



Sammamish – Juanita 115 kV Transmission Line Code Compliance Narrative

Project Description

Puget Sound Energy (PSE) is proposing a new 115 kV transmission line between Sammamish Substation in the City of Redmond and Juanita Substation in the City of Kirkland to improve system capacity and reliability within the Kirkland/Redmond service area. The new approximately 5 mile transmission line consists of approximately 1.7 miles of new transmission poles and conductor and 0.08 miles of replacement poles and conductor in the City of Redmond, 0.24 miles of new poles and conductor within unincorporated King County, 2.3 miles of new poles and conductor in the City of Kirkland, and 0.8 miles of replacement poles and conductor in the City of Kirkland. Within the City of Kirkland, the transmission line will loop through Totem Substation. The project also includes improvements at Sammamish and Totem Substations in order to accommodate the new transmission line.

Within the City of Redmond, PSE is proposing to construct the new 115 kV transmission line heading northeast out of Sammamish Substation and crossing Willows Road NE and heading north adjacent to the City of Redmond Central Connector (RCC) trail. The line will continue north past the trails termination south of the Overlake Christian Church frontage and continue to the City limits north of Sammamish Valley Park. In order to construct and maintain the new transmission line, PSE will construct a 17-foot wide gravel construction access and maintenance road by widening the existing abandoned rail ballast north of the RCC. In order to construct the access road in the City of Redmond, 5 existing culverts will be replaced under the existing rail ballast, 3 of which will be fish passable. The project includes 0.24 miles of new transmission line and access road within unincorporated King County on property owned by the City of Redmond. Two additional culverts will be replaced in unincorporated King County, one of which will be fish passable. After the transmission line corridor enters the City of Kirkland, the project limits cross back into the jurisdiction of the City of Redmond in two locations. The first is the replacement of two wood H-frames on the south side of NE 124th Street in the existing Beverly-Renton transmission corridor in order to accommodate the new transmission line crossing under this existing north-south set of transmission lines along the north side of NE 124th Street. The second location is the replacement of two existing transmission poles along the existing corridor leading into the Totem Substation on the City of Kirkland and City of Redmond border south of NE 124th Street.

In order to accommodate the new transmission line, some of the bays at Sammamish Substation will be realigned. This will include new equipment within the substation including switches, circuit breakers, two new and one replacement transmission pole and the replacement of six poles south of the

substation. Based on federal standards, an additional pole along the Sammamish-Novelty transmission line must also be installed south of the substation. The western pole of the 0/1 and 0/2 H-frames along the Sammamish – Ardmere line south of the substation will be topped, but not removed.

Project History and Route Selection

In September 2011, PSE convened a Stakeholder Advisory Group (SAG) to help inform the route selection for the new 115 kV transmission line. The SAG was made up of representatives from area businesses, neighborhoods, property owners, environmental groups, and city staff from Kirkland and Redmond. The goal of the SAG was to develop community-acceptable route alternatives using community input, resulting in a preferred route that meets the needs of PSE customers. The SAG met 8 times in 2011 and 2012 and, with the help of a GIS routing tool using weighted opportunity and constraint criteria, developed potential transmission line routes between Sammamish Substation in Redmond and Juanita Substation in Kirkland. The SAG meetings were open to the public. The City of Redmond requested that PSE and the SAG consider route options that avoided Willows Road NE.

Community meetings in the City of Redmond and the City of Kirkland were held at SAG milestones. These milestones included sharing sample route outputs using the SAGs weighting in December 2011, narrowing the routes to 3 alternatives after PSE had conducted in field constructability review to ensure route feasibility in June 2012, and the SAGs preferred route recommendation in August 2012. Over 400 community comments were collected during the routing process and shared with the SAG to help inform their process. Project briefings also occurred with neighborhood and community groups.

As a result of the year-long SAG and community outreach process, the SAG came up with a recommended preferred route in July 2012, which was shared with the public in August 2012. The SAG's preferred route in the City of Redmond included a route that exited the Sammamish Substation and traveled north along Willows Road NE for just over a mile, then headed northwest between and behind buildings within the office park and industrial development west of Willows Road NE and then paralleled the existing Beverly-Renton transmission corridor until reaching NE 124th Street in Kirkland. The City of Redmond requested that PSE pursue routes that avoided Willows Road NE, particularly the area of a designated view corridor, although transmission lines are not addressed or prohibited within the view corridor regulations. The preferred route included an alternative route option along Willows Road NE up to NE 124th Street if the route west of Willows Road NE was determined to not be feasible.

After internal engineering analysis, site evaluation and discussions with property owners, the route option west of Willows Road NE was determined not to be feasible. Therefore, PSE chose the route following Willows Road NE as the final route. Through several years of negotiations with the City of Redmond, it was determined that routing the transmission line along the east

side of Willows Road NE within the former rail corridor was the most acceptable and constructible location within proximity to Willows Road NE. In order to make construction viable, PSE has to widen the existing rail ballast to create a construction access and maintenance road for safe equipment access and construction staging.

21.76.070(B)(3): Criteria Applicable to All Land Use Permits

a. Consistency. Land use permits are reviewed by the City to determine consistency between the proposed project and the applicable regulations and Comprehensive Plan provisions.

i. A proposed project's consistency with the City's development regulations shall be determined by the consideration of:

A. The type of land use;

Response: PSE is proposing to construct a new 115 kV transmission line. Transmission lines fall under the definition of Regional Utilities and are designated as a Permitted Use in the Business Park (BP) and Manufacturing Park (MP) zoning districts and a Conditional Use in the Urban Recreation (UR) zoning district. In order to construct and maintain the transmission line, PSE will install a gravel construction access and maintenance road by widening the existing rail ballast east of Willows Road NE and replace five existing culverts under the access road (3 fish passable and 2 stormwater) that convey stormwater and streams channels from under Willows Road NE east through open space properties to the Sammamish River.

B. The level of development, such as units per acre or other measures of density;

Response: The proposed transmission line project does not include development density

C. Availability of infrastructure, including public facilities and services needed to serve the development; and

Response: The proposed project is an electrical utility infrastructure project to support capacity and reliability within the region. No additional public facilities and services are needed.

D. The character of the development, such as development standards.

Response: The proposed 115 kV transmission line is a Permitted Use in the Business Park (BP) and Manufacturing Park (MP) and a Conditional Use within the Urban Recreation (UR) zoning district under Regional Utilities. The zoning chart does not contain specific development standards for Regional Utilities (RZC 21.06.040).

ii. Upon review of a land use permit and accompanying site plan, the decision maker shall determine whether building design and/or site design complies with the following provisions.

A. The Comprehensive Plan , *RZC 21.02, Preface, RZC Article I, Zone Based Regulations, RZC Article II, Citywide Regulations*, and the Appendices that carry out these titles;

Response: The land use permit application and accompanying site plan comply with the application Comprehensive Plan provisions, Zone based regulations, and Citywide regulations.

Comprehensive Plan

Utilities

Policy UT-9: Promote the efficiency of utility placement both in cost and timing through methods such as the following:

- Collocate public and private utilities in shared trenches or utility corridors, provided that such joint use is consistent with limitations as may be prescribed by applicable legal and safety considerations;
- Coordinate facility planning so that utilities may locate in transportation corridors and other dedicated rights-of-way;
- Provide timely notice to utilities or coordinate with them when construction and or repair of existing and new roadway, bridges, or sidewalks is anticipated;
- Provide a reasonable regulatory climate, recognizing that utilities provide a critical service to the community;
- Provide expeditious permitting, recognizing that avoiding utility project delay can minimize service disruptions and associated costs for residents and businesses;
- Design new public infrastructure to allow for projected future utilities that may be placed within those facilities at a later time; and
- Encourage joint use of utility corridors for utilities, recreation and nonmotorized connections.

Response: The proposed transmission line will share a corridor reserved for multiple uses. The former rail corridor is owned by the City of Redmond with easements for King County Wastewater and Sound Transit facilities and is part of the rails to trails federal program. New conduit will be installed under the construction access and maintenance road in designated locations to allow for future installation of underground utilities.

Policy UT-12: Design, locate and construct facilities to minimize adverse impacts to the environment and to protect environmentally sensitive areas. Take into account both individual and cumulative impacts. Minimize impacts through actions such as:

- Using construction methods and materials to prevent or minimize the risk of overflows into watercourses and water bodies;

- Locating utility corridors in existing cleared areas;
- Locating utility facilities and corridors outside of wetlands;
- Minimizing crossings of fish-bearing watercourses;
- Using biostabilization, riprap or other engineering techniques to prevent erosion where lines may need to follow steep slopes; and
- Minimizing corridor width.

Response: The proposed transmission line will be constructed from a gravel construction access and maintenance road created by widening the existing abandoned rail ballast, minimizing impacts to adjacent wetlands and buffers. Unavoidable impacts to wetlands and buffers will be mitigated for through providing functional lift within the Willows Creek stream corridor as part of the Willows Creek Stream Relocation Project. Additionally, three existing culverts under the ballast containing regulated fish-bearing streams will be replaced with fish passable culverts, which will provide significant habitat enhancement for the streams.

Policy UT-61: Recognize the current Electrical Facilities Plan, authored by Puget Sound Energy, as the facility plan for electrical utilities serving Redmond and the vicinity. Use this plan, where it is consistent with Redmond's land use goals, as a guide in identifying and preserving utility corridors and locating electrical facilities.

Response: PSE has included the Sammamish-Juanita project in its Electrical Facilities Plan since the mid-1980s. A year-long community routing process included representatives of the City of Redmond and City of Kirkland communities (representing business, environmental, and residential interests and including city staff) to inform PSE of the community's preferred route for the project. PSE adopted the communities preferred route and along with engineering and permitting considerations and negotiations with the City of Redmond sited the transmission line in the current proposed corridor.

Natural Environment

Policy NE-18: Use science-based mitigation to offset unavoidable adverse impacts to critical areas.

Policy NE-22: Allow modification of critical areas where they have low ecological value and the function and values will be fully replaced. Avoid land uses and developments that are incompatible with environmentally critical areas.

Policy NE-63: Use federal mitigation sequencing guidelines when reviewing projects impacting wetlands. This involves, in the following order: avoiding the impact altogether by not taking a certain action or parts of actions; minimizing the impact by limiting the degree or

magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and compensating for the impact by replacing or providing substitute resources or environments.

Policy NE-66: Implement effective ways of wetland mitigation such as mitigation banking for capital improvements projects that are linear, such as road and utility projects.

Policy NE-79: Preserve and enhance the natural appearance of stream corridors.

Policy NE-82: Encourage improvements such as removal of fish barriers to the fisheries habitat of watercourses when abutting properties are developed.

Response: The proposed transmission line will be constructed within the City of Redmond between the Sammamish Substation and the north city limits east of Willows Road NE. The existing rail ballast along the east side of Willows Road NE will be widened to create a 17-foot wide gravel construction access and maintenance road. Three regulated streams cross under the existing rail ballast within existing culverts. These culverts will be replaced with fish-passable culverts. Another 2 culverts will be replaced to improve stormwater drainage. Impacts to adjacent wetlands, streams and buffers have been substantially avoided through use of the existing rail ballast and pole placement outside of wetlands. Mitigation for unavoidable wetland and buffer impacts within the City of Redmond will be accommodated by providing functional lift as part of the Willows Creek Stream Relocation Project.

- B. The provisions of RMC Title 15, Buildings and Construction, that affect building location and general site design;

Response: The proposed transmission line does not contain any buildings. The project will comply with applicable regulations within RMC 15.24 Clearing, Grading, and Stormwater Management, including the use of best management practices.

- C. The Washington State Environmental Policy Act (SEPA) if not otherwise satisfied;

Response: An Environmental Checklist has been submitted to the City of Kirkland for this project. The City of Kirkland has taken Lead Agency status for SEPA review since a majority of the project will be located in that jurisdiction.

- D. RZC Article VI, *Review Procedures*, to the extent it provides the procedures to ensure compliance with the requirements in subsections B.3.a.ii.B and B.3.a.ii.C of this section.

Response: As stated above, provisions related to density and public infrastructure needs do not apply to this project.

- E. Both within and outside Transition Overlays, decision makers authorized by RZC to decide upon discretionary approvals may condition such approvals and development permits, including but not limited to site plan approvals, to minimize adverse impacts on other properties and uses, and carry out the policies of the Comprehensive Plan.

Response: As demonstrated through the analysis of project documentation, site plans, and compliance with these code criteria, the proposal will not adversely impact other properties and uses and will carry out applicable policies of the Comprehensive Plan.

RZC 21.76.070(Y)(3): Site Plan Entitlement

Decision Criteria.

- a. The Technical Committee, composed of the Department of Planning and Public Works, shall review all Development Review permits with the State Environmental Policy Act and the RZC.

Response: The proposed project will be reviewed by the City’s Technical Committee under Site Plan Entitlement (SPE) and Conditional Use Permit (CUP) applications. SEPA review will be led by the City of Kirkland, as a majority of that project is within that city’s limits.

- b. The Landmarks and Heritage Commission will review all Certificates of Appropriateness for compliance with the RZC.

Response: A Certificate of Appropriateness is not applicable to this project.

RZC 21.76.070(K)(4): Conditional Use Permit

Decision Criteria. The City may approve or approve with modifications the conditional use only if the applicant demonstrates that:

- a. The conditional use is consistent with the RZC and the Comprehensive Plan;

Response: The proposed transmission line is consistent with applicable zoning code regulations and the Comprehensive Plan as demonstrated through this application and adherence to the decision criteria applicable to all land use permits, as well as Site Plan Entitlement and Conditional Use Permits.

- b. The conditional use is designed in a manner which is compatible with and responds to the existing or intended character, appearance, quality of development, and physical characteristics of the subject property and immediate vicinity;

Response: The proposed transmission line will be constructed within the former rail corridor that is a generally 75- 100-foot wide multi-use corridor. There is an existing transmission line east of Willows Road NE that turns west into the Sammamish Substation just north of NE 91st Street. PSE worked with the City of Redmond (the property owner of the parcels that make up

the rail corridor) to propose pole heights and span lengths that achieve transmission line compatibility along the corridor, while avoiding critical areas to the extent possible. Though the project will require the widening of the ballast for a gravel construction access and maintenance road, positive environmental benefits will be achieved by the replacement of 3 stream culverts with fish passage culverts with associated habitat enhancement and the replacement of 2 stormwater culverts with new culverts to achieve enhanced stormwater conveyance. As is evidenced by the east-west transmission line corridor that includes a regional trail (known as the “Puget Power Trail”), transmission lines and open space are compatible uses and multi-use corridors are common.

- c. The location, size, and height of buildings, structures, walls and fences, and screening vegetation for the conditional use shall not hinder neighborhood circulation or discourage the permitted development or use of neighboring properties;

Response: The proposed transmission line consists of poles and wires that are common elements of the built environment. The pole placement will not interfere with other permitted uses in or near the project corridor.

- d. The type of use, hours of operation, and appropriateness of the use in relation to adjacent uses minimizes hazards or characteristics of the use that would have adverse impacts;

Response: The transmission line is an unmanned utility facility and its operation will not interfere with adjacent uses or cause adverse impacts.

- e. The conditional use is such that pedestrian and vehicular traffic associated with the use will not be hazardous or conflict with existing and anticipated traffic in the neighborhood;

Response: There is no pedestrian or regular vehicular traffic associated with the use. Occasional maintenance trucks will visit the site and use the gravel access road and not interfere with traffic on Willows Road NE.

- f. The conditional use will be supported by adequate public facilities or services, and will not adversely affect public services to the surrounding area or conditions are established to mitigate adverse impacts on such facilities.

Response: The transmission line is a public facility and does not require additional facilities or services to operate.