

# Urban Forestry Commission / Seattle City Light Briefing

November 9, 2016

**Department:** Seattle City Light (SCL) response to Lance Young letter

**SCL Vegetation Management Role:** prunes trees in the electrical utility corridor to maintain electrical safety and reliability and, when necessary, removes and replaces trees.

**Vegetation Management Vision:** reduce vegetation conflict with electrical system through the comprehensive and environmentally responsible management of the vegetation our lines and infrastructure impact.

**Organization:** Brent Schmidt, Manager Support Services, ISA Certified Arborist  
Dave Bayard, Electrical Construction and Maintenance Supervisor, ISA Certified Arborist, ISA TRAQ Qualified, TCIA Certified Tree Care Safety Professional  
David Mutchler, Line Clearance Coordinator, ISA Certified Arborist, ISA Certified Utility Arborist, ISA TRAQ Qualified  
Glen Allen, Arboriculturist, ISA Certified Arborist, ISA TRAQ Qualified  
Heidi Narte, Arboriculturist, ISA Certified Arborist, ISA TRAQ Qualified

Contracts with three firms to provide distribution power line clearance services as defined and specified in Washington Administrative Code (WAC) 296-45-015 and 455. Contractors utilize qualified and annually certified power line clearance personnel under all WISHA State Laws and Federal OSHA laws. SCL Contracts have ISA Certified Arborist requirements.

- All Supervisors and Notifiers shall hold and maintain a current ISA Certified Arborist designation.
- All lift and climbing crews shall have at least one member with a current ISA Certified Arborist designation.

Designated by the National Arbor Day Foundation as a *Tree Line USA* utility since 2013 in recognition of the utility's quality tree care programs and services.

Conducts Tree Trim Post Transaction Survey to households where work is completed.

**Priorities:** Provide high level of customer service.

- Maintain vegetation clearances for safety and to increase reliability of electrical service
- Comply with applicable federal and state electrical regulations and codes
- Operate in a manner that is compatible with the long-term sustainability of the ecosystems that we affect

**Territory:**

- 1,770 miles of overhead distribution lines in Seattle and Shoreline, Burien, Lake Forest Park, Normandy Park, Renton, SeaTac, Tukwila and Unincorporated King County.
- 656 Transmission Circuit miles across 4 counties.

**Regulatory role:** Only electrically "qualified line clearance arborists or arborist trainees" may work within 10' of energized electrical lines from 0 -50kV per ANSI Z133 standards.

**Question 1. Why are Seattle City Light's minimum vegetation to power line clearance distances two to three times that of other utilities in our region?**

Our clearance distances are not two to three times other utilities. The SCL system is fundamentally different with different pruning cycles.

**Seattle City Light (SCL)**

SCL's distribution system is mostly a 26kv system with a four to five year cycle.

SCL does not have a Pre Trim clearance distance, we have a feeder based pruning cycle.

Our objective is to have our minimum clearance hold for our cycle recognizing that individual trees have different growth rates.

Our priorities recognize the importance of regular vegetation pruning in directly affecting reliability and safety. During storms and wind events, SCL's outages are often more limited in number, affect fewer customers and have shorter duration than surrounding utilities.

In addition, our clearance distances are important for the safety of SCL electrical workers who maintain the lines and operate with minimum approach distances. This is especially important during storms and restoration events.

**Portland General Electric (PGE)**

PGE's distribution system is a lower kv system that has a two to three year cycle for inspection and pruning.

*SCL's clearance distances must reduce contact for an additional 2 or three growing seasons.*

PGE also includes a recommendation for "additional pruning to restore tree balance and soften the effects."

While this may be done for aesthetic effect, it goes outside the bounds of line clearance pruning and is detrimental to the tree's health by creating additional wounds. This is not included in the objectives of utility pruning as based on ISA Best Management Practices.

**Snohomish Public Utility District (SNOPUD)**

Snohomish operates a 12.5kv system with a similar pruning cycle.

SNOPUD's below line clearance distance is actually larger than SCL calling for 2 ft. of clearance below the lowest communication lines. *SCL does not prune for clearance around communication lines.*

SNOPUD reliability statistics and outage timeframes are not as good as SCL's.

**Question 2. Why have Seattle City Light's vegetation clearances been increased (nearly doubled) over the past five years?**

Distribution clearances have not been increased. The contact language regarding *Tree Trimming – Clearing Requirements and Methods* (Section XX provided) is mostly the same in the current contract dated 1/19/13 as in the previous contract dated 8/15/08-08/14/13.

The Transmission Vegetation Management Plan (TVMP) is directed to SCL's transmission system. It is not applicable or relevant to the electrical distribution system work. Transmission clearance distances are different than distribution clearance distances. The standards and outage impacts are greater. 240kv transmission line clearances have been increased after an evaluation of potential sag and sway of our long distance lines.

Clarification on the web page was to indicate that our clearance distances are meant to exist for the pruning cycle and is not a minimum pruning distance.

**Question 3. *Why is our Power Company increasing instead of reducing their line clearance and canopy removal in a world where technology and understanding of these things is improving?***

The SCL Line Clearance Program was re-invigorated after the December 2006 Hanukkah Day Storm which caused major tree related outages throughout the region. SCL committed to a better understanding of utility line clearance practices and resources were allocated to develop a robust cyclical tree trimming program to reduce outages and improve safety. The most problematic feeders were identified and prioritized. We are currently in the midst of our second 4-year cycle. We are not increasing our line clearance and canopy removal. We recognize that the best tree care is proactive, routine, science based and instituted at smaller sizes. Unfortunately we are faced with a landscape of non-compatible tree species which require line clearance.

SCL is committed to the highest standards of Utility Arboriculture. We are invested in actively supporting and instituting best management practices. We are continually participating in International Society of Arboriculture opportunities and providing training for our employees and crews.

As mentioned in Question 2, The Transmission Vegetation Management Plan (TVMP) is directed to SCL's transmission system. It is not applicable or relevant to the electrical distribution system work. FERC/NERC have no relevance to distribution line clearance work. Minimum Vegetation Clearance Distance (MVCD) is only applicable to the work on our transmission system. NERC standards are only relevant to SCL's 240kv transmission lines. They are not appropriate to bring into the discussion of distribution line clearance pruning.