Archive Materials

"All Utilities" Letters
As issued by the Oregon Public Utility Commission

August 1994 – September 1999

These documents are provided for historical reference only; in many cases they were written for a specific circumstance or situation and may or may not represent Safety Staff's current position.

For additional information, please contact Paul Birkeland, Oregon PUC, at paul.birkeland@state.or.us

INDEX FOR PUC ALL UTILITY LETTERS (Electric & Communication) – August 1994 – September 1999

No.	Date	Description	Applicable (Elec., Tel., Cable TV, Gas)
1994			
70.	08-10-94	Incident Reporting	Elec., Tel., Cable TV
71.	11-15-94	Fire Prevention Course	Elec.
72.	11-23-94	Proposed Rulemaking – U.G. Color Coding Standards	Elec., Tel., Cable TV, Gas
73.	11-28-94	Comment Deadline for 1997 NESC	Elec., Tel., Cable TV
74.	12-02-94	Joint-Use Conference – March 1995	Elec., Tel., Cable TV
1995			
75.	02-02-95	Northwest Trees & Utilities Conference	Elec.
76.	03-07-95	1994 Incident Report	Elec., Tel., Cable TV
77.	04-13-95	Clear Zone at Pole Base	Elec., Tel., Cable TV
1996			
78.	03-05-96	1995 Incident Report	Elec., Tel., Cable TV
79.	09-06-96	Proposed Joint-Use Policy (second draft)	Elec., Tel., Cable TV
80.	09-09-96	1997 NESC Adoption Started	Elec., Tel., Cable TV
1997			
81.	04-08-97	1996 Incident Report	Elec., Tel., Cable TV
82.	04-09-97	1997 NESC Adoption Completed	Elec., Tel., Cable TV
83.	04-11-97	Joint-Pole Policy and Press Release	Elec., Tel., Cable TV
84.	08-08-97	New Service Connection Precautions	Elec.
1998			
85.	01-08-98	Pole Transfers	Elec., Tel., Cable TV
86.	01-28-98	NESC Change Proposal Deadline	Elec., Tel., Cable TV
87.	04-07-98	1997 Incident Report	Elec., Tel., Cable TV
88.	04-21-98	FEMA/OEM Report	Elec.
89.	06-05-98	Introduce John/Questionnaire	Elec. & P.O.
1999			
90.	01-10-99	F.O. Cable in Supply Space-Qualified Workers	Elec., Tel., Cable TV
91.	06-08-99	1998 Elec. Contact Incident Report	Elec., Tel., Cable TV
92.	09-10-99	Nominations for PUC Joint-Use Task Force	Pole owners/Pole users
93.	09-28-99	First annual tree trimming conference	Elec.

If your Adobe reader, allows you to follow document links, you can quickly access any of the letters by selecting the letter number, date, or title in the index above.

70

Oregon

PUBLIC
UTILITY
COMMISSION

August 10, 1994

ALL OREGON ELECTRIC, TELEPHONE,
AND CABLE TV UTILITY SYSTEM
OWNER/OPERATORS

RE: Incident Reporting in Oregon (Revised Reporting Form, Who is Responsible to File the Report, and Clarification on What Items are "Reportable")

The intention of this letter is to update, clarify, and remind Oregon utilities of the legal requirement to report certain "incidents" (physical contact/injury, property damage, and service outage) to the PUC.

I have attached a revised Electric Incident Report that updates a telephone number and some minor items. Please destroy all old reporting forms and use this revised form. Feel free to make copies of this form.

I am also attaching the reporting rule in two versions. OAR 860-28-005 is for all "utilities" as defined in paragraph (c) except "telecommunications utilities partially exempt from regulation under ORS 759.040." OAR 860-34-570 is for small telecommunication utilities (partially exempt from PUC regulation under ORS 759.040). There are some differences between these two rules. Please decide which rule applies to your utility and carefully read the rule to determine your reporting requirements.

REMEMBER THIS, if a reportable incident occurs on your system, then you must report it to the PUC.

If, for instance, you are an electric utility, you must report all high-voltage (700+ V) contacts by:

- Your employees (hospitalization only);
- Communication workers;
- Line contractors (people employed by your contractors may be considered employees, for reporting purposes, if they are properly trained for the high-voltage work being performed); and
- Nonutility workers and members of the public.

Definition of Contact (perception of shock)

Barbara Roberts
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

This may result in double reporting requirements. In the example above, the communication utility whose worker makes an electrical contact might also be required to report the same incident.

A clarification of "any contact" (see 860-28-005(1)(a), second sentence) may also help to determine what incidents are reportable. The PUC's Safety personnel interpret "any contact" to include a high-voltage contact with a tool, object, or device that is manipulated by or in contact with the person and also a vehicle operated by a person (car, truck, backhoe, crane, aircraft, etc.) that contacts the high-voltage line. In addition, since this paragraph's subject is "serious injury to person," there should be some physical effect from the contact. This effect could be as minor as feeling a shock, or the injuries experienced could be somewhat unrelated to electrical flow, like when an aircraft strikes a high-voltage line, then crashes, injuring the occupants. So, there are two elements, direct or indirect contact with a high-voltage line and some physical effect or injury. A nonreportable example is a dig-in, where the backhoe hits a high-voltage cable but no one is hurt or shocked. Here there is contact, but no physical effect or injury. A low-voltage contact would only be reportable if it resulted in hospitalization or death.

Please feel free to contact me or other PUC Safety staff if you have any questions.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451

6/1061HH

Attachments

ELECTRIC AND COMMUNICATION INCIDENT REPORT
(OAR 860-28-005 AND 860-34-570)
PUBLIC UTILITY COMMISSION OF OREGON

Instructions: Fill in portion above double lines and the appropriate following section. Circle options and fill in blanks.

Reporting Information & Phone Nos. (over)

SECTION 1 (immediate notice - phone/FAX)

For PUC Staff Only
Time Received____:____AM/PM Date __/__/__ Received By_____

Utility or Operator _____ Reported By_____

Phone Number (___) ___ - _____ Incident Date __/__/__ Time____:____ AM/PM

Location of Incident - City_____ County_____ Address or Directions_____

Description of Incident: _____

Personal Injury or Contact Information

Name_____, Age ___, Sex: M/F

Injury Severity: Fatal/*Hospital/*Minor Injury/No Injury

Name _____, Age ___, Sex: M/F

Injury Severity: Fatal/*Hospital/*Minor Injury/No Injury

Name_____, Age ___, Sex: M/F

Injury Severity: Fatal/*Hospital/*Minor Injury/No Injury

Name_____, Age ___, Sex: M/F

Injury Severity: Fatal/*Hospital/*Minor Injury/No Injury

Facility Type: OH/UG/Substation/Other_____ Voltage____

Work Related: Y/N Worker's Trade:_____

Employed By:_____

Utility notified of activity prior to incident: Y/N

(Over)

Property Damage

(over $25,000.00)
est. amount $_____

Service Outage

Date __/__/__
Time Out ____ a.m./p.m.
Time In ____ a.m./p.m.
Customers Out ____
No. of Circuits ____
Reportable:
- Utility serving over 15,000 customers with 500 customers or more out over two hours.
- Utility serving less than 15,000 customers with 500 customers or more out over five hours.

Exception:
- Not reportable if outage is restricted to a single feeder and outage is less than four hours.

Personal Injury or Contact Continued On Reverse Side

*See Definitions (over)

PERSONAL INJURY OR CONTACT (Cont.)
SECTION 2 (written notice - within 20 days - Sections 1 and 2)

Weather Conditions (circle one in each group):
Hot/Warm/Cool/Cold Light/Dim/Dark Dry/Fog/Light Rain/Rain
Wind: Heavy/Light/Calm Visibility: Clear/Impeded by_____

Area Type (circle all that apply):
Rural/Suburban/Urban/Industrial/Construction Site/Other_____

General Activity (circle all that apply):
Const./Maint./Utility Work/Logging/Agriculture/Recreation/Residential Work/Travel/Other_____

Contact Type (circle all that apply):
*Lift/*Crane/Antenna/Tree/Sign/Roof/Boat Mast/Air Collision/Climbing Structure/Pole/Kite/Dig In/Pipe/Body/WireDown/
Other_____

COMMENTS:_____

_____

_____

_____

***Definitions**

Y	=	Yes
N	=	No
OH	=	Overhead power lines
UG	=	Underground power lines
Lift	=	Includes fork lifts, man lifts, etc. (A fork, platform, or basket supports the load.)
Crane	=	Equipment designed to lift and move loads by means of a rope or cable. (Also includes hydraulic booms like that used for pumping cement.)
Hospitalized	=	Emergency room treatment is not considered "hospitalization."
Minor Injury	=	Includes emergency treatment and release, first aid treatment, minor injury requiring no treatment, and other similar situations.

Reporting Information & Phone/FAX Nos.

For reporting during normal working hours, the information can be given to a PUC secretary at (503) 378-6634. The PUC's FAX number is (503) 373-7752. Mail to: Bob Sipler, Oregon PUC, 550 Capitol St. NE, Salem, OR 97310-1380.

For those accidents involving fatalities and critical injuries only, even outside of business hours, we urge that you contact one of the following PUC safety personnel (listed in the preferred sequence) by telephone at the earliest practicable moment:

Contact One	Office Phone (503)	Home Phone (503)
Bob Sipler	373-7451	581-2567
Jerry Murray	378-6626	378-7373
Jim Stickles	373-1016	463-9669
Bill Warren	378-6053	581-7405

ger

DIVISION 28

REPORTS AND RECORDS

Exemption for Telephone Utilities Partially Exempt from Regulation Under ORS 759.040

860-28-000 The rules contained in this division do not apply to telecommunications utilities partially exempt from regulation under ORS 759.040.

Stat. Auth.: ORS Ch. 183, 756, 759
Hist.: PUC 6-1993, f. & ef. 2-19-93 (Order 93-185)

Reports

860-28-005 (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 nonemployee, "serious injury" means any contact with an energized high-voltage line, or any accident which results in hospitalization. Treatment in an emergency room is not hospitalization;

(b) "Serious injury to property" means:

(A) Damage to utility or nonutility property exceeding $25,000 ($5,000 in the case of gas utilities);

(B) Damage to property which causes a loss of service to over 500 utility customers (50 customers in the case of gas utilities) for over two hours (five hours for electric utilities serving less than 15,000 customers); however "serious injury to property" does not include damage which is restricted to a single feeder line and results in an electric outage of less than four hours.

(c) "Utility" means, every person, municipality, or public utility as defined in ORS 756.010, their agents, lessees or acting trustees or receivers, appointed by court, engaged in the management, operation, ownership or control of gas pipelines, telegraph, telephone, signal or power lines and serving 20 customers or more within this state.

(2) Except as provided in (5), every utility shall give immediate notice by telephone, telegraph, or personally to the Commission, of accidents attended by loss of life or limb, or serious injury to person or property, occurring in this state upon the premises of or directly or indirectly arising from or connected with the maintenance or operation of a utility.

(3) Except as provided in (5), accidents attended by loss of life or limb, or serious injury to person or property, occurring in this state upon the premises of or directly or indirectly arising from or connected with the maintenance or operation of a utility shall, in addition to the immediate notice given by telegraph, telephone or personally to the Commission, be reported in writing to the Commission within 20 days of the occurrence. In the case of injuries to employees, a copy of the accident report form that is submitted to Oregon OSHA, Department of Insurance and Finance, for reporting accident injuries, will normally suffice for a written report. In the case of gas utilities, copies of accident or leak reports submitted under **49 CFR Part 191** will normally suffice.

(4) An accident report filed by a 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).

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

Stat. Auth.: ORS Ch. 654, 756 & 757
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); PUB 12-1989, f. & cert. ef. 8-11-89 (Order No. 89-946); PUC 4-1992, f. & ef. 2-14-92 (Order No. 92-234)

Preservation and Destruction of Records

860-28-010 (1) Electric, Gas and Water Utilities. The **Regulations to Govern the Preservation of Records of Electric, Gas and Water Utilities**, April 1974, revised May 1985, published by the NARUC, a copy of which is on file with the Secretary of State, is hereby adopted and prescribed by the Commission for all Electric, Gas and Water Utilities with the following exceptions:

(a) Operations and Maintenance, Production — Gas. The Commission prescribes that royalty records be retained for six years;

(b) Operations and Maintenance, Records of Auxiliary and other Operations. The Commission prescribes that records of operations other than utility operations be retained for the same periods as prescribed for similar records pertaining to utility operations;

(c) Operations and Maintenance, Transmission and Distribution — Gas. The Commission prescribes that records of meter tests be kept until the superseding test but not less than two years or as may be necessary to comply with service rules regarding refunds on fast meters;

(d) Revenue Accounting and Collecting. The Commission prescribes that contracts and card files or other records thereof with customers for utility service be retained for one year after the expiration or cancellation of the agreement.

(2) Steam Heat Utilities. The **Regulations to Govern the Preservation and Destruction of Records of Classes A, B, and C Electric, Water, Gas and Steam Heat Utilities**, 1936, copies of which are on file with the Secretary of State, is hereby adopted and prescribed by the Commission for all Steam Heat Utilities.

(b) "Amortization" means the inclusion in rates of an amount which has been deferred under ORS 759.200 and which is designed to eliminate, over time, the balance in an authorized deferred account. Amortization does not include the normal positive and negative fluctuations in a balancing account.

(2) Expiration: Any authorization to use a deferred account shall expire 12 months from the date the deferral is authorized to begin. If a deferral under ORS 759.200 is reauthorized, the reauthorization shall expire 12 months from the date the reauthorization becomes effective.

(3) Contents of Application: Application for deferred accounting, by a utility or a ratepayer, shall include:

(a) A description of the utility expense or revenue for which deferred accounting is requested;

(b) The reason(s) deferred accounting is being requested and a reference to the section(s) of ORS 759.200 under which deferral can be authorized;

(c) The account proposed for recording of the amounts to be deferred and the account which would be used for recording the amounts in the absence of approval of deferred accounting;

(d) An estimate of the amounts to be recorded in the deferred account for the 12-month period subsequent to the application; and

(e) A copy of the notice of application for deferred accounting and list of persons served with the notice.

(4) Reauthorization: Application for reauthorization to use a deferred account shall be made not more than 60 days prior to the expiration of the previous authorization for the deferral. Application for reauthorization shall include the requirements set forth in subsections (3)(a) through (e) of this rule and, in addition, the following information:

(a) A description and explanation of the entries in the deferred account to the date of the application for reauthorization; and

(b) The reason(s) for continuation of deferred accounting.

(5) Exceptions: Authorization under ORS 759.200 to use a deferred account is necessary only to add amounts to an account, not to retain an existing account balance and not to amortize amounts which have been entered in an account under an authorization by the Commission. Interest, once authorized to accrue on unamortized balances in an account, may be added to the account without further authorization by the Commission, even though authorization to add other amounts to an account has expired.

(6) Notice of Application: The applicant shall serve a notice of application upon all persons who were parties in the utility's last general rate case. If the applicant is other than a utility, the applicant shall serve a copy of the application upon the affected utility. A notice of application shall include:

(a) A statement that the applicant has applied to the Commission for authorization to use deferred accounting; or for an order requiring that deferred accounting be used by a utility;

(b) A description of the utility expense or revenue for which deferred accounting is requested;

(c) The manner in which an interested person can obtain a copy of the application;

(d) A statement that any person may submit to the Commission written comment on the application by the date set forth in the notice, which date can be no sooner than 25 days from the date of the application; and

(e) A statement that the granting of the application will not authorize a change in rates, but will permit the Commission to consider allowing such deferred amounts in rates in a subsequent proceeding.

(7) Public Meetings: Unless otherwise ordered by the Commission, applications for use of deferred accounting will be considered at the Commission's public meetings.

(8) Reply Comments: Within 10 days of the due date for comments on the application from interested persons, the applicant, and the utility if the utility is not the applicant, may file reply comments with the Commission, and shall serve those comments on persons who have filed the initial comments on the application.

(9) Amortization: Amortization in rates of a deferred amount shall only be allowed in a proceeding, whether initiated by the utility or another party. The Commission may authorize amortization of such amounts only for utility expenses or revenues for which the Commission previously has authorized deferred accounting. Upon request for amortization of a deferred account, the utility shall provide the Commission with its financial results for a 12-month period or for multiple 12-month periods to allow the Commission to perform an earnings review. The period selected for the earnings review will encompass all or part of the period during which the deferral took place or must be reasonably representative of the period of deferral. Unless authorized by the Commission to do otherwise:

(a) A utility shall request that amortizations of deferred accounts commence no later than one year from the date that deferrals cease for that particular account; and

(b) In the case of ongoing balancing accounts, the utility shall request amortization at least annually, unless amortization of the balancing account is then in effect.

Stat. Auth.: ORS Ch. 183, 756, 759
Hist.: PUC 6-1993, f. & ef. 2-19-93 (Order No. 93-185)

Reports and Records

Reports

860-34-570 (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 nonemployee, "serious injury" means any accident which results in hospitalization. Treatment in an emergency room is not hospitalization;

(b) "Serious injury to property" means:

(A) Damage to utility or nonutility property exceeding $25,000;

(B) Damage to property which causes a loss of service to over 500 utility customers for over two hours; however "serious injury to property" does not include damage which is restricted to a single feeder or distribution line and results in an outage of less than four hours.

(2) Every utility shall give immediate notice by telephone, telegraph, or personally to the Commission, of accidents attended by loss of life or limb, or serious injury to person or property, occurring in this state upon the premises of or directly or indirectly arising from or connected with the maintenance or operation of a utility.

(3) Accidents attended by loss of life or limb, or serious injury to person or property, occurring in this state upon the premises of or directly or indirectly arising from or connected with the maintenance or operation of a utility shall, in addition to the immediate notice given by telegraph, telephone or personally to the Commission, be reported in writing to the Commission within 20 days of the occurrence. In the case of injuries to employees, a copy of the accident report form that is submitted to Oregon OSHA, Department of Insurance and Finance, for reporting accident injuries, will normally suffice for a written report.

(4) An accident report filed by a 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.

Stat. Auth.: ORS Ch. 183, 756, 759
Hist.: PUC 6-1993, f. & ef. 2-19-93 (Order No. 93-185)

Preservation and Destruction of Records

860-34-580 The Regulations to Govern the Preservation of Records of Communication Common Carriers, Part 42, 47 Code of Federal Regulations Chapter 1 (October 1, 1985, Edition) is hereby adopted and prescribed by the Commission for all utilities.

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

Stat. Auth.: ORS Ch. 183, 756, 759
Hist.: PUC 6-1993, f. & ef. 2-19-93 (Order No. 93-185)

71

Oregon

PUBLIC
UTILITY
COMMISSION

November 15, 1994

TO ALL OREGON ELECTRIC UTILITIES

RE: Power Line Related Fire Prevention Course

As part of a cooperative effort between Oregon's Electric Utilities, Oregon Department of Forestry, and the Oregon Public Utility Commission, a series of training sessions will take place in early December. Your utility is encouraged to send a representative to the session near you.

The goal of this training is to provide a basic understanding of electric utility facilities and operations to Oregon foresters. There will be an emphasis on tree trimming and fire-related issues. This information and the personal contacts should aid all parties to work together in a manner beneficial to all, with an additional benefit of increased public safety.

The attached agenda will provide an overview of the training and instructors. This course should be an excellent opportunity for foresters and electric utility personnel to share concerns and improve future coordination. The meetings will also provide an opportunity to talk about conditions unique to your service territory.

The times and locations of these meetings are:

December 5, 1994, 9 a.m. - noon
Sunridge Inn
One Sunridge Ln.
Baker City, OR
Hosted by Oregon Trail Electric Co-op.

Directions: just off Exit 304 on Hwy. I-84

Barbara Roberts
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

December 6, 1994, 9 a.m. - noon Pacific Power Service Center 4025 Old Hwy. 99S Roseburg, OR Hosted by Pacific Power	Directions: I-5 to Exit 120, left (south) on Hwy. 99S 1/2 mile. Park in front customer lot.
December 7, 1994, 9 a.m. - noon Rogue Regency Inn 2345 Crater Lake Hwy. (Hwy. 62) Medford, OR Hosted by Pacific Power	Directions: I-5 to Exit 30, N on Crater Lake Hwy. 1/4 mile.
December 8, 1994, 9 a.m. - noon Midstate Electric Service Center 51340 N Hwy. 97 La Pine, OR Hosted by Midstate Electric Co-op.	Directions: Hwy. 97 at south end of town near Alpine Foods. In the lineman's room.
December 9, 1994, 9 a.m. - noon PGE Service Center 14655 SW Old Scholls Ferry Rd. Beaverton, OR Hosted by Portland General Electric	Directions: Hwy. 217 to Progress, Scholls Ferry Rd. Exit, west 1 mile at Murray Blvd. Park in front lot.

Feel free to contact me for information related to the presentations.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451

18/1532HH

Enclosure

POWER LINE RELATED FIRE PREVENTION COURSE

Purpose

- To enable Department of Forestry employees to recognize potential fire hazards associated with power lines and to become acquainted with local electric utility officials.
- To educate local electric utility officials on the Department of Forestry's roles and responsibilities and to become acquainted with local Forestry officials.

Target Audience

- Department of Forestry employees, including Unit Foresters, Assistant Unit Foresters, Forest Practices Foresters, permanent Forest Officers, and select others.
- Local electric utility officials.

Instructors

- Rick Gibson, Oregon Department of Forestry.
- Bob Sipler, Oregon Public Utility Commission.
- David Wall, Pacific Power and Light Company.
- Local electric utility officials.

Instruction Length

- Approximately three hours.

Instruction Dates and Locations

December 5-9, 1994:

- December 5	Monday	Baker City
- December 6	Tuesday	Roseburg
- December 7	Wednesday	Medford
- December 8	Thursday	La Pine
- December 9	Friday	Beaverton

Instruction Outline

- **0900-0915/Rick Gibson:**
  - Introduction.
    - Introductions.
    - Background.
    - Recognition that not all "power line" fires are caused by electric utility actions.
  - Department of Forestry roles and responsibilities:
    - Prevent and suppress fires.
    - Do not regulate power lines.
    - Do not engage in comprehensive power line inspections.
  - Communication of potential fire hazard conditions:
    - Department of Forestry employees to complete reporting forms and forward to local electric utilities. Explain how to complete the forms.

    - Local electric utilities to respond to reported conditions.
    - Public Utility Commission to be notified of inadequate response to reported conditions.
- **0915-1015/Bob Sipler**:
  - Public Utility Commission roles and responsibilities:
    - Regulate and enforce safety aspects of all electric utilities.
    - Power line clearance standards.
  - Basics of power lines and electric transmission.
    - Explain the features of a power pole (cross arms, cable lines, telephone lines, insulators, etc.).
    - Explain how to identify various types of power lines.
    - Explain how to read power pole identification numbers.
    - Recognition of fire prevention concerns (down lines, deteriorated poles or arms, damaged insulators or guys).
- 1015-1030/Break
- **1030-1130/David Wall:**
  - Electric utility roles and responsibilities:
    - Provide electricity to customers.
    - Comply with Department of Forestry IFPLs:
      - Problems encountered in compliance.
    - Comply with Public Utility Commission power line clearance standards.
      - Problems encountered in compliance.
      - Trimming methods and cycles.
      - Working with landowners to maintain clearance requirements.
      - Explain power line clearance considerations (sag, sway, fast growing species, danger trees, down neutral lines, etc.).
- **1130-1200/Local Electric Utility Official:**
  - Description of local situation, concerns, and problems.
  - Tour of equipment yard.

Instruction Handouts

- Memorandum of Understanding.
- Course outline.
- List of contact telephone numbers.
- Illustration of a typical power pole.
- Illustration of typical power line clearance requirements.
- Public Utility Commission tree trimming policy.
- Booklet on electric transmission facilities.
- Laminated cards with typical power pole illustrated.
- Report form.
- Service area map.

Audio-Visual Needs

- Overhead projector.
- Slide projector.
- Video player.
- Video display terminal.

94-72

Oregon

PUBLIC
UTILITY
COMMISSION

November 23, 1994

TO ALL OREGON CABLE TV, ELECTRIC,
GAS, AND TELEPHONE UTILITIES

RE: Rulemaking to Establish Underground Color Coding Standards

At the urging of the Oregon Utility Safety Committee (OUSC), I will be coordinating a rulemaking effort to establish underground color coding standards in Oregon.

The reason for the rulemaking is to enhance safety through the correct identification of underground facilities exposed during excavation. Limiting and standardizing the colors used for pipes, cables, and ducts will make identification easier. Electric cables and ducts will also be distinctly striped.

Utility personnel met to establish the Utility Color Coordinating Task Force (UCCTF) in 1992. This group brought recommendations before the OUSC to establish voluntary standards throughout Oregon. The UCCTF again met in early 1994 to improve the voluntary standard and to ask the OUSC to consider rulemaking to mandate color coding standards. At the November 18, 1994, meeting of the OUSC, proposed wording for the rule and a timeline were established to start this rulemaking process (enclosed).

I need to know as soon as possible: 1) if your utility supports this rulemaking or not, 2) if you want to be included on an "Interested Party" list, and 3) if you want to suggest any modifications to the wording of the rule.

Your communication does not need to be formal at this point. You can call, write, or fax. Fax is preferred. If you want to be included as an "Interested Party," please include a fax number. All communication for this stage should be to me before January 5, 1995.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451

1/1558HH

Enclosure

Barbara Roberts
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

Proposed Draft Law (November 21, 1994)

Color Code for Underground Utility Facilities

OAR 860-24-007 -- *When underground systems are installed, colors* for cables and ducts shall be as listed below:

(a) Gas Pipe - Yellow, Green or Black with yellow stripes;

(b) Gas Casing-Yellow

(c) Electric Duct - Black or Gray, with three evenly spaced red stripes;

(d) Direct Buried, Jacketed, Electric Cable over 750 V. - Solid Black with three evenly spaced red stripes;

(e) Direct Buried Electric Service Cable 0-750V. - Black except neutral conductor may have red stripe(s);

(f) Communication Cable or Duct - Orange, Black, Gray or White, no stripes permitted except on cable which is continuously enclosed in duct.

EXCEPTION: There are no color requirements for steel pipe or ducts or ducts completely encased in concrete.

Statutory Authority: ORS 757.035 and 757.039

Effective Date: January 1, 1997

Timeline

for Adopting Proposed Underground Color Coding Standards into Oregon Administrative Rule (Law)

1. Present draft OAR language to Oregon Utility Safety Committee for comments and recommendations before sending to Oregon Department of Justice.

2. Obtain informal feedback from OUSC members and other interested parties by January 5, 1995 (before first OUSC meeting, Jan 20,1995). Develop "Interested Party" list with FAX numbers.

3. Obtain formal letters of support and opposition by March 17, 1995 (second OUSC Meeting in 1995).

4. Request that Commissioners initiate rulemaking procedure at the first PUC public meeting in April 1995.

5. Oregon Secretary of State will make newspaper announcements of the rulemaking process in May, 1995.

6. PUC public hearings in July-August, 1995.

7. Issue Commission Order adopting new law, December, 1995.

8. Law becomes effective on January 1, 1997 (allowing manufacturers and utilities to use existing warehouse stocks).

Address correspondence about the above rulemaking to:

Bob Sipler
Oregon Public Utility Commission
550 Capitol St, NE
Salem OR 97310-1380

94-73

Oregon

PUBLIC
UTILITY
COMMISSION

November 28, 1994

TO ALL OREGON CABLE TV, ELECTRIC, AND TELEPHONE UTILITIES

RE: Comment Deadline for the 1997 National Electrical Safety Code

Oregon utility people can have an impact on the changes made to the National Electrical Safety Code (NESC).

Right now is an important time in the formation of the 1997 Edition of the NESC. The Preprint 1997 Proposals is available from the IEEE Standards Department, 445 Hoes Lane, PO Box 1331, Piscataway, New Jersey 08855-1331. It is stock no. SH17491, with a price of $40. The IEEE Customer Service Center phone number is 1-800-678-IEEE.

The "Preprint" has the change proposals and the initial actions and decisions from the various NESC Subcommittees (SC). This is not the end of the story! You are free to submit your comments on the proposals and on the SC opinions and actions. These comments will be taken into consideration when the SCs again meet (late 1995).

I want to encourage utility engineers and others who regularly work with this code to review the "Preprint" and submit comments on those items where your perspective and experience can help the SCs to make sound decisions. As a member of SC3 (Electric Supply Stations), I can assure you that every comment is taken into consideration.

The deadline for the receipt of these comments is May 30, 1995.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451

18/1590HH

Barbara Roberts
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

94 - 74

Oregon

PUBLIC
UTILITY
COMMISSION

December 2, 1994

TO: All Oregon Electric and Communication Utilities

RE: March 1995 Joint-Use Conference, Portland, Oregon

Attached is a bulletin that should be forwarded to your operations managers, engineers, and other personnel involved in joint-use coordination and contract administration.

This conference focuses on many of the concerns that Oregon electric and communication utilities have recently been trying to resolve. I spoke with Brent Daniels of Utility Consultants, Inc., who is putting together the conference. He hopes to have conference speakers who represent utilities and organizations who have been successful in handling joint-use issues.

This conference is timely in Oregon. The Oregon PUC has been working closely with Oregon's electric and communication utilities to improve joint-use pole coordination throughout the state. This last September the PUC initiated a Joint-Pole Committee to develop a better joint-pole coordination system for electric and communication utilities. The committee has representatives from investor and public-owned utilities from the electric, telephone, and cable television utilities. The committee has three task groups: Joint-Pole Transfer Notification Automation Group, Training/Standards Group, and Local Coordination Group.

If you have any questions about the conference, please call Brent Daniels at (415) 738-9600. If you have any questions about the Oregon's Joint-Pole Committee, please feel free to call me.

Jerry Murray

Jerome A. Murray, P.E.
Program Manager
Energy Division/Safety Section
(503) 378-6626

Attachment

OECU.doc

Barbara Roberts
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

WESTERN STATES JOINT USE CONFERENCE

SHERATON - PORTLAND AIRPORT

PORTLAND, OREGON
MARCH 2 and 3, 1995

FOCUSING on JOINT USE and CONTRACT ADMINISTRATORS and ENGINEERS

CONFERENCE OBJECTIVES:

- *FORUM for SHARING CONCERNS and SOLUTIONS COMMON to the CABLETELEVISION, ELECTRIC and TELECOMMUNICATION INDUSTRIES*
- *WORKSHOPS PRESENTING INDUSTRYWIDE BEST PRACTICES*
- *NETWORKING with INDUSTRY PEERS throughout the WESTERN UNITED STATES*

SPONSORED BY: UTILITY CONSULTANTS, INC.

~~over for details ~~

WESTERN STATES JOINT USE CONFERENCE

TENTATIVE AGENDA

WEDNESDAY, MARCH 1, 1995:

PRE-REGISTRATION and HOSPITALITY SUITE	6:00 PM to 9:00 PM

THURSDAY, MARCH 2, 1995:

REGISTRATION and CONTINENTAL BREAKFAST	7:30 AM to 8:30 AM
WELCOME, OPENING REMARKS, CONFERENCE OBJECTIVES:	8:30 AM to 8:45 AM
STATUS of PENDING NATIONAL JOINT USE LEGISLATION	8:45 AM to 9:30 AM
ONE-CALL LEGISLATION and ACTIVITIES	9:30 AM to 10:00 AM
MORNING BREAK:	10:00 AM to 10:15 AM
ELECTRONIC POLE TRANSFER NOTIFICATION	10:15 AM to 10:45 AM
FEDERAL CLEAR ZONE UPDATE	10:45 AM to 11:30 AM
RISK MANAGEMENT - JOINT USE LIABILITIES	11:30 AM to 12 NOON
BUFFET LUNCHEON	12:00 NOON to 1:00 PM
CONCURRENT BREAKOUT SESSIONS and WORKSHOPS:	1:00 PM to 2:00 PM
CABLEVISION INDUSTRY REPRESENTATIVES	ROOM A
TELECOMMUNICATIONS INDUSTRY REPRESENTATIVES	ROOM B
ELECTRIC INDUSTRY REPRESENTATIVES	ROOM C
JOINT SESSION; OPEN DISCUSSION	2:00 PM to 3:00 PM
AFTERNOON BREAK	3:00 PM to 3:15 PM
JOINT FACILITIES TRANSFER AGREEMENTS	3:15 PM to 3:45 PM
WIN - WIN JOINT FACILITIES CONTRACT SPECIFICATIONS	3:45 PM to 4:15 PM
JOINT USE FACILITY AUDITS and INVENTORIES; SUCCESS STORIES	4:15 PM to 4:45 PM
OPEN DISCUSSION and ADJOURNMENT	5:00 PM
NO HOST HOSPITALITY in the GARDEN ROOM	5:30 PM to 7:00 PM

FRIDAY, MARCH 3, 1995:

CONTINENTAL BREAKFAST	7:30 AM to 8:30 AM
JOINT TRENCHING; SOLUTIONS from CALIFORNIA and FLORIDA	8:30 AM to 9:15 AM
JOINT USE CONTACTS on ELECTRIC TRANSMISSION FACILITIES	9:15 AM to 10:00 AM
MORNING BREAK:	10:00 AM to 10:15 AM
ALTERNATIVES to TRADITIONAL WOOD POLE CONSTRUCTION	10:15 AM to 11:00 AM
POLE OWNERSHIP; WHO WANTS TO OWN and MANAGE THIS RESOURCE?	11:00 AM to 11:45 AM
KEY NOTE LUNCHEON, CONFERENCE WRAP UP AND ADJOURNMENT	12:OO NOON to 1:00 PM

WESTERN STATES JOINT USE CONFERENCE

SHERATON HOTEL at the PORTLAND AIRPORT

CONFERENCE FEES, ACCOMMODATIONS and REGISTRATION

CONFERENCE FEES:

BEFORE JANUARY 15, 1995: EIGHTY-FIVE DOLLARS ($85.00)
AFTER JANUARY 15, 1995: ONE HUNDRED DOLLARS ($100.00)

REMIT CHECK OR MONEY ORDER PAYABLE TO:

WESTERN STATES JOINT USE CONFERENCE
c/o UTILITY CONSULTANTS, INC.
ATTENTION: RON LIPHAM, VP
1810 WATER PLACE, SUITE 200
ATLANTA, GA 30339

NOTE:

TO ENCHANCE THE OVERALL QUALITY OF THE CONFERENCE, ATTENDANCE WILL BE LIMITED TO ONE HUNDRED AND TEN PARTICIPANTS. ONCE THAT LIMIT IS REACHED, WE WILL BE UNABLE TO HONOR ANY FURTHER ATTENDANCE REQUESTS.

ACCOMMODATIONS:

The Conference is being held at the *SHERATON - PORTLAND AIRPORT,* located at 8235 NE Airport Way, Portland, Oregon 97220-1398. The *SHERATON - PORTLAND AIRPORT* has set aside a limited number of rooms for our use at these special rates:

Single occupancy; Seventy-six dollars ($76.00) per night

Double occupancy. Eighty-eight dollars ($88.00) per night

Those rates are valid until February 4, 1995. Room reservations made after that date may be subject to current room charge rates established by the hotel.

For reservations call the *SHERATON - PORTLAND AIRPORT* at:

1 - 503 - 281 - 2500

The *SHERATON - PORTLAND AIRPORT* offers complimentary shuttle service to Portland International Airport.

On-site complimentary parking is available for those driving to the Conference.

See over for Western States Joint Use Conference Registration Form

WESTERN STATES JOINT USE CONFERENCE

~~ *REGISTRATION FORM* ~~

Enclosed is my check or money order for:

- ❑ **Eighty-five dollars ($85.00) prior to January 15, 1995**
- ❑ **One hundred dollars ($100.00) after January 15, 1995**

NAME: _____

COMPANY: _____

ADDRESS: _____ *STATE:* ___ *ZIP CODE:* _____

TITLE _____

MAJOR AREAS of RESPONSIBILITY:

_____

_____

_____

PLEASE SEND REGISTRATION FORM AND REMITTANCE TO:

WESTERN STATES JOINT USE CONFERENCE
c/o UTILITY CONSULTANTS, INC.
ATTENTION: RON LIPHAM, VP
1810 WATER PLACE, SUITE 200
ATLANTA, GA 30339

IF YOU HAVE ANY QUESTIONS OR CONCERNS REGARDING

THE WESTERN STATES JOINT USE CONFERENCE

PLEASE CONTACT:

Brent K. Daniels
Manager - Western Region
Utility Consultants, Inc.
P.O. Box 1591
Pacifica, CA 94044

Phone: (415) 738 - 9600
Fax: (415) 359 - 7799

CONTACT THE *SHERATON - PORTLAND AIRPORT* DIRECTLY AT: 1 - 503 - 281-7602
FOR HOTEL RESERVATIONS

95-75

Oregon

PUBLIC
UTILITY
COMMISSION

February 2, 1995

ALL OREGON ELECTRIC UTILITIES

RE: Northwest Trees and Utilities Conference

Thousands of trees are growing closer to your utility's lines as you read this letter. It is a tough and expensive job to maintain the clearance from those trees needed for safety and reliability.

There are some vegetation management programs that work better than others. Some methods slow regrowth, control growth direction, and even cost less in the long run.

At the PUC we often see the results of inadequate programs. There are fires, injuries, outages, and legal battles. Even though the Northwest grows trees better than most places, this is a nationwide issue. Allan Clapp (the NESC guru) has devoted his latest issue of the DANESC Update to Line Clearance and Tree Removal Standards.

There is a regional conference scheduled for March 15 and 16 that may be helpful to your utility. The Northwest Trees & Utilities Conference will address many important subjects related to tree work around utility lines. I am enclosing a brochure.

If you have any questions on the conference, please call the number on the brochure ((206) 784-1945).

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752

1/1842HH

Enclosure

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

95-76

Oregon

PUBLIC
UTILITY
COMMISSION

March 7, 1995

ALL OREGON ELECTRIC, TELEPHONE, AND
CABLE TV SYSTEM OPERATORS

RE: 1994 Electric Contact Incident Report

Enclosed is a copy of the report related to personal injury electric utility contacts reported to the PUC in 1994.

After a sharp increase in 1993, the number of incidents in 1994 declined by almost 23 percent. The most dramatic drop came in the number of incidents involving members of the public.

Credit for the decrease should go to the electric utility companies for their accident prevention efforts. There is a growing awareness that the safe transportation of electric energy includes more than just building and maintaining facilities to meet a safety code. Many utilities are providing public and worker safety education in very creative ways. That makes a big difference.

If you need additional copies, we have a limited supply. You are welcome to copy the report also.

If you have any questions, please contact me. Any comments you have are welcome. It is our intent to make this report as practical and easily understood as possible, so future accidental contacts with power lines can be prevented.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752

6/1926HH

Enclosure

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

95-77

Oregon

PUBLIC
UTILITY
COMMISSION

April 13, 1995

TO: ALL OREGON ELECTRIC AND COMMUNICATION UTILITIES

RE: Clear Zone At Pole Bases - Low-Mounted Equipment Cabinets

PUC Safety staff has become increasingly aware of an NESC issue that has been overlooked by many electric and communication utilities. It involves the placement of equipment cabinets (or cases) on utility poles. These cabinets may be electric meters, control boxes, telephone enclosures, CATV amplifiers, etc. The NESC references involved are Rule 232-B3 and Table 232-2. Please have your standards engineers and operations managers review these code requirements so that new cabinets are installed correctly.

One of the basic concepts of overhead line safety is the prevention of access through isolation. This means we want to make it difficult for unauthorized people to get up a pole.

PUC staff has consistently recommended that an 8-foot "clear zone" be maintained at the base of each utility pole. This 8-foot clear zone must be maintained to discourage climbing by unauthorized persons, especially children. Pole steps are strictly prohibited in this clear zone. Conduit riser standoffs must also be located so that the clear zone remains difficult to climb. Cabinets, other equipment, and attachments are occasionally mounted in the clear zone area. Even where the NESC allows an installation, the structure must be configured so that it is not "readily climbable" (see NESC definition).

When installing a cabinet on a pole, Table 232-2 criteria must be carefully reviewed. It is important to carefully determine which category you use in classing the area below the

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

equipment case. What type of area is the equipment or case actually over? We discourage the use of Category 1d (pedestrian or restricted traffic only) because of the restrictive definition and significantly reduced clearances. Another fairly restricted classification is 2b, where the area must be in a "rural district," and it must be determined that it is unlikely a vehicle will cross under the line. If you determine that you are in an area which will allow the use of Footnote 7, staff again encourages a careful reading to determine just where the case may be allowed.

If your utility is mounting any type of equipment or cabinet on a pole that is less than 15 feet above ground level, you need to make sure that it meets NESC requirements. Also, utilities need to perform the necessary engineering and joint-use utility coordination so that the clear zone is safely maintained.

If you are at all unclear about this subject or the related code rules, please feel free to call me.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752

3:6/2054HH

95-77

Clear the Zone

Make sure low-mounted equipment cabinets at the base of poles are installed correctly

Staff at the Oregon Public Utility Commission has become aware of an NESC issue overlooked by many electric and communications utilities: the placement of equipment cabinets (or cases) on utility poles. These cabinets may be electric meters, control boxes, telephone enclosures, CATV amplifiers, etc.

The NESC references involved are Rule 232-B3 and Table 232-2. Please have your standards engineers and operations managers review these code requirements so new cabinets are installed correctly. One of the basic concepts of overhead line safety is the prevention of access through isolation. This means we want to make it difficult for unauthorized people to get up a pole.

PUC staff has consistently recommended that an 8-foot "clear zone" be maintained at the base of each utility pole. This clear zone must be maintained to discourage climbing by unauthorized persons, especially children. Pole steps are strictly prohibited in this clear zone. Conduit riser stand-offs must also be located so the clear zone remains difficult to climb. Cabinets, other equipment and attachments are occasionally mounted in the clear zone area. Even where the NESC allows an installation, the structure must be configured so it is not "readily climbable" (see NESC definition).

When installing a cabinet on a pole, Table 232-2 criteria must be carefully reviewed. It is important to carefully determine which category you use in classing the area below the equipment case. What type of area is the equipment or case actually over? We discourage the use of Category 1d (pedestrian or restricted traffic only) because of the restrictive definition and significantly reduced clearances. Another fairly restricted classification is 2b, where the area must be in a "rural district," and it must be determined that it is unlikely a vehicle will cross under the line. If you determine you are in an area which will allow the use of Footnote 7, staff encourages a careful reading to determine just where the case may be allowed.

If your utility is mounting any type of equipment or cabinet on a pole that is less than 15 feet above ground level, you need to make sure it meets NESC requirements. Also, utilities need to perform the necessary engineering and joint-use utility coordination so the clear zone is safely maintained.

Changes to Eye and Face Protection Rule Being Considered

In the industry it's known as Z87. OSHA recognizes it in regulation 29 CFR Part 1910—Personal Protective Equipment for General Industry. The full title is the American National Standard Practice for Occupational and Educational Eye and Face Protection, ANSI Z87.1-1989. Its purpose: provide minimum performance requirements for eye and face protective devices and offer guidance for the selection, use and maintenance of these protective devices.

The American National Standards Institute (ANSI) requires each of its standards to be reviewed every five years. This process is overseen by a committee of representatives from organizations having a substantial interest in the design or use of eye and face protective devices. This allows for advances in design, materials, technologies and product performance that can help reduce the frequency and severity of eye injuries.

The process of revising ANSI Z87.1 was initiated in 1994 and may continue for many months as the committee tries to reach a consensus on needed revisions. Changes to be considered include:

- Mandatory third-party certification: An independent assessment of protector performance. Currently manufacturers self-certify their products.
- Impact resistance: Testing and labeling requirements that provide a better means of identifying superior impact-resistant materials.
- Welding lenses: Performance requirements for automatic darkening welding lenses.
- Splash-resistant goggles: Stronger performance requirements for splash-resistant goggles.

Reprinted with permission from "Wise Owl News," Summer 1995, published by Prevent Blindness America, 500 East Remington Road, Schaumburg, Illinois 60173

Ruralite

Oregon

PUBLIC
UTILITY
COMMISSION

March 5, 1996

ALL OREGON ELECTRIC, TELEPHONE, AND CABLE TV SYSTEM OPERATORS

RE: 1995 Electric Contact Incident Report

Enclosed is a copy of the report related to personal injury contacts with electric utility power lines reported to the PUC in 1995.

After a high number of contacts in 1993, the number of incidents dropped in 1994 and again in 1995. There was a significant decline in work-related contacts last year.

Utility worker accidents declined, but the number is still high when compared to long-term levels.

Credit for the decrease should go to the electric utility companies for their accident prevention efforts. Utilities recognize that the safe transportation of electric energy includes more than building and maintaining facilities to meet a safety code. Most electric utilities are providing public and worker safety education in very creative ways. There is also a big effort to warn people at large construction sites of potential dangers both overhead and underground.

If you need additional copies, we have a limited supply. You are welcome to copy the report also.

If you have any questions, please contact me. Any comments you have are welcome. It is our intent to make this report as practical and easily understood as possible. We all want future accidental contacts with power lines to be prevented.

Bob Sipler

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752

95eleltr

Enclosure

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

Jim Stickles 79

Oregon

PUBLIC
UTILITY
COMMISSION

September 6, 1996

TO: ALL ELECTRIC UTILITIES AND ALL TELECOMMUNICATION UTILITIES AND OPERATORS

RE: Proposed PUC Pole Joint-Use Policy

Attached for your review and comment is the second draft of the PUC's "Safety Provisions for Joint-Use of Poles" policy (J-U Policy). Please review and make any recommendations to us as soon as practical.

PUC staff formulated this second draft after receiving considerable comment from electric, telephone, and cable television utilities and operators. Most of the recommendations received to date are reflected in the revised proposal.

With the Federal Telecommunication Act of 1996 and competitive restructuring in the electric and telecommunication industries, it has became more apparent that clear and more uniform joint-pole practices are needed for engineering, construction, operations, and maintenance. Also, better communications and coordination needs to occur between many joint-pole users and pole owners.

Consequently, the policy focuses on establishing sound joint-pole use standards and interutility communication protocols. Notice the written documentation specified in the policy for attachment prenotification, project plans, compliance certification, and pole owner authorization. It is hoped that these communications will prompt the better exchange of standards, project plans and coordination information between pole owners and joint-pole users.

PUC staff will be making a presentation on the J-U Policy to the Oregon Utility Safety Committee on September 20 between 9:00 am and 12:00 noon at PGE Salem Service Center at 4245 Kale Street NE, Keizer, Oregon. We welcome your attendance and participation.

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-2080

Oregon

PUBLIC
UTILITY
COMMISSION

September 9, 1996

TO: ALL OREGON ELECTRIC AND TELECOMMUNICATION SYSTEM OPERATORS

RE: 1997 Edition of the National Electrical Safety Code (NESC) Adoption

The new code edition has been published, and PUC staff is recommending its adoption into Oregon state law. I will ask the Commission to begin the process to change the rules (OAR 860-024-0010 and 860-034-0430) at the PUC's Public Meeting on September 10, 1996. The announcement from the Secretary of State should come out soon afterward, giving opportunity to comment.

If you wish to comment on a less formal basis, feel free to contact me by phone, Fax, or E-mail.

Copies of the 1997 NESC are available at this time. Two possible sources are:

IEEE Customer Service
(see attached order form)

and locally
Building Tech Bookstore, Inc.
8020 SW Cirrus Drive
Beaverton, Oregon 97008-5986
(503) 641-8020 or 1-800-ASK-BOOK

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752
Bob.Sipler@state.or

S:Electric:Policies:Aulnesc

Attachment

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-2080

Publications Order Form

NYS

Name

IEEE Member No.

Company

Street

City State/Prov

Zip/Postal Code Country

Qty	Publication	Product No	List Price	Member Price	Total
	1997 NESC	SH94406-NYS	$63.00	$44.10	
	NESC Handbook	SP1105-NYS	$89.00	$62.30	
	NESC & Handbook*	SH94419-NYS	$137.00	$96.00*	
	1996 NEC	SH94318-NYS	$39.00	$33.60**	
	NEC Handbook	SP1099-NYS	$77.50	$65.90**	
	NEC & Handbook	SH94336-NYS	$93.50	$82.25**	

Handling — for orders totaling (US Dollars) — $1-$50, add $4; $50.01-$75, add $5; $75.01-$100, add $6; $100.01- $200, add $8, over $200, add $15. IEEE Member discount on one copy only. Please include your member number.
**Special Member price.*
No other discounts apply.
***Not availble to resellers.*

Subtotal	
CA, DC, FL, NJ, OH, add sales tax	
Handling Charge	
NY and DC, add applicable sales tax	
Canadian Residents, add 7% GST	
TOTAL	

(IEEE GST Reg # 125634188)

Please check the appropriate box:

❑ Payment enclosed *(Please make check payable to IEEE)*
❑ Please invoice me *(Subject to credit approval)*
❑ Please charge to the credit card checked below
❑ AMEX ❑ MasterCard/EuroCard ❑ Diners Club ❑ VISA

Card No _____

Signature _____ Exp. Date _____

Four Easy Ways to Order

Phone: (800) 678-IEEE
(within US and Canada)
(908) 981-0060
(outside of US and Canada)

Fax: (908) 981-9667, 24 hrs daily

Mail: IEEE Customer Service
445 Hoes Lane, PO Box 1331
Piscataway, NJ
08855-1331 USA

Telex: 833233

6/96

1997 — 81

Oregon

PUBLIC
UTILITY
COMMISSION

April 8, 1997

TO: ALL ELECTRIC AND TELEPHONE UTILITIES AND CABLE TV OPERATORS

RE: 1996 Utility Electric Contact Incident Report.

Enclosed you will find a copy of the report. It is our purpose to provide a tool to Oregon utilities to aid in their accident prevention efforts. This information is presented in a graphic format where possible.

The report breaks down the information reported to the PUC so that a more detailed understanding of common characteristics of the incidents can be seen. This information can then be combined with each utility's knowledge of the unique characteristics found in their operating area to prevent accidents. The report concludes with a summary and some general recommendations.

Your comments and suggestions to improve this annual report are welcome. If you need additional copies, feel free to copy the report. A limited number are also available upon request.

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
Fax: (503) 373-7752

Enclosure
mh/f/sipler/aleutltr

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

97 — 82

Oregon

PUBLIC
UTILITY
COMMISSION

April 9, 1997

To: All Oregon Electric and Telephone Utilities and Cable TV Operators

Re: Completed adoption of the 1997 National Electric Safety Code (NESC)

The hearing process to officially adopt the 1997 NESC as Oregon's standard for the construction, operation and maintenance of electric supply and signal lines was completed on February 6, 1997. The 1997 NESC replaces the 1993 edition under PUC Order 97-032.

I recommend, for your reading, the "Forward" on pages V and VI. This section includes a bit of code history and an overview of major changes found in each section of the code. Also covered is the comment and revision process and how to request an interpretation from the national committee.

A form for change proposals is found on page 261 and the schedule for the next code revision cycle is on page 262. If you have an idea for improving this code, I encourage you to submit it to the national committee.

If you have questions concerning this new NESC edition, feel free to contact me at the number below. The PUC is the administrative authority for the NESC in Oregon.

Bob Sipler
Sr. Utility Analyst
Energy Division/Safety Section
(503) 373-7451
FAX: (503) 373-7752

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-3849

97-83

Oregon

PUBLIC
UTILITY
COMMISSION

April 11, 1997

TO: ALL ELECTRIC UTILITIES, TELEPHONE UTILITIES, TELECOMMUNICATION COMPANIES AND CARRIERS (operating in Oregon)

RE: New PUC Policy entitled, "Safety Provisions for Joint-use of Poles"

Please distribute the enclosed PUC safety policy related to the joint-usage of poles to your company's engineering, operations, and joint-use departments. We have also attached a news article recently released by the PUC about the policy.

The Commission adopted this policy on February 18, 1997, after considerable industry input and suggestions. Its main purpose is to emphasize prudent practices for keeping Oregon's utility poles and overhead rights-of-way (R-O-W) safe and efficient, especially as we move into a new era of utility deregulation and telecommunication competition. The policy gives emphasis to existing National Electrical Safety Code (NESC) responsibilities and sets reasonable standards and protocols necessary to ensure effective joint-use cooperation and coordination.

The Federal Telecommunications Act of 1996 was enacted to promote telecommunication competition and open access. The Act will result in more communication lines being attached to poles and coexisting together in the same R-O-Ws. In densely populated areas such as Portland and other urban areas we could see five or more separate telecommunication lines attached to the same pole, each owned and operated by a separate carrier. To accommodate this increase and congestion, better attachment standards, communication protocols and industry cooperation will be needed to ensure public safety and joint-use cooperation. This new policy is an effort by the PUC to lay the framework for the new safety cooperation needed in the years ahead.

John A. Kitzhaber
Governor

550 Capitol St. NE
Salem, OR 97310-1380
(503) 378-5849

The policy focuses on seven key responsibility areas that are essential for new attachments and continued joint-use cooperation. The areas are:

- Notification and coordination protocols for new attachments;
- Project planning and engineering for new attachments;
- Qualified personnel who can work on joint-pole installations;
- Ongoing NESC inspection, maintenance, and compliance responsibilities by all line operators;
- Pole-owner responsibilities, especially to establish technical standards and communication protocols for attachment coordination;
- Electric joint-user responsibilities to ensure structural integrity and safety of high voltage lines; and,
- Record-keeping and administration by all joint-users.

Basically the policy is an extension of the NESC. Without adherence to it our R-O-Ws would quickly become bottlenecked and dangerous. The NESC requires that the joint-use parties come to agreement on the conditions and terms for the shared usage of poles so that safety conflicts are prevented. This policy is the PUC's interpretation of the minimum coordination items that need to be addressed in reaching those agreements.

In closing we ask for each company's support and commitment to keep Oregon's poles and rights-of-way safe by adhering to the enclosed policy. If you have any questions or need clarification about the policy, please feel free to contact me.

Jerome A. Murray P.E.
Program Manager
Utility Safety Section
(503) 378-6626
e-mail: *jerry.murray@state.or.us*

enclosures

Oregon PUC Public Utility Commission

NEWS

OREGON PUBLIC UTILITY COMMISSION
550 CAPITOL ST. N.E.
SALEM, OR 97310-1380

March 20, 1997
97-08

FOR IMMEDIATE RELEASE

Joint-use utility pole safety mandated by OPUC

Contacts: Jerry Murray, Utility Safety, (503) 378-6626; or
Mike Allegre, Information Director, 378-8962.

Salem, Ore. – As new telecommunications services and devices make their way to Oregon homes, the utility poles will become more congested. To ensure utility lines and installations remain safe to the public and to line workers, the Oregon Public Utility Commission (OPUC) has adopted a new safety policy to ensure that new overhead lines to homes, businesses and along our streets and highways are safely installed.

For safety reasons, homeowners and businesses should never attach antennas, cables, wires, signs, basketball backboards or any other device to a pole. If a person thinks they have a legitimate reason, they must first consult with the electric utility or pole owner to obtain permission before any attachment is made. OPUC accident records indicate unauthorized attachments can lead to death or serious injury.

While some business entities -- utilities, cable television and other telecommunication operators -- have justifiable reasons for attaching cables and lines to utility poles, they must first contact the pole owner or the local electric utility to obtain permission before attaching anything. All attachments must also be designed and installed to meet the standards of the pole owner, the National Electrical Safety Code (NESC) and other local regulations. The NESC codes are enforced by the OPUC to ensure that utility lines and installations remain safe.

"We adopted the new safety policy for one main reason," said Jerry Murray, OPUC Utility Safety Manager. "Communication and coordination is lacking between many electric and telecommunication operators involving the attachment of new lines, devices and cables, and cooperation must be drastically improved."

- over -

Murray indicated increased telecommunications competition will mean more congestion brought about by new communications services to homes and businesses. New as well as current pole users must adhere to OPUC safety policies and regulations set. Besides causing injuries, unauthorized attachments can result in removal, expensive repairs and penalties.

Murray said any attachments to a utility pole must be cleared with the pole owner or local electric utility. A copy of the OPUC's policy and regulations concerning this subject may be obtained by calling the Commission Safety Office.

-30-

Oregon Public Utility Commission Policy

Safety Provisions for Joint-Use of Poles

The Public Utility Commission has adopted this policy as a reasonable and prudent practice to ensure safety of Oregon's overhead rights-of-way.

1. Purpose

The purpose of this policy is to ensure the safe and efficient use of overhead line rights-of-way. This policy establishes provisions necessary to ensure compliance with the National Electrical Safety Code (NESC) as required by ORS 757.035, OAR 860-024-0010 and OAR 860-034-0430 as interpreted by the administrative authority. Refer to applicable NESC rules, with a focus on rules 012, 013, 213, 214, 217, 220, 221, and 222.

2. Scope

This policy applies to all electric and telecommunication system owners or operators (including utilities), and other authorized entities that attach lines, equipment, or devices to joint-use poles.

3. Definitions (For other definitions, see the NESC Section 2, Definitions)

Attachment Project. Any addition, modification or removal of any electric supply line, signal line, device, apparatus, equipment, or structural member that materially changes the clearance, mechanical, structural, or electrical characteristics of the joint-pole installation. Maintenance replacements that do not modify the installation or affect other joint-pole users are intended to be exempted.

Joint-pole users. All utilities or entities with line, equipment, or device attachment(s) on a specified pole or joint-pole installation, including the pole owner and the electric joint-user.

Modifying entity. Any utility or entity planning or carrying out an attachment project to a pole installation(s).

4. Notification and Coordination

a. The modifying entity shall give prior written notification to the pole owner for each attachment project. The modifying entity shall receive written preauthorization from the pole owner before attaching. The notification shall be given in a timely manner to allow for ample engineering and coordination by affected joint-pole users. Sufficient coordination including submittal of project plans and exchange of information shall take place between joint-pole users so that the attachment does not create a NESC violation or conflict. Written notifications, authorizations, project plans and certifications shall be transmitted by paper or by electronic means using computers, fax, e-mail, Internet, etc.

b. Exception. Where NESC compliance can be assured, the modifying entity may be exempted from any of the written documentation provisions associated with prenotification, project plans, project certification or pole owner authorization at the pole-owner's discretion. This should only apply if the modifying entity has a written agreement with the pole owner that such submittals are unnecessary under specified conditions and limitations.

5. Engineering and Project Planning

Each attachment project shall involve sufficient planning by the modifying entity to ensure NESC compliance during construction and upon completion. The project plans shall include sufficient design drawings and specifications so that qualified personnel can safely make the attachments in compliance with the NESC and joint-pole agreements. Except as noted in paragraph 4.b., written project plans shall be submitted to the pole owner prior to commencing the attachment project.

6. Qualified Personnel

Joint-pole users shall only use trained qualified persons to work on joint-pole installations. Qualified persons shall be knowledgeable in applicable NESC rules and must be able to demonstrate competence as required by NESC rule 420.A.1. They shall also be trained to recognize and prevent NESC violations and conflicts, and to keep safe working clearances from energized lines and equipment.

7. Inspection, Maintenance and Compliance Responsibilities
(The below applies to both new and existing joint-pole installations.)

a. Each joint-pole user shall take appropriate means to ensure the safety of its lines and devices.

b. Each joint-pole user shall promptly respond to pole-owner notifications related to, but not limited to, maintenance, relocation, rearrangement, violations, or abandonment of joint-pole installations.

c. Except as noted in 4.b. above, upon completion of an attachment project, the modifying entity shall give written certification to the pole owner that the attachment project is complete and complies with the NESC.

d. Each joint-pole user shall conduct sufficient inspections and prompt repairs to ensure ongoing NESC compliance of its lines and facilities. In cases where discovered safety violations cannot be corrected safely or in a timely manner, the pole owner shall be notified promptly of the conditions. (Also, refer to NESC rule 214 and PUC Staff policy on "Requirements for Line Inspection by Utility Operators.)

e. Each joint-pole user shall ensure that its employees and employed contractors are following project plans, joint-use agreements, standard practices, and NESC rules.

f. Joint-pole users that fail to promptly correct their NESC violations are responsible for costs including inspection, design, coordination, repair, etc. that the pole owner incurs in correcting such violations and in ensuring joint-use safety. Refer to OAR 860-022-0055(8).

8. Pole Owner Responsibilities

a. The pole owner must promptly respond to all notifications so that attachment projects and safety violation corrections are not unduly delayed. The pole owner may deny access if the attachment project will result in safety, reliability, and generally accepted engineering standards not being met.

b. Each pole owner should have written standard practices that address construction standards and communication protocols to be followed by joint-pole users. The standards should specify any obligations that exceed NESC regulations. These standards should also address communication methods and contacts for notifications, project plans, authorizations, and compliance certifications. These standards should be made readily available to requesting entities.

9. Electric Joint-Pole User Responsibilities

Special coordination is required for joint-use poles supporting high voltage lines (over 600 volts) where the poles are not owned by the electric joint-pole user. In such cases, the electric joint-pole user shall have agreements with the pole owner to ensure the structural integrity and safety of the electric lines.

10. Record-Keeping and Administration

Each joint-pole user shall perform the necessary administration and record-keeping to ensure that activities and responsibilities addressed in this policy and NESC Rule 214A-4 are being carried out.

Approved by Oregon Public Utility Commission on February 18, 1997

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

August 8, 1997

TO: ALL OREGON ELECTRIC UTILITIES

RE: New Service Connection Precautions

Recently a complaint was made to the PUC regarding an electric utility's practice relative to new service connections to residences. We are sharing the information surrounding this issue in the interest of preventing electrical accidents and clarifying existing safety regulations. We hope this information encourages utilities to carefully evaluate their current new service connection practices.

Two months ago a number of general and electrical contractors challenged the authority of a major electric utility to perform inspections on customer premises and to deny service because of an unsafe condition. The electric utility was refusing to connect a new residence because the main breaker and its panel enclosure (service equipment) was not adequately covered. The panel opening was apparently covered with a cardboard material. The electrician asserted that the manufacturer's panel cover would be installed after the sheetrock and painting work was completed.

In this case PUC staff supported the electric utility's position that it was right and prudent to perform verification checks of the customer's "service equipment" before the customer's facility was energized. Also, PUC staff affirmed that the utility had a clear safety obligation to refuse service until the service equipment was fully enclosed or guarded per National Electrical Code (NEC) and National Electrical Safety Code (NESC) requirements. The PUC also cautioned the utility to make sure that this practice is uniformly applied to all new customers.

Rationale: New customer electrical installations must comply with Oregon Building Code Division regulations (OAR Chapter 913, Division 305). These regulations adopt the NEC as the minimum standards for all building electrical wiring and equipment. PUC regulations and utilities tariffs also emphasize NEC compliance (see Attachment B, items D, E, and F.) and give the right to the utility to refuse if safe service cannot be given. Specifically, the NEC sets very clear standards that energized parts shall be enclosed or guarded. These standards are covered in NEC sections 230-62, 110-17, and 110-12a (see Attachment A).

Moreover, the electric utility has duties under NESC Rules 214, 420 and 441 (see Attachment B) to make sure that it is not knowingly creating or leaving an electrical hazard. Therefore, the utility has obligations to take safety precautions including inspections and tests before it energizes a new service installation and before leaving the customer's premises. Although the specific precautions are not prescribed, checking service equipment ratings, verifying that the main breaker(s) is turned "OFF" and the service equipment is fully enclosed and grounded are reasonable and prudent measures by the utility.

Per NEMA national standards indoor electrical equipment enclosures and covers must be designed to: (1) prevent personnel and public contact against accidental contact with enclosed electrical energized parts; and, (2) protect internal devices from external conditions. Cardboard, a combustible material of

questionable strength, is not a suitable material that meets either of these two conditions, especially on a construction site where unqualified workers, children or other members of the public may be present.

The process of energizing a new service is an especially critical time when there is a higher probability for electrical faults. Such short-circuits can result from faulty equipment, human errors in wiring, vandalism, or the presence of small animals or foreign materials, etc. Consequently, before the service is connected by the utility, the service equipment must be fully enclosed or guarded to prevent accidental contact and to contain and limit any fault, should it occur. In all probablility a manufacturer of the panel will not guarantee its equipment against personal injury or property damage if an unauthorized cover (i.e. cardboard) is used. The guarantee would only apply if the panel is completely assembled with the cover that was designed and tested by the manufacturer, and approved by UL or another authorized testing laboratory.

PUC safety staff agrees that utilities should promote "metermains" in new installations to reduce utility involvement inside of buildings and to improve safety. Safety is improved by providing an outside main disconnect that can be used when the meter is initially installed or when later reconnected. It also provides a outside disconnecting means that can be used in case of fire or when the house wiring needs to be deenergized. Moreover, the metermain provides for better overload and short-circuit protection for the customer's wiring. Although a metermain may cost more than a standard meter socket, it offers benefits that oftentimes offsets the extra cost. For example, it allows the circuit panel to be more centrally located within a home or small business, reducing branch circuit wiring costs, and improving power quality and energy efficiency for the customer's equipment.

In issuing this letter the PUC is in no way implying that it is the duty of electrical utilities to approve or to assume NEC inspection responsibility for the customer electrical service equipment. That responsibility must remain with the customer, the customer's electrician and the local building codes organization having enforcement jurisdiction. However, PUC staff believes that it is a good practice that the company's service personnel perform a safety check of customer equipment that they will be energizing before any new service connection is made. One of those checks should be to make sure that the service equipment covers are fastened in place and no energized part is exposed. If this type of safety violation or other NEC violations are found that threaten life or property the connection should be denied and the customer notified of the hazards involved.

I hope this information is of help to your company in affirming or revising your new customer connection practices. Please forward this letter to the appropriate operations and engineering personnel for review in your company. If you have any questions or comments about this letter, please do not hesitate to call Bob Sipler at (503) 373-7451 or me.

for Jerome A. Murray
Program Manager
Utility Safety Section
(503) 378-6626

Attachments
cc: Junior Owings, Oregon Building Codes Division
Mike L. Mitchell, OR-OSHA

	Reference	Regulation, Code, or Standards Language
National Electrical Code (NEC) - minimum prescribed standard for electrical wiring and equipment within *buildings (enforced by the Oregon Building Codes Division)*		
(a)	NEC Article 100	Definition of Service Equipment: The necessary equipment, usually consisting of a circuit breaker or switch or fuses, and their accessories, located near the point of entrance of supply conductors to a building or other structure, or an otherwise defined area, and intended to constitute the main control and means of cutoff of the supply.
(b)	NEC Section 230-62	Service Equipment—Enclosed or Guarded Energized parts of service equipment shall be enclosed as specified in (a) below, or guarded as specified in (b) below. (a) Enclosed. Energized parts shall be enclosed so that they will not be exposed to accidental contact or guarded as specified in (b) below. (b) Guarded. Energized parts that are not enclosed shall be installed on a switchboard, panelboard, or control board and guarded in accordance with Sections 110-17 and 110-18. Where energized parts are guarded as provide in Sections 110-17(a)(1) and (a)(2), a means for locking or sealing doors to energized parts shall be provided.
(c)	NEC Section 110-17 (a)	Guarding of Live Parts (600 Volts, Nominal, or Less) (a) Live Parts Guarded Against Accidental Contact. Except as elsewhere required or permitted by this Code, live parts of electric equipment operating at 50 Volts or more shall be guarded against accidental contact by approved enclosures or by the following: (1) By location in a room, vault, or similar enclosure that is accessible only to qualified persons. (2) By suitable permanent, substantial partitions or screens so arranged that only qualified persons will have access to the space within reach of the live parts. Any openings ins such partitions or screens shall be so sized and located that persons are not likely to come into accidental contact with the live parts or to bring conducting objects into contact with them. (3) By location on a suitable balcony, gallery, or platform so elevated and arranged as to exclude unqualified persons. (4) By elevation of 8 feet or more above the floor or other working space. (b) Prevent Physical Damage. In locations where electric equipment is likely to exposed to physical damage, enclosures or guards shall be so arranged and of such strength as to prevent such damage. (c) Warning Signs. Entrances to rooms and other guarded locations containing exposed live parts shall be marked with conspicuous warning signs forbidding unqualified persons to enter.
(d)	NEC Section 110-3(b)	Installation and Use. Listed or labeled equipment shall be installed, used, or both, in accordance with any instructions included in the listing or labeling..
(e)	NEC Section 110-9	Interrupting Rating. Equipment intended to break current at fault levels shall have an interrupting rating sufficient for the nominal circuit voltage and the current that is available at the line terminals of the equipment,
(f)	NEC Section 110-12 (partial).	Mechanical Execution of Work. Electric equipment shall be installed in a neat and workmanlike manner. (a) Unused Openings. Unused openings in boxes, raceways, auxiliary gutters, cabinets, equipment cases or housings shall be effectively closed to afford protection substantially equivalent to the wall of the equipment.

Oregon PUC Regulations and Utility Tariffs and Standards Attachment B

	Reference	*Regulation, Code, or Standards Language*
	National Electrical Safety Code (NESC) - minimum prescribed standard for the construction, maintenance of electrical supply and signal lines (authorized by ORS 757.035 and OAR 860-24-0010 & enforced by OPUC (Note 1)	
A.	NESC Rule 214 A.1. & Rule 313.A.1. (Note 1)	Initial Compliance with NESC Rules Lines and equipment shall comply with these safety rules when placed in service.
B.	NESC Rule 420.C.4. (Note 1)	Safeguarding Oneself (Lineman) and Others Employees who work on or in the vicinity of energized lines shall consider all of the effects of their actions, taking into account their own safety as well as the safety of other employees on the job site, or on some other part of the affected electric system, the property of others, and the public in general.
C.	NESC Rule 441(first sentence) (Note 1)	Energized Conductors or Parts Employees shall not approach, or knowingly permit others to approach, any exposed ungrounded part normally energized except as permitted by this rule.
	Oregon Administrative Rules - Grounds for Refusal of Service	
D.	OAR 860-24-0335 (Note 2)	(6) Any utility shall refuse to provide service if a customer or applicant has not complied with state and municipal codes and regulations governing service and with the rules and regulations of the utility. (7) A utility shall not accept an application for service or materially change service to a customer, if, in the best judgment of the utility, it does not have adequate facilities to render the service applied for, or if the desired service is of a character that is likely to unfavorably affect service to other customers. (8) A utility shall refuse to serve a customer or applicant, if, in the best judgment of the utility, the facilities of the customer or applicant are of such a character that safe and satisfactory service cannot be given.
	Utility Tariffs and Standards	
E.	Typical Utility Tariff for PGE, PP&L and IPC) (Note 3)	Condition for Receiving Service The applicant's wiring and equipment must conform with applicable municipal, county and state requirements, and to accepted standards of the NESC, NEC, Company's "Electric Service Requirements" and Company standards and practices before the Company will provide service. As required by law, a certificate of electrical inspection must be obtained by the Applicant before the Company will provide service.
F.	PGE/PP&L Electric Service Requirements Book (Section 1.6) (Note 3)	Customer's Responsibility for Safety ... The customer shall comply with all laws and regulations to protect themselves, their family, their employees, the Power Company and its employees, contractors, and all third parties from injury, loss, or damage.

Notes

1. Applies to all electrical utilities and supply lines within the State of Oregon.
2. Applies to investor-owned electric utilities regulated by the Oregon PUC.
3. Applies to only those utilities listed with this note.

85

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

January 8, 1998

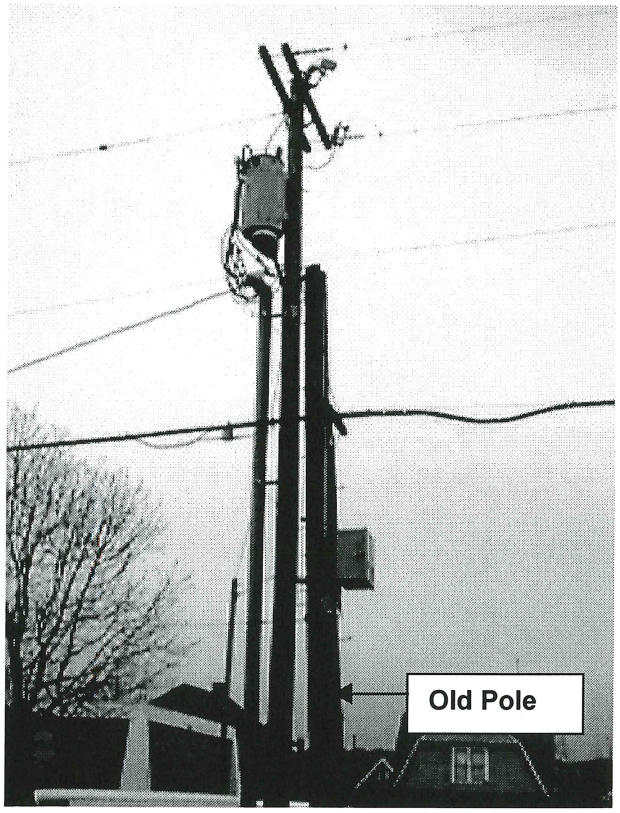
TO: ALL OREGON ELECTRIC, TELEPHONE AND CABLE TELEVISION UTILITIES

RE: Pole transfers and joint-use cooperation

Pole attachments need to be promptly transferred after new replacement poles have been set. The entire process, including the removal of the old pole, should be completed within 90 days. As long as the old pole remains, there is increased exposure to injury both for line personnel and the public. Transfer delays also contribute to utility unsightliness and increased customer complaints.

During safety inspections PUC safety staff have been focusing more on pole transfer cooperation to make sure that the 90-day deadline is being met by all joint-users. We have also been reviewing notification procedures and work progress tracking.

The picture below involves a recent PUC citation. It illustrates a pole transfer that should have been completed more than a year ago. Note the new replacement pole (with transformer and crossarms) and the old pole still tied off with a rope to its right. Also, observe that a telecommunication cable and cabinet are still attached to the old pole. The installation contains violations of NESC Rules 236 (climbing space obstructed), 234.B. (inadequate cable clearances to an unattached structure) and 214.A.5. (known unsafe conditions not corrected in a prompt manner).



To help with pole transfer coordination, there is a new communication system that may be beneficial to your organization and service area. It is called the National Joint Utility Notification System or NJUNS, which utilizes the Internet to speed and simplify communications between pole owners and joint-users.

Areas in ten states are now using NJUNS to improve notification and tracking efficiency for pole transfers.

The key benefits of NJUNS to pole joint-users are:

1. Provides an efficient system to exchange pole transfer information between entities that attach to poles.
2. Assists utilities in meeting their notification obligations per 1996 Federal Telecommunications Act and Oregon PUC regulations and policies.
3. Provides a forum to improve joint-use cooperation and coordination.
4. Establishes a tracking and monitoring system for work-in-progress.
5. Reduces the paperwork.

Besides pole transfer communications, NJUNS is now being successfully used in the Portland area for new pole attachment permitting, both for request and approval. The Oregon NJUNS Committee is also working to expand capabilities to include communications for joint-trenching and for highway and road permitting.

Attached is an information sheet, which provides more details about NJUNS. Note that you can directly access the NJUNS web page at "**www.njuns.com.**"

In closing, PUC staff asks for your cooperation in completing transfers and pole removals within 90 days. If your pole transfer system needs improvement, I would encourage you to review the Portland NJUNS system and consider starting a NJUNS system in your area. For more information about the Portland NJUNS system, please contact: Patti Lama, Portland General Electric, ((503) 570-4421); Craig Eyestone, TCI Cablevision ((503) 605-4831); John Bachmeier, US WEST Communications ((503) 242-8972); or myself.

Jerome A. Murray
Program Manager
Utility Safety and Reliability
(503) 378-6626
fax (503) 373-7752
e-mail: jerry.murray@state.or.us

Attachment

Overview

Since many States have mandated, for public safety, that the Utilities Industry become better at coordinating the transfer and removal of joint use facilities, the National Joint Use Notification System has been developed.

The system was originally implemented by several utility companies in the Southeastern United States, as strictly a database system for pole transfer notification. Since that time the system has grown into a multipurpose system that allows not only for pole transfers but for many other user friendly services.

The Internet is used as the backbone for the transfer of information and allows for multi-user access, with information being transmitted at hyper-speed and with amazing accuracy.

All it takes is an Internet hook up and you too can join the Information Super Highway.

Designed by Oregon Joint Notification Committee

NJUNS

National Joint Utilities Notification System

We are now on the

World Wide Web

Electronic Notification for

Pole Transfer Coordination

Joint Use Permitting

Highway Permitting

Joint Trench Coordination

Search and Report Capabilities

POLE TRANSFERS

The pole transfer menu allows for the entry of all pertinent information, e.g. - map name, pole location, type of work needed, who needs to do what and timing of the project.

When the ticket has been entered, the system automatically routes it to all involved utilities. As the work progresses, the ticket is forwarded to the next utility with a required action.

If information is needed during the process, anyone can retrieve the ticket and check on the progress.

JOINT TRENCH COORDINATION

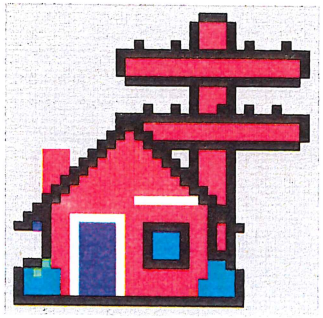
This menu, like the pole transfer, is used for the coordination of joint use trenching.

It provides for all important information to be shared by all involved utilities, with an on-line E-Mail notification system.

HIGHWAY/ROAD PERMITS

This function allows processing highway and road permits right on-line via the Internet. Think of the time that can be saved with this type of a distribution system.

Just fill in the necessary information, attach a sketch and send the permit on its way for rapid processing, no mailing delays, no waiting for someone to type the form and no getting lost on someone's desk.



POLE ATTACHMENT PERMITS

This menu is used in the permit process to attach to another utility's pole. Again the menu handles all required information and allows ample space for remarks. Some of the included items are: pole/map numbers, pole height and class, year set, attachment height, anchoring, etc.

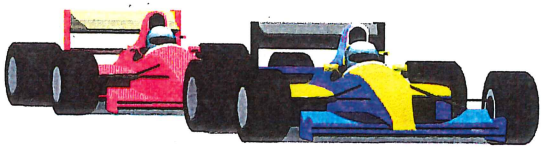
The ability to attach a sketch is also available.

POLE REPORTS & SEARCHES

Pole reports provides for late notifications, incomplete job steps, and many other useful reports.

The search function allows for searching by any item of information that is available on the form.

WOULD YOU LIKE TO TAKE IT FOR A TEST DRIVE??



You can find all the forms and information by logging on to the Internet, then type "www.njuns.com" at the http:\\ prompt.

When it asks for Account:, type "ptxxx", then "test" in the member name, and finally "test" in the password.

You can check out all the forms, although you will not be able to fill out the form in its entirety.

For further info contact:

Annette Albert - GTE
503 531-8445
Patti Lama - PGE
503 590-1377

97 (86)

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

January 28, 1998

TO: ALL OREGON ELECTRIC, TELEPHONE, AND CABLE TV UTILITIES/OPERATORS

RE: Deadline for National Electrical Safety Code (NESC) Change Proposal

Change can be a good thing! You may find this a little hard to believe. Most of us are feeling overloaded from all the changes we're experiencing.

In Oregon, we've made an effort to have a single safety-based standard for the utility industry, the NESC. The American National Standards Institute (through IEEE, in this case) works hard to keep its standards and codes up to date. The NESC has a regular cycle when changes are proposed, evaluated, and adopted.

The revision cycle was three years. This was believed to be too frequent by a majority of industry participants. The cycle was extended to four years for the present edition and will be five years for subsequent revisions (1993-1997-2002-2007, etc.).

I wanted to let you know that a deadline is coming up. If you want to propose a change for the 2002 NESC, you have less than six months. The deadline is July 17, 1998. The procedure, form, and schedule are included in the 1997 NESC on pages 259-262.

Managers, please pass this letter on to your engineers, designers, and crews who work regularly with the code. If I can be of assistance, feel free to contact me.

Bob Sipler
Sr. Utility Analyst
Utility Safety and Reliability Section
Electric & Natural Gas Division
(503) 373-7451
Fax: (503) 373-7752
E-mail: bob.sipler@state.or.us

1998 — [redacted] 87

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

April 7, 1998

TO: ALL ELECTRIC, TELEPHONE, AND CABLE TV UTILITIES AND OPERATORS

Safety education is one of our most important concerns. Results—particularly for accidents that have been prevented—may be hard to fully quantify, but one cannot overstate the importance of those safety education efforts. They literally mean life to individuals saved from preventable accidents. Your success also touches you on a very personal level, because the lives saved are often the customers and employees you work with on a regular basis.

The Commission's goal in providing you with this complimentary copy of the *1997 Utility Electric Contact Incident Report* is to present our most up-to-date safety data for 1997, along with useful collected data for previous years. With this information, all of us can better direct our safety efforts in the years ahead.

In the midst of the tremendous changes that we are all experiencing and the many demands made on our time, I hope that you and other members of your organization will be able to review the enclosed report. With a proactive approach to safety education and accident prevention, we will continue to save lives and prevent needless accidents.

If I can provide any additional information, feel free to call or e-mail me. I also welcome any ideas you may have to improve this yearly report.

Bob Sipler
Sr. Utility Analyst
Utility Safety and Reliability Section
Electric & Natural Gas Division
(503) 373-7451
Fax: (503) 373-7752
E-mail: bob.sipler@state.or.us

f:sipler:ltr4-7-98.doc

Enclosure: Report

1998-88

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

April 21, 1998

TO: OREGON'S ELECTRIC UTILITIES

RE: FEMA/OEM Report

What happens when a disaster strikes? To a large degree, it depends on what preparations were made ahead of time.

Electric utilities seem to be experts in responding to natural disasters. Most have disaster plans and have trained both employees and customers on how to prepare and what actions to take. Routine inspection and maintenance programs also give the system the best chance to avoid or limit damage. Engineering improvements and better materials also help.

On October 7, 1997, FEMA (Federal Emergency Management Agency) and OEM (Oregon Emergency Management) called together an Interagency Hazard Mitigation Team (IHMT) meeting to discuss the December 10-12, 1995, windstorm. This storm resulted in 10 Oregon counties being declared disaster areas by President Clinton. Many of Oregon's 37 electric utilities sent representatives to participate in this meeting. Some of these folks continued to help the IHMT through the entire process of preparing the enclosed report.

The report focuses on a number of areas that will mitigate windstorm damage. Some of the areas are highlighted below:

1. Enhancement of tree trimming programs (page 20).

2. Community outreach programs to prevent power line tree interference (pages 18-20).

3. Grade school education (page 15).

4. Better pole joint-use coordination (page 12).

5. Support of Oregon Utility Coordination Council, Oregon Utility Safety Committee and the Forestland Power Line Coalition.

98-89

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

June 5, 1998

TO: ALL OREGON ELECTRIC UTILITIES AND MAJOR POLE-OWNERS

RE: Introduction of new OPUC employee, John Wallace.

Upon the occasion of Jim Stickles retirement from the Oregon PUC, I was hired to replace him as a Utility Operations Analyst in the Safety and Reliability Section. As stated, my name is John Wallace. I came to the PUC from a 26-year career with PacifiCorp. I was trained as a Journeyman Lineman and worked at that craft for a number of years, before moving into a variety of management positions. Most recently, I served eight years as a Labor Relations Manager. Prior to that, I worked for six years in various districts as an operations supervisor and also spent two years as a regional safety coordinator.

I believe that my background and experience in this industry enable me to develop an understanding of the problems you face on a daily basis, in operating your systems in a constantly changing environment. I'm confident that we will function as allies in ensuring that those systems are operated safely and reliably.

By yearend, it is my intent to individually meet with representatives of all 37 electric utilities that operate within the State of Oregon. Prior to those meetings, it would help me a great deal if you could take the time to fill out the attached questionnaire. I am hoping to use the requested information to assemble a database for program tracking, scheduling, etc. It will also be invaluable to me as a tool to learn more about your systems and organization, prior to visiting you personally. Please return the completed questionnaire by July 6, 1998. For those of you with direct reports, who function as independent operators of individual districts, please copy this document and attachments to them, for their response.

For your review, because monitoring these will constitute the primary portion of my field activity, I have also attached copies of OPUC policy

letters on Electric Line Inspection, Tree to Power Line Clearances, Safety Provisions for Joint-Use of Poles, and Electric Safety Enforcement.

Thanks for your cooperation in this matter. I'm looking forward to meeting with each of you in the near future.

John E. Wallace
Utility Operations Analyst
Utility Safety and Reliability Section
(503) 373-1016
fax: (503) 373-7752
e-mail: john.e.wallace@state.or.us

Attachments

Oregon PUC SAFETY INSPECTION QUESTIONNAIRE

I. Please identify the employee who will be the primary contact when OPUC Safety Staff needs to contact a representative of your utility. For those with multiple locations, please identify that employee who will be the primary contact at each location.

Name: _____ *Title:* _____

Address: _____ *Phone:* _____

_____ *FAX #:* _____

City-State-Zip: _____ *E-mail:* _____

II. CONSTRUCTION STANDARDS

A. Does your utility have **written** standards for line construction? ☐ Yes ☐ No

B. Does your utility have **written** customer service connection standards? ☐ Yes ☐ No

C. Does your utility have **written** construction standards that must be followed by entities that attach to your poles? ☐ Yes ☐ No

D. Have the above standards been updated to comply with 1997 National Electrical Safety Code (NESC)? ☐ Yes ☐ No

If "No" for any of the above, describe the basis for design of your facilities.

III. NEW, REBUILT, AND REPAIRED INSTALLATIONS (See 5a of OPUC Line Inspection Policy.)

A. Is crew work checked for compliance with the NESC and Utility Standards before being placed into service?

☐ Yes ☐ No By whom? _____

B. Are utility managers performing regular quality assurance checks of crew work? ☐ Yes ☐ No

Approximately what percent is quality assurance checked? _____%
Are records kept of the quality assurance checks? ☐ Yes ☐ No

C. Does your utility have a **written** policy or standard practice concerning the inspection of construction work? ☐ Yes ☐ No
If you operate under a standard practice, please describe:

IV. PUBLIC SAFETY INSPECTIONS (See 5b of OPUC Line Inspection Policy.)

A. Does your utility have a **written** policy or standard practice for performing public safety inspections? ☐ Yes ☐ No
If you operate under a standard practice, please describe.

B. Are cyclic public safety inspections being performed by your utility? ☐ Yes ☐ No

What percent of the system is completed each year? _____%

C. Are records kept of public safety inspections? ☐ Yes ☐ No

D. Are management quality assurance checks performed of each inspector's work? ☐ Yes ☐ No

V. DETAILED FACILITY INSPECTIONS (See 5c of OPUC Line Inspection Policy.)

A. Does your utility have a **written** policy or standard practice for performing detailed facility inspections?
☐ Yes ☐ No
If you operate under a standard practice, please describe.

B. Are cyclic detailed facility inspections being performed over your entire system? ☐ Yes ☐ No
What percent of your system is covered yearly by this program? _____%

C. Are management quality assurance checks performed of each inspector's work? ☐ Yes ☐ No

D. Are records kept of the detailed facility inspections? ☐ Yes ☐ No
Are records kept of the management quality assurance checks? ☐ Yes ☐ No

VI. SUBSTATION INSPECTIONS (See NESC Rule 121.)

A. Does your system have substations that your utility is responsible for? ☐ Yes ☐ No
If yes, how many substations are involved? _____ Also, answer B, C, and D below.

B. Does your utility have a **written** policy or standard practice for performing substation inspections?
☐ Yes ☐ No
If you operate under a standard practice, please describe.

C. How often are the substations regularly inspected? ☐ Monthly ☐ Other, specify _____

D. Are records kept of these inspections? ☐ Yes ☐ No

VII. *TESTING AND REPLACEMENT OF POLES AND STRUCTURES* (See NESC Rule 214 and NESC Sections 24, 25, and 26.)

A. Does your utility have a systematic cyclic pole testing program? ☐ Yes ☐ No

B. Does your utility have a **written** policy or standard practice for pole testing and replacement?
☐ Yes ☐ No
If you operate under a standard practice, please describe.

C. Does your utility follow accepted industry standards (for example, REA Bulletin 161-4) which address each of the following: excavation, boring, sounding, and visual inspection? ☐ Yes ☐ No

D. How long is each pole-testing cycle? _____

E. Are poles treated when inspections are done? ☐ Yes ☐ No

F. Are records kept of these tests? ☐ Yes ☐ No

G. Approximately how many poles are on your system? Transmission: _____ Distribution: _____

VIII. TREE CLEARANCE PROGRAM (See OPUC Tree Trimming Policy.)

A. Does your utility have a cyclic tree clearance program for covering the entire system? ☐ Yes ☐ No

B. What is the average cycle length (in years) for your program? _____

VIII. TREE CLEARANCE PROGRAM, continued

C. Does your utility have a **written** policy or standard practice for your tree clearance program?
☐ Yes ☐ No
If you operate under a standard practice, please describe.

IX. ACCIDENT REPORTS
(See Oregon Administrative Rule 860-028-0005.)

A. Does your utility routinely report all required injury, outage and damage incidents to the Oregon PUC?
☐ Yes ☐ No

X. JOINT-USE COORDINATION AND COOPERATION

A. Please identify those other utilities and entities with whom you share space on your own poles. (List only those utilities/entities with 20 or more attachments.):

Telephone: _____

CATV: _____

Government: _____

Other: _____

B. Please identify those other utilities and entities that own poles and structures to which your utility has attached high voltage line facilities. _____

_____

B. Does your utility have a **written** procedure for pole attachment permitting and joint-use communications for the poles you own? ☐ Yes ☐ No

C. Are you aware of a new electronic notification system called NJUNS (National Joint Utilities Notification System)? ☐ Yes ☐ No If so, are you presently using the system? ☐ Yes ☐ No

D. Does your utility actively participate in all local utility coordination councils within your service areas?
☐ Yes ☐ No

E. Who is your company's main contact person for pole attachment permitting, coordination and issues?

_____ Phone # _____ e-mail: _____

'tility Representative: _____ Title: _____

Date: _____

Oregon Public Utility Commission
Staff Policy

Electric Line Inspection Requirements For 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

Lines - 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.)

Utility Operator - 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.

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 employees 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:

a. 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 November 1987, Revised November 1989)

Oregon Public Utility Commission
Staff Policy

Tree To Power Line Clearances

PURPOSE

The purpose of this policy is to modify and define the tree trimming rules of ANSI C2, National Electrical Safety Code (NESC) as interpreted by the administrative authority (Reference--NESC Rules 012, 013, and 218). This policy is to set forth the specifications and guidelines relating to tree trimming, tree removal, and line clearance to provide for reasonable service continuity, safety to the public, and to guard against forest fire damage caused by supply conductors.

POLICY

Trees which may interfere or do interfere with supply conductors should be trimmed or removed.

A. Specifications and guidelines for line clearances.

1. The necessary clearance of supply lines from trees is determined by:

   a. Voltage, location, and importance of individual line.

   b. The height of the poles and line.

   c. The growth habit and final appearance of the trees.

   d. Combined movement of trees and conductors under adverse weather conditions.

   e. Sag of conductors at elevated temperatures.

2. Concept:

   a. Transmission lines should have a minimum clearance of ten feet in all directions.

   b. Primary distribution lines.

      There should be a minimum 5-foot clearance between an energized high voltage distribution conductor and any part of a tree. This clearance may be reduced to three feet if the tree is not readily climbable (having sufficient handholds and footholds to permit an average person to climb easily without using a ladder or other special equipment).

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.

c. Secondary and/or service conductors (600 volts and below) should have at least 1-foot clearance. While extensive tree trimming or tree removal relating to these services is not expected, proper consideration must be given to possible conductor damage and service outages caused by trees, and appropriate measures taken.

B. Tree removal. Whenever justified, tree removal should be encouraged. Trees should be removed under the following conditions:

1. Trees located in school yards, playgrounds, parks, backlot construction areas, or other areas and which children may climb easily and contact overhead conductors.

2. Trees that have been topped under low-level primary and transmission circuits with no chance for a reasonable, natural development.

3. Trees that are unsightly because of excessive trimming and cannot be economically retrimmed.

4. Trees in rural areas along county roads and state highways which would eventually reach a primary or transmission line.

5. Fast-growing tree species located in suburban and urban areas, near homes or in landscaped areas which will eventually grow into transmission or distribution lines.

6. Trees, both live and dead, which are leaning toward the line and which would strike the line when falling.

(Issued before 1983; revised Jan. 1987)

I:Safety:Electric:Policies:Trees.doc

Oregon Public Utility Commission Policy

Safety Provisions for Joint-Use of Poles

The Public Utility Commission has adopted this policy as a reasonable and prudent practice to ensure safety of Oregon's overhead rights-of-way.

1. Purpose

The purpose of this policy is to ensure the safe and efficient use of overhead line rights-of-way. This policy establishes provisions necessary to ensure compliance with the National Electrical Safety Code (NESC) as required by ORS 757.035, OAR 860-024-0010 and OAR 860-034-0430 as interpreted by the administrative authority. Refer to applicable NESC rules, with a focus on rules 012, 013, 213, 214, 217, 220, 221, and 222.

2. Scope

This policy applies to all electric and telecommunication system owners or operators (including utilities), and other authorized entities that attach lines, equipment, or devices to joint-use poles.

3. Definitions (For other definitions, see the NESC Section 2, Definitions)

Attachment Project. Any addition, modification or removal of any electric supply line, signal line, device, apparatus, equipment, or structural member that materially changes the clearance, mechanical, structural, or electrical characteristics of the joint-pole installation. Maintenance replacements that do not modify the installation or affect other joint-pole users are intended to be exempted.

Joint-pole users. All utilities or entities with line, equipment, or device attachment(s) on a specified pole or joint-pole installation, including the pole owner and the electric joint-user.

Modifying entity. Any utility or entity planning or carrying out an attachment project to a pole installation(s).

4. Notification and Coordination

a. The modifying entity shall give prior written notification to the pole owner for each attachment project. The modifying entity shall receive written preauthorization from the pole owner before attaching. The notification shall be given in a timely manner to allow for ample engineering and coordination by affected joint-pole users. Sufficient coordination including submittal of project plans and exchange of information shall take place between joint-pole users so that the attachment does not create a NESC violation or conflict. Written notifications, authorizations, project plans and certifications shall be transmitted by paper or by electronic means using computers, fax, e-mail, Internet, etc.

b. Exception. Where NESC compliance can be assured, the modifying entity may be exempted from any of the written documentation provisions associated with prenotification, project plans, project certification or pole owner authorization at the pole-owner's discretion. This should only apply if the modifying entity has a written agreement with the pole owner that such submittals are unnecessary under specified conditions and limitations.

5. Engineering and Project Planning

Each attachment project shall involve sufficient planning by the modifying entity to ensure NESC compliance during construction and upon completion. The project plans shall include sufficient design drawings and specifications so that qualified personnel can safely make the attachments in compliance with the NESC and joint-pole agreements. Except as noted in paragraph 4.b., written project plans shall be submitted to the pole owner prior to commencing the attachment project.

6. Qualified Personnel

Joint-pole users shall only use trained qualified persons to work on joint-pole installations. Qualified persons shall be knowledgeable in applicable NESC rules and must be able to demonstrate competence as required by NESC rule 420.A.1. They shall also be trained to recognize and prevent NESC violations and conflicts, and to keep safe working clearances from energized lines and equipment.

7. Inspection, Maintenance and Compliance Responsibilities
(The below applies to both new and existing joint-pole installations.)

a. Each joint-pole user shall take appropriate means to ensure the safety of its lines and devices.

b. Each joint-pole user shall promptly respond to pole-owner notifications related to, but not limited to, maintenance, relocation, rearrangement, violations, or abandonment of joint-pole installations.

c. Except as noted in 4.b. above, upon completion of an attachment project, the modifying entity shall give written certification to the pole owner that the attachment project is complete and complies with the NESC.

d. Each joint-pole user shall conduct sufficient inspections and prompt repairs to ensure ongoing NESC compliance of its lines and facilities. In cases where discovered safety violations cannot be corrected safely or in a timely manner, the pole owner shall be notified promptly of the conditions.
(Also, refer to NESC rule 214 and PUC Staff policy on "Requirements for Line Inspection by Utility Operators.)

e. Each joint-pole user shall ensure that its employees and employed contractors are following project plans, joint-use agreements, standard practices, and NESC rules.

f. Joint-pole users that fail to promptly correct their NESC violations are responsible for costs including inspection, design, coordination, repair, etc. that the pole owner incurs in correcting such violations and in ensuring joint-use safety. Refer to OAR 860-022-0055(8).

8. Pole Owner Responsibilities

a. The pole owner must promptly respond to all notifications so that attachment projects and safety violation corrections are not unduly delayed. The pole owner may deny access if the attachment project will result in safety, reliability, and generally accepted engineering standards not being met.

b. Each pole owner should have written standard practices that address construction standards and communication protocols to be followed by joint-pole users. The standards should specify any obligations that exceed NESC regulations. These standards should also address communication methods and contacts for notifications, project plans, authorizations, and compliance certifications. These standards should be made readily available to requesting entities.

9. Electric Joint-Pole User Responsibilities

Special coordination is required for joint-use poles supporting high voltage lines (over 600 volts) where the poles are not owned by the electric joint-pole user. In such cases, the electric joint-pole user shall have agreements with the pole owner to ensure the structural integrity and safety of the electric lines.

10. Record-Keeping and Administration

Each joint-pole user shall perform the necessary administration and record-keeping to ensure that activities and responsibilities addressed in this policy and NESC Rule 214A-4 are being carried out.

Approved by Oregon Public Utility Commission on February 18, 1997

Oregon Public Utility Commission
Staff Policy

Electric Safety Enforcement

PURPOSE

This policy is to set guidelines related to electric supply and signal line operator inspections by PUC staff. For the purpose of this document, an operator is defined as 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.

POLICY

A. Inspection of Operators by PUC Staff

1. Priority in inspections will be given to those systems and plants with greater risk potential. The following factors will be considered in determining potential risk: the size of the plant or system and the number of customers it serves; the number of past accidents; and the extent of the operator's past violations.

2. Field inspections will include evaluations to ensure that operator is complying with the latest edition of the National Electric Safety Code (NESC) adopted by the Public Utility Commission. Inspections may include reviews of the operator's standard practices and records concerning design, construction, operation, maintenance, inspection, and emergency procedures.

B. Written Notice of Probable Violations

1. As soon as practical after an inspection where a probable violation was noted, a written inspection report by PUC staff listing all violations found will be issued. The report will contain a notice that a probable violation exists, a short description of the probable violation, and a citation to the rule(s) in point. The report will specify reasonable times for the operator to submit a response to the violation.[1]

2. A written response from the operator, pursuant to paragraph C below, must be received by the PUC within the time specified in the inspection report.

C. Responses Open to the Operator

1. After receiving the probable violation, the operator may:
   a. Correct the violation within the time allotted in the inspection report and notify the PUC staff of the action taken;

[1]Although PUC staff may specify a deadline for the operator to respond to the probable violation, the operator retains full responsibility to correct those violations cited in a prompt manner so that life and property are not endangered. (See NESC Rules 121A, 214A.5, and 313A.5.)

b. Submit a written plan of action indicating the action to be taken to correct the probable violation, including a schedule and the date when the completion of corrective action is anticipated; or[2]

c. Request an informal conference with the PUC staff.

2. If the plan of action is not acepted by PUC staff, or if the operator selects option c., an informal conference will be scheduled.

D. Informal Conference

A date, time, and place for the informal conference will be arranged. At the conference, the operator may explain his position and may present alternatives for remedying the probable violation. The operator and the PUC staff may agree on a plan to remedy the probable violation.

E. Referral to Commission

After receiving a response from the operator and after holding the informal conference, if any, or after receiving no response within the time specified in the inspection report, the PUC staff will determine whether to refer the case to the Public Utility Commission for formal action. In such case, the PUC staff shall notify the Commission of the response chosen by the operator and the result of the informal conference, if any.

F. Civil Penalties[3]

Civil penalties for failure to comply with PUC utility safety rules or regulations shall be based on the gravity of the violation, the extent of the operator's past violations, and other matters as justice may require.

G. Waivers

Upon formal application by an operator, the Public Utility Commission may grant a waiver from compliance with the utility safety regulations. The application shall include a statement of reasons why the regulations are not appropriate and why a waiver is consistent with sound electric and signal line safety practices.

---

[2]As soon as the corrective action for the violation is completed, the operator shall notify PUC staff of the final action taken.

[3]ORS 756.180 provides for the enjoining of a violation of the utility laws. ORS 757.990 provides for penalties for failure to comply with PUC safety rules or regulations of not less than $100, nor more than $10,000 for each such offense.

(Issued March 12, 1987)
I:Safety:Electric:Policies:Enforce.doc

99- #90

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

January 10, 1999

To: All Electric Utilities and Telephone Utilities and Cable Television Operators in Oregon

RE: Installation of Fiber-Optic Cable on Poles in the (Electrical) Supply Space

This letter is in regard to an issue raised by representatives of an Oregon electrical utility. Specifically, it involved the installation of a fiber-optic system within the confines of their service territory and owned by them. The fiber-optic cable would be attached to their poles in the electrical supply system space.

When they explained the installation and the type of cable they plan to use, OPUC staff could find no conflict with the provisions of the National Electrical Safety Code (NESC), insofar as placement on the pole was concerned. NESC Rule 230F1 allows for treatment of fiber-optic cable as part of the electrical supply system, particularly cable that is "entirely dielectric," as theirs will be.

The portion of the project that staff took issue with, and viewed as a potential violation of the NESC, was their intent to use personnel trained as telecommunications linemen to install the facilities in the electric supply space of the pole. NESC Rule 224A1 states that "Communication circuits located in the supply space shall be installed and maintained only by personnel authorized and qualified to work in the supply space in accordance with the applicable rules of Sections 42 and 44." OPUC staff interprets this to mean that communications workers are prohibited from working in the electric supply space unless they: (1) are qualified to do so, (2) use the (electric) supply employee work rules, and (3) have permission of the (electric) supply utility to do so. This intent is further demonstrated in Section 43 (Additional Rules for Communications Employees), Rule 432 (Joint-Use Structures) that states that when employees are working on jointly used poles or structures, they "shall not position themselves above the level of the lowest electrical supply conductor . . . ." In this case, because the fiber-optic cable, consistent with NESC Rule 230F1, is designed to be a part of the electrical supply system and is located within the supply space, it becomes an "electrical supply conductor."

The position of OPUC staff on this issue is as follows: Use of insufficiently trained workers in the supply space constitutes a violation of the NESC, as well as creates the potential for a significant safety hazard for the employees involved. It is imperative that employers remain aware of their responsibility to

provide training, thereby ensuring that their employees are in compliance with the NESC, Section 41. Likewise, employees must accept responsibility to perform only those tasks for which they are trained, equipped, authorized, and directed to perform, pursuant to the rules stated in NESC, Section 42. Finally, all the requirements of Section 44 are applicable to employees who perform work within the supply space.

The purpose of this letter is to prevent accidents, both to utility employees and members of the public. Unfortunately, electric contact incidents and injuries have been on the increase in the last couple of years for utility line workers. According to OPUC records, the state will set an unacceptable new record with at least 11 utility workers injured in 1998 because of contacts with electric supply lines. Please take special care to ensure that all workers on your respective systems are fully qualified, trained, and supervised. The rules and requirements of the NESC are not only state law, but are practical, time-tested rules designed to provide the proper latitude of safety for utility employees, as well as for members of the general public.

If you have any questions regarding NESC rules, feel free to call me (number below) or Bob Sipler at (503) 373-7451.

Jerome A. Murray
Program Manager
Utility Safety & Reliability Section
(503) 373-6626
e-mail: jerry.murray@state.or.us

p:utility safety:electric:policies:letters:AUL Fiber Optics 1-10-99.doc

cc: Marilyn Schuster, OR-OSHA

99-#91

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

June 4, 1999

TO: ALL OREGON ELECTRIC, TELEPHONE AND CABLE TV UTILITIES

Enclosed is our annual report on the electrical contact incidents reported to the Public Utility Commission in 1998.

As always, our purpose is to aid utilities in their efforts to prevent accidents. I'm sure you already know that preventing accidents isn't just the right thing to do, but it is also good business. This report can help you with facts about utility accidents that occurred last year, over the last 5 years and often over the last 20 years. When you know the **who, when, where, and how** information, then your accident prevention efforts can produce a greater effect.

Utility Managers, please route this report around to your employees in operations, safety and customer service. The accidents prevented could very possibly involve one of your line workers, a customer trimming a tree in their yard, or a local contractor operating a crane or a trencher.

Working together, we can prevent accidents!

Bob Sipler
Sr. Utility Analyst
Utility Safety and Reliability
(503) 373-7451

Enclosure

Chron 92

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

September 10, 1999

TO: UTILITY POLE OWNERS AND POLE USERS

RE: Nominations for PUC Pole Joint-Use Task Force

The 1999 Oregon Legislature directed the Public Utility Commission (PUC), via provisions of House Bill 2271 (Attachment A), to "establish a task force consisting of utility pole owners and utility pole users to advise the Commission on policies and regulations for accommodating changes in the utility industries." More specifically, this task force is directed per Section 9 of the House Bill to immediately address: (1) development of appropriate sanctions for unauthorized pole attachments, and (2) development of criteria for certification of compliance with laws regulating pole attachments. Such certification will qualify the licensees for rental reductions for their attachments.

Please regard this letter as notification from the PUC that the Pole Joint-use Task Force will be formed as quickly as possible. It is the intent of PUC Staff to form a group of no more than fifteen members, including PUC Staff. We believe that a small group will be productive and efficient, yet still afford adequate representation of all parties' interests.

If you have an interest in participating on the Task Force, please complete the nomination form (Attachment B) and return it with a cover letter signed by company/organization management. Also, if appropriate in your case, please contact and coordinate with the organization (i.e., ORECA, OPUDA, OCTA, OTA, etc.) representing your segment of the industry about nomination endorsement. I would appreciate receiving the nominations no later than September 24, 1999. Also, please include any comments or suggestions about how the Task Force should proceed in meeting its objectives.

For those who are not appointed to the Task Force, be assured that there will be opportunity to voice your concerns. There are a limited number of positions available and a large pool of qualified people who are potential members. Your segment of the industry will be represented on the Task Force and you will have the opportunity to communicate through your representative and/or PUC Staff during the process. Upon reaching agreement on proposals, the Task Force will invite comments on its work before submitting formal proposals to the Commission for rulemaking. This will afford yet another opportunity for your participation.

70th OREGON LEGISLATIVE ASSEMBLY--1999 Regular Session

NOTE: Matter within { + braces and plus signs + } in an amended section is new. Matter within { - braces and minus signs - } is existing law to be omitted. New sections are within { + braces and plus signs + } .

LC 1795

A-Engrossed
House Bill 2271
Ordered by the House May 7
Including House Amendments dated May 7

Ordered printed by the Speaker pursuant to House Rule 12.00A (5). Presession filed (at the request of House Interim Judiciary Committee for Senator Kevin Mannix)

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure.

Subjects { - electric cooperatives - } { + consumer-owned utilities + } to laws regulating utility pole attachments. Modifies provisions for determining rental rates for utility pole attachments. { + Establishes task force to advise on issues pertaining to utility poles. + }

A BILL FOR AN ACT

Relating to utility attachments; creating new provisions; and amending ORS 757.270, 757.276, 757.279, 757.282 and 757.285. Be It Enacted by the People of the State of Oregon:

SECTION 1. { + Sections 2 and 3 of this 1999 Act are added to and made a part of ORS 757.270 to 757.290. + }

SECTION 2. { + (1) Subject to applicable regulations of the Public Utility Commission, a person shall not establish an attachment to a pole or other facility of a public utility, telecommunications utility or consumer-owned utility unless the person has executed a contract with and has authorization from the utility allowing the attachment.
(2) A licensee shall report all pole attachments to the pole owner. A pole owner may impose on a licensee a penalty charge for failing to report an attachment. The pole owner also may charge the licensee for any expenses incurred as a result of an unauthorized attachment or any attachment that exceeds safety limits established by rule of the commission. + }

SECTION 6. ORS 757.279 is amended to read:
757.279. (1) Whenever the Public Utility Commission of Oregon finds, after hearing had upon complaint by a licensee, a public utility, a telecommunications utility or a { - people's utility district - } { + consumer-owned utility + } that the rates, terms or conditions demanded, exacted, charged or collected in connection with attachments or availability of surplus space for such attachments are unjust or unreasonable, or that such rates or charges are insufficient to yield a reasonable compensation for the attachment and the costs of administering the same, the commission shall determine the just and reasonable rates, terms and conditions thereafter to be observed and in force and shall fix the same by order. In determining and fixing such rates, terms and conditions, the commission shall consider the interest of the customers of the licensee, as well as the interest of the customers of the public utility, telecommunications utility or { - people's utility district which - } { + consumer-owned utility that + } owns the facility upon which the attachment is made.
(2) When the order applies to a { - people's utility district - } { + consumer-owned utility + }, the order shall also provide for payment by the parties of the cost of the hearing. The payment shall be made in a manner which the commission considers equitable.

SECTION 7. ORS 757.282 is amended to read:
757.282. { + (1) + } A just and reasonable rate shall { - assure - } { + ensure + } the public utility, telecommunications utility or { - the people's utility district - } { + consumer-owned utility + } the recovery from the licensee of not less than all the additional costs of providing and maintaining pole attachment space for the licensee nor more than the actual capital and operating expenses, including just compensation, of the public utility, telecommunications utility or { - people's utility district - } { + consumer-owned utility + } attributable to that portion of the pole, duct or conduit used for the pole attachment, including a share of the required support and clearance space in proportion to the space used for pole attachment above minimum attachment grade level, as compared to all other uses made of the subject facilities, and uses { - which - } { + that + } remain available to the owner or owners of the subject facilities.
{ + (2) A licensee shall receive a rental deduction if the licensee is in compliance with rules adopted by the Public Utility Commission for certifying compliance with the laws regulating pole attachments. A licensee is eligible for the rental reduction unless the commission or the utility authorizing the attachment notifies the licensee in writing that the licensee has failed to comply with either the commission's rules or the terms of a contract between the licensee and the utility authorizing the attachment.
(3) For purposes of determining the rental rate for a pole attachment, the usable space on the pole shall include 20 inches of safety clearance space between communication circuits and electric circuits, provided the licensee is in compliance with rules and agreements as described in subsection (2) of this section. + }

SECTION 8. ORS 757.285 is amended to read:
757.285. Agreements regarding rates, terms and conditions of attachments shall be deemed to be just, fair and reasonable, unless the Public Utility Commission finds upon

PUC Pole Joint-use Task Force Nomination

Mail to: Jerry Murray, Program Manager
Oregon Public Utility Commission
550 Capitol Street NE, Suite 215
Salem OR 97301-2551
Phone (503) 378-6626
Fax (503) 373-7752
e-mail: jerry.murray@state.or.us

I request to have the nominee below be on the PUC's Pole Joint-use Task Force. The following information is relevant to the nomination:

1. Name of Nominee to Task Force:_____
2. Title:_____
3. Company/Organization:_____
4. Address:_____

_____

5. Phone #:_____
6. FAX #:_____
7. Pager #_____
8. E-mail:_____
9. Other organizations/associations that the Nominee person will be representing (i.e., OTA, OCTA, League of Oregon Cities, ORECA, OPUDA, OMEU, etc.):_____

_____

10. If not chosen to be on the Task Force, does the Nominee want to be on the Task Force Interested Parties List to receive future announcements? (Yes/No) _____
11. Comments/Suggestions for meeting task force objectives:_____

_____

_____

Interested Party to PUC Pole Joint-use Task Force

Mail to: Jerry Murray, Program Manager
Oregon Public Utility Commission
550 Capitol Street NE, Suite 215
Salem OR 97301-2551
Phone (503) 378-6626
Fax (503) 373-7752
e-mail: jerry.murray@state.or.us

I request to be put on the interested parties list for announcements and information on the PUC's Pole Joint-use Task Force.

1. Name:_____
2. Title:_____
3. Company/Organization:_____
4. Address:_____

_____

5. Phone #:_____
6. FAX #:_____
7. E-mail:_____
8. Comments/Suggestions for meeting task force objectives:_____

_____

_____

_____

_____

_____

Oregon
John A. Kitzhaber, M.D., Governor

Public Utility Commission
550 Capitol Street NE
Salem, OR 97310-1380
(503) 373-7394

September 28, 1999

To: All electric utilities in Oregon.

Re: First annual Oregon tree trimming conference.

We want to make you aware, if you haven't already heard about it via the utility "grapevine", of the first annual Oregon tree trimming conference. It is scheduled for October 27-28 in Eugene, Oregon. The attached flyer has all the details, including registration information.

During discussions last year between representatives of PacifiCorp, Portland General Electric and OPUC staff members, it was generally recognized that this type of conference is something that has been sorely needed. OPUC staff would like to take the opportunity to commend both companies for their willingness to alternately host and chair this conference for the next ten years.

PGE agreed to have Dave Johnson chair the first meeting. Dave has done a great job of assembling a support group for planning and logistics. As you can see from the schedule, they have put together a first class program for a two-day conference.

We urge you to send a representative from your organization. We believe that this sort of conference will go a long way toward developing uniform application of tree trimming standards and practices across the state and should result in safer rights of way for utility workers and customers alike. See you there!

John E. Wallace

John E. Wallace
Utility Operations Analyst
Utility Safety & Reliability Section
(503) 373-1016
e-mail: john.wallace@state.or.us

attachment