CHAPTER 1. INTRODUCTION AND SUMMARY

The City of Bellevue and its partner *Eastside* Cities (partner Cities) are jointly conducting a phased environmental review process under the State Environmental Policy Act (SEPA) for the "Energize Eastside" Project proposed by Puget Sound Energy (PSE). Energize Eastside is a proposal to build new electrical infrastructure to serve PSE's customers in the area between Lake Washington and Lake Sammamish, in King County, Washington. This first phase assesses the comprehensive range of impacts and implications associated with broad options for addressing PSE's objectives, in a non-project or *programmatic* Environmental Impact Statement (EIS). The second phase of this EIS process will assess project-level alternatives, as described in Section 1.5. This chapter provides an overview of the project and a summary of the findings of the Phase 1 Draft EIS. The project includes numerous terms that may not be familiar to all readers. Words shown in italics when they first appear in the document are included in the glossary, which follows the Table of Contents and precedes this chapter.

1.1 WHAT IS THE PROJECT THAT IS BEING EVALUATED IN THIS DRAFT EIS?

PSE is proposing to construct and operate a new 230 kilovolt (kV) to 115 kV electrical *transformer* served by approximately 18 miles of new high-capacity electric *transmission lines* (230 kV) extending from Renton to Redmond. The proposed transformer would be placed at a *substation* site near the center of the Eastside. The Eastside is an area of King County, Washington, roughly defined as extending from Renton in the south to Redmond in the north, and between Lake Washington and Lake Sammamish. Electrical power would be transmitted to this substation and the voltage lowered, or "stepped down" (transformed), from 230 kV to 115 kV for distribution to local customers.

This set of facilities is proposed in order to address a deficiency in electrical *transmission* capacity during peak periods that has been identified by PSE through its system planning process. This deficiency is expected to arise as a result of anticipated population and employment growth on the Eastside, and it is expected to negatively affect service reliability for Eastside customers within the next few years. The project would improve reliability for Eastside communities and would supply the needed

What is an electrical transformer? An electrical transformer is a stationary piece of equipment that converts electricity from one voltage to another. For Energize Eastside, the transformer would convert 230 kV power to 115 kV power to supply the local electrical distribution system.

What is a transmission line? A transmission line is a system of support structures and wires that typically carry electricity from a power source to a substation or between substations. In western North America's electrical grid system, transmission lines are operated at voltages of 115 kV, 230 kV, 500 kV, and greater.

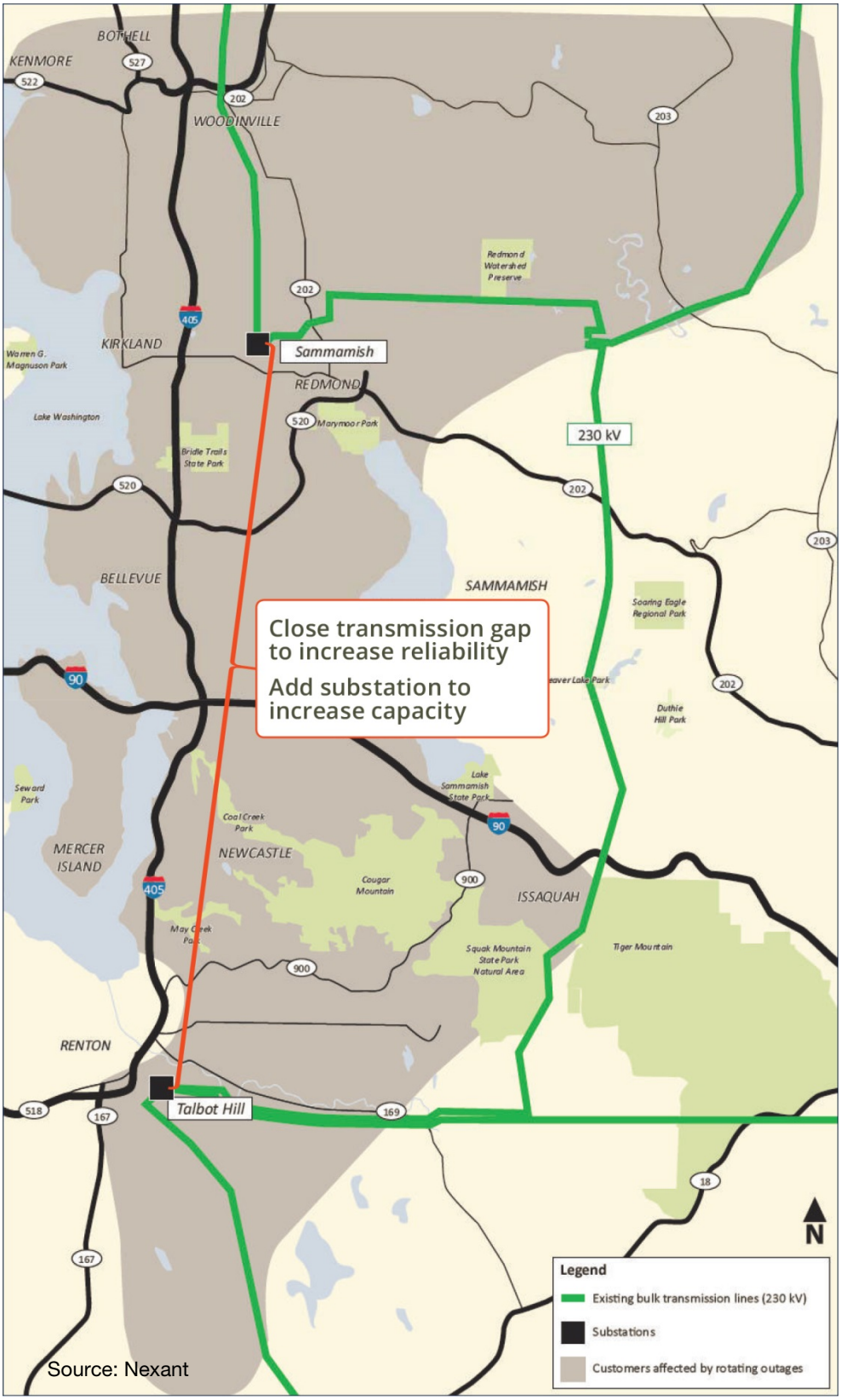
What is a substation? A substation is a facility with equipment that switches, changes, or regulates electric voltage. Substations typically include transformers and other equipment and obtain power from transmission lines.

electrical capacity for anticipated growth and development on the Eastside.

Based on federally mandated planning standards, PSE's analysis found that the existing transmission system could place Eastside customers and/or the regional power grid at risk of power outages or system damage during peak power events due to cold or hot weather. PSE's analysis concluded that the most effective solution was to add a 230-to-115 kV transformer within the center of the Eastside to relieve stress on the existing 230-to115 kV transformers that currently supply the area. This would need to be fed by new 230 kV transmission lines from the north and south. Figure 1-1 shows the Eastside and the locations of existing substations and transmission lines, and the area where a new substation and new 230 kV lines are proposed. The 230 kV system is proposed because that is the next highest voltage line (greater than the existing115 kV lines) that PSE could feasibly install and operate consistent with the regional grid system. As illustrated in Figure 1-1, there is no 230 kV transmission line that reaches the center of the Eastside area.

This Phase 1 Draft EIS evaluates the proposed 230 kV improvements as well as alternatives to PSE's proposal as described in more detail in Chapter 2.

Figure 1-1. PSE Bulk Transmission System in the Eastside Area



Source: Nexant

1.2 WHY IS THIS EIS BEING PREPARED?

Discussions between partner Cities and PSE determined that the proposal is likely to have significant adverse environmental impacts. Pursuant to SEPA, a Threshold Determination of Significance was issued as required in the Washington Administrative Code (WAC) 197-11-360 on April 30, 2015.

To address the potential for significant environmental impacts, PSE submitted an application for processing of an EIS with the City of Bellevue. As the largest and potentially most affected city, the City of Bellevue agreed with the other partner Cities to take the role of *lead agency*, consistent with WAC 197-11-944. The City of Bellevue is directing overall preparation of the EIS. Partner Cities including the Cities of Kirkland, Newcastle, Redmond, and Renton have reviewed preliminary versions of this Draft EIS and provided input on its preparation.

This Phase 1 Draft EIS is the first phase of a two-phase Draft EIS process to evaluate the potential for significant environmental impacts (see Section 1.5.1 for an explanation about the Phase 1 Draft EIS and the Phase 2 Draft EIS). The Phase 1 Draft EIS broadly evaluates the general impacts and implications associated with feasible and reasonable options available to address PSE's identified objectives for the project. The evaluations conducted during Phase 1 will be used to narrow the range of alternatives for consideration in the Phase 2 Draft EIS. The Phase 2 Draft EIS will be a project-level evaluation, describing impacts at a site-specific and project-specific level. This approach is consistent with the requirements for Phased Review outlined in WAC 197-11-060 (5)(c).

1.3 WHAT IS THE PURPOSE AND NEED FOR THE ENERGIZE EASTSIDE PROJECT?

PSE has determined that there is a need to construct a new 230 kV bulk electrical transmission line and an associated electrical substation east of Lake Washington to supply future electrical capacity and improve the reliability of the Eastside's electrical grid. PSE provided two documents that describe the need: the *Eastside Needs Assessment Report* and the *Supplemental Eastside Needs Assessment Report* (Gentile et al., 2014, 2015). These are referred to collectively as PSE's Eastside Needs Assessment.

What is bulk electrical transmission? Bulk electrical transmission is a system for transfer of electrical energy, from power generation plants to electrical substations near or within demand centers.

To better understand PSE's project proposal, the EIS Consultant Team obtained clearance and reviewed internal utility planning and operations information used by PSE in developing the Energize Eastside Project proposal. Because of security concerns, this information is released only to individuals with approved security clearance and who can meet other evaluation factors established by the Federal Energy Regulatory Commission (FERC) allowing restricted disclosure of Critical Energy Infrastructure Information (FERC, 2007).

The EIS Consultant Team, represented by Stantec (an electrical system planning and engineering subconsultant working in support of the Energize Eastside EIS effort), has reviewed this background information and studied the process used by PSE to establish a need for the proposed Energize Eastside Project. Stantec prepared a memorandum evaluating the stated need for the project, and confirmed that PSE's Eastside Needs Assessment was conducted in accordance with industry standards for utility planning (Stantec, 2015). See Appendix A for more information.

As outlined in WAC 197-11-060 (3)(a), it is the responsibility of the lead agency to make certain that a proposal that is the subject of environmental review is properly defined. The process of defining the proposal includes an objective understanding of the need for the project, to enable a thorough understanding of the project's objectives (see Chapter 2) and technical requirements, and in order to accurately identify feasible and reasonable project alternatives for consideration in the EIS. As noted in WAC 197-11-060(3)(a)(iii), proposals should be described in ways that encourage considering and comparing alternatives, and agencies are encouraged to describe proposals in terms of objectives rather than preferred solutions. An understanding of the need for the project helps in clarifying the objectives that have been used to develop the broad alternatives.

This EIS will not be used to reject or validate the need for the proposal. Rather, the EIS is intended to identify alternatives that could attain or approximate PSE's objectives at a lower environmental cost and disclose potential significant adverse environmental impacts associated with all alternatives identified.

The deficiency in transmission capacity on the Eastside that PSE has identified is based on a number of factors. It arises from growing population and employment, changing consumption patterns associated with larger buildings, more air-conditioned space, and a changing regulatory structure that requires a higher level of reliability than was required in the past. The regulatory changes that underlie the heightened concerns about reliability trace back to an August 2003 blackout in the midwestern and northeastern portions of North America that affected 55 million customers.[1] PSE has concluded that the most effective and cost-efficient solution to meet its objectives is to site a new 230 kV transformer in the center of the Eastside, which would be fed by new 230 kV transmission lines from the north and south (Stantec, 2015).

The population of the Eastside is expected to grow at a rate of approximately 1.2 percent annually over the next decade, and employment is expected to grow at an annual rate of approximately 2.1 percent, a projection based on internal forecasting conducted by PSE. For this forecast PSE used demographic data based on U.S. Census information and the Puget Sound Regional Council. PSE also relies on Moody's Analytics U.S. Macroeconomic Forecast, a long-term forecast for the U.S. economy, with adjustments for PSE's service territory using equations that relate national to regional conditions. Local economic data are provided by the Washington State Employment Security Department, U.S. Bureau of Labor

[1] See U.S. - Canada Power System Outage Task Force Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations, April 2004.

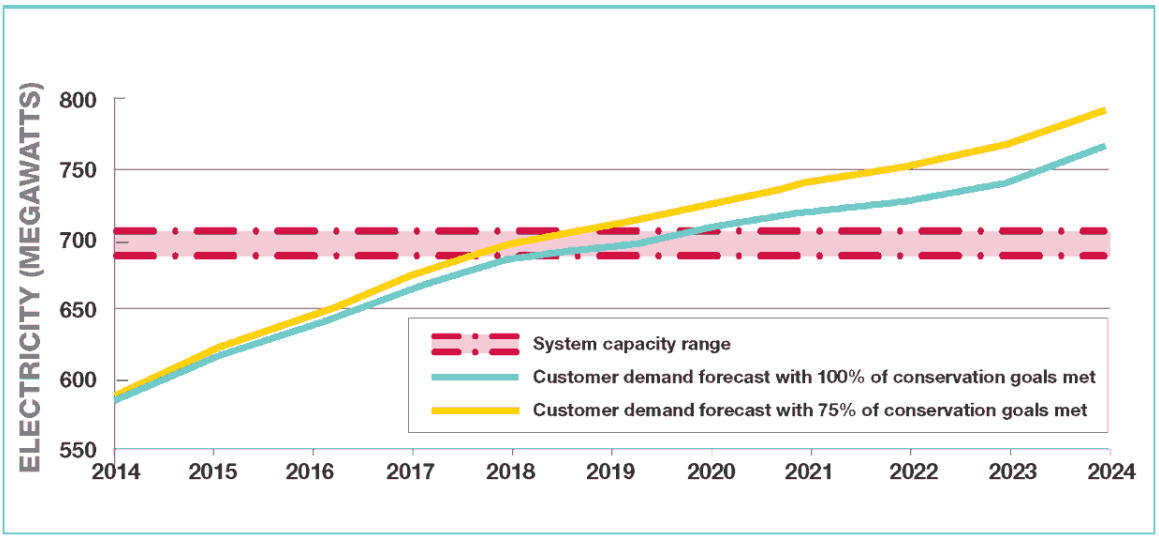
Statistics and Bureau of Economic Analysis, and local organizations such as the Washington Builders Association (Gentile et al., 2015).

This forecast is based on the assumption that economic activity has a significant effect on energy demand. Given the nature of expected development, PSE has projected that electrical demand will grow at an annual rate of 2.4 percent. As described in PSE's Eastside Needs Assessment, this growth rate takes into account population and employment growth as well as expected "block load" growth that PSE is aware will be coming in the next 10 years (Gentile et al., 2014, 2015).

What is a block load? A block load is the expected increase in energy demand from a specific customer or group of customers. PSE regularly asks its largest customers if they anticipate substantial increases in their electrical demand, to help estimate energy consumption growth expected to occur independent of employment or population growth rates.

Without adding at least 74 megawatts (MW) of transmission capacity for local peak periods in the Eastside, a deficiency could develop as early as winter of 2017 - 2018 or summer of 2018, putting customers at risk of *load shedding* (forced power outages) (Stantec, 2015). According to PSE projections, the 74 MW would marginally meet the demand through 2018 (Gentile et al., 2015). Figure 1-2 shows PSE's projected growth in load for the eastside from 2014 to 2024 and the capacity of its transmission system.

Figure 1-2. Eastside Customer Demand Forecast



Source: Gentile et al., 2015.

Based on these projections, load demand could increase to a point where, if adverse weather conditions occur and one or more components of the system are not operating for any reason, load shedding could be required in order to protect the Eastside and the rest of the regional grid. This is because, once the threshold is crossed, the physical limitations of the system are such that even the slightest overload will produce overheating that can damage equipment, and larger overloads will produce overheating more quickly. Once equipment is in an overload condition, the options are to let it fail or take it out of service. Both conditions leave the Eastside in a vulnerable state where the system is incapable of reliably serving customer

load. At that point, further actions such as load shedding may be needed in order to keep the system intact within the Eastside service area and beyond. By the end of the 10-year forecast period, a large number of customers would be at risk, and the load shedding requirement could be as high as 133 MW (Stantec, 2015). Specifically, PSE's estimate is that in the summer 2024 scenario, over 211,000 customers experience rotating outages on up to 9 days over a period of 16 days. In the winter 2023-2024 scenario, around 175,000 customers experience rotating outages on up to 13 days over a period of 29 days (Nexant, 2015).

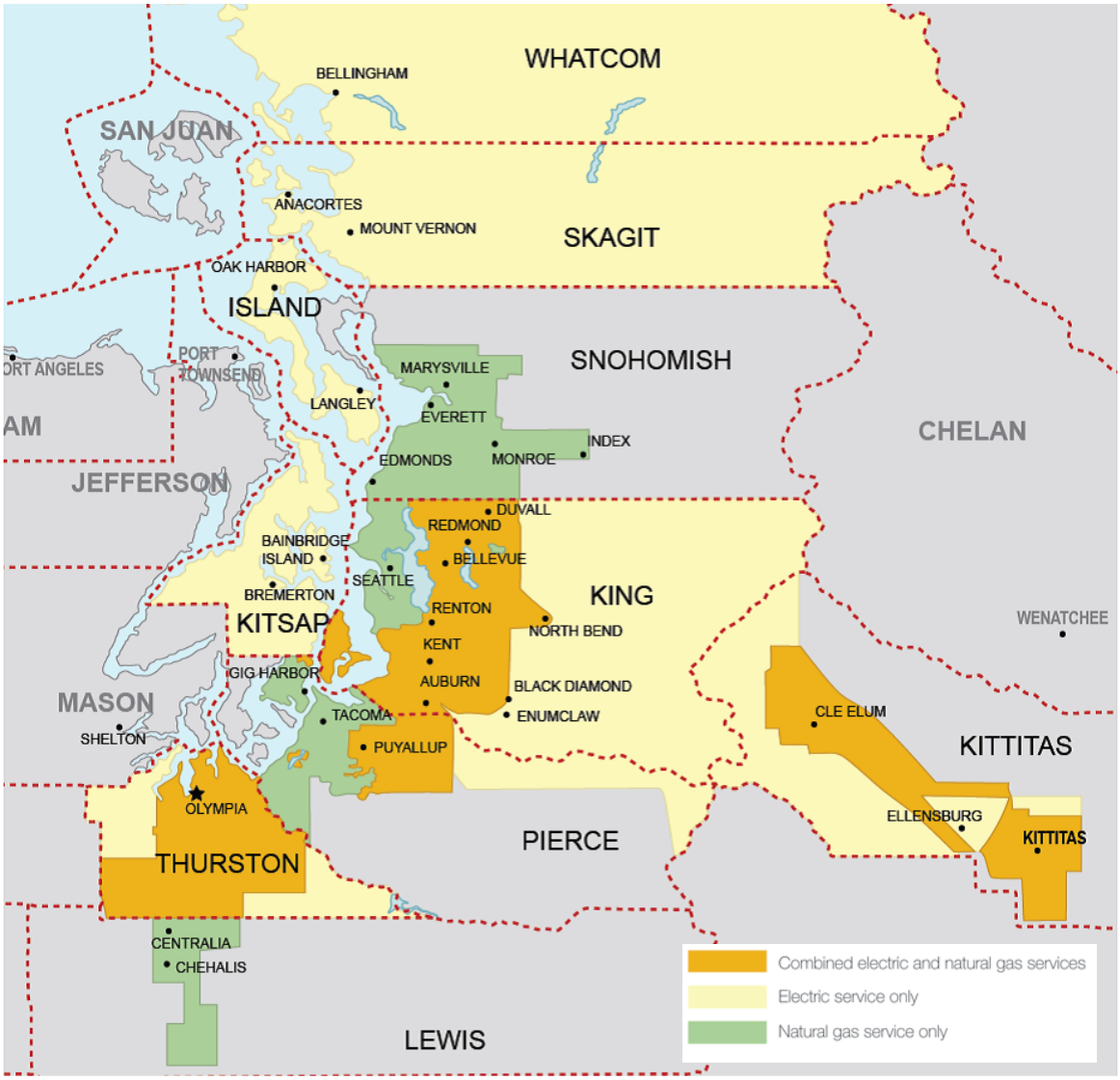
The load area in question is situated between two existing sources of bulk electrical power: the Sammamish substation on the north end (Redmond/Kirkland area) and the Talbot Hill substation on the south end (Renton area) (Figure 1-1). These two sites are the closest substations that bring 230 kV power supply to the Eastside, and therefore supply power to support most of this geographic area. Increases or decreases in load that are not directly supplied by these two substations, or power flow to other parts of the system outside the service area, have minimal effect on the ability of these substations to supply load. Because of the configuration and limited capacity of the transmission system within the Eastside, a direct change in electrical demand for power flowing through these two substations, or a change in power being supplied to these two substations, will affect the Eastside area. Once the higher voltage (230 kV) is transformed down to a lower voltage (115 kV) at these two substations, the system is limited by the physical capacity of the conductors and transformers that connect those two substations to the load and feed the area (Stantec, 2015).

What is a conductor? An object or type of material that allows the flow of electrical current in one or more directions. The wires on a transmission line are conductors.

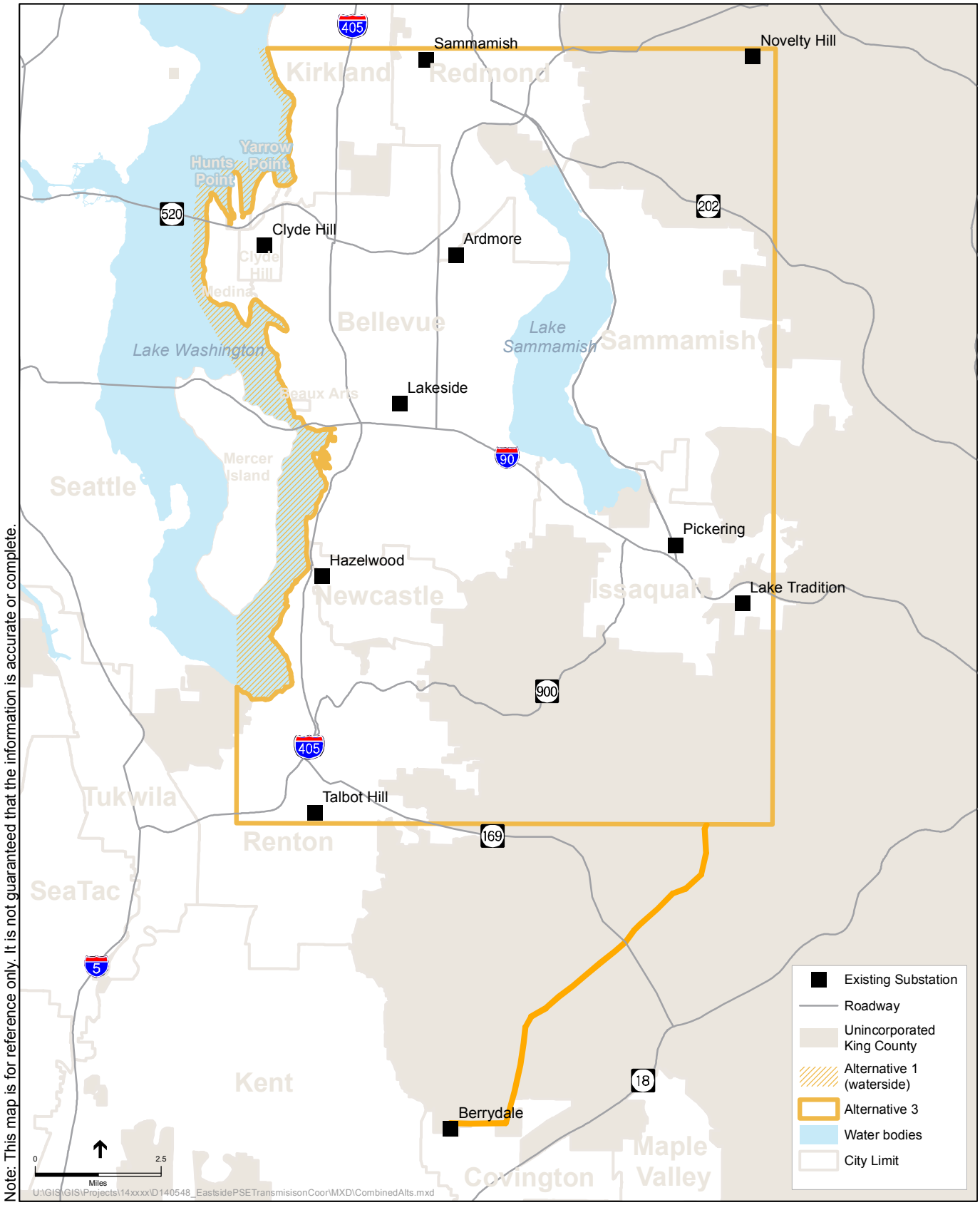
1.4 HOW DOES PUGET SOUND ENERGY'S ELECTRICAL SYSTEM WORK?

PSE is a regulated utility that serves approximately 1.1 million customers with electricity in a 4,500-square-mile service area (PSE, 2013a). Figure 1-3 shows PSE's service area for both electricity and gas service. This service area includes the study area for the Energize Eastside project. Study areas were developed for each of the three action alternatives evaluated in this Phase 1 Draft EIS (depicted on Figures 2-4, 2-5, and 2-6 in Chapter 2), because each alternative would affect slightly different geographic area. The *combined study area* is shown in Figure 1-4.

Figure 1-3. PSE Service Area



Source: PSE, 2016



Note: This map is for reference only. It is not guaranteed that the information is accurate or complete.

SOURCE: King County 2015; ESA 2015;
Puget Sound Energy 2015; WA Ecology 2014.

Energize Eastside EIS 140548

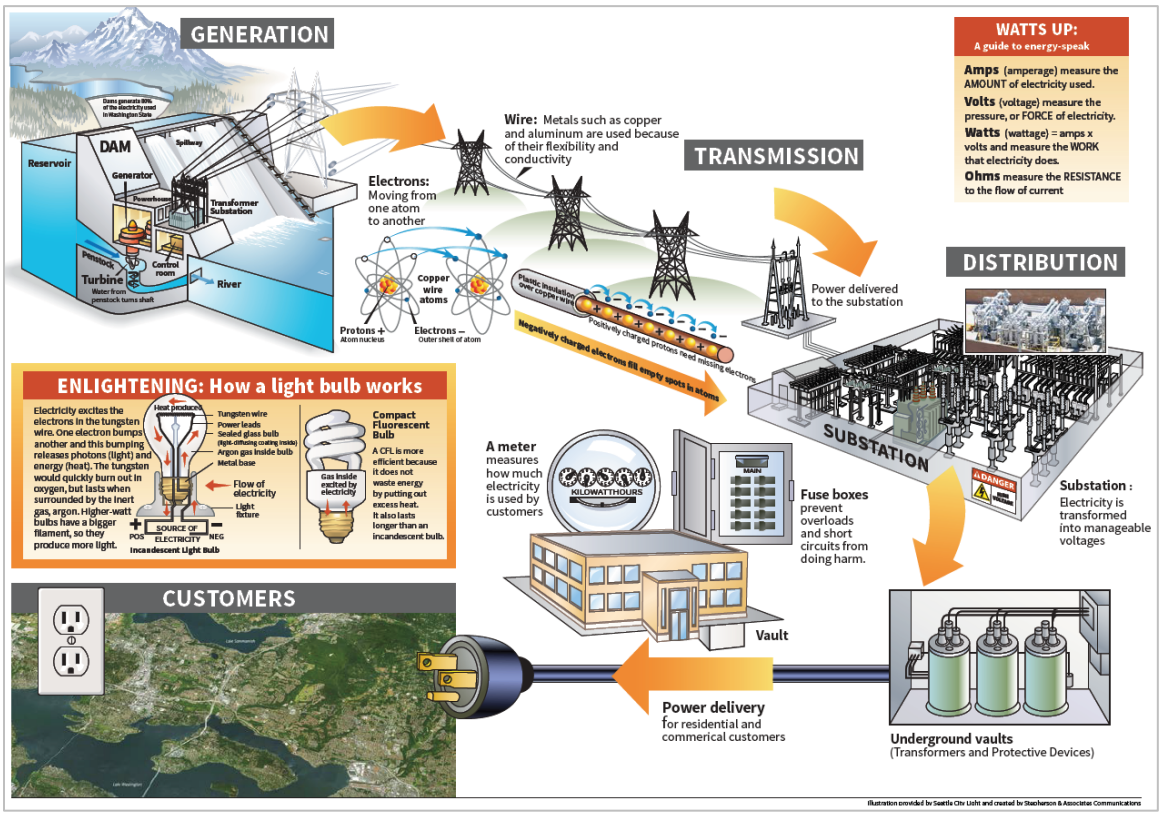
Figure 1-4

Combined Study Area

The Eastside represents approximately 14 percent of PSE's total electrical load. PSE is part of a western regional system, through which electricity is produced elsewhere and transported to the Eastside along high-voltage transmission lines. As electricity nears end users, the voltage is reduced (using transformers) and redistributed through transmission substations and distribution substations. Figure 1-5 provides an overview of how electrical transmission and distribution systems work.

Power is carried on high-voltage transmission lines (230 kV and greater) from generating facilities to the Eastside via the Sammamish substation in Redmond and Talbot Hill substation in Renton. From these substations, voltage is reduced to 115 kV and distributed to numerous Eastside distribution substations (PSE, 2013b). See Figure 1-1 above and Figure 16-1 in Chapter 16 for a map that shows PSE's existing electrical system on the Eastside and vicinity.

Figure 1-5. How Electricity is Delivered from Generation to Customers

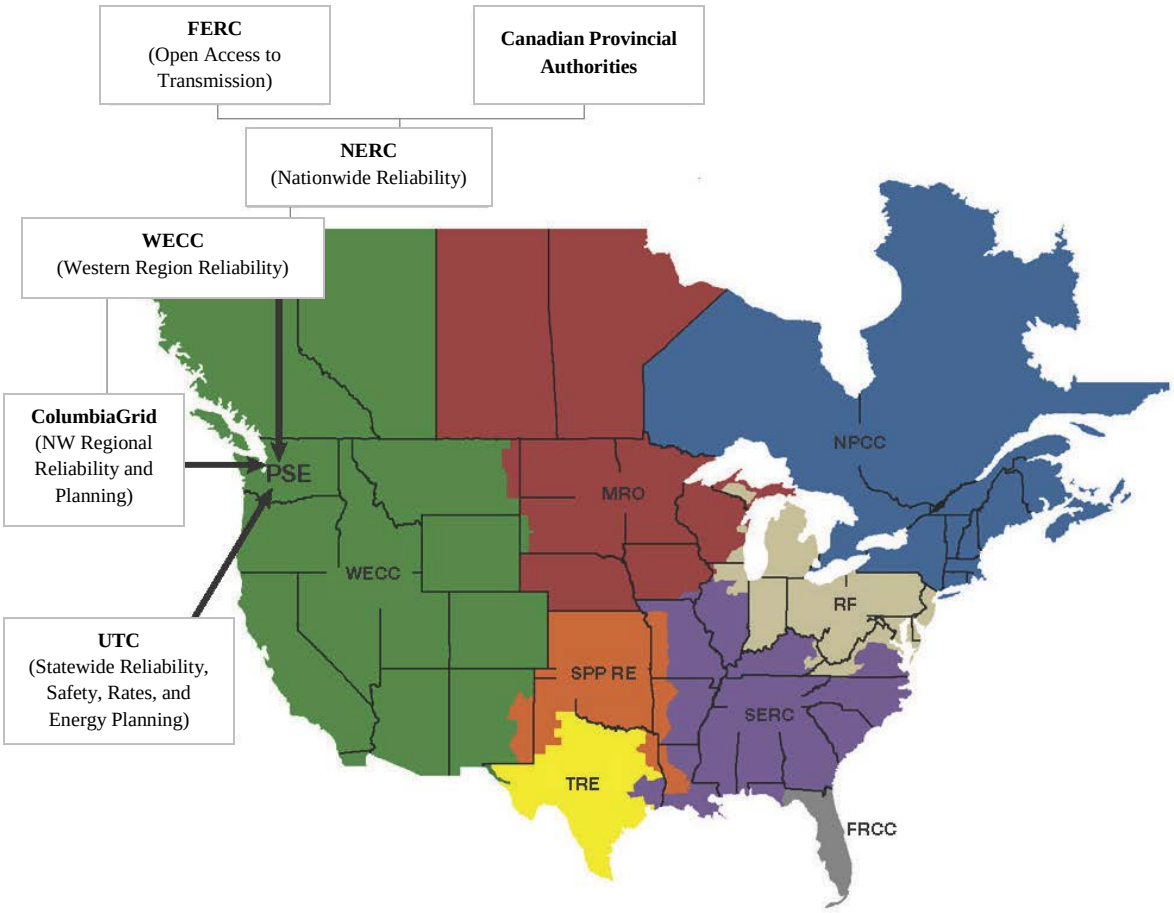


The Energize Eastside Project is intended to address an identified deficiency in the capacity of PSE's transmission system. It does not address the sources of generation, which at present are primarily located outside of the Eastside area. PSE conducts a separate planning process called an Integrated Resource Plan regarding its sources of energy (PSE, 2013a).

PSE's electric delivery system is regulated and coordinated by several state and federal agencies, including FERC, North American Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and Washington Utilities and

Transportation Commission (UTC). PSE cooperates and supports ColumbiaGrid in its regional planning processes. Figure 1-6 shows the agencies involved in regulation of PSE's transmission system. The general roles of each agency are described briefly in parentheses in Figure 1-6 and in further detail in Table 1-1.

Figure 1-6. Regulatory and Planning Framework for PSE



FERC: Federal Energy Regulatory Commission; FRCC: Florida Reliability Coordinating Council; MRO: Midwest Reliability Organization; NERC: National Electric Reliability Corporation; NPCC: Northeast Power Coordinating Council; RF: Reliability First; SERC: Southeastern Electric Reliability Council; SPP RE: Southwest Power Pool Regional Entity; TRE: Texas Reliability Entity; UTC: Washington State Utilities and Transportation Commission; WECC: Western Electricity Coordinating Council. Source: WECC 2015

Table 1-1. Regulatory and Coordinating Agencies Governing PSE

Federal Energy Regulatory Commission (FERC)	FERC is a U.S. federal agency that regulates interstate transmission of electricity, natural gas, and oil, as well as Liquefied Natural Gas (LNG) terminals, interstate natural gas pipelines, and hydropower projects. FERC requires any public utility (including PSE) that owns, controls, or operates facilities used for transmission of electric energy in interstate commerce to provide open access transmission service comparable to that provided by transmission owners (such as PSE) to themselves (18 CFR 35.28).
North American Electric Reliability Corporation (NERC)	NERC is a not-for-profit international regulatory authority whose mission is to ensure the reliability of the *bulk power system* in North America, as certified by FERC. NERC develops and enforces Reliability Standards and annually assesses seasonal and long-term reliability. PSE is required to meet the Reliability Standards and is subject to fines if noncompliant.
Western Electricity Coordinating Council (WECC)	WECC is a Utah nonprofit corporation with the mission to foster and promote reliability and efficient coordination in the Western Interconnection, which includes much of western North America. The PSE service area is in the WECC region. WECC develops and implements Regional Reliability Standards and WECC Regional Criteria for the Western Interconnection. PSE is part of the Western Interconnection and is obligated to meet the Regional Reliability Standards.
ColumbiaGrid	ColumbiaGrid is a nonprofit membership corporation formed to: improve reliability of the transmission grid and efficiency in its use; provide cost-effective transmission planning and expansion; develop and facilitate the implementation of solutions relating to improved use and expansion of the interconnected Northwest transmission system; and support effective market monitoring within the Northwest and within the Western Interconnection while considering environmental concerns, regional interests, and cost-effectiveness. The corporation itself does not own transmission, but its members and the parties to its agreements own and operate an extensive network of transmission facilities. As a signatory to ColumbiaGrid, PSE is obligated to meet the objectives of operating a reliable electric grid.
Utilities and Transportation Commission (UTC)	The UTC is a Washington state regulatory agency. The UTC requires that PSE make its electric service available to all residents and businesses within its service area, and that the service must be delivered in a safe and reliable manner. This is known as the "obligation to serve" and is codified in Washington state law. This means that PSE shall operate a system that is safe and delivers reliable power, thus minimizing interruptions and outages. The UTC has the authority to levy fines against the company for failure to comply with regulatory requirements.

The UTC requires providers of electricity to provide service on demand in support of growth that occurs in their service areas. PSE conducts an ongoing capacity planning process to ensure its power supply and infrastructure are adequate to meet anticipated future needs (PSE, 2013a). The *2013 Integrated Resource Plan* is the strategic plan for securing reliable and cost-effective energy resources (PSE, 2013a). PSE develops both short-range and long-

range infrastructure plans based upon economic, population, and load growth projections, as well as information from large customers and government stakeholders. The plan is reviewed annually with periodic updates to the plan. PSE's revised plan was submitted to the UTC November 30, 2015, but was not included in this Draft EIS because it was completed too late in this EIS process. It will be considered in Phase 2. The *2015 Integrated Resource Plan* (PSE, 2015) is available for review on PSE's website at https://www.pse.com/aboutpse/EnergySupply/Pages/Resource-Planning.aspx.

1.5 HOW IS THE SEPA REVIEW BEING CONDUCTED FOR THIS PROJECT?

1.5.1 Phase 1 and Phase 2 EIS

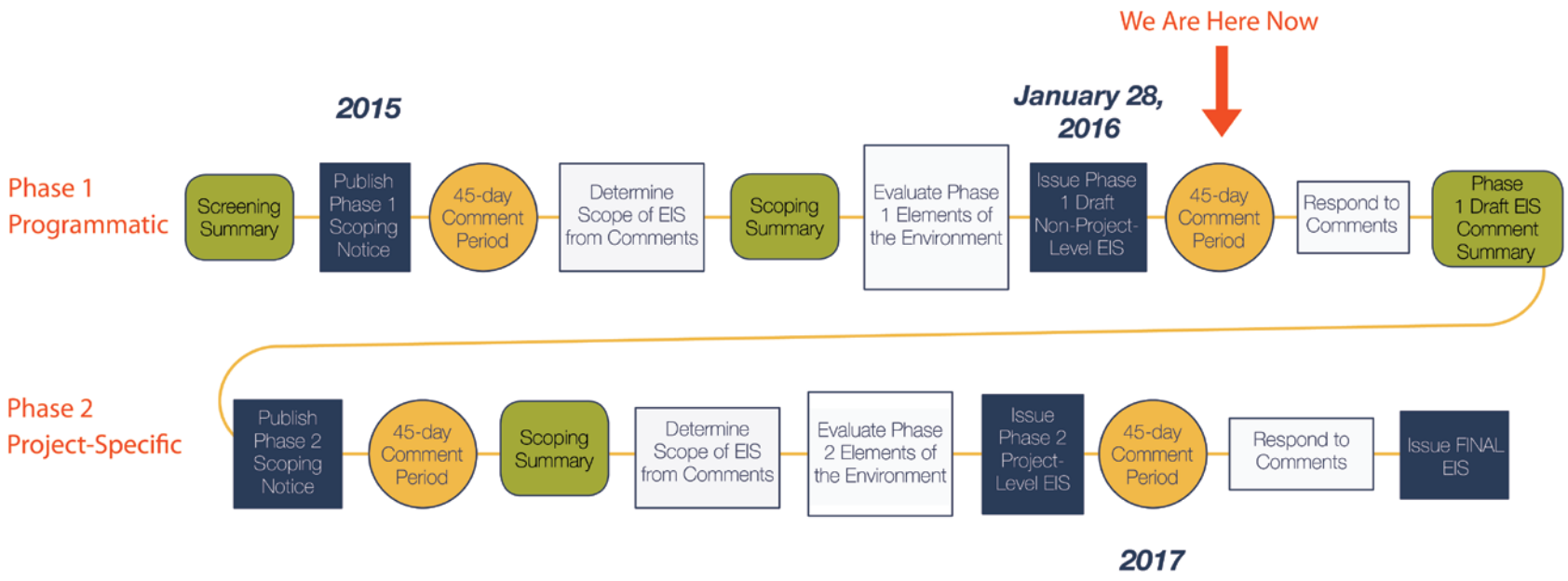
The Eastside Cities (Bellevue, Kirkland, Newcastle, Redmond, and Renton) determined that a Phased EIS (WAC 197-11-060(5)), supported by the EIS Consultant Team and in collaboration with the applicant, PSE, would be the best approach to adequately evaluate the proposal. The first phase, for which this Draft EIS has been prepared, programmatically evaluates the potential environmental impacts of various alternatives to be considered for addressing the identified project need. This Phase 1 Draft EIS broadly describes the types of impacts that the alternatives could cause and mitigation that would be available to minimize or avoid such impacts. It also describes any significant impacts that would be unavoidable for each alternative. This broad evaluation is intended to provide decision-makers and community members with a better understanding of what constructing and operating the alternative methods would mean to the community, and how to best evaluate the environmental impacts of project-level alternatives in Phase 2.

Following release of the Phase 1 Draft EIS, comments will be reviewed and responded to, in a Phase 1 Draft EIS comment summary. These comments will be used to inform the alternatives carried forward into the Phase 2 Draft EIS, which will include additional detail on the proposed project alternatives.

The Phase 1 Draft EIS generally does not analyze impacts associated with specific development at specified geographic locations. The Phase 2 Draft EIS will include project-level alternatives based on more defined geographic locations and a more detailed analysis of potential environmental impacts. Figure 1-7 illustrates the overall process for preparing the two phases of the Draft EIS. A Final EIS will be prepared to respond to comments on both Draft EIS documents.

The Phase 1 Draft EIS and Phase 2 Draft EIS together are intended to provide a comprehensive analysis of the project and alternatives. The Phase 2 Draft EIS will be a supplement to the Phase 1 Draft EIS as described in WAC 197-11-600 and WAC 197-11-620, and as part of a Phased EIS process per WAC 197-11-060(5). Commenting is invited for each of the Draft EIS stages and at each of the scoping stages. The Final EIS will include responses to comments on both Draft EIS documents and will be used by the partner Cities to support any permit decisions required.

Figure 1-7. Environmental Impact Statement Process



1.6 HOW WAS THIS EIS DEVELOPED?

The EIS was developed under the direction of the City of Bellevue, working closely with its partner Cities and its consultants. As previously noted, the project is proposed by PSE, a regulated utility. Therefore, PSE developed the project objectives and helped to define alternatives that would attain or approximate the proposal's objectives, as required by SEPA. The City of Bellevue and its team refined the Phase 1 alternatives to meet SEPA requirements, including development of a No Action Alternative.

The following major steps were taken to develop the Phase 1 Draft EIS:

1. Programmatic alternatives were defined through an iterative process with input by the EIS Consultant Team, PSE, City of Bellevue, and the other partner Cities. After examining the materials provided by PSE regarding its planning process for the project, alternatives were selected that would broadly define different ways of approaching the deficiency in transmission capacity identified by PSE. One approach would use 230 kV transmission lines as PSE proposes; one would use alternative methods that would minimize the need for new transmission lines; and one would use 115 kV transmission lines (which are more common on the Eastside and smaller in scale than 230 kV) along with substation upgrades. These three alternatives plus a No Action Alternative were carried forward in Phase 1 EIS scoping, which commenced in April 2015.

2. Phase 1 EIS public scoping outreach was conducted to assist in identifying technically viable alternatives that address PSE's reported deficiency in electrical transmission capacity. Scoping comments were requested to focus on identification of viable alternatives and associated impacts. Five public meetings were held at venues in Bellevue, Kirkland, Newcastle, and Renton, along with opportunities to provide comments online. More than 400 comments in the form of website forms, emails, oral testimony, and letters were received during scoping, as summarized in the *Phase 1 Draft EIS Scoping Summary and Final Alternatives* (City of Bellevue, 2015).

3. As a result of scoping, the alternatives were expanded and refined. The EIS Consultant Team reviewed all alternatives proposed during scoping, made a technical review of the efficacy of the proposed alternatives, and screened the alternatives against PSE's criteria for an effective solution as listed in PSE's 2015 *Supplemental Solutions Report* (Gentile et al., 2015). Staff representing each of the partner Cities discussed the findings, and a final set of alternatives was established by agreement among the Cities and PSE. These are also summarized in the *Phase 1 Draft EIS Scoping Summary and Final Alternatives* (City of Bellevue, 2015). The alternatives reflect the 19 project criteria developed by PSE (described in detail in Chapter 2). The Phase 1 Draft EIS includes three action alternatives and the No Action Alternative. All alternatives would attain or approximate PSE's objectives. Alternatives 2 and 3 would not fully meet all objectives, but would address the objectives sufficiently enough to be reasonable for consideration at this phase of analysis.

4. Input received during *scoping* was also used to define the environmental analysis needed, including methods used, area of study, and other topics. The topics to be studied were also summarized in the *Phase 1 Draft EIS Scoping Summary and Final Alternatives* (City of Bellevue, 2015).

5. Each chapter of this Phase 1 Draft EIS describes the methods used by the EIS Consultant Team to analyze potential environmental impacts. This process included consultation with PSE and numerous agencies throughout the Eastside, including the partner Cities as well as other study area communities.

6. The City of Bellevue and the other partner Cities reviewed drafts prepared by the EIS Consultant Team and provided comments for EIS Consultant Team response. Following this review, PSE reviewed a preliminary version of a portion of this Phase 1 Draft EIS for technical accuracy. PSE was provided and reviewed sections of Chapter 1 and Chapter 2 that did not contain analysis or conclusions of the analysis. The City of Bellevue, as SEPA lead agency, performed final review of the Phase 1 Draft EIS prior to publication.

1.7 HOW HAS PUBLIC INPUT BEEN INCORPORATED INTO THE EIS PROCESS?

As described above, the scope of this EIS has incorporated public comment received through website forms, emails, oral testimony, and letters. Comments regarding the need for the project helped focus attention on clarifying the project objectives. Comments regarding the alternatives resulted in changes to the alternatives proposed in the initial Scoping Notice published in April 2015. Comments regarding potential impacts were catalogued and evaluated by the lead agency to determine which impacts could potentially be significant. For some topics, even though significant impacts are not anticipated, there is sufficient controversy about potential impacts that the topics are included in the EIS. The results of the scoping process were summarized in the *Phase 1 Draft EIS Scoping Summary and Final Alternatives* (City of Bellevue, 2015).

1.8 WHAT ARE THE APPLICANT'S OBJECTIVES FOR THE ENERGIZE EASTSIDE PROJECT AND HOW WERE THEY USED FOR THIS DRAFT EIS?

The purpose and need for the project, summarized in Section 1.3, helped to define PSE's broad objectives for the project, which are as follows:

- Address PSE's identified deficiency in transmission capacity;
- Find a solution that can be feasibly implemented before system reliability is impaired;
- Be of reasonable project cost;
- Meet federal, state, and local regulatory requirements; and

- Address PSE's electrical and non-electrical criteria for the project (described in further detail in Chapter 2).

1.9 WHAT ALTERNATIVES ARE EVALUATED IN THE PHASE 1 DRAFT EIS?

Chapter 2 describes in detail the alternatives included in the Phase 1 Draft EIS. The EIS evaluates a No Action Alternative and three action alternatives, summarized below.

1.9.1 No Action Alternative

As required by SEPA, the No Action Alternative must be evaluated in an EIS, as a baseline against which the action alternatives can be gauged. The No Action Alternative includes the following:

- Ongoing maintenance that PSE can do without requiring state or local approvals;
- No new 230 kV transmission lines, substations, energy generation, or storage facilities; and
- No change to conservation efforts as described in the *2013 Integrated Resource Plan* (PSE, 2013a).

1.9.2 Alternative 1: New Substation and 230 kV Transmission Lines

This alternative includes installing a new transformer that would transform 230 kV bulk power to 115 kV. This new transformer would require either expansion of an existing substation on the Eastside or construction of a new substation. It would also need to be fed by new 230 kV transmission lines. The Phase 1 Draft EIS considers a range of 230 kV transmission options to serve the Eastside. These would range in length from approximately 18 miles up to 26 miles in length. The key elements of this alternative include the following:

- New substation at Vernell or Westminster, or adding a 230 kV substation near the existing 115 kV Lakeside substation. A new substation adjacent to the Lakeside substation would be known as Richards Creek substation; however, for simplicity, this site will be referred to as Lakeside.
- New 230 kV transmission line or an upgrade of an existing 230 kV transmission line from Redmond to Renton, located between Lake Washington and Lake Sammamish, using the following possible options:
    - A. Use of overhead lines in new or existing PSE or public *rights-of-way* and/or utility corridors;
    - B. Use of Seattle City Light's 230 kV transmission line corridor along with construction of new 230 kV lines looping the system into both the Sammamish and Lakeside substations;
    - C. Use of underground lines; and
    - D. Use of submerged lines.

- No change to conservation efforts as described in PSE's *2013 Integrated Resource Plan* (PSE, 2013a).

A new 230 kV transmission line would run a minimum of approximately 18 miles. The submerged line option would require the greatest length of all options considered under this alternative.

1.9.3 Alternative 2: Integrated Resource Approach

Alternative 2 combines the following methods to meet the projected need and PSE's stated electrical criteria:

- Energy efficiency (e.g., promoting use of LED lightbulbs rather than incandescent, more efficient appliances, and updated windows and insulation);
- Demand response (e.g., installing specialized devices to control customer electrical usage and help manage peak uses);
- Distributed generation (e.g., promoting use of various small-scale energy generation equipment tied to the PSE distribution system and controllable by PSE);
- Energy storage using large-scale battery systems; and
- Simple-cycle generation facilities of approximately 20 MW size, located at some PSE substations within the Eastside and operated as needed during peak demand periods, or other times as needed.

1.9.4 Alternative 3: New 115 kV Lines and Transformers

This alternative includes the following changes to the PSE transmission system:

- A new 230 to 115 kV transformer at Lake Tradition substation;
- A new transmission line between the Bonneville Power Administration (BPA) Maple Valley-Sammamish 230 kV line and the Lake Tradition substation;
- A third 230 to 115 kV transformer at Sammamish substation;
- A third 230 to 115 kV transformer at Talbot Hill substation;
- Three new 115 kV lines at Lake Tradition substation;
- Two new 115 kV lines at Sammamish substation; and
- Two new 115 kV lines at Talbot Hill substation.

The seven additional 115 kV lines would total approximately 60 miles in length. There would be no change to conservation efforts as described in the *2013 Integrated Resource Plan* (PSE, 2013a).

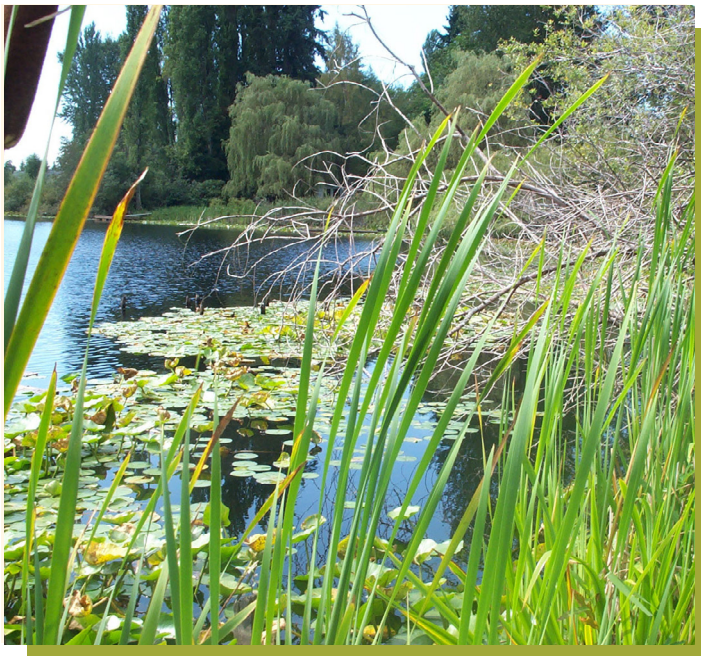
1.10 WHAT ARE THE KEY FINDINGS OF THIS DRAFT EIS?

The following pages provide a summary of the findings of each chapter of this Phase 1 Draft EIS regarding the impacts of the alternatives. For each element of the environment evaluated

in the EIS, these two-page summaries provide a brief description of key findings about the affected environment, potential impacts, mitigation available, and any unavoidable significant impacts. The number at the top of each page identifies the chapter from this Phase 1 Draft EIS that is summarized below. Summaries are not intended as a replacement for more thorough review undertaken in each chapter.

Impacts are generally categorized as minor, moderate, or significant. Each chapter defines these categories for the specific element of the environment and provides detailed descriptions of impacts. Impacts that are described in this EIS as “negligible” refer to small impacts that would be inconsequential.

3 Earth



Affected Environment

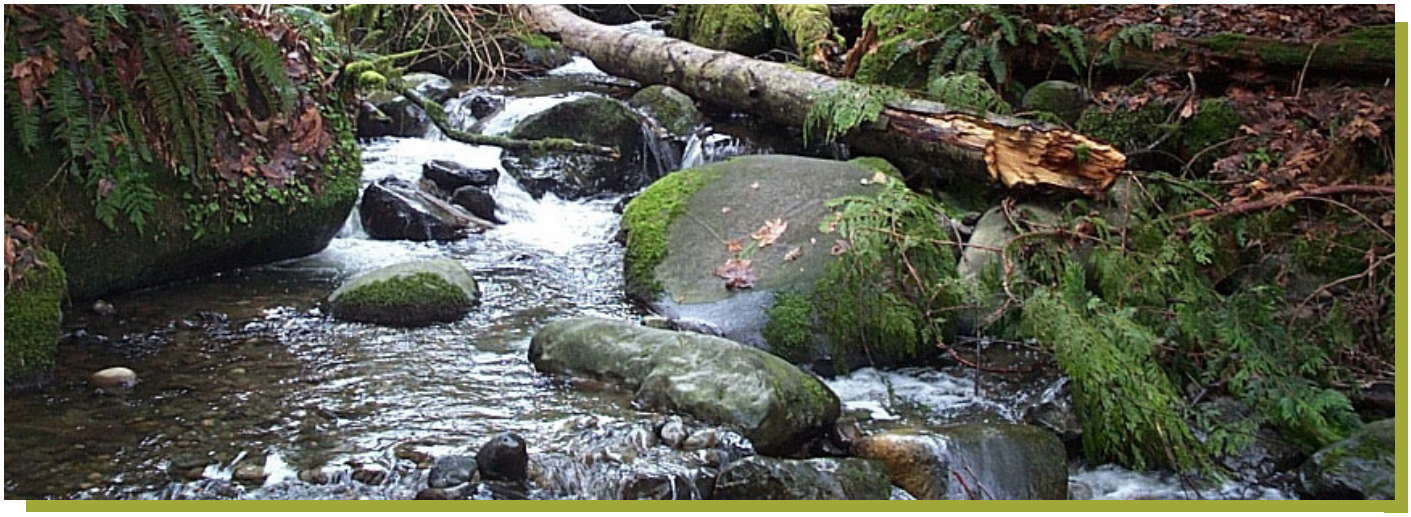
Geology of the combined study area is characterized by recent, surficial soils over thick glacially consolidated soils underlain by bedrock.

The Puget Sound basin is located within a seismically active area dominated by the Cascadia subduction zone.

Earthquakes in the region result from the Cascadia subduction zone, the deep subduction zone below the Puget Sound, or shallow crustal faults.

Liquefaction hazard areas include lowland lakeside areas of the northern and southern tips of Lake Sammamish, as well as the floodplains of Cedar River and Evans Creek.

Other geological hazards (steep slopes, erosion, landslides, and other hazards such as soft soils and old coal mines) are located in the combined study area.



Summary of Impacts Common to All Alternatives

- Erosion during construction could occur.
- All of the alternatives would rely on a system that crosses seismic and other geologic hazard areas that range in severity.
- Incorporation of National Electric Safety Code (NESC) 2012 and NERC/ FERC standards and requirements into project design would minimize hazards.
- All impacts would be minor with implementation of best management practices, geotechnical recommendations, regulatory requirements, and industry standards.

Summary of Impacts by Alternative

NO ACTION

- With no new improvements, there would be no impacts related to geologic and seismic hazards that do not already exist today.

ALTERNATIVE 1

- Impacts from all options would be similar.
- Implementation of facility design measures in accordance with regulatory requirements would result in minor impacts for each of the four options under Alternative 1.

ALTERNATIVE 2

- Demand-side strategies would require less new construction, reducing the potential for new hazards. Impacts of battery storage and peak generation plants would be similar to Alternative 1 (minor).

ALTERNATIVE 3

- Involves the most new construction over the widest area and would likely encounter a range of geotechnical and seismic hazards. Although the area of impact is the largest, the impacts themselves would be minor.

Mitigation Measures

- Avoid construction on steep slopes, known and potential landslide zones, and areas with organic or liquefiable soils, where feasible.
- Implement construction best management practices.
- Adhere to applicable code requirements and monitor all improvements for changes.

Significant Unavoidable Adverse Impacts

- Under all alternatives, including the No Action Alternative, there is an unavoidable seismic risk. None of the alternatives would increase that risk, but all action alternatives increase the number of facilities. New facilities built to current standards reduce risks, and no significant impacts are likely.

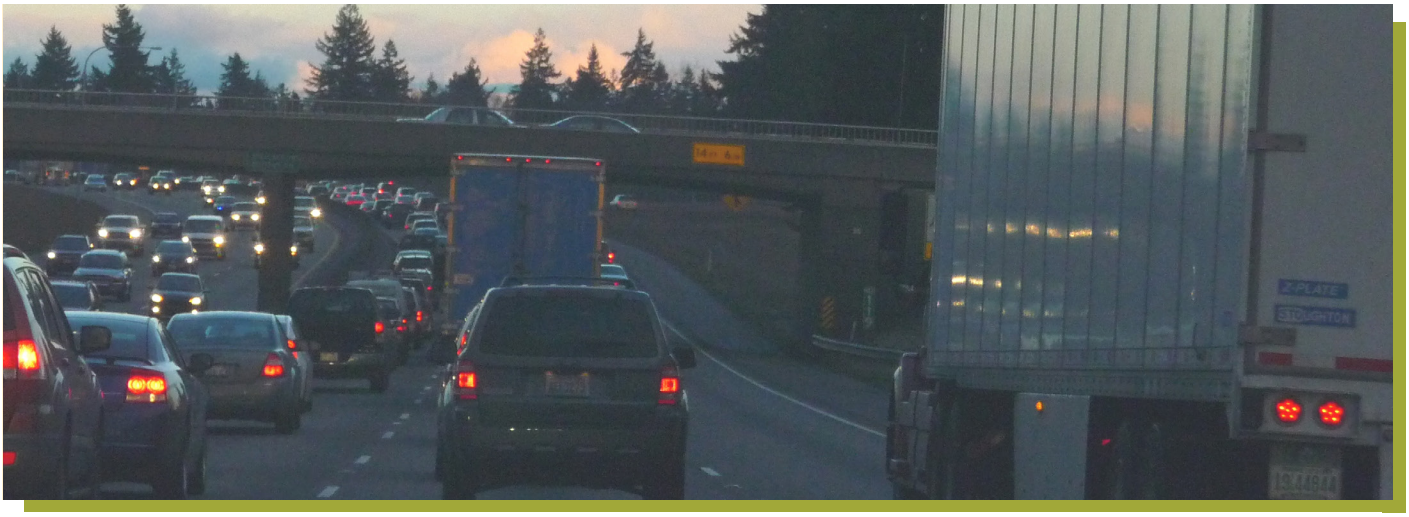
4 Greenhouse Gas Emissions

Affected Environment

King County's Strategic Climate Action Plan has committed to a countywide Green House Gas (GHG) emission reduction of 25 percent by 2020.

Eight of the 12 study area cities have committed to reduce GHG emissions by 7 percent from 1990 levels through climate action plans.

Ecology estimated that in 2010, Washington produced about 106 million U.S. tons of CO_2e. Sources of GHG emissions in the state are transportation, electric generation; residential commercial, and industrial energy; agriculture, water management, and industrial processes.



Summary of Impacts Common to All Alternatives

- All alternatives would release GHG during construction.

Summary of Impacts by Alternative

NO ACTION

- The No Action Alternative would not result in construction or operational GHG impacts.
- As part of ongoing maintenance, vegetation and tree removal would continue.

ALTERNATIVE 1

- Option A could result in CO_2 sequestration losses from tree removal that exceed the state's GHG reporting threshold and could be a potentially significant adverse impact.
- Option B could require less tree removal than Option A and sequestration loss impacts could be a minor impact.
- Option C could result in the least sequestration loss from tree removal of the Alternative 1 options and would be considered a minor impact.
- Option D would result in a minor impact from construction emissions. Sequestration loss would occur on overland segments, similar to other options.

ALTERNATIVE 2

- Peak generation plants could produce GHG emissions during operation and result in a moderate GHG impact.

ALTERNATIVE 3

- Alternative 3 could result in CO_2 sequestration losses from tree removal that would be a significant adverse impact.

Mitigation Measures

- Gas turbines or reciprocating engines may require air quality permits to restrict the use of fuel and associated GHG emissions.
- Vegetation replacement could reduce sequestration losses under Alternative 1, Option A, and Alternative 3 to a moderate level.
- Carbon offsets could be purchased.

Significant Unavoidable Adverse Impacts

- If mitigation measures are employed, there would be no significant and unavoidable adverse impacts related to GHG emissions associated with any of the project alternatives.

5 Water Resources

Affected Environment

The combined study area is within Cedar-Sammamish River watershed (WRIA 8) and Duwamish-Green River watershed (WRIA 9).

The two largest waterbodies are Lake Washington and Lake Sammamish.

There are about 2,000 mapped streams and rivers in the combined study area with associated floodplains. These include the Sammamish River, Cedar River, Bear Creek, Evans Creek, Kelsey Creek, Richards Creek, May Creek, Coal Creek, and Issaquah Creek.

There are over 1,000 mapped wetlands.

Most mapped groundwater aquifers in the combined study area are within King County's jurisdiction.

Summary of Impacts Common to All Alternatives

- There is a potential for minor water quality impacts from construction site runoff, dewatering discharge, or accidental spills.
- There is a potential for minor impacts to water quality from operation, if impervious areas and associated surface water runoff are increased, or stored hazardous materials or chemicals are inadvertently released into surface waters.

Summary of Impacts by Alternative

NO ACTION

- Existing water resource conditions would not change and no impacts are expected.

ALTERNATIVE 1

- There is a potential with all options for significant impacts to water resources from construction of overhead or underground lines in streams, lakes, wetlands, or their buffers, however, limitations imposed by regulatory agencies would reduce impacts to minor or moderate.
- Under Option D, minor to moderate temporary impacts to Lake Washington could result from construction of underwater transmission lines including impaired water quality, local turbidity, disturbance of contaminated sediment, underwater noise, and impacts to the shoreline.
- Although unlikely, significant impacts on water resources could occur if the Olympic Pipeline were ruptured during construction.

ALTERNATIVE 2

- Minor impacts on water resources from construction and operation could occur for components that involve ground disturbance.

ALTERNATIVE 3

- Similar impacts as for overhead transmission lines as under Alternative 1, Option A, could occur.

Mitigation Measures

- Avoid locating facilities and infrastructure near or in streams, lakes, wetlands, floodplains, and groundwater.
- Employ best management practices required by water quality regulations during construction.
- Comply with local critical areas and stormwater management regulations for water retention and treatment at substations and other facilities during operation.

Significant Unavoidable Adverse Impacts

- No significant unavoidable adverse impacts to water resources are likely to occur given the breadth of regulations that would govern construction and operation.

6 Plants & Animals

Affected Environment

Vegetation cover types include forest, herbaceous, scrub-shrub,agriculture, and woody and herbaceous wetlands.

Habitat for fish and wildlife occurs in freshwater wetlands, forest, lakes and ponds, biodiversity areas and corridors, and natural areas within the combined study area.

Fish species listed under the Endangered Species Act are found in lakes and streams in the combined study area.

State priority species with potential habitat in the combined study area include waterfowl, pileated woodpecker, great blue heron, purple martin, and several raptors, turtles, and bats.

Summary of Impacts Common to All Alternatives

- All alternatives could cause impacts to plants and animals due to habitat disturbance from infrastructure constructed and operated within existing developed areas.

Summary of Impacts by Alternative

NO ACTION

- Existing habitat conditions would not change and no impacts are expected.

ALTERNATIVE 1

- Construction of any of the Alternative 1 options could cause minor to significant impacts from: habitat alteration; interference with critical survival activities; or direct injury, death, or harassment of some species. Impacts would depend on the scale of habitat alteration and species disturbance, and species affected.
- Option D could cause minor to significant impacts on fish from construction and operation of underwater transmission lines.
- Although the probability is low, once constructed, overhead transmission lines under Option A and B could result in significant impacts to threatened or endangered species or species of concern from collisions or electrocution.

ALTERNATIVE 2

- Impacts to plants and animals may be significant resulting from the construction of a battery storage facility or peak generation plant, depending on the species affected and scale of habitat alteration and species disturbance.
- Impacts could be moderate to significant on wildlife due to noise disturbance from peak generation plants.

ALTERNATIVE 3

- Similar impacts as for overhead transmission lines using existing corridors under Alternative 1, Option A.

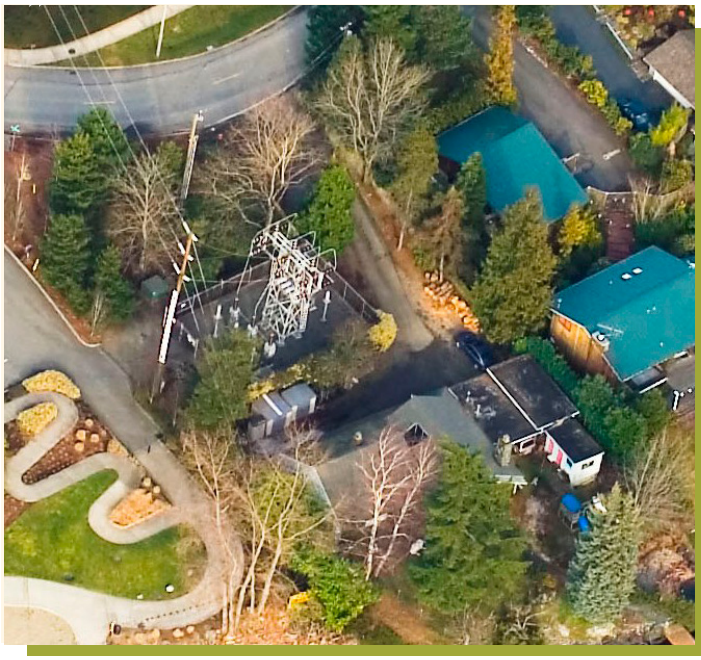
Mitigation Measures

- Avoid and minimize vegetation, tree, and habitat removal to extent possible in development of facilities and infrastructure.
- Require measures to reduce noise and human activity near priority habitat areas in accordance with applicable permit requirements.
- Implement PSE Avian Protection Program to reduce avian collisions with overhead transmission lines, once constructed.

Significant Unavoidable Adverse Impacts

- Alternative 1 could result in significant unavoidable impacts due to habitat loss, and if threatened or endangered species or species of concern are affected. Alternative 3 would use existing corridors, but system requirements could force additional clearing in valuable habitat areas, similar to Alternative 1.

7 Energy & Natural Resources



Affected Environment

The mix of resources used regionally for energy production includes hydropower, coal, natural gas, wind, nuclear, biomass, landfill gas, petroleum, and waste. Relative use of each changes over time.

No federal policies or regulations govern types of energy resources PSE consumes; state policy guides types of resources and conservation levels.

The Energy Independence Act of Washington State requires that PSE must obtain 15 percent of its electricity from new renewable resources by 2020, as well as undertaking cost-effective energy conservation.

No local jurisdiction controls how PSE provides power; some have policies addressing sustainable development, climate change, or energy conservation.

Summary of Impacts Common to All Alternatives

- No adverse impacts are likely to energy and natural resources from construction or operation.
- All alternatives are generally consistent with local jurisdictions' energy policies.
- None of the alternatives change the amount of energy generated regionally. All consume small amounts of energy during operation.

Summary of Impacts by Alternative

NO ACTION

- Involves no construction activities, and therefore no change to energy or natural resource usage.
- Operations do not increase energy used to provide power.
- No expanded transmission capacity could mean limits to peak energy availability, possibly with lower consumption of electricity than projected.

ALTERNATIVE 1

- Described under impacts common to all.

ALTERNATIVE 2

- Would employ energy resources locally, but would not substantially change the overall mix or amount of regional energy resources used for Eastside power delivery.

ALTERNATIVE 3

- Described under impacts common to all.

Mitigation Measures

- No mitigation is needed.

Significant Unavoidable Adverse Impacts

- These are no significant unavoidable adverse impacts.

8 Environmental Health

Affected Environment

Contaminated soil or groundwater is likely in places, from historical land uses (logging, agriculture, industry).

Hazardous materials are likely in electrical infrastructure (e.g., oil-containing transformers, High Pressure Fluid-Filled [HPFF] power lines used in some underground lines).

Pressurized flammable petroleum products transported in the Olympic Pipeline, which shares a corridor with a PSE transmission line, and is located in other portions of the combined study area.

Some risk of fire or explosion at substations or transmission lines exists due to damage from earthquakes or lightning strikes.

Hazardous materials and public safety risks are regulated by federal, state, and local codes/standards.

Power lines, electrical wiring, and appliances produce EMF and corona ionization is likely occurring around existing transmission lines; associated health risks for both have not been definitively identified through ongoing research.

Summary of Impacts Common to All Alternatives

- Hazardous materials spilled during construction or operations would be subject containment and cleanup requirements that would prevent more than a minor impact from occurring.
- Each action alternative could be constructed in/near previously contaminated sites; proper management of those materials is expected impacts could be minor depending on location.
- Risk to the public is not likely from constructing or operating the project near pipelines due to extensive safety policies and regulations.
- EMF and corona ionization impacts are not expected.

Summary of Impacts by Alternative

NO ACTION

- Earthquakes or lightning strikes could damage transformers or drop power poles or lines, but potential public safety risks are not likely and negligible to minor impacts could be expected.

ALTERNATIVE 1

- Similar to No Action, potential for minor to moderate impacts depending on option chosen.
- Risk of accidental rupture and explosion of Olympic Pipeline would increase during construction but be minimize by employing best management practices.
- With new equipment being installed, greater potential for spills of hazardous materials during construction and operation than No Action.
- HPFF cable, if used for new underground transmission, could be damaged and leak.
- Risks associated with encountering contamination or conflicts with petroleum pipelines are higher for Option C because of increased ground disturbance and the impacts are expected to be minor to moderate.

ALTERNATIVE 2

- Distributed generation, energy storage, and peak generation plant components have a potential risk of minor impacts from fire or explosion at energy storage or generation facilities, similar to Alternatives 1 and 3.

ALTERNATIVE 3

- Same as Alternative 1, Option A, potential for minor to moderate impacts, but increased potential to encounter contamination during construction because of longer corridors.

Mitigation Measures

- Use vegetable-based oil for transformers rather than petroleum based oil or SF6.
- Minimize use of HPFF lines.
- Prior to starting work, conduct targeted characterization of soils at identified high- and moderate impact site locations.
- Design to avoid intercepting known contamination and use specialized material management plans to control contamination encountered during construction.
- Use best management practices for spill containment and cleanups.
- Install native plantings not needing pesticides at new sites.
- Investigate feasibility of alternative design options for transformers for greater seismic protection and avoidance of safety risks.
- Local governments and PSE would further evaluate the PIPA recommendations to determine if any additional safety practices could be implemented for Energize Eastside Project.
- Comply with all applicable requirements for avoiding utility conflicts during siting and design. Coordinate with potentially affected utilities.

Significant Unavoidable Adverse Impacts

- Significant impacts would be avoided through compliance with all applicable regulations and industry safety standards.

9 Noise

Affected Environment

Transportation is the primary source of noise in the study areas.

Both state and local codes establish limits on permissible noise levels but exempt substations and daytime construction activity.

Corona discharge from existing transmission lines may be audible, but it is a relatively low noise level.

Existing transformers and ancillary equipment may be audible at adjacent sensitive land uses.

Existing electrical substations produce audible noise, but are exempt from maximum permissible nose levels in the WAC.

Summary of Impacts Common to All Alternatives

- Construction impacts would be minor if restricted to daytime hours, but nighttime work, if required, would be a moderate but temporary impact.

Summary of Impacts by Alternative

NO ACTION

- No construction-related or operational noise impacts.

ALTERNATIVE 1

- Electrical substations could result in minor operational noise impacts.
- Operational noise from corona discharge would be negligible.

ALTERNATIVE 2

- Peak generation plants or distributed generation could result in a minor to moderate operational noise impact.

ALTERNATIVE 3

- Transformer noise could result in a minor operational noise impact.
- Operational noise from corona discharge would be negligible.

Mitigation Measures

- Siting of transformers, substations, distributed generation sources (gas turbines, anaerobic digesters, etc.) should include attenuation measures to maintain noise levels at the nearest receptors within 5 dBA of existing levels.

Significant Unavoidable Adverse Impacts

- There would be no significant unavoidable noise impacts.

10 Land Use & Housing

Affected Environment

Population is projected to increase.

Land use is, and will remain, predominantly residential.

Housing was mostly single family units in 2014. The percentage of multifamily units will increase over time through most of the area. Mixed use development (housing and commercial combined) will become more common.

The percentage of industrial land uses will remain about the same.

All jurisdictions have land and shoreline use policies and zoning regulations addressing project consistency and design.

Summary of Impacts Common to All Alternatives

- Construction of action alternatives would be of relatively short duration at any one location with negligible land use impacts.
- Land use goals and policies of the combined study area communities provide some guidance as to where new transmission lines, transformers, or the features of Alternative 2 should be located, and some have goals or policies supporting undergrounding of electrical lines. All acknowledge a need for adequate infrastructure to support development.
- Five jurisdictions promote combining utilities within the same corridors in some cases; some may prohibit combining regional utility lines with high flammable liquid pipelines for safety.
- Most jurisdictions would require new utilities that are not dependent on a shoreline location to be located outside the shoreline jurisdiction unless there is no feasible alternative.

Summary of Impacts by Alternative

NO ACTION

- Would not directly change any property uses, but could delay growth or shift growth to other areas of the region.
- Inconsistency with planning goals for adequate power supply could be a significant adverse impacts.

ALTERNATIVE 1

- Moderate to significant land use impacts and housing impacts could occur because up to 327 acres of land could change to utility use, and some housing could be removed to accommodate new transmission lines.
- Although generally consistent with most planning policies, it may not be permissible to co-locate with Olympic Pipeline through three jurisdictions due to regulations for pipeline safety.
- Option C could use less new land because underground lines require less clear zone than overhead.
- Option D would have less over-land area and less potential for impacts than other options, but shoreline regulations prohibit new utilities in Lake Washington.

ALTERNATIVE 2

- Negligible to moderate land use and housing impacts because limited conversion of land use would be required, mainly for the energy storage and peak plant components.
- Some development regulations would prohibit components in certain locations.

ALTERNATIVE 3

- Same types of impacts as Alternative 1, Option A, but would only install new overhead lines along existing road or utility right-of-way.
- Total area of new corridor/clear zone could be less than building a new corridor but greater than using an existing corridor, as described under Alternative 1.

Mitigation Measures

- Use existing utility corridors or properties already owned by PSE to minimize conversion of other land uses.
- Underground all or part of the line, or place through Lake Washington, to minimize conversion of land to utility use.
- Provide relocation assistance.

Significant Unavoidable Adverse Impacts

- No significant unavoidable adverse impacts to land use or housing are expected. Alternative 1, Option A, could have significant impacts if a new corridor were required. The No Action Alternative could lead to unavoidable significant impacts. If unreliable power supply were to result in growth that is inconsistent with regional growth plans.

11 Views & Visual Resources

Affected Environment

The area is mostly urbanized, bounded by large lakes to the east and west, and comprised primarily of low, rolling hills.

Most views are observed from private residences or publicly accessible parks, trails, and open spaces.

Visual resources include nearby mountains (e.g. the Cascades, Olympics, and Issaquah Alps), water bodies (e.g. Lake Washington, Lake Sammamish, and the Cedar River), and the Seattle skyline. Territorial views are the most common types of views.

Existing 115 kV lines are generally along road rights-of-way or in dedicated utility easements, and are suspended on 50 to 90-foot tall wood poles. Existing 230 kV lines operated by Seattle City Light are predominantly in residential areas, and are suspended on 100 to 135-foot steel poles, and lattice structures.

Most of the development, including residential areas, were developed after the transmission lines were constructed.

Existing large substations are typically in industrial, or commercial areas. Smaller substations are found adjacent to most land uses, including residential areas.

Views can affect property values positively or negatively. Although views of transmission lines can negatively affect property values, studies are inconclusive on the duration of negative effects.

Summary of Impacts Common to All Alternatives

- Visual character of neighborhoods could change due to introduction of new or taller electrical infrastructure (e.g., transmission poles and substations) and creation of clear zone.
- View obstruction or changes to viewpoints or visual resources could result from placement of new infrastructure.
- Extent of impact would depend on the degree of contrast, number of viewers, duration of impact, and the sensitivity of the viewers.
- Construction impacts would be temporary and minor to moderate depending on location.

Summary of Impacts by Alternative

NO ACTION

- No visual impacts are expected.

ALTERNATIVE 1

- All options would include a new or expanded substation. Westminster and Lakeside sites could have moderate impacts on adjacent park and residential uses.
- Option A could have greatest impacts due to taller poles, widest clear zones.
- Option B would use only the existing clear zone of SCL line.
- Option C would have the least visual impacts because lines would be underground.
- Option D would not be visible for the segment underwater, but requires overland segments to connect to substations, that could require a new corridor similar to Option A.

ALTERNATIVE 2

- Primary visual impacts would be from 6-acre battery storage facility and from several 1-acre peak power generation facilities, all near substations.
- Total clearing and development would be less than all other alternatives.

ALTERNATIVE 3

- Impacts could be minor where new transmission lines replace existing poles with taller poles and limited additional clearing is required.
- Impacts could be significant where 40 feet of additional corridor is required, especially where there are no lines at present.

Mitigation Measures

- Co-locate transmission lines with current routes to reduce clearing.
- Place and design structures to minimize impacts.
- Use aesthetically pleasing system components (such as poles and davit arms) and landscaping to shield equipment.

Significant Unavoidable Adverse Impacts

- Significant impacts from Alternative 1 would be unavoidable if a new corridor were developed.
- Significant impacts from Alternative 3 may be unavoidable due to the extensive area that must be served with new or taller poles.

12 Recreation

Affected Environment

There are approximately 265 recreation sites covering about 16,400 acres in the study area.

Recreation sites include small pocket parks to large natural areas under the jurisdiction of 11 communities, King County, and Washington State.

Transmission lines and substations are found adjacent to several parks.

Recreation opportunities include:
Hiking/walking/running • Bicycling • Beach/water access • Horseback riding • Nature viewing • Playgrounds • Sports fields • Community centers

Informal recreation also occurs outside of formal recreation sites throughout the study area, including within some transmission easements that are used as trails.

Summary of Impacts Common to All Alternatives

- There could be minor to moderate impacts to recreation if construction activities occur within or adjacent to a recreation site. Level of impact would vary depending on time of year of construction, recreation facilities affected, and how many facilities are affected concurrently.
- For any of the action alternatives, there could be significant impacts if use of recreation facility is permanently lost and cannot be replaced. Recreation facilities will be avoided to the extent practicable.
- Recreation facilities are often subject to restrictions limiting their conversion to another use.

Summary of Impacts by Alternative

NO ACTION

- There would be no impacts to recreation.

ALTERNATIVE 1

- If infrastructure is placed within a recreation site and substantially alters, limits, or precludes the use of that site, impacts could be significant.
- Where existing transmission lines are already located within a recreation facility (Alternative 1, Option A) it is more likely that impacts cannot be avoided.

ALTERNATIVE 2

- Permanent impacts from operation of Alternative 2 are not expected, with the possible exception of Lake Tradition NRCA if the substation in this location is chosen for a peak generation plant; impacts could be significant.

ALTERNATIVE 3

- Impacts could be similar to Alternative 1, Option A, but there is greater potential to cross or be near recreation sites.

Mitigation Measures

- Place any permanent infrastructure outside of recreation sites, where feasible.
- Employ best management practices to minimize construction traffic, dust, and noise.
- Restore recreation sites after construction where feasible; if they cannot be restored, replace lost recreation facilities and screen new infrastructure with vegetation.

Significant Unavoidable Adverse Impacts

- Some significant impacts may be unavoidable if design or siting factors limit the ability to locate lines or facilities away from recreation sites.

13 Historic & Cultural Resources

Affected Environment

Less than 25% of the combined study area has been tested for cultural resources.

There are 69 historic properties and 94 known archaeological resources in the study areas.

All action alternatives have areas classified as high to very high risk for containing Precontact cultural resources.

Summary of Impacts Common to All Alternatives

- Ground disturbance could impact cultural resources, if present, and could be significant depending on the resource affected.
- Impacts to above ground historic properties could include vibration and increased dust.
- Energy efficiency methods that modify building facades, such as weatherization, may result in minor to moderate impacts to historic properties, if present.

Summary of Impacts by Alternative

NO ACTION

- Same as impacts common to all alternatives.

ALTERNATIVE 1

- Ground disturbance would be greatest near new or expanded substation and for underground corridor (Option C).
- Possible underwater disturbance under Option D could affect sumerged historic resources.

ALTERNATIVE 2

- This would cause the least amount of ground disturbance of all alternatives.
- Battery storage and peak power generation have greatest potential for impacts among components of Alternative 2.

ALTERNATIVE 3

- Similar impacts as for Alternative 1, Option A and B except that more miles of transmission lines would be built, and several substations would be expanded, resulting in ground disturbance.

Mitigation Measures

- Prior to construction, conduct a survey for any archaeological resources in areas of proposed ground disturbance, and prepare plans to address affected resources.
- If there are potential impacts to eligible or listed historic register properties, develop property-specific mitigation measures with stakeholders, including the Washington State Department of Archaeology and Historic Preservation.

Significant Unavoidable Adverse Impacts

- There are no known significant unavoidable adverse impacts to historic and cultural resources. However, the exact location of the project is not known, and will be evaluated in phase 2.

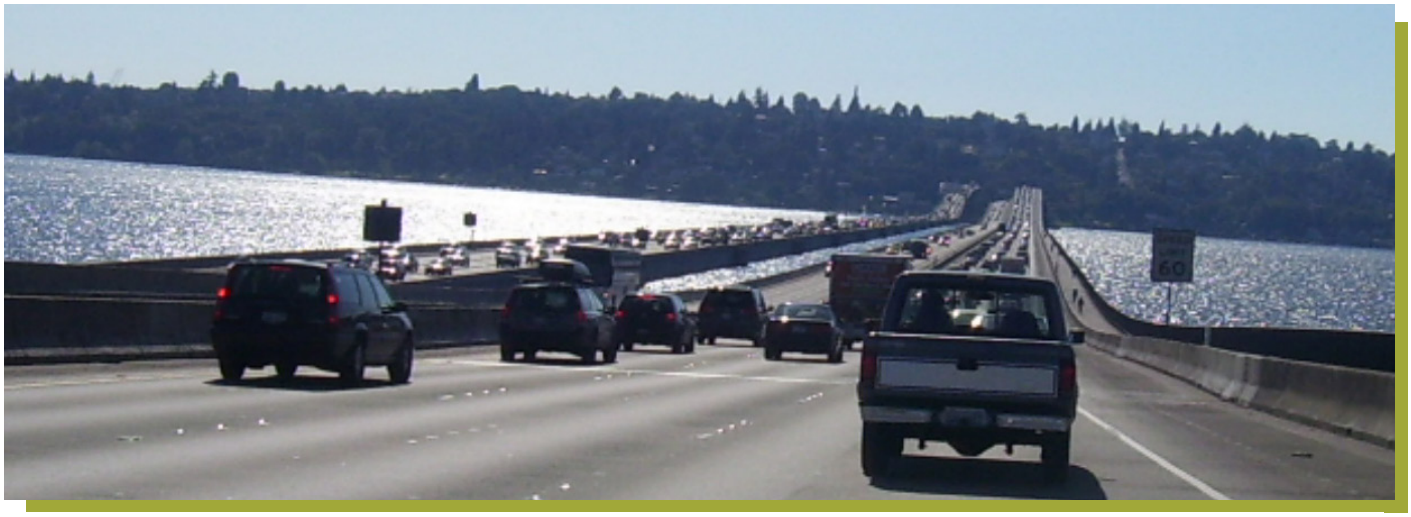
14 Transportation

Affected Environment

The street system consists of a mix of freeways, arterials, collectors, and local access streets that represent varying levels of emphasis on pedestrian orientation, mobility, and access. Most neighborhoods have on-street public parking and off-street private parking.

The combined study area is served by bus service that is most concentrated in the vicinity of transit centers, park-and-ride lots and freeway stations.

Pedestrian and bicycle facilities include sidewalks, shoulders, multi-use trails, and painted on-street bicycle and shared-use lanes.



Summary of Impacts Common to All Alternatives

- Project elements would be physically separated from transportation infrastructure and services. Transportation infrastructure disrupted during construction would be restored, and streets, sidewalks, and trails disturbed during construction would be repaved.

Summary of Impacts by Alternative

NO ACTION

- No construction impacts.
- Power outages during operations could impact traffic operations and safety.

ALTERNATIVE 1

- Construction impacts include restrictions on roadway use, sidewalk use, property access, transit, and parking, as well as construction-generated truck and commute trips, and potential pavement degradation.
- If the Olympic Pipeline were accidentally damaged during construction, products normally transported by pipeline would need to be shipped by other means, primarily by trucks.
- Construction impacts would be minor to moderate and operation impacts would be negligible.

ALTERNATIVE 2

- Negligible to moderate construction impacts and negligible to minor operational transportation impacts, depending on components used.

ALTERNATIVE 3

- Construction impacts similar to Alternative 1, with lower magnitude and duration of construction at any one location, but more geographically spread out.
- Negligible operational impacts.

Mitigation Measures

- Mitigation could include “maintenance of traffic” plans that identify traffic control and detours to maintain mobility and safety for vehicular and nonmotorized travelers, and maintain access to properties.
- A public involvement program could provide information about the types and locations of construction impacts and the measures to minimize those impacts.

Significant Unavoidable Adverse Impacts

- With the appropriate mitigation measures in place, no unavoidable significant adverse impacts to transportation are anticipated.

15 Public Services

Patch.com

Affected Environment

The public services that were considered for this programmatic analysis are fire, emergency medical, and police services.

Individual communities may have their own police and fire departments or may contract with other jurisdictions, such as adjacent cities or King County, to provide the services. Many local fire and police agencies in the combined study area have mutual response agreements, which allow public safety responsibilities to be shared across jurisdictional boundaries.

Throughout the combined study area, individual fire departments set levels of service and target response times. Fire departments throughout the combined study area reported meeting level of service and response time targets for various types of emergencies, including emergency medical and other incidents.

Except for a few incidents of theft of ground wires in a utility corridor, police departments reported few unique crime-related problems associated with existing electricity substations or transmission corridors.

Summary of Impacts Common to All Alternatives

- Minor to moderate impacts related to increased demand for emergency response services.
- Negligible impacts related to additional law enforcement demands.
- No adverse impacts on emergency communication or devices.

Summary of Impacts by Alternative

NO ACTION

- There could be minor impacts associated with a sudden, unplanned loss of electricity. Emergency response facilities are the highest priority for maintaining power during an outage, and they are equipped with backup power supplies.
- Although a significant adverse impact could result if a pipeline explosion near the transmission line occurred, the risk is minimized by conformance with regulatory requirements and procedures that address pipeline safety.

ALTERNATIVE 1

- There could be minor to moderate impacts to emergency services as a result of construction or operation.
- Conformance with regulatory requirements and procedures would ensure that potential hazards are identified, and design plans developed, that minimize adverse effects from pipeline hazards.

ALTERNATIVE 2

- Given the potential complexity of emergency response to certain facilities (i.e., battery storage and peak generation plant), moderate impacts could occur.

ALTERNATIVE 3

- There could be minor to moderate impacts to emergency services as a result of construction and operation.

Mitigation Measures

- Follow all siting, design, construction, and operational requirements, standards, and plans to reduce risk of pipeline damage and to reduce risk of a substation fire:
- Implement maintenance of traffic plans to minimize effects on emergency response.
- Notify emergency service providers and neighborhood residents of construction schedules, street closures, and utility interruptions as far in advance as possible.
- Coordinate with law enforcement agencies to implement crime prevention plans for construction sites and staging areas.

Significant Unavoidable Adverse Impacts

- There would be no significant unavoidable adverse impacts.

16 Utilities

Affected Environment

Comprehensive plans for study area communities contain goals and policies relating to the provision and management of utilities to meet community needs.

The combined study area includes both regional and local utilities. This programmatic analysis focuses on regional utilities in the combined study area, which includes: overhead 115 kV, 230 kV, and 500 kV transmission lines; electric substations; high-pressure natural gas mains; petroleum pipelines; water mains; major sewer conveyance lines; main feeder telephone and fiber optic lines.

Utilities are provided by a combination of City-managed providers and providers managed by other entities. Depending on their services, utilities not managed by the Cities are state regulated, federally licensed, and/or municipally franchised providers.

PSE natural gas mains and the Olympic Pipeline, an underground, flammable liquids pipeline, are located in existing PSE and Seattle City Light transmission lines easements and through other areas of the combined study area.

Summary of Impacts Common to All Alternatives

- Construction disturbance could affect existing utilities if present. Potential for encountering utilities is higher when constructing within a road right-of-way or within existing utility easements. Impacts would be minor to moderate for all alternatives except Alternative 1, Option B (moderate to significant).
- Temporary service outages could occur during utility relocations; disruptions would likely be minimal.
- Inadvertent damage to underground utilities could occur if utility locations are uncertain or misidentified. Although such incidents do not occur frequently, if numerous relocations are required during project construction, the potential for accidents is more likely.
- Appropriate cathodic-protection measures would be determined by the utility owner on a case-by-case basis in accordance with applicable federal requirements; impacts on buried pipelines would be minor.

Summary of Impacts by Alternative

NO ACTION

- High electrical loads and lack of bulk transmission in the vicinity of the load could result in moderate to significant adverse impacts to electrical service reliability.
- A potential significant adverse impact if Olympic Pipeline were damaged and explodes near existing PSE lines. Potential hazards minimized to minor levels with conformance to standards and requirements.

ALTERNATIVE 1

- If located in PSE easement, extensive coordination with Olympic Pipe Line Company would be required during project design and construction. Conformance with standards and requirements would ensure that potential hazards are identified and design plans developed to minimize adverse effects.

ALTERNATIVE 2

- There could be moderate to significant adverse impacts on electric service reliability given the level of uncertainty in implementing this solution. The risk would be lower than the No Action, but higher than other action alternatives.
- Increased demand for natural gas and water to supply simple-cycle generators could require upgrades to major gas and water supply lines which are also difficult to site.

ALTERNATIVE 3

- Higher likelihood of utility conflicts than all options under Alternative 1 due to more line installation along road rights-of-way and more substation expansion work.
- New overhead lines and substation expansion could be constructed near gas mains and the Olympic Pipeline resulting in the same potential impacts as Alternative 1, Option A.

Mitigation Measures

- Coordinate with utility providers during project design to avoid and minimize conflicts.
- Schedule any utility relocations in advance to minimize the impact of potential service outages.
- Design, construct, and operate new facilities according to industry standards and applicable requirements.

Significant Unavoidable Adverse Impacts

- No Action Alternative – less reliable service could result in power disturbances and could increase likelihood of power outages.
- Alternative 2 – uncertainties about feasibility and performance, participation, and conservation levels would result in risk to reliability.

1.11 HOW DO THE IMPACTS OF THE ALTERNATIVES COMPARE?

The following tables compare of the degree of impacts that can be expected from each of the alternatives on each of the elements in the environment that was evaluated in the Phase 1 Draft EIS. Table 1-2 compares construction impacts. Table 1-3 compares operational impacts.

Table 1-2. Construction Impacts Comparison

	No Action Alternative	Alternative 1: New Substation and 230 kV Transmission Lines			
Element of the Environment	**PSE would continue to manage its system as they do at present.**	**Option A: New Overhead Transmission Lines**	**Option B: Existing Seattle City Light 230 kV Transmission Corridor**	**Option C: Underground Transmission Lines**	**Option D: Underwater Transmission Lines**
Earth	Negligible	Minor	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Minor to Significant	Minor	Minor	Minor
Water	Negligible to Minor	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Plants and Animals	Minor	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible to Minor	Negligible
Environmental Health	Negligible	Minor	Minor	Minor to Moderate	Minor
Noise	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Negligible	Negligible
Views and Visual Resources	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Recreation	Negligible	Minor to Moderate	Minor to Moderate	Moderate	Minor
Historic and Cultural Resources	Minor to Moderate	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Transportation	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate	Minor to Moderate
Public Services	Negligible	Minor	Minor	Minor to Moderate	Minor
Utilities	Negligible	Minor to Moderate	Moderate to Significant	Minor to Moderate	Minor

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

Table 1-2. Construction Impacts Comparison (Continued)

	Alternative 2: Integrated Resource Approach				
Element of the Environment	**Energy Efficiency Component**	**Demand Response Component**	**Distributed Generation Component**	**Energy Storage Component**	**Peak Power Generation Component**
Earth	Negligible	Negligible	Negligible	Minor	Minor
Green House Gas Emissions	Negligible	Negligible	Negligible	Minor	Minor
Water	Negligible	Negligible	Negligible	Minor	Minor
Plants and Animals	Negligible	Negligible	Minor	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible	Minor to Moderate	Minor to Moderate	Minor to Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Negligible	Negligible
Views and Visual Resources	Minor	Minor	Minor	Minor	Minor
Recreation	Negligible	Negligible	Minor	Minor to Moderate	Minor to Moderate
Historic and Cultural Resources	Minor to Significant	Negligible to Minor	Minor to Significant	Minor	Minor
Transportation	Negligible	Negligible	Negligible	Minor	Minor
Public Services	Negligible	Negligible	Negligible	Minor	Minor
Utilities	Negligible	Negligible	Minor	Minor	Minor to Moderate

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

Table 1-2. Construction Impacts Comparison (Continued)

	Alternative 3: New 115 kV Lines and Transformers
Element of the Environment	**60 miles of 115 kV single circuit lines and 3 new 230 kV to 115 kV transformers installed at existing substations (Lake Tradition, Talbot Hill, and Sammamish).**
Earth	Minor
Green House Gas Emissions	Significant
Water	Minor to Moderate
Plants and Animals	Minor to Significant
Energy and Natural Resources	Negligible
Environmental Health	Minor
Noise	Minor to Moderate
Land Use and Housing	Negligible
Views and Visual Resources	Minor to Moderate
Recreation	Minor to Moderate
Historic and Cultural Resources	Minor to Significant
Transportation	Minor to Moderate
Public Services	Minor to Moderate
Utilities	Moderate

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

Table 1-3. Operation Impacts Comparison

	No Action Alternative	Alternative 1: New Substation and 230 kV Transmission Lines			
Element of the Environment	**PSE would continue to manage its system as they do at present.**	**Option A: New Overhead Transmission Lines**	**Option B: Existing Seattle City Light 230 kV Transmission Corridor**	**Option C: Underground Transmission Lines**	**Option D: Underwater Transmission Lines**
Earth	Negligible	Minor	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Minor	Minor	Minor	Minor
Water	Minor	Minor	Minor	Minor	Minor
Plants and Animals	Minor	Minor to Significant	Minor to Significant	Minor	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Land Use and Housing	Moderate to Significant	Moderate to Significant	Minor	Minor	Minor to Significant
Views and Visual Resources	Minor	Minor to Significant	Minor to Significant	Minor to Moderate	Minor to Significant
Recreation	Negligible	Minor to Significant	Minor to Significant	Negligible to Significant	Minor to Moderate
Historic and Cultural Resources	Minor to Moderate	Minor to Significant	Minor	Negligible	Negligible
Transportation	Negligible to Moderate	Negligible to Minor	Negligible to Minor	Negligible to Minor	Negligible to Minor
Public Services	Minor	Minor	Minor	Minor	Minor
Utilities	Moderate to Significant	Minor	Minor	Minor	Minor

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

Table 1-3. Operation Impacts Comparison (Continued)

Element of the Environment	Alternative 2: Integrated Resource Approach				
	Energy Efficiency Component	Demand Response Component	Distributed Generation Component	Energy Storage Component	Peak Power Generation Component
Earth	Negligible	Negligible	Minor	Minor	Minor
Green House Gas Emissions	Negligible	Negligible	Negligible to Moderate	Minor	Moderate
Water	Minor	Minor	Minor	Minor	Minor
Plants and Animals	Negligible	Negligible	Negligible	Minor to Significant	Minor to Significant
Energy and Natural Resources	Negligible	Negligible	Negligible	Negligible	Negligible
Environmental Health	Negligible	Negligible	Negligible to Minor	Negligible to Minor	Negligible to Minor
Noise	Negligible	Negligible	Minor to Moderate	Negligible	Moderate
Land Use and Housing	Negligible	Negligible	Negligible	Minor to Moderate	Minor to Moderate
Views and Visual Resources	Negligible	Negligible	Minor to Moderate	Minor to Significant	Minor to Moderate
Recreation	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant	Minor to Significant
Historic and Cultural Resources	Minor to Moderate	Minor	Minor	Minor	Minor
Transportation	Negligible	Negligible	Negligible	Minor	Minor
Public Services	Negligible	Negligbile	Negligible	Moderate	Moderate
Utilities	Moderate to Significant	Moderate to Significant	Moderate to Significant	Moderate to Significant	Moderate to Significant

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

Table 1-3. Operation Impacts Comparison (Continued)

	Alternative 3: New 115 kV Lines and Transformers
Element of the Environment	**60 miles of 115 kV single circuit lines and 3 new 230 kV to 115 kV transformers installed at existing substations (Lake Tradition, Talbot Hill, and Sammamish).**
Earth	Minor
Green House Gas Emissions	Minor
Water	Minor
Plants and Animals	Minor to Significant
Energy and Natural Resources	Negligible
Environmental Health	Negligible to Minor
Noise	Minor
Land Use and Housing	Minor to Moderate
Views and Visual Resources	Minor to Significant
Recreation	Minor to Significant
Historic and Cultural Resources	Minor to Moderate
Transportation	Negligible
Public Services	Minor
Utilities	Minor

Impact Categories

Negligible	Impacts, if any, would be inconsequential
Minor	Noticeable but infrequent and temporary (such as a noise or emission), or limited in extent (such as a small change in appearance); typically not disruptive or destructive
Moderate	Adverse but limited in scope or effect; within an average range (such as non-impact construction noise like saws and drills, or periods of congestion typical during construction); not exceeding any regulatory standards
Significant	More than a moderate impact

1.12 WHAT ARE THE AREAS OF SIGNIFICANT CONTROVERSY?

1.12.1 Need for the Project

Controversy about the need for the project is high. Some members of the community reject the idea that the project is needed based on their understanding of how much energy actually needs to be transmitted through and into the Eastside area. Other members of the community accept PSE's assertion that the need is real and want only the most efficient and cost-effective approach to addressing it.

The purpose of this EIS is not to determine whether the project is needed, but to confirm that the methods used to define the need are consistent with industry standards and generally accepted methods. After determining that PSE's evaluation process has been conducted according to industry standards, the lead agency and the partner Cities have worked to understand the nature of the need that PSE has identified, and to look broadly at the possible alternatives that could address that need. This Phase 1 Draft EIS reflects the Cities' concern that the alternatives should include more options than alternative routes for 230 kV transmission lines.

1.12.2 What Alternatives Should be Examined

Prior to the development of the scope for this Phase 1 Draft EIS, PSE had considered a wide range of possible options in addition to a 230 kV transmission line solution, identifying that as its preferred approach. Because of the desire of the Cities to examine a wider range of options than only the 230 kV transmission line solution, PSE has cooperated in developing the alternatives solutions that have been evaluated in this EIS. PSE has conducted additional modeling to guide the scale of a 115 kV solution, and commissioned analysis on different routes and methods of developing a 230 kV solution.

In developing Alternative 2, the Cities have outlined a combination of options suggested by community members and evaluated by PSE in its own planning process. These options would require far greater efforts by PSE and its customers in adopting energy efficiency, demand-side reduction, distributed generation, energy storage, and peak power supplies than anything PSE has proposed or studied in its prior evaluations.

The intent in examining these alternatives in this Phase 1 Draft EIS is that the consequences of selecting specific project-level alternatives will be better understood.

Several options suggested by community members would modify assumptions PSE made in its planning analysis regarding the need for the project, specifically around the use of additional power plants outside of the Eastside during peak demand periods, and prohibiting the flow of electricity to Canada during peak demand periods. Options like these were examined but were found to be technically incapable of addressing the capacity deficiency PSE has identified on the Eastside. Options considered but not carried forward for analysis in this EIS are discussed in Chapter 2.

1.12.3 Impacts from the Project

Controversy also remains about how the impacts from any solution for the Energize Eastside Project will be borne by the communities the project will serve. Growth in electrical demand in the coming decades is expected to be driven by new multifamily and commercial development. The deficiency in transmission capacity could result in power outages throughout the Eastside, which is predominantly developed with single-family residences. Because there are no significant sources of electricity within the Eastside, virtually all electricity for the Eastside must come via transmission lines that extend through rural, single-family, and industrial areas as well as multifamily and commercial areas. Furthermore, residents in both single-family and multifamily areas on the Eastside work in the commercial areas where growth in electrical demand is expected to be concentrated. The controversy centers around what parts of the community would benefit from the lines, and what parts would bear the impacts.

Although significant impacts could occur with any alternative, the most controversial impacts relate to concerns about the visual impacts and potential for conflicts between electrical and flammable-liquid pipelines. Fear of these and other impacts led to concerns in the community about reduced property values, degradation of neighborhood character, and public safety. The Phase 1 Draft EIS acknowledges these concerns and provides the results of relevant studies prepared by local and national experts on the topics.

This Phase 1 Draft EIS does not define specific locations of impacts, and therefore it describes the impacts and associated tradeoffs in general terms. The project-level analysis in the Phase 2 Draft EIS will provide more detailed information about the areas that would be affected by various alternatives.

1.13 WHAT HAPPENS NEXT IN THE ENERGIZE EASTSIDE EIS PROCESS?

The Fact Sheet at the beginning of this Phase 1 Draft EIS includes the timeframe for public comment on the Draft EIS, including times and locations for public meetings to take comment, and the addresses where comments can be submitted. Once public comments have been received, the partner Cities will issue a Scoping Notice for the Phase 2 Draft EIS. The findings from this Phase 1 Draft EIS and comments received on it will be used to help outline proposed alternatives for inclusion in the Phase 2 (project-level) Draft EIS. Comments received on the Phase 1 Draft EIS will also be summarized and made available to the public. Scoping meetings will be held and comments accepted on the project-level analysis that will be prepared in the Phase 2 Draft EIS. Comments received on the scope of the Phase 2 Draft EIS will be summarized and made available to the public. Then the Phase 2 Draft EIS will be prepared.

After publication of the Phase 2 Draft EIS, public meetings will be held to take comments on that document. The Final EIS will include responses to comments on the Phase 1 and Phase 2 Draft EIS documents, as well as any additional analysis that may be required to provide a thorough project-level environmental review for the Energize Eastside Project. The Final EIS, expected to be completed in spring 2017, will be used by each of the study area communities in making permit decisions regarding the project.