIENCE:

1965-69 Varied Summer Engineering-Related Work Experience.

Southern California Edison, Groundman; CALTRAN, Engineering Aid; Pacific Gas & Electric, Mapper; Mobil Oil Corp, Engineering Aid,

1970-73 US Navy Civil Engineers Corp, Construction Management.

Seabee Team 0417 (civic action work and training), Xuan Loc, Vietnam Construction Battalion Unit (hurricane recovery), Corpus Christi, TX

1973-74 Pacific Power and Light Company, Portland, OR.

Transmission Design Engineer (69 kV and 115kV lines)

1974-83 Consulting Engineering Firms, 4 yrs in Portland & 5 yrs in Salem.

Supervising Electrical Engineer; Specialty areas: electric power distribution, generation, control systems, instrumentation, telemetry, & lighting for utility, industrial, institutional and commercial plants, facilities, and buildings. Partial client list: Bonneville Power Administration; Canby Utility Board; Central Electric Cooperative; City of Portland; Corvallis Public Works; Fred Meyer; Idaho National Guard; Keizer Water District; Washington County Fire District; Kaiser Permanente; Oregon Air National Guard; Pacific Northwest Bell; Post Falls ID Utilities; Republic of Sudan, Africa; Salem School District 24J; Twin Falls ID Public Works; & Western OR Univ.

1983-Present

Oregon Public Utility Commission, Utility Safety and Reliability Section,

Salem. Program Manager; Responsibility areas include:

- National Electrical Safety Code (NESC) Administration and Enforcement;
- Federal Gas Pipeline Safety Regulation Administration and Enforcement;
- Electric Power Reliability and Quality;
- Pole Attachments; and
- Electrical Meter Accuracy Assurance.

PROFESSIONAL ORGANIZATIONS:

IEEE Power Engineering Society, Transmission & Distribution Committee

IEEE Industrial Applications Society

Professional Engineers of Oregon (past officer)

A PUC STAFF REPORT ON THE UTILITY POLE Attachment F – About the Authors

NAME:

Robert (Bob) E. Sipler, Jr.

EMPLOYER:

Oregon Public Utility Commission

TITLE:

Senior Utility Analyst, Electrical Utility Safety and Reliability

ADDRESS:

PO Box 2148

Salem, Oregon 97308-2148

EDUCATION:

Bachelor of Science, Education (1983)

Multnomah School of the Bible, Portland, Oregon

EXPERIENCE:

1963-68 Southern California Edison Co.

Los Angeles, California

-Groundman, Crew Assistant, Apprenticeship,

-Journeyman Cable Splicer/Lineman

1969-71 Naushon Island Trust

Woods Hole, Massachusetts

-General maintenance, construction, operate island's diesel generators, electric distribution

system, and telephone system

1971-78 New Bedford Gas & Edison Light Co.

Boston, Massachusetts

-Journeyman Lineman (distribution) and

-Lineman Special (transmission),

-Union Steward, Instructor for First Aid and CPR

1979-83 College

1984-Present OPUC Electric and Natural Gas Division, Utility

Safety and Reliability Section

-Utility Engineering Analyst, 1984 through 1989

-Senior Utility Analyst, 1/1/90 to present

-Member, Subcommittee 3 of NESC Standards Committee, 6/90 to 2003, Secy. SC-3, 98-2003.

-Member, NARUC Elec. Reliability Staff SC, 2000.

-Testified in the following OPUC dockets:

-UM 814, PGE/Enron Merger

-UE 102, PGE Customer Choice Plan

-UE 94, Pacificorp General Rate Case (AFOR)

-UM 918, ScottishPower purchase of PacifiCorp

-UM 967, SierraPacific purchase of PGE

Attachment H **Joint-Use Pole Zones** Staff Report Electric Supply Restricted to NESC **Space Qualified Electrical** Workers only Restricted Communication activities & Worker Safety facilities in CWSZ Zone (CWSZ) Communication Space **Restricted NESC** Qualified Electric & Communication Workers Multiple-use Safety Zone (MSZ)

Uncomplicated example of a joint-use pole illustrating access and restrictions for multiple parties. Requirements specified in the National Electrical Safety Code include climbing and working spaces for all workman.

Public Access Area (8 feet or greater)

Piggybacking on Poles

To the Editor:

Your recent article on pole attachments ("Pole-Fee Flap Could Prove Costly to Cable," Multichannel News, May 22) presented a one-sided, cable-industry view of a two-sided story. While several utilities are quoted, the gist of the article is that the poor cable operators are being screwed to the wall by the big, bad electric utilities.



Richards

Noting that cable operators typically pay an average of only \$6.63 per attachment per pole, per year (less than the cost of a single movie ticket), the article expresses grave concern that utilities might "play the Hurricane Katrina card" and charge rates in the \$30 to \$40 range.

Cable attorneys are quoted as arguing that cable operators should pay only 7.41% of the utility's annual cost of pole ownership, since cable attachments occupy only that percentage of the pole's usable space. In other words, cable operators should be allowed to "piggyback" on the electric utilites' systems for a negligible fee, without incurring any of the far greater costs of constructing or maintaining their own systems.

The costs that cable operators save by not having to construct their own systems far exceed the minimal charges currently allowed by FCC regulations. Under the FCC's rules, electric utilities get to pay the lion's share of constructing and operating the systems, then cable operators get to hop on board and take advantage of them for a small fraction of the costs.

The result, in effect, is a gross subsidy of the cable industry by the electric utility industry. For some reason, the FCC (which, after all, is the Federal Communications Commission, not the Federal Electric Utility Commission) finds this arrangement to be logical and consistent with sound public policy.

Unlike the FCC, fortunately, not all regulatory bodies buy into the cable industry's argument that electric utilities and their rate payers should subsidize the cable



Magee

industry with unreasonably low pole-attachment rates. Some state jurisdictions recognize that attachers would have to incur significant costs, far beyond the costs of simply attaching to the utility's poles, if they were required (as other businesses are) to build and maintain their own distribution systems. These jurisdictions recognize the *value* of the utility's distribution system to the

cable attachers and have crafted rates that require cable operators to pay their fare share.

Cable is no longer the nascent industry that it was in 1978, when the original pole-attachment laws were enacted. "CATV" companies have transformed themselves into communications giants, offering not only cable-television service, but also video on demand, broadband Internet access and telephone services. Not only have the monthly rates for standard cable television services outpaced inflation, but additional new services have contributed to significantly higher monthly revenue streams for cable companies.

For instance, Comcast, the largest cable company in the country, now boasts a market capitalization of some \$66 billion. Last year, the company reported \$2.6 billion in free cash flow, based on an increase in monthly revenues per subscriber from \$77 to \$84. Most customers subscribing to Comcast's video, Internet and telephone services pay \$120 per month, and the number of those customers is growing rapidly. Profits are expanding.

So, please, before complaining about utilities "playing the Hurricane Katrina card," look at both sides of this issue. It's not as clear-cut or one-sided as your article would have us believe.

Jack Richards
Tom Magee
Keller and Heckman LLP
Washington, D.C.

STATEMENT FOR THE RECORD SUBMITTED BY EDISON ELECTRIC INSTITUTE

COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION UNITED STATES SENATE

HEARING ON STATE AND LOCAL ISSUES AND MUNICIPAL NETWORKS

FEBRUARY 14, 2006

Mr. Chairman and Members of the Committee:

Edison Electric Institute (EEI) is pleased to submit this statement for the record to the Committee. EEI is the premier trade association for U.S. shareholder-owned electric companies and serves international affiliates and industry associates worldwide. EEI's members serve 97 percent of the ultimate customers in the shareholder-owned segment of the industry and 71 percent of all electric utility ultimate customers in the nation.

EEI member companies share a longstanding common commitment to maintaining the safety, security, reliability, and structural integrity of the nation's critical electric infrastructure, which is essential not only to the electric industry but also to the cable and communications industries that are attached to it. That is why we have concerns with the "pole attachment" provision [Section 13 (f)(1)] of the "Broadband Investment and Consumer Choice Act" [S. 1504] introduced by Senators Ensign and McCain, which addresses the rates, terms, and conditions for access by third parties to electric utility poles, ducts, conduits, and rights-of-way.

Under current law, cable and telecommunications companies are allowed to attach their wires to utility poles at subsidized rates. S. 1504 would perpetuate—and expand—preferential access rights and subsidized rates that now benefit telecommunications and

cable companies, while failing to address critical infrastructure issues caused by increasing numbers of legitimate and illegitimate pole attachments. Not only would the proposed legislation exacerbate an already unfair cost burden on electric utilities and their customers, but it also could threaten the safety, integrity, and reliability of the electric distribution system.

As this Committee considers comprehensive legislation on broadband and other telecommunications matters, it should address important safety and reliability issues associated with the attachment of third-party facilities to utility-owned critical wireline infrastructure and should require all parties to pay a fair share of the costs of that infrastructure.

Background

The nation's electric distribution systems—including poles, ducts, conduits, and rights-of-way—deliver power along millions of miles of lines to neighborhoods, businesses, and consumers, and are a key part of the nation's critical energy infrastructure. These facilities were designed and built originally to provide reliable and affordable electricity.

Responsibly sharing utility infrastructure avoids the wasteful duplication of facilities on public or private rights-of-way and reduces costs and other impacts on consumers. Electric and telephone utilities historically have shared their network facilities through mutual "joint use" agreements. Today, electric utilities own and operate the majority of the facilities to which telephone, cable, and other telecommunications companies attach their wires.

The Pole Attachment Act Amendment of 1978 (Section 224) limited the rates utilities could charge cable companies for their attachments to utility poles and other electric distribution facilities. In the 1996 Telecommunications Act, Congress amended Section 224 to require that electric utilities allow nondiscriminatory access at below-cost regulated rates for other entities (except incumbent local phone companies) seeking attachments to poles, ducts, conduits, and rights-of-way. The lowest regulated rates—which cover only a fraction of a fair share of the actual costs associated with establishing and maintaining the poles—are reserved for cable companies, which were seen at the time as "nascent service providers" that needed a subsidy. As a result, for example, an electric utility that averages \$80 per pole in annual maintenance and carrying charges is only permitted to recover from a cable TV company less than \$6 of the annual costs associated with owning the pole.

Legislation currently pending in Congress would expand the list of entities eligible for mandatory access and require the lowest subsidized cable rates under Section 224 to be available to all cable, telecommunications, and broadband providers. S. 1504 would expand Section 224 to benefit all "video service providers, regardless of the nature of the services provided," not just cable television systems as under current law. The result would be a windfall, in the form of subsidized pole attachment rates equal to those already enjoyed by cable TV companies, for incumbent telecommunications companies that now pay negotiated rates for pole attachments.

Ironically, the communications industries that would benefit from preservation and expansion of federal pole attachment subsidies can hardly be described as "nascent" any longer. Virtually all of the major companies that would reap the benefits of

mandatory access and subsidized rates are today listed in the Fortune 500, are worth billions of dollars, and continue to grow through mega-mergers and acquisitions.

Critical Infrastructure Issues Need To Be Addressed

Electric utility poles, ducts, and conduits are key components of the transmission and distribution network that provides our nation with reliable electric service. This network has long been recognized as a core infrastructure system critical to the nation's economy and homeland security. Public safety agencies, energy production and delivery companies, financial markets, telecommunications companies, and transportation, health care, water, and sanitation providers all depend on reliable electric and communications services.

Telephone, cable, and other telecommunications companies routinely attach their wires to electric distribution infrastructure. The rapid development of new communications technologies and the massive increase in demand for communications services, coupled with the numerous competitive entrants seeking to deploy those technologies and provide such services, have dramatically increased the number, size, and weight of communications facilities seeking to attach to the critical infrastructure. This universe of existing and potential pole attachments raises a number of issues.

- Pole attachments affect the structural integrity, safety, security, and reliability
 of electric distribution infrastructure.
- Pole attachments increase operation and maintenance costs for electric utilities and their customers.
- Pole attachments cause increased susceptibility to damage caused by ice and wind storms and other natural disasters.

Pole attachments increase restoration times following natural disasters and other emergencies. For example, each additional wire and device attached or strung along a distribution network adds physical stresses (e.g., weight, wind loading, etc.) to the poles, resulting in an extra layer of complexity and risk from the standpoint of reliability, safety, and maintenance. When a pole is damaged by a storm or other catastrophic event, restoring service is more complex. This complexity is further multiplied when thousands of poles in a large utility system need to be replaced after a widespread natural disaster, such as a hurricane, ice storm, or earthquake.

The nation's electric utilities are fully capable of managing the shared use of their infrastructure to minimize these risks, but they cannot do so effectively in the current regulatory climate, which overemphasizes near-term deployment of telecommunications services to the detriment of the long-term safety, security, reliability, and integrity of the critical wireline infrastructure. For example, under present law and regulation, existing communications wires can be overlashed again and again with additional cables without an engineering evaluation of the ability of the poles to withstand the increased wind or ice loading and without any prior notice to the pole owner. When inventorying pole attachments, electric utilities routinely discover thousands, even tens of thousands, of attachments made to their poles without notice or authorization. These practices create a public safety issue, because the resulting pole loads may not be in compliance with good utility practice or the National Electrical Safety Code (NESC), which is the basic guideline on which most utility engineering standards are based.

Historically, promoting a rapid move to competition—not infrastructure protection—has been the primary policy goal of federal pole attachment legislation and regulation. Federal legislation enacted in 1978 and 1996 focused almost exclusively on access and subsidized rates for cable television and telecommunications companies. Safety, integrity, and reliability issues important to the protection of critical electric and telecommunications infrastructure to date have not been addressed adequately by Congress or the Federal Communications Commission (FCC).

Competition is an important goal, and indeed some electric utilities plan to provide a competitive "third link" to customers through the deployment of broadband over power line (BPL) technology. But without a safe and reliable electric utility infrastructure, which powers and supports cable and communications networks, even existing competition will be stymied. Pole attachment legislation <u>must</u> protect critical wireline infrastructure that supports both electric and communications services by providing for agreements between the parties; certification of the number of attachments; pre-attachment notification; and payment of "make-ready" (e.g., planning, engineering, and construction costs) and fair on-going maintenance costs.

Unfair Cost Subsidies Imposed on Electric Utilities and Their Customers

The federal approach to pole attachment policy and regulation has focused on mandating access at rates far below fully allocated costs, in order to promote the deployment of new technologies and to foster competition. Unfortunately, that policy has not only undermined the safety, security, reliability, and integrity of the critical wireline infrastructure upon which both electric and communications service depends, but it has

unfairly forced electric utility customers to subsidize cable and telecommunications companies.

The cable industry can afford to pay its fair share for maintaining critical electric infrastructure, as can the other communications companies that make up the \$1 trillion telecommunications industry. Every user of these facilities should pay its full and fair share of the actual costs of building and safely maintaining the facilities.

Under current law, federally regulated pole attachment rates do not permit utilities to recover all of the costs actually related to supporting and managing such attachments. If pole attachment revenues are not sufficient to cover all costs, the difference is made up from rates paid by electric customers. The result is a subsidy borne by electric utility customers, including low-income customers who do not use the cable or new telecommunications products. Pole attachment revenues offset utility distribution system costs, and thus are not a source of profit for the utility.

The bottom line is that when the federal government requires pole attachment rates to be set far below market or even replacement rates, they become a subsidy for the attaching entities, at the expense of utility customers. To expand the FCC's class of entities entitled to subsidized pole attachment rates likely would lead to higher electric rates for electric utility customers in order to benefit large, highly profitable media and telecommunications conglomerates. This is unfair, and distorts critical infrastructure priorities by favoring broadband and video at the expense of electricity service.

Electric utilities also attach their equipment to telephone company poles, for which they pay a negotiated rate. Providing a lower subsidized rate to telecommunications providers would not only abrogate these longstanding reciprocal

agreements, but would create a significant disparity in the rates that electric utilities are charged to attach to telecommunications poles versus what telecommunications providers are charged for their attachments to electric utility poles.

Pole attachment legislation should eliminate—not expand—pole attachment subsidies to communications giants now borne by electric customers. The best way to prevent subsidies is to allow the parties to negotiate the rates, terms, and conditions for any attachments. Negotiated agreements, particularly joint use agreements between electric and telephone utilities, should not be abrogated. Regulated rates should apply only where existing agreements have expired according to their terms and the parties are unable to reach agreement, and should be phased in over a reasonable transition period to ensure that electric consumers are held harmless from rate increases. Regulated pole attachment rates should be technology-neutral so that all attaching entities pay the same rate regardless of the technology involved, and also must ensure that all costs of critical wireline infrastructure are shared proportionately among users. When allocating pole attachment costs, Congress should ensure that each entity pays for the space it uses. In addition, each paying entity (including the pole owner) should share equally in the cost of all other space on the pole (including space below ground level).

State Utility Commissions Should Be Allowed an Appropriate Role in Regulating Pole Attachments

State commissions have decades of experience regulating retail electric service, including many rules and standards related to utility poles, ducts, and conduits. State commissions also regulate local telecommunications service.

Unlike nationwide telecommunications and cable services, pole attachments affect local facilities and raise local reliability issues. The safety, integrity, and reliability of this critical wireline infrastructure are largely dependent on local circumstances (e.g., geography, weather), and failures have local consequences (e.g., service interruptions, power outages).

State commissions are well positioned to oversee and regulate these attachments while balancing the electricity and telecommunications policy issues. And, states have proven they are capable of regulating pole attachments. Nineteen states already do so under current law.

States already are responsible for regulating the retail electric facilities subject to federal pole attachment rules—no federal agency has a similar role. From their long history of telecommunications and electric utility regulation, states are well prepared to handle all pole attachment issues and appropriately balance the interests of utility customers, telecommunications customers, and the public at large.

At the very least, states should be allowed to continue to regulate pole attachments and should be allowed a greater role in implementing and enforcing uniform pole attachment safety, reliability, engineering, and rate standards, and resolving disputes between utilities and attaching entities. If a state chooses not to regulate pole attachments, the FCC should regulate according to the uniform standards outlined above.

Conclusion

As the threats to the structural integrity of critical wireline infrastructure grow, the electric utility industry believes that it is time to revise the current public policy regarding

pole attachments. Instead of forcing electric utility customers to subsidize the likes of Time Warner, Comcast, Cox, and the former Bell companies, Congress should:

- (1) Emphasize the protection of critical wireline infrastructure and public safety, and establish certain fundamental criteria for installing or modifying attachments to critical infrastructure.
- (2) Provide for an equitable sharing of the costs associated with the ownership of shared critical infrastructure among those who benefit from its use.
- (3) Set minimum notification, certification, and other requirements for gaining access to critical wireline infrastructure.
- (4) Allow continued and, where appropriate, expanded jurisdiction over the shared use of local critical infrastructure to the same state agencies that already regulate the safety, reliability, and cost of local electric and communications utility distribution systems and protect electric and communications consumers.

EEI and its member companies appreciate this opportunity to outline our concerns with the pole attachment provisions of S. 1504 and other proposed legislation. We look forward to working with the Members of the Committee on Commerce, Science and Transportation to address the issues we have raised.







Powered by Ocickability

A Joint-Use Bill of Rights

Sep 1, 2004 12:00 PM By Tom Magee, Keller and Heckman LLP

When the U.S. Congress entrusted the Federal Communications Commission (FCC) with pole attachment regulation 26 years ago, it could not have anticipated that the FCC's pro-attacher, anti-utility rulings would leave the joint-use departments of many electric utilities short of funding and without many of the tools required to control cable and telecommunications attachers. But here we are, more than a quarter-century later, with just that result.

The attacher-friendly regulatory environment has enabled attachers to move quickly into new markets, but at the expense of overworked, outmanned joint-use employees. Taking advantage of the permissive regulatory environment, many attachers fail to comply with utility attachment guidelines and make far too many unauthorized and unsafe attachments. Therefore, it is no wonder so many utilities treat pole attachments as little more than a nuisance.

Despite the pro-attacher nature of most FCC rulings, the commission's regulations contain several provisions that utility pole owners may use to recover their costs and deal appropriately with outlaw attachers. These core regulations are identified in this article, forming the basis for what we consider to be the electric utility industry's pole attachment "Bill of Rights."

Pole Attachment Regulations

The FCC regulates attachments to investor-owned utility (IOU) poles unless a state certifies that it regulates such attachments. Eighteen states and the District of Columbia have certified that they regulate pole attachments, and most states have adopted regulations similar in type and scope to those of the FCC. Attachments to poles owned by cooperatives and municipally owned utilities are exempt from federal and state pole attachment regulation, except in a handful of states such as Kentucky, Vermont and Oregon.

The rates, terms and conditions of pole attachments imposed by the FCC favor attachers at the expense of utilities for two main reasons. First, both the Pole Attachment Act and the 1996 Telecommunications Act are designed — first and foremost — to promote the spread of cable and telecommunications services, not the preservation and protection of the nation's electric power grid. Second, the FCC is naturally more accountable to cable and telecommunications companies that, unlike electric utilities, are in the business of providing video programming and telecommunications services as their primary lines of business, and that, incidentally, interact with the agency on a daily basis.

As a practical matter, the FCC's pole attachment formulas establish rates at levels far lower than the actual value of utility distribution systems to attachers. As implemented by the agency, FCC pole attachment regulations do not do nearly enough to protect the safety and reliability of electric distribution systems, and in practice make it difficult to recover — at a bare minimum — all legitimate and prudent expenses incurred by utilities in installing and maintaining their poles.

From the utility perspective - in the real world - the results of FCC regulation have not been positive:

- Joint-use departments that are poorly funded
- High levels of unauthorized attachments
- National Electric Safety Code (NESC) and other safety violations

• Less safe and reliable electric distribution systems.

One-Sided FCC Decisions

One-sided decisions by the FCC have rendered many utilities timid and reluctant to assert their rights as pole owners, either for fear of another adverse decision or because they simply are resigned to being shortchanged by pole attachment regulations.

Because of the adverse nature of most FCC decisions in this area, utilities must remain ever more vigilant, not less. The FCC's core regulations, comprising what we characterize as the "Bill of Rights," will be enforced by the agency only if the utility proves to the FCC that application of the regulations is justified under the circumstances. This means, for instance, that if a utility wishes to assess penalties for unauthorized attachments, to take action to remedy safety violations, or to seek recovery for certain costs, its oversight and accounting of pole attachments must be at a level high enough to enable the utility to prove such measures are "reasonable." Moreover, it takes money to collect money and to enforce safety and other requirements. As explained by John Sullivan, general manager of the Utility Asset Management Group for Portland General Electric, a utility could spend \$1 on joint-use activities to collect 50 cents or it can spend \$2 to collect \$2.

As with the U.S. Constitution, there are 10 inalienable rights contained in the electric utility pole attachment Bill of Rights.

Rates and Cost Recovery

- 1. Utilities may negotiate UNREGULATED rates, terms and conditions for access to:
 - Interstate transmission towers by any entity
 - o Distribution poles by ILECs, Internet-only providers, and telecom non-common carriers.

Many utilities believe they must charge all attachers the same rate, but unregulated attachments may be charged more reasonable rates, terms and conditions than those permitted by the FCC. The situation is even better for cooperatives and municipally owned utilities, because attachments to cooperatives and munis are unregulated in most states. For unregulated attachments, a variety of reasonable, more utility-friendly cost-based rate formulas may be applied. For example, the state of Maine employs an "avoided cost" methodology that allocates far more costs to attachers than does the FCC formula based on what each attacher would pay to build its own independent facilities.

The primary concern with unregulated rates, terms and conditions is that antitrust laws may apply, especially if the utility or its telecom subsidiary competes with the attacher. That said, a utility's use of a cost-based rate that has been approved by a regulatory entity such as Maine offers a compelling defense for any antitrust claim based on rates.

- 2. Utilities may recover all direct and indirect costs of providing access, including costs associated with:
 - o Permit applications
 - O Providing maps, plats and other data
 - o Engineering
 - o Pre-construction
 - o Make-ready
 - o Inspections
 - Audits
 - o Changeouts and other modifications
 - o Relocation or removal of attacher facilities
 - O Damage to distribution facilities
 - o Correcting safety violations.

FCC regulations are designed to allow utilities to recover all of their out-of-pocket expenses, but in practice, very few utilities employ the detailed accounting necessary to effect a full recovery. The way the regulations operate, any direct or indirect expenses incurred by utility pole owners that would not be incurred in the absence of the attachments are recoverable from the attacher. Many utilities use their annual rental calculation to recover some of these costs, but the annual rental allocates only a small percentage of costs to attachers and is a poor substitute for requiring attachers to make separate payments for each incurred expense.

FCC rules require that all charges to attachers be reasonable. The challenge for utility joint use departments is establishing a system that properly substantiates those charges and can verify that none of the separate charges are double-recovered through the annual rental.

Utilities may undertake reasonable measures to ensure prompt and reliable payment by attachers, including:

- o Deposit requirements
- o Performance bonds or other payment guarantees
- o Up-front payments
- o Unauthorized attachment penalties.

Using any of these protections must be justified under the circumstances. However, utilities are not required to bear unreasonable credit risks. If an attacher has a history of nonpayment or if a threat of bankruptcy exists, then higher performance bonds and other payment guarantees may be appropriate. Upfront payments also may be appropriate, particularly for annual rentals. A deposit system may facilitate advance payments for items such as make-ready expenses, if such up-front payments are reasonable. If upfront payments are not possible, utilities should consider requiring the attacher to pay for one step in the attachment process before it may proceed to the next.

Penalties for unauthorized attachments are permissible under FCC regulations, but any significant penalty must be justified under the circumstances. The greater the penalty imposed, the greater the evidence that may be required to prove the attacher needs a penalty incentive to comply with the permitting process.

Access

3. Utilities may deny access to distribution poles if there is insufficient capacity.

Two years ago, the U.S. Court of Appeals for the 11th Circuit overturned an FCC ruling that required utilities to expand capacity to meet requests for new attachments. As a result of this ruling, the lack of capacity on a particular facility entitles a utility to deny a request for access. Changeouts to larger poles also are not required (See Southern Co. v. FCC, 293 F.3d 1338, 11th Cir. 2002). If utilities wish to entertain requests for access in circumstances where insufficient capacity exists, they should establish separate contracts governing the rates, terms and conditions of such access.

4. Utilities may reserve space on their poles for future expansion and for emergencies.

A utility's reservation of space for future expansion must be consistent with a bona fide development plan that reasonably and specifically projects a need for that space in the provision of the utility's core utility service. However, until a utility actually needs the reserved space, it must allow attachments to be made in the space. When needed, the utility may recover the reserved space and require whoever was using it to pay for the cost of any modifications needed to expand capacity in order to maintain their attachments.

Furthermore, utilities are entitled to reserve capacity for the provision of emergency service, and space reserved for emergencies is not subject to interim use.

5. Utilities may require advance notice of overlashing.

Attachers sometimes claim that FCC rules do not permit a utility to require advance notice of overlashing. In fact, commission rules only prohibit a utility from requiring advance permitting of overlashing. Utilities may require advance notice of over-lashing, but that requirement must be specified in the pole attachment agreement.

Safety and Reliability Provisions

- 6. Utilities may protect the safety and reliability of their distribution systems by requiring:
 - Adequate training of attachers and contractors
 - o Reasonable pole loading studies
 - o Post-attachment and periodic inspections
 - Correction of safety violations

o Identification tags on all attachments.

Under FCC rules, utilities may require the contractors used by attachers to be at least as well trained as the utility's own employees. Pole loading studies may be conducted, but they should be conducted on representative poles, not every pole. Inspections may be conducted frequently, starting with the initial attachments and continuing up to once per year thereafter. The attacher must pay for the inspection to the extent that the inspection was conducted to review attachments made by the attacher. Utilities also may require attachers to affix identification tags to their lines in order to enable the utility easily to identify the owner of the attachments from ground level.

It is still unclear whether the FCC would allow utilities to impose penalties in an effort to discourage safety violations. Oregon allows utilities to impose safety violation penalties of \$200 per pole, which increases if the violation is not fixed in a timely manner. As expected, Oregon's penalty provision has greatly reduced the number of unsafe attachments in that state.

As with the other "utility-friendly" provisions, more stringent safety requirements require utilities to produce adequate documentation that such requirements are justified under the circumstances.

7. Utilities may be reimbursed for any damage caused by attachers.

Even the FCC recognizes that full reimbursement for damages caused by attachers is appropriate. Sufficient proof is required that the attacher caused the damage, and compensation for consequential damages (for lost profits, for example) may not be recoverable.

Risk Prevention

- 8. Utilities may minimize risks by requiring attachers to:
 - O Obtain adequate insurance and warrant their contractors have obtained insurance
 - O Properly indemnify the utility for damage and injury caused by their attachments
 - O Warrant that they have obtained all required easements, rights-of-way and other authorizations
 - O Assume the risk of injuries associated with working on or near electric distribution poles.

The insurance that attachers and their contractors should be required to carry includes commercial general liability, worker's compensation, employer's liability, automobile and umbrella (excess liability) coverage. Broad indemnity provisions should be drafted to protect utilities from damage or injury resulting in any way from attachments. It is reasonable for utilities to require attachers to warrant that they have obtained all necessary easements and rights-of-way, which has become a particularly important issue. Landowners are increasingly suing pole owners themselves for violations of easement provisions, on the grounds that the landowner's easement does not permit access to their property by telecom and cable companies attaching to the utilities' poles.

Remedies for Breach

- Utilities may employ a variety of measures to remedy an attacher's material noncompliance with contract provisions, including:
- Refusing to issue new permits
- Removing the offending attachments
- Denying access
- · Requiring reimbursement of any corrections made by the utility
- Requiring specific performance.

One difficulty with many, if not most, pole attachment agreements is that termination of the agreement is listed as the only remedy available to the utility in the event the agreement is breached by the attacher. Termination of the

AR 506 Division 24 Staff Exhibit 8/Pg. 5

agreement, however, is a drastic remedy that is almost always impractical to impose. For this reason, pole attachment agreements should provide utilities with a variety of remedies to provide meaningful incentives for attachers to bring themselves back into compliance.

Conclusion

The pole attachment Bill of Rights identifies the regulatory tools available to enable utilities to recover pole attachment costs, improve attacher relations, and protect the safety and integrity of electric distribution systems. Utilities interested in making the pole attachment process safer, easier and less costly will be well served by these regulatory tools, if they devote additional resources to the oversight and management of pole attachments.

Tom Magee is an attorney with Keller and Heckman LLP, specializing in utility telecommunications and pole attachments. magee@khlaw.com

> Want to use this article? Click here for options! © 2006 Prism Business Media Inc.

Find this article at:

http://www.tdworld.com/mag/power_jointuse_bill_rights/index.html

Check the box to include the list of links referenced in the article.



Public Utility Commission

550 Capitol St NE, Suite 215

Mailing Address: PO Box 2148

Salem, OR 97308-2148

Consumer Services

1-800-522-2404 Local: (503) 378-6600 **Administrative Services**

(503) 373-7394

August 22, 2006

OREGON PUBLIC UTILITY COMMISSION ATTENTION: FILING CENTER PO BOX 2148 SALEM OR 97308-2148

RE: <u>Docket No. AR 506 Phase I</u> - In the Matter of a Rulemaking to Amend and Adopt Permanent Rules in OAR 860, Divisions 024 and 028, Regarding Pole Attachment Use and Safety.

Enclosed for electronic filing in the above-captioned docket is the Public Utility Commission Staff's Comments on Division 24 Proposed Rules.

/s/ Diane Davis

Diane Davis Regulatory Operations Division Filing on Behalf of Public Utility Commission Staff (503) 378-4372 Email: diane.davis@state.or.us

c: AR 506 Service List (served 8/23/06)

PUBLIC UTILITY COMMISSION CERTIFICATE OF SERVICE

AR 506

I, DIANE DAVIS, of the Regulatory Operations Division, Public Utility Commission of Oregon, hereby certify that on the 23rd day of August, 2006, I served a copy of Staff's Comments on Division 24 Proposed Rules upon all persons as indicated on the attached listing, by electronic mail and by depositing in the United States Mail at Salem, Oregon, with postage prepaid.

PUBLIC UTILITY COMMISSION

Utility Program

Attached List

PHIL CHARLTON ELECTRIC LIGHTWAVE

EMail pcharlton@eli-consulting.com

MATT COONS

EMail <u>matt.coons@comspanusa.net</u>

SEBASTIAN MC CROHAN COMSPANUSA

EMail <u>sebastian.mccrohan@comspanusa.n</u>

<u>et</u>

KARLA WENZEL PORTLAND GENERAL ELECTRIC

EMail karla.wenzel@pgn.com

SCOTT THOMPSON
COLE RAYWID & BRAVERMAN LLP
1919 PENNSYLVANIA AVE NW STE 200
WASHINGTON DC 20006

EMail sthompson@crblaw.com

RENEE WILLER
BELL ATLANTIC COMMUNICATIONS INC
1320 N COURT HOUSE RD 9TH FL
ARLINGTON VA 22201-2508

EMail renee.willer@verizon.com

CATHERINE A MURRAY ESCHELON TELECOM OF OREGON INC 730 SECOND AVE S STE 900 MINNEAPOLIS MN 55402-2489

EMail <u>camurray@eschelon.com</u>

RICHARD STEWART VERIZON NORTHWEST INC 600 HIDDEN RIDGE HQEO3J28 IRVING TX 75038

EMail <u>richard.stewart@verizon.com</u>

Printed: 8/22/2006

FRANK X MCGOVERN QUALITY TELEPHONE INC PO BOX 7310 DALLAS TX 75209-0310

EMail fmcgovern@qtelephone.com

THOMAS DIXON VERIZON CORPORATE SERVICES 707 17TH STREET DENVER CO 80202

EMail thomas.f.dixon@verizon.com

JEANNETTE C BOWMAN IDAHO POWER COMPANY PO BOX 70 BOISE ID 83707

EMail jbowman@idahopower.com

BRENT VAN PATTEN IDAHO POWER COMPANY PO BOX 70 BOISE ID 83707

EMail bvanpatten@idahopower.com

RANDALL MILLER
PACIFIC POWER & LIGHT
1407 W N TEMPLE STE 220
SALT LAKE CITY UT 84116

EMail randy.miller@pacificorp.com

KRISTIN L JACOBSON SPRINT NEXTEL 201 MISSION ST STE 1400 SAN FRANCISCO CA 94105

EMail kristin.l.jacobson@sprint.com

STEPHEN R CIESLEWICZ CN UTILITY CONSULTING PO BOX 746 NOVATO CA 94948-0746

EMail steve@cnutility.com

DAVID LUCHINI CENTURYTEL OF OREGON INC PO BOX 327 AURORA OR 97002

EMail dave.luchini@centurytel.com

JOHN SULLIVAN
OREGON JOINT USE ASSOCIATION
2213 SW 153RD DR
BEAVERTON OR 97006

EMail john.sullivan@pgn.com

JOHN SULLIVAN
PORTLAND GENERAL ELECTRIC
2213 SW 153RD DR
BEAVERTON OR 97006

EMail john.sullivan@pgn.com

SCOTT WHEELER
COMCAST PHONE OF OREGON LLC
9605 SW NIMBUS AVE
BEAVERTON OR 97008

EMail scott wheeler2@cable.comcast.com

WILLIAM C WOODS
OREGON JOINT USE ASSOCIATION
9605 SW NIMBUS AVE
BEAVERTON OR 97008

EMail william woods@cable.comcast.com

KEENE C BASSO CLATSKANIE PUD PO BOX 216 CLATSKANIE OR 97016

EMail kbasso@clatskaniepud.com

NANCY JUDY EMBARQ COMMUNICATIONS INC 902 WASCO ST A0412 HOOD RIVER OR 97031

EMail nancy.judy@embarq.com

TOM MCGOWAN
UNITED TELEPHONE COMPANY OF THE NORTHWEST
902 WASCO ST
HOOD RIVER OR 97031

EMail tom.a.mcgowan@sprint.com

BARBARA YOUNG
EMBARQ COMMUNICATIONS INC
902 WASCO ST - ORHDRA0412
HOOD RIVER OR 97031-3105

EMail barbara.c.young@embarq.com

BILL KIGGINS CLEAR CREEK MUTUAL TELEPHONE CO 18238 S FISCHERS MILL RD OREGON CITY OR 970445-9696

EMail bkiggins@clearcreek.coop

SCOTT ROSENBALM MCMINNVILLE CITY OF WATER & LIGHT PO BOX 638 MCMINNVILLE OR 97128-0638

EMail sgr@mc-power.com

SARAH K WALLACE DAVIS WRIGHT TREMAINE 1300 SW FIFTH AVENUE SUITE 2300 PORTLAND OR 97201

EMail sarahwallace@dwt.com

JIM DEASON ATTORNEY AT LAW 521 SW CLAY ST STE 107 PORTLAND OR 97201-5407

EMail jimdeason@comcast.net

MARK P TRINCHERO DAVIS WRIGHT TREMAINE LLP 1300 SW FIFTH AVE STE 2300 PORTLAND OR 97201-5682

EMail marktrinchero@dwt.com

JENNIFER BUSCH
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST
PORTLAND OR 97204

EMail jennifer.busch@pgn.com

RANDALL DAHLGREN
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST 1WTC 0702
PORTLAND OR 97204

EMail randy.dahlgren@pgn.com

ALEX M DUARTE QWEST CORPORATION 421 SW OAK ST STE 810 PORTLAND OR 97204

EMail alex.duarte@gwest.com

RICHARD GRAY
PORTLAND CITY OF - OFFICE OF TRANSPORTATION
1120 SW 5TH AVE RM 800
PORTLAND OR 97204

EMail richard.gray@pdxtrans.org

BARBARA HALLE PORTLAND GENERAL ELECTRIC 121 SW SALMON ST 1 WTC-13 PORTLAND OR 97204

EMail barbara.halle@pgn.com

DOUG KUNS
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST
PORTLAND OR 97204

EMail doug.kuns@pgn.com

KEVIN O'CONNOR TIME WARNER TELECOM 520 SW 6TH AVE PORTLAND OR 97204

EMail kevin.oconnor@twtelecom.com

INARA K SCOTT
PORTLAND GENERAL ELECTRIC
121 SW SALMON ST
PORTLAND OR 97204

EMail inara.scott@pgn.com

JEFF KENT QWEST 8021 SW CAPITOL HILL RD ROOM 180 PORTLAND OR 97219

EMail jeffrey.kent@qwest.com

HEIDI CASWELL PACIFICORP 825 NE MULTNOMAH ST PORTLAND OR 97232

EMail <u>heide.caswell@pacificorp.com</u>

CECE L COLEMAN
PACIFIC POWER & LIGHT
825 NE MULTNOMAH STE 800
PORTLAND OR 97232

EMail cece.coleman@pacificorp.com

PETE CRAVEN
PACIFICORP
825 NE MULTNOMAH - STE 300
PORTLAND OR 97232

EMail pete.craven@pacificorp.com

BILL CUNNINGHAM
PACIFICCORP
825 NE MULTNOMAH STE 1500
PORTLAND OR 97232

EMail bill.cunningham@pacificorp.com

WILLIAM EAQUINTO
PACIFIC POWER & LIGHT
825 NE MULTNOMAH - STE 1700
PORTLAND OR 97232

EMail bill.eaquinto@pacificorp.com

COREY FITZGERALD
PACIFIC POWER & LIGHT
825 NE MULTNOMAH STE 800
PORTLAND OR 97232

EMail corey.fitz-gerald@pacificorp.com

ANDREA L KELLY
PACIFICORP DBA PACIFIC POWER & LIGHT
825 NE MULTNOMAH ST STE 2000
PORTLAND OR 97232

EMail andrea.kelly@pacificorp.com

SUSAN K ACKERMAN ATTORNEY PO BOX 10207 PORTLAND OR 97296-0207

EMail susan.k.ackerman@comcast.net

DOUG COOLEY CENTURYTEL OF OREGON INC 707 13TH ST STE 280 SALEM OR 97301

EMail doug.cooley@centurytel.com

DON GODARD OREGON PUD ASSOCIATION 727 CENTER ST NE - STE 305 SALEM OR 97301

EMail dgodard@opuda.org

GENOA INGRAM
OREGON JOINT USE ASSOCIATION
1286 COURT ST NE
SALEM OR 97301

EMail genoa@westernadvocates.com

SANDRA FLICKER
OREGON RURAL ELECTRIC COOPERATIVE ASSN
707 13TH ST SE STE 200
SALEM OR 97301-4005

EMail sflicker@oreca.org

BRANT WOLF OREGON TELECOMMUNICATIONS ASSN 707 13TH ST SE STE 280 SALEM OR 97301-4036

EMail bwolf@ota-telecom.org

MICHAEL T WEIRICH
DEPARTMENT OF JUSTICE
REGULATED UTILITY & BUSINESS SECTION
1162 COURT ST NE
SALEM OR 97301-4096

EMail michael.weirich@doj.state.or.us

MICHAEL DEWEY
OREGON CABLE AND TELECOMMUNICATIONS
ASSOCIATION
1249 COMMERCIAL ST SE
SALEM OR 97302

EMail mdewey@oregoncable.com

ROGER KUHLMAN 633 7TH ST NW SALEM OR 97304

EMail <u>kuhlman@salemelectric.com</u>

DAVID P VAN BOSSUYT PORTLAND GENERAL ELECTRIC 4245 KALE ST NE SALEM OR 97305

EMail dave.vanbossuyt@pgn.com

ANDREA FOGUE LEAGUE OF OREGON CITIES PO BOX 928 1201 COURT ST NE STE 200 SALEM OR 97308

EMail afogue@orcities.org

TOM O'CONNOR OREGON MUNICIPAL ELECTRIC UTILITIES ASSOC PO BOX 928 SALEM OR 97308-0928

EMail toconnor@teleport.com

JERRY MURRAY
PUBLIC UTILITY COMMISSION
PO BOX 2148
SALEM OR 97308-2148

EMail jerry.murray@state.or.us

GARY PUTNAM
PUBLIC UTILITY COMMISSION
PO BOX 2148
SALEM OR 97308-2148

EMail gary.putnam@state.or.us

BOB SIPLER
PUBLIC UTILITY COMMISSION
PO BOX 2148
SALEM OR 97308-2148

EMail <u>bob.sipler@state.or</u>.us

JOHN WALLACE
PUBLIC UTILITY COMMISSION
PO BOX 2148
SALEM OR 97308-2148

EMail john.wallace@state.or.us

THE HONORABLE ROBERT ACKERMAN OREGON HOUSE OF REPRESENTATIVES 900 COURT ST NE RM H-389 SALEM OR 97310

JIM MARQUIS
PACIFICORP
830 OLD SALEM RD
ALBANY OR 97321

EMail james I.marquis@pacificorp.com

J WHITE MONMOUTH CITY OF 151 W MAIN ST MONMOUTH OR 97361

EMail jwhite@ci.monmouth.or.us

DAVE WILDMAN MONMOUTH CITY OF 401 N HOGAN RD MONMOUTH OR 97361

EMail dwildman@ci.monmouth.or.us

DENISE ESTEP
CENTRAL LINCOLN PUD
PO BOX 1126
NEWPORT OR 97365

EMail destep@cencoast.com

MICHAEL L WILSON CENTRAL LINCOLN PUD 2129 N COAST HWY NEWPORT OR 97365-0090

EMail mwilson@cencoast.com

GENERAL MANAGER
PIONEER TELEPHONE COOPERATIVE
1304 MAIN ST PO BOX 631
PHILOMATH OR 97370

STUART SLOAN CONSUMER POWER INC PO BOX 1180 PHILOMATH OR 97370

EMail stuarts@cpi.coop

CHRISTY MONSON SPEER, HOYT, JONES, FEINMAN, ET AL 975 OAK STREET, SUITE 700 EUGENE OR 97401

EMail christy@speerhoyt.com

CRAIG ANDRUS EMERALD PUD 33733 SEAVEY LOOP RD EUGENE OR 97405-9614

EMail craig.andrus@epud.org

MARK OBERLE EUGENE WATER & ELECTRIC BOARD (EWEB) PO BOX 10148 EUGENE OR 97440

EMail mark.oberle@eweb.eugene.or.us

ANDREW MCBRIDE COOS CURRY ELECTRIC COOPERATIVE PO BOX 1265 PORT ORFORD OR 97465

EMail <u>amcbride@cooscurryelectric.com</u>

LINDA L SPURGEON COOS CURRY ELECTRIC COOPERATIVE PO BOX 1268 PORT ORFORD OR 97465

EMail spurgeon@cooscurryelectric.com

MARTY PATROVSKY WANTEL INC 1016 SE OAK AVE ROSEBURG OR 97470

EMail marty.patrovsky@comspanusa.net

RICHARD W RYAN HUNTER COMMUNICATIONS INC 801 ENTERPRISE DR STE 101 CENTRAL POINT OR 97502

EMail rryan@coreds.net

RONALD W JONES IBEW LOCAL 659 4480 ROGUE VALLEY HWY #3 CENTRAL POINT OR 97502-1695

EMail ronjones@ibew659.org

SCOTT JOHNSON ASHLAND CITY OF 90 NORTH MOUNTAIN AVE ASHLAND OR 97520

EMail johnsons@ashland.or.us

PRIORITYONE TELECOMMUNICATIONS INC PO BOX 758 LA GRANDE OR 97850-6462

EMail kmutch@p1tel.com

EUGENE A FRY MILLENNIUM DIGITAL MEDIA 3633 136TH PL SE #107 BELLEVUE WA 98006

EMail gfry@mdm.net

CINDY MANHEIM CINGULAR WIRELESS PO BOX 97061 REDMOND WA 98073

EMail cindy.manheim@cingular.com

BROOKS HARLOW MILLER NASH LLP 601 UNION ST STE 4400 SEATTLE WA 98101-2352

EMail brooks.harlow@millernash.com

BRIAN THOMAS
TIME WARNER TELECOM OF OREGON LLC
223 TAYLOR AVE N
SEATTLE WA 98109-5017

EMail <u>brian.thomas@twtelecom.com</u>

RICHARD J BUSCH GRAHAM & DUNN PC PIER 70 2801 ALASKAN WAY STE 300 SEATTLE WA 98121-1128

EMail rbusch@grahamdunn.com

STEVEN LINDSAY
VERIZON
C/O SUSAN BURKE
1800 41ST ST
EVERETT WA 98201

EMail steve.lindsay@verizon.com

Printed: 8/22/2006

CHARLES L BEST ELECTRIC LIGHTWAVE LLC PO BOX 8905 VANCOUVER WA 98668-8905

EMail charles best@eli.net

GARY LEE CHARTER COMMUNICATIONS CORP 521 NE 136TH AV VANCOUVER WA 98684

EMail glee@chartercom.com

Labels: 87