Oregon Joint Use Association Inspection Correction Efficiency ICE Committee

Prepared for and Presented to
OPUC Safety Staff
October 22, 2015
Presented on behalf of OJUA by
Gary Lee & Janet Ebright

Ice Committee Members

- **Chairs:**
- Gary Lee (Charter)
- Janet Ebright (PGE)

- **Staff:**
- Genoa Ingram

The OJUA Board represents over 55 member companies and organizations, including some from outside of Oregon.

- **Committee Members:**
- Terry Blanc, Tillamook PUD
- Jerry Donovan, PGE
- Jeff Kent, PacifiCorp
- Wally Riggs, Frontier
- Timothy Hesselman, Frontier
- Tom Jorgenson, CenturyLink
- Sanjeev King, Springfield Utility Board
- Todd Gover, Bend Broadband
- Scott Rosenbalm, McMinnville Water & Light
- Stuart Sloan, Consumers Power
- Linda Spurgeon, Coos-Curry Electric
- Scott Wheeler, Comcast
- *Intermittent attendance as needed & Input to deliverables*: OPUC Safety Staff

Mission Statement

- The misalignment of inspection schedules and differing inspection criteria results in increased administrative burden and reduces operational efficiency without commensurately increasing safety.

Goals for Committee

- The Committee is building a framework for all parties on the pole to develop and utilize for Joint Inspection programs
  - Maintain compliance with the intent of the OARs
  - Inspection over ten years, most corrections in two years
  - List of ways to reduce costs to administer Inspection-Correction Programs
    - One Inspector to the pole!

Benefits of Joint Inspection

A successful collaborative inspection program should provide these benefits:

- Build trust, develop relationships, and improve coordination with all participating entities.
- Clarified expectations among parties.
- Cost savings through increased efficiency.
- Reduced number of visits to the pole.
- Improved customer perception.
- Established geographic areas that are "clean" (providing correction program follows inspection program).
- Increased compliance.

ICE Deliverables – Removing Barriers to Joint Inspection

Develop Joint Inspection best practices

- Common ten-year Schedule Methodology for State of Oregon
- Map of ten-year Schedule for State of Oregon
  - (Subcommittee work in progress)
- Joint Inspection/Correction Best Practices
  - (Subcommittee work in progress)
- Industry Education to Maximize Participation
  - Participation will not be a regulatory mandate. Work to educate on benefits.
- Pilot programs over the next two years to further vet and refine recommendations.
  - Discuss required coordination between parties for successful inspections at the inception of next ten-year cycle, so all entities 'start on time'.

Common Ten-Year Schedule for State of Oregon

Options for Consolidated Oregon Schedule:

The Committee reviewed several options for how to approach the concept of defining where each successive 10 percent areas for Joint Inspections would be defined for the next ten-year cycle.

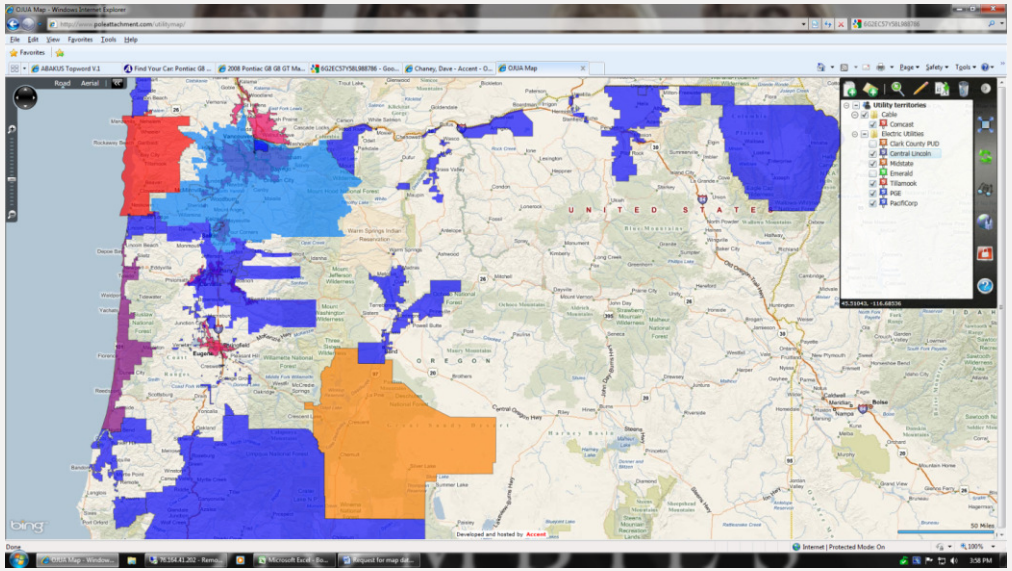
The option selected:

- Continue following the established ten-year cycle for power operators. Pole occupants would participate in the Joint Inspections in these areas, thus requiring only one visit to these poles. The areas would be displayed on the OJUA map with the aid of township and range grid overlay.

- All poles owned by both power and communications would be completed concurrently.
  - Each communication company (primarily telephone companies) would then coordinate the inspections of their poles in this same footprint with the operators on their poles. For efficiency, these inspections may be performed by the same contractor as the joint use poles while they are in the map grid, requiring only one visit to these facilities as well.

Map Development: 10-year cycle

Mapping Subcommittee Members:
Linda Spurgeon, Coos-Curry Electric, Chair
Jeff Kent, PacifiCorp
Russel Chilson, Frontier



- 2015 create and imbed ESRI platform webmap and start to collect service territory and each pole owners ten year inspection data to overlay including multiple basemap presentations, simple querying, markup, and printing capabilities replacing the older OJUA mapping platform.
- 2016 Planned Enhancements include:
  - Ability to model impact of joint inspections by year for each pole owner and occupant
  - TRS, ¼, and ¼-¼ display
  - Pole count by owner in each TRS ¼-¼
  - Standardize on inspection area color for each inspection year displayed
  - Create help documentation and post to OJUA website, mapping page

2015
OJUA Joint Inspection Subcommittee

OJUA
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Scott Wheeler, Comcast, Co-Chair
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Terry Blanc, Tillamook PUD
Bill Hamelman, Frontier
Corey Cook, PacifiCorp
Mark Rettmann, OPUC
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Mike Allen, Comcast
Todd Gover, Bend Broadband
Julian Khouri, PGE
Laureal Williams, Staff

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Four Key Deliverables

1. Matrix of Common Joint Use Violations
(Dropdowns for corrective actions and assignments)

2. PowerPoint of Common Joint Use Violations
(Descriptions, photos of scenarios with correction options)

3. Inspection/Correction Best Practices Manual
(Training tool and field reference guide)

4. Guidelines for Measuring Success
(Measuring inspection/correction accuracy and effectiveness)

Matrix of Common Joint Use Violations

Pole #	Alternate Pole #	Deviation	Equipment 1	Equipment 2	Action	Assigned Party	Comments
1	CTL 1111	MidspanVertical_24_inches	PDRP-Power Service Drop	COMM-Comm Messenger	Place California Top	POWER1	Power Company permit for pole top extension attachment on phone pole.
2	CTL 2222	MidspanVertical_30_inches	SEC-Power Secondary	COML-Comm Main Line	Share Arm	COMM1	CATV seek joint arm agreement with phone company to clear 40" PV and 30" MV.
3	CTL 3333	PoleVertical_12_inches_3_SL	COML-Comm Main Line	PDLP-Power Drip-Loop	Ground/Bond	POWER1	Light owner to cover SLT driploop and ground/bond SLT bracket.
4	CTL 4444	PoleVertical_40_inches	COML-Comm Main Line	SEC-Power Secondary	Lower CATV	COMM1	CATV seek joint arm agreement with phone company and other Comm clear 40" PV.
5	CTL 5555	MidspanVertical_12_inches	PDRP-Power Service Drop	COMD-Comm Drop	Relocate/Move	TELCOM1	Relocate phone drop from power mast to structure for minimum 12" separation from power service drop.
6	CTL 6666	ClimbingSpace	COML-Comm Main Line	Other-See Comments	Relocate/Move	COMM1	CATV to cut/splice strand and coax feeder to opposite side of pole.

Using the Matrix Tool

PRACTICE STEPS:

1. **Select a scenario from the High Level PowerPoint Presentation or Best Practices.**
2. **Select the appropriate deviation (violation) from the dropdown options.**
3. **Select Equipment 1 and Equipment 2 from the dropdown options.**
4. **Select the best correction from the dropdown options.**
5. **Assign the correction to the best entity who can safely perform the work.**

Sample -Matrix of Common Joint Use Violations

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High Level PowerPoint Presentation

Violation Description: Midspan Vertical 24" Conductor to Conductor

NESC Rule 233C1, Table 233-1

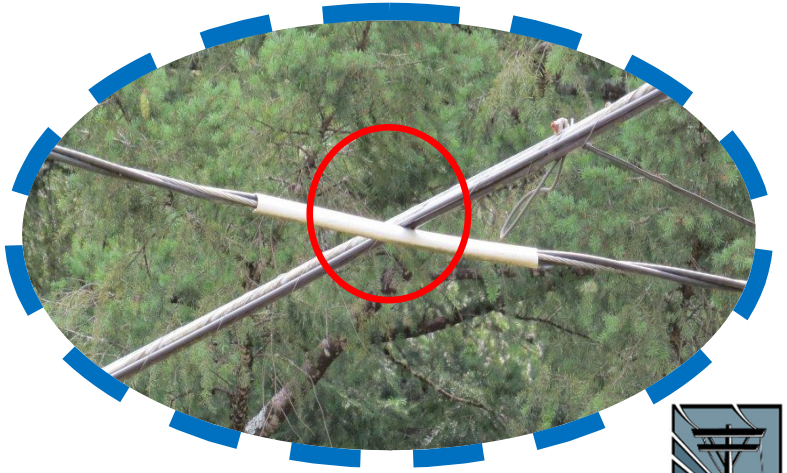
Sample PowerPoint Slide

Violation:
Supply to Comm clearance of different supporting structures

OJUA Codes:
MV,COML,PDRP

Scenario #1:
Less than 24" clearance between supply and comm crossing each other

Options to Fix:
Raise supply;
Lower comm;
Install span



Sample Best Practices Slide: Worker Safety Zone – Midspan

Different Supporting Structures

PHOTOS

Vertical clearance between supply svc and comm messenger is 9”

Oregon Joint Use Association

Sample Best Practices Slide: Worker Safety Zone – Midspan

Different Supporting Structures

OJUA Coding: MV – PDRP / COMM

24 inches required at crossings between any type of wires or conductors carried on different supporting structures. See footnote reference below for reduction between communication conductors.

NESC Rule 233C1, Table 233-1 The vertical clearance between any crossing or adjacent wires, conductors, or cables carried on different supporting structures shall be not less than that shown in Table 233-1.

Footnote 2: The clearance of communication conductors and their guy span, and messenger wires from each other in locations where no other classes of conductors are involved may be reduced by mutual consent of parties concerned, except for fire alarm or railroad conductors.

ASSUMPTIONS:

- Communication cannot move down due to road clearance requirements.
- For aesthetic reasons, customer does not want a taller mast even if cost is covered.

FACTS:

1. Vertical separation between supply svc and comm messenger = 9”

SUGGESTED BEST PRACTICE: Electric utility should request permit for a pole top extension that would allow 40” separation on telephone pole until such time that the pole requires replacement.

Guidelines for Measuring Success

- Determine what quantity and quality metrics are important to measure.
- Develop guidance for selecting samples and a sample size.
- Evaluate concept of different quantity/quality targets for Rural, Suburban and Urban areas (based on # of poles, # of services per square mile, etc.).

ICE Committee Next Steps

- **What do the next two years look like to finish out this cycle?**
- Volunteer companies will conduct pilot programs and utilize lessons learned to prepare for full-scale joint inspection/correction.
- ICE Committee will meet every six months and continue educational role.

- **How do we transition into the next ten-year cycle?**
- Challenges associated with managing off-cycle notifications.
- Work with Safety Staff on a "reset period" (2016 to 2018) when operators can finish up work on current plans of correction (POC's) and prepare for implementing joint inspections beginning in 2018.