

Whatcom County Planning & Development Services Staff Report

Miscellaneous Code Amendments 2024: Public Utility Code

I. File Information

File # PLN2024-00002

File Name: Public Utility Code Amendments 2024

Applicants: Whatcom County Planning and Development Services (PDS)

Summary of Request: Amending WCC 20.82.010 & WCC 20.82.030(9)(a-c) to allow electrical power lines of up to 230kV countywide with a Conditional Use Permit.

Location: Countywide.

II. Background

Council Directive

On October 8, 2024, the Council Committee of the Whole passed a motion to direct PDS to review and revise WCC 20.82.030 (a-c) to increase the maximum voltage requirements of WCC 20.82.030(9)(a-c).

History of Current Restrictions

In 1990, Initiative 4-90 was placed on the Whatcom County ballot asking voters, “Shall new high voltage power transmission lines over 115,000 volts be restricted to industrial zones?” Whatcom County residents voted (64.3% in favor) to enact the initiative, prompting the Whatcom County Council to pass Ordinance 1990-124 stating, “Except on land where such permits have already been granted or in those districts classified as industrial, no conditional use permit shall be granted for electrical power transmission lines carrying more than 115,000 volts.” While the initial 1990 ordinance was codified, it was in fact illegal, as any ordinance proposed by initiative that would repeal a portion of County zoning regulations is outside the scope of initiative power (See *Save Our State Park v. County Commissioners*, 74 Wn. App. 637, 74 Wash. App. 637, 875 P.2d 673 (Wash. Ct. App. 1994)).

Since 1990, the language of this particular code section has changed several times. The most significant update was Ordinance 2004-041, which created stricter requirements for maximum wattage of transmission lines, in addition to voltage requirements. This ordinance, as well as Ordinance 2002-002 and Resolution 2003-051 (a resolution initiating an emergency amendment to the WCC), cite various concerns over transmission lines, in particular the potential health impacts that electromagnetic fields (EMFs) may produce. Recently, Whatcom County’s energy utility, Puget Sound Energy (PSE), has advocated for the increase of maximum voltage requirements in WCC 20.82.030(9)(a-c). This change would allow electrical transmission lines of up to 230,000 volts or 230 kilovolts (kV) outside of industrial zones, aiding PSE in their ability to meet growing electricity demands.

Role of Puget Sound Energy

PSE follows a regulated electricity market structure, meaning it is a vertically integrated monopoly that is responsible for the generation, transmission, and distribution of energy within its region. In exchange for holding a monopoly over the market, investor owned utilities (IOUs), including PSE, are regulated by state Public Utility Commissions (PUCs). Washington’s PUC, the Washington Utilities and Transportation Commission, uses specific rate-making formulas to determine a “fair” electricity price for PSE customers based on PSE’s operating and investment costs.

Transmission lines are infrastructure that transport energy from where it is generated to where it is consumed. PSE owns and operates the transmission line infrastructure in their region, including all of Whatcom County. However, PSE's transmission business operates independently from its generation/distribution business. PSE's transmission business is regulated by the Federal Energy Regulatory Commission (FERC) through an Open Access Transmission Tariff (OATT). This is to ensure that fair rates are charged to anyone who needs access to the transmission lines, as it is not economical or sustainable for each separate entity to build their own transmission systems.

Recent State Actions

In 2019, the Washington State legislature passed Engrossed Second Substitute Senate Bill 5116, known as the Clean Energy Transformation Act (CETA), requiring all retail sales of electricity to be greenhouse gas neutral by 2030. To comply with CETA, PSE estimates that it will need an additional 6,700 megawatts of CETA-compliant energy by 2030. Higher voltage power lines will be needed to transport this added electricity to consumers. However, since Whatcom County is the only county in PSE's service area that prohibits 230 kV transmission lines, there is a disincentive for PSE to invest in new energy projects in Whatcom County. Amending the code to allow for higher voltage power lines will incentivize new industrial economic opportunities within Whatcom County, provide needed infrastructure in areas where heavy industry may expand, and ensure adequate energy infrastructure is planned for and can be sited appropriately. This will also allow Whatcom County to take advantage of state and federal investments in upgrading electrical transmission systems.

Effect of the Amendments

Amending WCC 20.82.030(9)(a-c) would allow PSE the flexibility to make long-term choices as it plans for grid modernization. This code change will likely not result in instant or large-scale changes due to the cost involved, but specific plans and timelines would be up to PSE. Ultimately, if PSE decides to invest in upgrading transmission lines, it will likely result in an increase in the rates consumers pay (again, as determined as "fair" by Washington's PUC). Increasing the voltage of transmission lines would help increase capacity and efficiency, but it would also require infrastructure investments and construction.

III. Code Amendments

The proposed code amendments are found in Exhibit A of the draft ordinance. Please refer to that document.

IV. Comprehensive Plan Evaluation

1. *The proposed amendments are consistent with the Comprehensive Plan's Policy 5C-5: Encourage regional planning of public facilities and utilities that will facilitate coordinated land-use management and capital facility construction.*

For PSE to comply with CETA, higher voltage powerlines will be needed. Whatcom County is the only county in the PSE coverage area to limit transmission lines to 115kV. Amending the code to allow for higher voltage power lines will incentivize new industrial economic opportunities within Whatcom County, provide needed infrastructure in areas where heavy industry may expand, and ensure adequate energy infrastructure is planned for and can be sited appropriately.

2. *The proposed amendments are consistent with the Comprehensive Plan's Policy 5C-9: Appropriately scale public utility systems to accommodate anticipated population growth.*

It is anticipated that Whatcom County will have a substantial amount of growth in the future (Whatcom County, 2016). The projected growth coupled with CETA will increase demands on

the electrical infrastructure. Giving PSE the ability to upgrade lines would allow PSE the to make long-term choices as it plans for grid modernization.

3. *The proposed amendments are consistent with the Comprehensive Plan's Policy 5K-1: As new information regarding EMF becomes available consider the need for new standards.*

Ordinance 2004-041 references studies that demonstrate a link between EMFs and cancers. However, the World Health Organization (WHO) states, "based on a recent in-depth review of the scientific literature, the WHO concluded that current evidence does not confirm the existence of any health consequences from exposure to low level electromagnetic fields." (World Health Organization, 2016)

Furthermore, the National Institute of Environmental Health Sciences states, "It is important to remember that the strength of a magnetic field decreases dramatically with increasing distance from the source. This means that the strength of the field reaching a house or structure will be significantly weaker than it was at its point of origin." (National Institute of Environmental Health Sciences, n.d.)

Several national and international agencies study different exposures in the environment to determine if they can cause cancer. Something that causes cancer or helps cancer grow is called a carcinogen. They show limited evidence or inadequate evidence for carcinogenicity of ELF magnetic fields. (Cancer.org, n.d.)

4. *The proposed amendments are consistent with the Comprehensive Plan's Policy 5L-2: Require a utility proponent to show how the proposal provides local or regional benefit.*

Amending the code to allow for higher voltage power lines will incentivize new industrial economic opportunities within Whatcom County, provide needed infrastructure in areas where industry may expand, and ensure adequate energy infrastructure is planned for and can be sited appropriately. This will also allow Whatcom County to take advantage of state and federal investments in upgrading electrical transmission systems.

5. *Goal 5F: Identify and remove impediments to effective siting of necessary utility facilities.*

Whatcom County is the only county in PSE's service area that prohibits 230 kV transmission lines, which is a disincentive for PSE to invest in new energy projects in Whatcom County. Amending the code to allow for higher voltage power lines will incentivize new industrial economic opportunities within Whatcom County, provide needed infrastructure in areas where industry may expand, and ensure adequate energy infrastructure is planned for and can be sited appropriately.

6. *Goal 5H: Support cost-effective renewable energy projects and implement policies that promote renewable energy projects.*

If PSE upgrades the infrastructure it will create more opportunities for Whatcom County to connect with renewable energy across Washington. It would further align Whatcom County with CETA, requiring all retail sales of electricity to be greenhouse gas neutral by 2030.

7. *Goal 5L: Support direct and indirect economic benefits to Whatcom County originating with energy or utilities in general.*

Amending the code to allow for higher voltage power lines will incentivize new industrial economic opportunities within Whatcom County, provide needed infrastructure in areas where industry may expand, and ensure adequate energy infrastructure is planned for and can be sited appropriately.

V. Proposed Findings of Fact and Reasons for Action

1. Whatcom County Planning and Development Services has submitted an application to make various amendments to the Whatcom County Code (WCC) to make corrections, updates, and clarifications.
2. A determination of non-significance (DNS) was issued under the State Environmental Policy Act (SEPA) on February, 19th, 2025. One comment was received with a link to an article regarding the potential safety hazards of living near power lines.
3. Notice of the subject amendment was submitted to the Washington State Department of Commerce on February 20th, 2025 for their 10-day review. One comment was received to date.
4. The Planning Commission held a work session on the proposed amendments on March 13th, 2025.
5. The Planning Commission held a duly noticed public hearing on the proposed amendments on April 24th, 2025.
6. The County Council held a duly noticed public hearing on the proposed amendments on [REDACTED], 2025.
7. The amendments are consistent with Comprehensive Plan Goal 2D to refine the regulatory system to ensure accomplishment of desired land use goals in a fair and equitable manner.
8. The amendments are consistent with Comprehensive Plan's Policy 5C-5: *Encourage regional planning of public facilities and utilities that will facilitate coordinated land-use management and capital facility construction.*
9. The amendments are consistent with Comprehensive Plan's Policy 5C-9: *Appropriately scale public utility systems to accommodate anticipated population growth.*
10. The amendments are consistent with Comprehensive Plan's Policy 5K-1: *As new information regarding EMF becomes available consider the need for new standards.*
11. The amendments are consistent with Comprehensive Plan's Policy 5L-2: *Require a utility proponent to show how the proposal provides local or regional benefit.*
12. The amendments are consistent with Comprehensive Plan's Goal 5F: *Identify and remove impediments to effective siting of necessary utility facilities.*
13. The amendments are consistent with Comprehensive Plan's Goal 5H: *Support cost-effective renewable energy projects and implement policies that promote renewable energy projects.*
14. The amendments are consistent with Comprehensive Plan's Goal 5L: *Support direct and indirect economic benefits to Whatcom County originating with energy or utilities in general.*

VI. Proposed Conclusions

1. The amendments are in the public interest.
2. The amendments are consistent with the Whatcom County Comprehensive Plan.

VII. Recommendation

Planning and Development Services recommends County Council adopt the proposed amendments into code.