



DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT  
ENVIRONMENTAL COORDINATOR  
450 110<sup>th</sup> Ave NE., P.O. BOX 90012  
BELLEVUE, WA 98009-9012

**OPTIONAL DETERMINATION OF NON-SIGNIFICANCE (DNS) NOTICE MATERIALS**

The attached materials are being sent to you pursuant to the requirements for the Optional DNS Process (WAC 197-11-355). A DNS on the attached proposal is likely. This may be the only opportunity to comment on environmental impacts of the proposal. Mitigation measures from standard codes will apply. Project review may require mitigation regardless of whether an EIS is prepared. A copy of the subsequent threshold determination for this proposal may be obtained upon request.

File No. 11-131123-LB, 11-131124-WG, 11-131125-LO

Project Name/Address: PSE Transmission Line – Lake Hills Substation to Phantom Lake Substation  
16315 NE 8<sup>th</sup> Street to 15555 SE 16<sup>th</sup> St. via 148<sup>th</sup> Avenue

Planner: Sally Nichols

Phone Number: (425) 452-2727

**Minimum Comment Period: 14 days**

Materials included in this Notice:

- Blue Bulletin
- Checklist
- Vicinity Map
- Plans
- Other:

**ENVIRONMENTAL CHECKLIST**

12/29/2011

If you need assistance in completing the checklist or have any questions regarding the environmental review process, please visit or call Development Services (425-452-6800) between 8 a.m. and 4 p.m., Monday through Friday (Wednesday, 10 to 4). Assistance for the hearing impaired: Dial 711 (Telecommunications Relay Service).

**BACKGROUND INFORMATION**

Property Owner: Puget Sound Energy (franchise holder)

Proponent: Puget Sound Energy

Contact Person: Jeff McMeekin, Land Planner  
Puget Sound Energy

(If different from the owner. All questions and correspondence will be directed to the individual listed.)

Address: PO Box 97034, PSE 9N  
Bellevue, Washington 98034-9734

Phone: 425-462-3824

*Received  
DEC 30 2011  
Permit Processing*

Proposal Title: Lake Hills – Phantom Lake 115 kV Loop

Proposal Location: SE 16<sup>th</sup> Street, 148<sup>th</sup> Avenue NE, and NE 8<sup>th</sup> Street public rights-of-way and private property between Phantom Lake Substation at 15457 SE 16<sup>th</sup> Street (Parcel #0224059137) and Lake Hills Substation at 16325 NE 8<sup>th</sup> Street (Parcel #3316500006).

(Street address and nearest cross street or intersection) Provide a legal description if available.

Phantom Lake Substation: N 230 FT of E 230 FT of NE ¼ OF SW ¼ LESS CO RDS TCO 17-747

Lake Hills Substation: HILL-SIRE ADD LESS ST – TCO 17-1193

Please attach an 8 ½" x 11" vicinity map that accurately locates the proposal site.

Give an accurate, brief description of the proposal's scope and nature:

1. General description:

PSE is proposing to establish a new 115 kV overhead transmission line corridor between Phantom Lake Substation and Lake Hills Substation to accommodate the installation of a new 115 kV overhead transmission line. The purpose of the Lake Hills to Phantom Lake 115 kV Transmission Line Project is to improve reliability and allow for better use of existing capacity at the community and local level.

Construction of a new transmission line to connect the Lake Hills and Phantom Lake Substations will create a "loop," which means each substation will be fed by two transmission lines. If one transmission line goes out, the other line will still feed the substation and customers. In addition, with the new line, PSE will be able to use each of the substations to its designed capacity. The new transmission line will allow PSE to better use the existing capacity of the substations without additional substation expansion. In addition, the College Substation and its service area (located immediately to the west of the Phantom Lake service area) will indirectly benefit from the new transmission line.

The proposed route would begin at the Lake Hills Substation; extend westerly along the south side of NE 8th Street, to the west side of the intersection with

156th Avenue NE. West of 156th Avenue NE, the line would cross to the north side of NE 8th Street. The line would then extend along the north side of NE 8th Street, passing condominium developments and wetlands associated with Kelsey Creek to and across 148th Avenue NE. From the northwest corner of NE 8th St. and 148th Avenue (adjacent to a small wetland area), the line would extend southerly along the west side of 148th Avenue past the commercial area and continue to a point north of NE 3rd Street, where it would cross to the east side of 148th Avenue (south of the existing residences near right-of-way edge). The line would remain along the east side of 148th until Main Street, where it would then cross back to the west to avoid proposed east side frontage improvements. The line would then remain on the west side, and extend south to SE 16th Street, along the edge of a residential area. At SE 16th Street, the line would cross 148th and continue east on the south side of SE 16th Street, through a residential area, to the Phantom Lake Substation.

The new transmission line will be supported on single wooden, steel poles, or weathered steel, with typical heights of 70 to 80 feet above ground. Additional project activities include stringing conductor wire between installed poles; and vegetation management activities (tree removal or trimming) to meet transmission line clearance requirements as needed.

Work within the Lake Hills and Phantom Lake Substations will occur in order to accommodate the new transmission line; new foundations will be installed to accommodate steel termination poles, bus supports, and switch gear. This work will be within the confines of the existing substation yards. The fences around each substation will be replaced due to aging and deterioration. A second driveway will be added to Lake Hills Substation.

Landscaping modifications will also occur at the substation sites.

2. Acreage of site: Phantom Lake Substation: 40,000 square feet (0.92 acres)  
Lake Hills Substation: 72,817 square feet (1.67 acres)  
Public right-of-way alignment: 2.9 miles
3. Number of dwelling units/buildings to be demolished: none
4. Number of dwelling units/buildings to be constructed: none
5. Square footage of buildings to be demolished: none
6. Square footage of buildings to be constructed: none
7. Quantity of earth movement (in cubic yards): Approximately 477 cubic yards (total) will be removed for the pole installations.
8. Proposed land use: Transmission line corridor for 115 kV electrical transmission line
9. Design features, including building height, number of stories and proposed exterior materials: The transmission poles will be made of wood, steel, or weathered steel and will typically be 70 -80 feet in height.  
  
Substation fencing will include the replacement of like kind materials. Lake Hills Substation includes a wooden fence to be replaced with a similar wooden fence.
10. Other


Estimated date of completion of the proposal or timing of phasing:  
The construction is expected to begin early 2013. The duration of the project is expected to be between six to nine months.

Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.  
There are no future additions or expansions related to this proposal.

List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

Critical Area Report: Lake Hills – Phantom Lake 115 kV Transmission Line Project, GeoEngineers, December 2011.  
Conditional Use Permit Application and Alternative Siting Analysis. December 29, 2011.

Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain. List dates applied for and file numbers, if known.

No other applications are pending.

List any government approvals or permits that will be needed for your proposal, if known. If permits have been applied for, list application date and file numbers, if known.

PSE plans in late 2012 to seek coverage under the Construction Stormwater General Permit (NPDES) issued by the Department of Ecology.

City of Bellevue administered permits and approvals are as follows:

- Alternative Siting Analysis
- Conditional Use Permit
- Shoreline Substantial Development Permit
- Shoreline Conditional Use Permit
- Critical Areas Land Use Permit
- SEPA Threshold Determination
- Clearing and Grading Permit
  - Construction Stormwater Pollution Prevention Plan
  - Temporary Erosion and Sediment Control Plan
- Building Permit (Substation Fences)

Please provide one or more of the following exhibits, if applicable to your proposal.  
(Please check appropriate box(es) for exhibits submitted with your proposal):

- Land Use Reclassification (rezone) Map of existing and proposed zoning
- Preliminary Plat or Planned Unit Development  
Preliminary plat map
- Clearing & Grading Permit  
Plan of existing and proposed grading  
Development plans
- Building Permit (or Design Review)  
Site plan  
Clearing & grading plan

X Shoreline Management Permit  
Site plan

A. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site: X Flat  Rolling  Hilly  Steep slopes  Mountains  Other

b. What is the steepest slope on the site (approximate percent slope)?

GeoEngineers (Critical Areas Report, December 2011) observed two areas along the proposed corridor that potentially meet the definition of steep slopes regulated under LUC 20.25H.120. A potential steep slope (Steep Slope 1) is located immediately north of NE 8<sup>th</sup> Street approximately 1,000 feet east of 148<sup>th</sup> Avenue NE. Steep Slope 1 is inclined approximately 45 percent and has a vertical relief of approximately 10 to 20 feet.

A second potential steep slope (Steep Slope 2) is on the west side of 148<sup>th</sup> Avenue NE, approximately 600 feet south of NE 8<sup>th</sup> Street. The top of Steep Slope 2 is estimated to be 25 feet above the elevation of 148<sup>th</sup> Avenue and is completely vegetated by English ivy. An approximately 8-foot tall rockery is located at the toe of the slope and abuts the sidewalk.

c. What general types of soil are found on the site (for example, clay, sand, gravel, peat, and muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Soil types vary throughout the project area depending upon location. Based on the Natural Resource Conservation Services Web Soil Survey, a majority of the project area contains Arenets, Alderwood material (AmC) and Alderwood gravelly sandy loam (AgC). There are areas of Seattle Muck (Sk) due to the presence of wetlands along the route.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

There are no known surface indications or history of unstable soils in the immediate vicinity of the project area. The two steep slope areas identified above do not display the geomorphic characteristics that define Landslide Hazards under LUC 20.25H.120(A)(1) per GeoEngineers (Critical Areas Report, December 2011). Both steep slopes appear to be engineered and are stable.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Grading activities will be limited to excavation for pole installation. There are approximately 50 proposed poles along the route. Typically, poles are installed by augering a hole (generally 3 feet in diameter and 8-12 feet deep). The pole is placed in the hole and the hole is backfilled with gravel. The soil spoils are either spread around the base of the pole with a mulch covering or hauled off site to an approved disposal site.

For poles in areas that require additional stability such as soft soils, a caisson will be placed vertically in the ground. The soil will then be removed from inside the caisson. The pole will then be held in place while gravel is backfilled inside the caisson.

Total excavation work associated with the pole installation will include approximately 477 cubic yards. Excavation for the new foundations at the substations will include approximately 400 cubic yards of material.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

During construction, temporary measures (best management practices [BMPs]) will be implemented to reduce the potential for soil erosion. However, significant erosion is very unlikely at the substation, as the site is essentially flat and site disturbances will be kept to a minimum.

- g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Along the 2.9 mile long proposed corridor, approximately 500 square feet additional impervious surface will be added outside the substation yards as a result of this project.

- g. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

Appropriate BMPs will be used to reduce and/or minimize the potential for erosion and sedimentation. Disturbed areas will be revegetated where possible to provide long-term stabilization to the project area. A Construction Stormwater Pollution Prevention Plan will be produced and adhered to as a requirement under the City of Bellevue Clearing and Grading requirements.

## 2. AIR

- a. What types of emissions to the air would result from the proposal (i.e. dust, automobile odors, and industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Short-term emissions will result during construction from minor dust and exhaust from construction equipment. Soil will be exposed during brief periods of time during pole placement [and construction associated with substations]. Soil exposed during construction around the substations will be landscaped per the Final Approved Landscape Plans.

- b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no off-site sources of emissions or odor that will affect this proposal.

- c. Proposed measures to reduce or control emissions or other impacts to the air, if any:

Standard emission control devices, in conformance with federal and state air quality standards, will be used during construction. Dust control BMPs, including wetting of exposed soil surfaces, will be implemented as needed by PSE's contractor to limit dust-generating sources. Efficient construction practices and timely restoration of areas of temporary disturbance will further reduce dust-generating sources.

## 3. WATER

- a. Surface

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

As shown in the attached Critical Areas Report, the following water bodies are located in the immediate vicinity of the site:

Kelsey Creek – Type F  
Kelsey Creek Tributary – Type N  
Larsen Lake Tributary – Type F

Wetland A – Category I  
Wetland B – Category II  
Wetland C – Category I  
Wetland D – Category III

- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If Yes, please describe and attach available plans.

The Phantom Lake Substation is located across 156<sup>th</sup> Avenue SE and SE 16<sup>th</sup> Street from the Lower Kelsey Creek wetlands. There is a small wetland (Wetland D) adjacent to the substation property on the southwest corner of SE 16<sup>th</sup> Street and 156<sup>th</sup> Avenue SE. No work is proposed within this wetland area. Some work may occur in the wetland buffer, which is currently substation landscaping.

The transmission route will run along the west side of 148<sup>th</sup> Avenue SE. Wetland C is included as part of the Lake Hills Greenbelt south of Main Street. Based upon field verification by GeoEngineers, the transmission poles will not be located within Wetland C, but will be located within the buffer adjacent to 148<sup>th</sup> Avenue SE. Kelsey Creek Tributary crosses under 148<sup>th</sup> Avenue SE going east – west along the northern portion of Wetland C. Larsen Lake Tributary also crosses under 148<sup>th</sup> Avenue SE within a culvert originating in Wetland C.

The transmission line route crosses 148<sup>th</sup> Avenue NE from the west side to the east side of the right-of-way just north of Main Street. There is an unnamed wetland east of 148<sup>th</sup> Avenue NE along this segment of the route. New poles are proposed within the wetland buffer.

The route also runs along the north side of NE 8<sup>th</sup> Street east of 148<sup>th</sup> Avenue NE adjacent to Wetland A. The poles will not be located within the wetland, but will be located in the buffer adjacent to NE 8<sup>th</sup> Street as field verified by GeoEngineers. Kelsey Creek runs underneath NE 8<sup>th</sup> Street via a culvert and crosses through Wetland A.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

No dredging or filling is proposed within surface water bodies or wetlands as a result of this project.

- (4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

The proposal will not require any surface water withdrawals or diversions.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

The proposed transmission line crosses through the Larsen Lake and Kelsey Creek floodplains within the street right of way.

The Critical Areas Report attached identifies the floodplains associated with the project.

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

The proposed project does not involve any discharges of waste materials to surface waters.

b. Ground

- (1) Will ground water be withdrawn, or will water be discharged to ground water? Give general

description.

Ground water will not be withdrawing and water will not be discharged to ground water as a result of this project.

- (2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals...; agricultural; etc.) Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

No waste material will be discharged into the ground from septic tanks or other sources as a result of this project.

c. Water Runoff (Including storm water)

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Runoff from the proposed project will be associated with stormwater that could originate during construction activities. Work within the substation will be relatively minor; therefore, containment of stormwater will be managed on site using appropriate BMPs.

- (2) Could waste materials enter ground or surface waters? If so, generally describe.

Waste materials will not enter the ground or surface waters.

- d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Vegetation removal and soil disturbance will be minimized to the extent possible. Areas that are disturbed will be controlled using appropriate BMPs.

#### 4. Plants

- a. Check or circle types of vegetation found on the site:

deciduous tree: alder, maple, aspen, other

evergreen tree: fir, cedar, pine, other

shrubs

grass

pasture

crop or grain

wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other

- water plants: water lily, eelgrass, milfoil, other
- other types of vegetation

b. What kind and amount of vegetation will be removed or altered?

In order to keep its obligation to provide safe and reliable service to its customers, PSE must establish and then maintain its utility corridors. A major part of the maintenance includes vegetation management which reduces tree caused outages. To prevent mature tree and transmission line conflicts, trees along the proposed route have been identified for removal and trimming. A majority of the trees to be removed are within the public right-of-way. Vegetation removal at the substation sites will be minimal. Removal of the trees is necessary as they will be in conflict with the new transmission lines. The transmission line will be above ground, thereby minimizing ground disturbances.

Transmission line corridor vegetation management will include the removal and/or trimming of approximately 490 trees, primarily composed of Douglas fir, big-leaf maple, red alder, Western red cedar, Western hemlock, black cottonwood, cherry, and flowering pears. A replanting effort will be defined through the permitting process.

c. List threatened or endangered species known to be on or near the site.

No known threatened or endangered species are on or near the site.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Vegetation enhancements along the transmission line corridor will be determined in coordination with the City of Bellevue.

## 5. ANIMALS

a. Check or circle any birds and animals which have been observed on or near the site or are known to be on or near the site:

- Birds: hawk, heron, eagle, songbirds, other:
- Mammals: deer, bear, elk, beaver, other:
- Fish: bass, salmon, trout, herring, shellfish, other:

b. List any threatened or endangered species known to be on or near the site.

There are no known threatened or endangered species on or the near the site.

c. Is the site part of a migration route? If so, explain.

The site, like much of western Washington is located within the Pacific Flyway.

d. Proposed measures to preserve or enhance wildlife, if any:

Critical Areas mitigation may be consolidated with other vegetation enhancements and will be determined during the permitting process, in coordination with the City of Bellevue.

## 6. Energy and Natural Resources

- a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy need? Describe whether it will be used for heating, manufacturing, etc.

The project is an electrical transmission line project and will not require additional energy.

- b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

The project will not affect the potential use of solar energy by adjacent properties.

- c. What kinds of energy conservation features are included in the plans of the proposal? List other proposed measures to reduce or control energy impacts, if any:

PSE provides a broad array of services and programs to encourage energy conservation and efficient use of energy.

## 7. Environmental Health

- a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Electrical transmission lines, distribution lines, and substations create electric and magnetic fields (EMF). EMF also exists in nature and around all types of electrical devices and appliances. Electric fields are produced by the presence of electrical charges (voltage); the movement of charges (current) produces magnetic fields. The electrical and magnetic fields around electrical appliances and utility facilities such as electrical power lines are referred to as extremely low frequency EMF. Extremely low frequency EMF does not have sufficient energy to break molecular bonds or damage DNA.

Magnetic fields are generated by transmission and distribution lines. Magnetic field strength from power lines depends on many factors including the design of the line, the amount of current the line carries, and the distance away from the line. EMF data collected by BPA for a large number of transmission lines in the Pacific Northwest found 29.7 milligauss (mG) to be the mean magnetic field reading at ground level underneath under 115 kV lines. The strength of a magnetic field drops off exponentially - the magnetic field decreases with the square of the distance. As such, ground level readings taken at a distance of 50 feet horizontally from the transmission line were found to be approximately 6.5 mG.

PSE relies on the independent scientific research community for information regarding EMF and potential health effects. The consensus of the scientific community is described in a number of reports that have been released by respected independent scientific groups representing a variety of disciplines including physics, epidemiology, and cellular biology. A review of these sources has found no causal relationship between exposure to extremely low frequency EMF associated with 60 Hertz (Hz) electrical facilities and adverse effects to human health. Currently the EPA or any other health agency of the state or federal government does not regulate electric and magnetic fields. This is consistent with the consensus of the scientific community that there is no basis from which to conclude the exposures to EMF cause adverse health effects.

EMF was addressed in conjunction with the most recent update to the Utilities Element of the City of Bellevue Comprehensive Plan. The City concluded that the existing policies contained in the Utilities Element are still adequate and that after reviewing planning for existing and proposed transmission lines within Bellevue, that "...the existing transmission lines or even those proposed as far out into the future as 2030 would not be expected to produce field levels approaching ICNIRP or ICES guidelines for public exposure."

Exposure limits. Neither the U.S. government nor the State of Washington has established exposure standards for public exposure to power frequency EMF. Two international organizations, the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the Institute of Electrical and Electronic Engineers (IEEE), have developed exposure guidelines. For power frequency (60 Hz) magnetic fields ICNIRP recommends public exposures not exceed 2,000 milliGauss (mG) and the IEEE recommends a maximum of 9,040 mG.

- (1) Describe special emergency services that might be required.

No special emergency services are anticipated to be required for this project.

- (2) Proposed measures to reduce or control environmental health hazards, if any.

No such measures are required.

**b. Noise**

- (1) What types of noise exist in the area which may affect your project (for example, traffic, equipment, operation, other)?

Noise within the area consists of generally traffic noise and will not affect the project.

- (2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example, traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Short-term noise impacts will result from equipment during construction. Construction activity will be confined to hours permitted under the Noise Code in BCC 9.18.020(C); 7:00 am – 6:00 pm during the week and 9:00 am – 6:00 pm on Saturdays (if weekend work is necessary). The transmission line will not generate long-term noise impacts. Noise from the new transmission line will not be audibly noticeable to adjacent property users.

- (3) Proposed measures to reduce or control noise impacts, if any:

Short-term noise impacts will be limited to construction hours outlined in BCC 9.18.

**8. Land and Shoreline Use**

- a. What is the current use of the site and adjacent properties?

The project begins and ends at electrical distribution substations. The transmission line corridor passes by single-family residential, multi-family residential, parks, office, and commercial uses.

- b. Has the site been used for agriculture? If so, describe.

The proposed alignment is currently public right-of-way. The city-owned Larson Lake Blueberry Farm is located on the opposite (east) side of 148<sup>th</sup> Avenue SE from the transmission corridor.

- c. Describe any structures on the site.

The site includes two fenced substations and associated equipment.

- d. Will any structures be demolished? If so, what?

No structures will be demolished as part of this project.

- e. What is the current zoning classification of the site?

The Phantom Lake Substation site is zoned Single-Family Residential, 1.8 units/acre (R-1.8) and the Lake Hills Substation site is zoned Office (O). Zoning district along the proposed transmission line alignment

include: Single-Family Residential (R-1, R-1.8, R-3.5, R-5), Multi-family Residential (R-10, R-20), Office (O), Neighborhood Business (NB), and Community Business (CB).

- f. What is the current comprehensive plan designation of the site?

The Comprehensive Plan designation for the Phantom Lake Substation site is Single-Family Low Density (R-1, R-1.8) and the designation for the Lake Hills Substation is Office (O). Comprehensive Plan designations along the route include: Single-Family Low Density (R-1, R-1.8), Single-Family Medium Density (R-2.5, R-3.5), Single-Family High Density (R-4, R-5), Multi-Family Low Density (R-10), Multi-Family Medium Density (R-15, R-20), Multi-Family High Density (R-30), Office (O), Community Business (CB), Professional Office (O), and Neighborhood Business (NB).

- g. If applicable, what is the current shoreline master program designation of the site?

A portion of the corridor is located on the west side of 148<sup>th</sup> Ave and within the Shoreline Overlay District.

- h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The following environmentally sensitive areas can be found along the proposed transmission line corridor:

1. Streams and Riparian Areas

- Kelsey Creek: Type F stream located on the north side of NE 8<sup>th</sup> Street, approximately 140 feet east of 148<sup>th</sup> Avenue NE.
- Kelsey Creek Tributary: Type N stream located on the west side of 148<sup>th</sup> Avenue SE, approximately 700 feet south of Main Street.
- Larsen Lake Tributary: Type F stream located within mapped culverts under 148<sup>th</sup> Avenue SE, west of Larsen Lake.

2. Wetlands

- Wetland A: Category I wetland associated with Kelsey Creek located on the north side of NE 8<sup>th</sup> Street, east of 148<sup>th</sup> Avenue NE.
- Wetland B: Category II wetland located on the north side of NE 8<sup>th</sup> Street, immediately west of 148<sup>th</sup> Avenue NE.
- Wetland C: Category I wetland located west of 148<sup>th</sup> Avenue SE near Larson Lake.
- Wetland D: Category III wetland located immediately east of the Phantom Lake Substation on the southwest corner of SE 16<sup>th</sup> Street and 156<sup>th</sup> Avenue SE.

3. Habitats of Species of Local Importance

- Merlin: Merlins are found in urban areas within the Puget Sound lowlands during winter and migration. Nests are primarily constructed in conifers between 18 and 36 feet high or in old crows' nests (Bell and Kennedy, 2006). These habitats occur throughout the proposed alignment, predominantly along SE 16<sup>th</sup> Street.
- Pileated woodpecker: Habitat areas can be found where there are trees large enough to roost and nest (typically western hemlock and western red cedar), generally found in city parks. These habitats occur primarily within the vicinity of the proposed alignment along SE 16<sup>th</sup> Street.

4. Geological Hazard Areas

- Steep Slope #1: Located on the west side of 148<sup>th</sup> Avenue NE, approximately 600 feet south of NE 8<sup>th</sup> Street. The top of the slope is approximately 25 feet from the grade of 148<sup>th</sup> Avenue SE

and it is completely vegetated with English ivy. An 8-foot rockery is located at the toe of the slope and abuts the sidewalk.

- Steep Slope #2: Located east of the intersection of NE 3<sup>rd</sup> Street and 148<sup>th</sup> Avenue NE. Extends approximately 15 feet down from 148<sup>th</sup> Avenue NE and is completely vegetated with Himalayan blackberry.

#### 5. Areas of Special Flood Hazard

The mapped flood hazard areas along the proposed alignment roughly coincide with the areas of Wetland A and C.

#### 6. Shorelines

- Wetland C is an associated wetland to Phantom Lake, and therefore falls within shoreline jurisdiction.
- Kelsey Creek: Type F stream located on the north side of NE 8<sup>th</sup> Street, approximately 140 feet east of 148<sup>th</sup> Avenue NE.
- Kelsey Creek Tributary: Type N stream located on the west side of 148<sup>th</sup> Avenue SE, approximately 700 feet south of Main Street.

#### i. Approximately how many people would reside or work in the completed project?

Maintenance workers will visit the completed project on a periodic basis. No personnel will work fulltime at the substations or along the transmission route.

#### j. Approximately how many people would the completed project displace?

The completed project will not displace any people.

#### k. Proposed measures to avoid or reduce displacement impacts, if any:

No measures are proposed, as there will be no displacement impacts.

#### i. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Portions of Lakes Hills and Phantom Lake substation landscaping will be enhanced. Tree replacement will occur in the project vicinity at a yet to be determined location.

### 9. Housing

#### a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

No housing units will be provided.

#### b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

No housing units will be eliminated.

#### c. Proposed measures to reduce or control housing impacts, if any:

There will be no impacts on housing, therefore no measures are proposed to reduce or control impacts.

## 10. Aesthetics

- a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The proposed transmission poles will be approximately 70 -80 feet in height. Most of the poles will be wood, some will be steel or weathered steel.

- b. What views in the immediate vicinity would be altered or obstructed?

PSE has designed the proposed transmission line corridor to reduce impacts to views. However, in order to keep its obligation to provide safe and reliable service to its customers, PSE must establish and maintains its utility corridors. A major part of the maintenance includes vegetation management which reduces tree caused outages.

Photo simulations that illustrate the proposed alterations are available.

- c. Proposed measures to reduce or control aesthetic impacts, if any:

Pole locations have been optimized to help reduce view impacts; however, it is anticipated that all impacts cannot be avoided. Vegetation enhancement as mitigation will improve aesthetics in the project vicinity.

## 11. Light and Glare

- a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

The proposal will not produce light or glare.

- c. Could light or glare from the finished project be a safety hazard or interfere with views?

Additional light or glare will not be a result of the finished project.

- d. What existing off-site sources of light or glare may affect your proposal?

Off-site light or glare will not affect the project.

- d. Proposed measures to reduce or control light or glare impacts, if any:

There are no proposed measures.

## 12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?

Recreational opportunities in the vicinity of the project include the Lake Hills Greenbelt and associated trails and the Crossroads Park and Community Center.

- b. Would the proposed project displace any existing recreational uses? If so, describe.

The proposal will not displace any existing recreational uses.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

There are no proposed measures.

### 13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

There are no known places or objects listed on, or proposed for, national, state, or local preservation registers on or next to the substation properties or proposed transmission route.

- d. Generally describe any landmarks or evidence of historic, archeological, scientific, or cultural importance known to be on or next to the site.

Larson Lake Blueberry Farm within the Lake Hills Greenbelt was identified as part of the City of Bellevue's 1992 Historic and Cultural Resources Survey.

- c. Proposed measures to reduce or control impacts, if any:

There are no proposed measures.

### 14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

The proposed project will be accessed by the existing street system. An additional driveway to 164<sup>th</sup> Avenue NE will be added to at the Lake Hills Substation.

- b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Public transit is not applicable to the proposal.

- c. How many parking spaces would be completed project have? How many would the project eliminate?

The proposal does not include additional parking.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

The Lake Hills Substation will install a new driveway which will result in the relocation of the existing King County Metro bus shelter. The shelter will be moved south.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

The project will not use water, rail or air transportation.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

The finished project will not result in additional vehicular trips per day.

- g. Proposed measures to reduce or control transportation impacts, if any:

There are no proposed measures.

**15. Public Services**

- a. Would the project result in an increased need for the public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

There will not be an increased need for public services as a result of the project.

- b. Proposed measures to reduce or control direct impacts on public services, if any.

There are no proposed measures.

**16. Utilities**

- a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

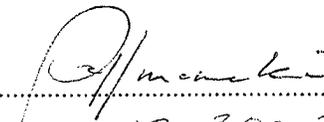
Electricity is currently available at the site.

- b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

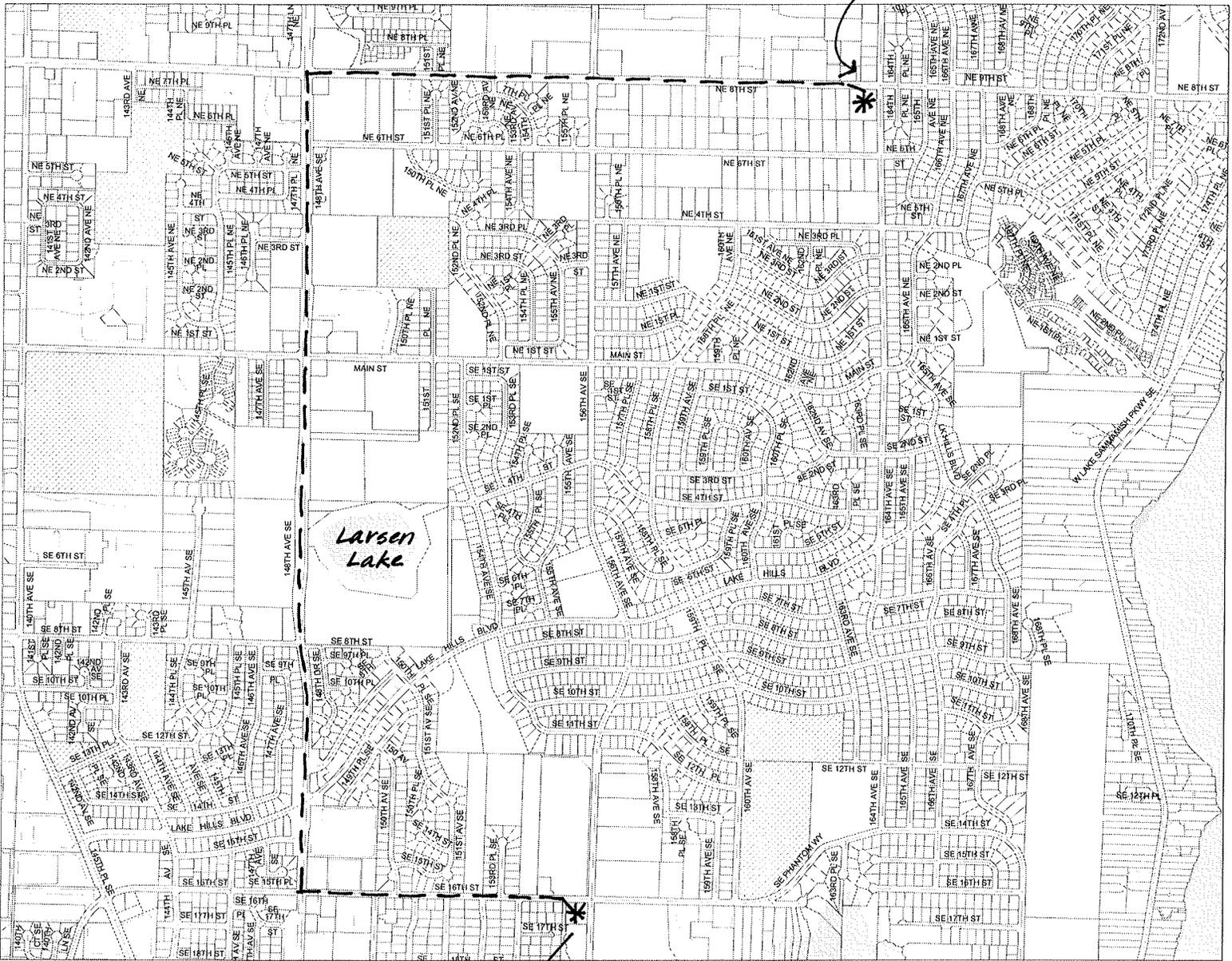
The project will strengthen the existing electrical system by adding redundancy. The new transmission line will increase the reliability of the electrical system for customers in the Crossroads, Robinswood, Lake Hills and Phantom Lake neighborhoods, as well as those neighborhoods served by the College Substation.

**Signature**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature.....  
Date Submitted..... 12-30-2011

10315 NE 8th St -  
Lake Hills  
Substation



Phantom Lake Substation -  
15555 SE 16th St.

