Small Cell Wireless Overview



Background

Business Line	# Existing Attachments or Units
Street & Area Lights	118,000
Wireless	405*
Wireline	378,949
TOTALS	497,354

History

- Nearly 20 Years of Experience With Wireless Collocation
- 400+ Existing Wireless Attachments

Small Cell Wireless

• Presents New Challenges With Increased Volume & New Applications.

Pole Services Department

- Consolidated PSE's wireless, wireline and streetlight operations.
- Resource Optimization (People, Systems & Budget).
- Streamlined Pole Asset Utilization, Planning, Coordination & Tracking

Key Business Drivers

- Safety Focus
 - Ensure Public Safety & Safety of PSE Crews and Contractors
- Regulatory Adherence
 - Federal (FCC), State of Washington (RCW/UTC) & Local Jurisdictions
- Minimize Service Outages & Increase Reliability



Process Overview

Preliminary Screening

- Verifyy Pole Ownership & Candidacy
- Verify Application Contains All Necessary Information For Review
- Identify Obvious Issues & Conflicts

Application Review

- 45-Day "Shot Clock" (FCC)
- Internal Review To Determine Conditions For Approval

Engineering & Design

- 14-Day Shot Clock For Engineering Work & Make Ready For Make Ready Construction
- Review To Ensure Structural Integrity & Compliance with PSE Standards
- Design Finalized & Approved
- Right of Way (ROW) & Traffic Control Plan (TCP) Submitted & Approved.
- Estimate For Make-Ready Construction Sent To Wireless Carrier For Approval.

Make-Ready Construction

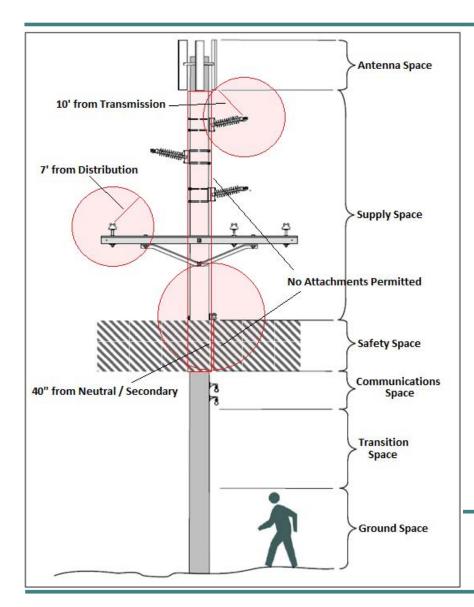
- 90-Day "Shot Clock" To Complete Make-Ready Work
- Includes rearrangement of existing attachments and replacement of poles where needed to create sufficient space and capacity.

Equipment Installation

 Installation Of Wireless Antennas & Equipment



Separations & Clearances



NESC

- Minimum 40" from distribution conductor.
- Minimum approach distance starts at 10' and increases as voltage increases.
- Safety Space: Off Limits.
- Qualified Workers Required For Energized Conductor Work.

PSE

- Minimum 7' from distribution
- Minimum 10' from transmission
- Attachments of radiating antenna in Supply Space & Communications Space are currently not permitted.

