WHATCOM COUNTY
WASHINGTON

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Memorandum

TO:	Whatcom County Planning Commission
FROM:	Lucas Clark, Planner II
THROUGH:	Mark Personius, Director
DATE:	April 15, 2025
SUBJECT:	Public Utility Code Amendments

At the March 13, 2025, Planning Commission (PC) meeting, the PC held a work session on proposed amendments to the Public Utility Code that would allow electrical power lines of up to 230 kV countywide with a Conditional Use Permit (CUP) or a Major Project Permit (MPP). The PC asked questions related to tower size, public safety, existing location, and setback regulations. Staff was asked to research their questions and provide more context around existing code and design standards.

Most of the existing 115 kV power lines are sited within public rights-of-way (ROW) or on PSE easements negotiated with private land owners. It is likely that future 230 kV will be similarly sited. The attached map shows where existing 115 kV power infrastructure is. It includes the historic 230-500 kV lines for Intalco and Bonneville Power Administration. The attached PSE FAQ sheet on Vegetation Management Standards for 230 kV transmission lines visually illustrates setbacks and the standards that PSE manages vegetation in an easement.

1. Setback and Safety Regulations

The PC had questions relating to the standards for setbacks in the ROW.

Staff Response: Existing ROW management code is found in Title 12, Roads and Bridges, specifically

WCC 12.27.170 Overhead utilities – Power and communication lines.
(…)
B. The minimum vertical clearance for overhead power and communication lines above the road and the minimum lateral and vertical clearance from bridges shall be in compliance with the National Electrical Safety Code and Washington State Department of Labor and Industries "Electrical Construction Code".

The WCC cites national electrical and state code as setting the standard to which WC complies. Key safety requirements typically include:

1. Minimum Clearances:
   - Ground clearance: Typically, 23-25 feet minimum
   - Building clearance: Usually, 18-20 feet horizontal
   - Crossing over roads: Generally, 30-35 feet minimum

2. Right-of-Way (ROW) Requirements:
    - Typical width: 100-150 feet
    - Must be clear of tall vegetation and structures
    - Regular maintenance and inspection required

2. Design Standards and Aesthetic Considerations

Commissioners also had questions regarding design standards and aesthetic considerations, in particular, does WC have any, and what do other jurisdictions do?

Staff Response: WCC 12.27.180 addresses power lines going through areas of scenic beauty:

WCC 12.27.180 Aesthetic/scenic considerations

A. Utility installations shall be designed and constructed to minimize the adverse effect on existing roadside manmade or natural amenities. Special efforts shall be taken to minimize any potential negative impact on areas of scenic beauty (i.e., scenic strips, viewpoints, rest areas, recreation areas, public parks or historic sites, etc.).

(…)

This section also goes on to state that overhead utilities are only allowed in areas of scenic beauty when other utility locations are not available, not technically feasible, are unreasonably costly or less desirable from a visual standpoint.

However, regarding aesthetic mitigation for most power poles/lines, staff has researched what other jurisdiction do but have found very little. Frankly, we don't believe there are any measures that could mitigate such visual impacts.

3. Permitting Requirements

Staff would also like to clarify what types of projects would be a permitted use vs. a conditional use requiring either a Conditional Use Permit or a Major Project Permit (if the project meets the MPP thresholds per WCC 20.88.100). The amendments as written would allow installation of new lines below 55 kV and maintenance and replacement of existing lines and poles that were previously permitted as a permitted use. However, new power lines above 55 kV, or replacing existing 55 kV lines with higher voltage lines on existing poles would require a CUP/MPP.