



# Phase 2 Draft EIS, Scope of Analysis

December 21, 2016

## INTRODUCTION

The City of Bellevue is overseeing the preparation of a phased Environmental Impact Statement (EIS) for Puget Sound Energy's (PSE's) Energize Eastside project in cooperation with the jurisdictions of Kirkland, Newcastle, Redmond, and Renton (collectively referred to as the Partner Cities). The City of Bellevue is the State Environmental Policy Act (SEPA) nominal Lead Agency.

This report summarizes the alternatives and the elements of the environment that will be evaluated in the Phase 2 Draft EIS based on the scoping comments received during the initial Phase 2 scoping period (conducted April 14–May 31, 2016) and the additional scoping period (June 30–August 1, 2016). See the Scoping Comment Summary Reports on the EIS project website for more detail.

## WHAT IS THE ENERGIZE EASTSIDE PROJECT?

The Energize Eastside project is a PSE proposal to construct approximately 18 miles of new 230 kilovolt (kV) electrical transmission lines and add a new substation (Richards Creek) adjacent to the existing Lakeside substation to serve PSE customers in the area generally between Lake Washington and Lake Sammamish, in King County, Washington (Figure 1). Electrical power would be transmitted to the new substation and the voltage lowered, or “stepped down” (transformed), from 230 kV to 115 kV for distribution to local customers.

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### Phased Environmental Impact Statement

The Partner Cities are conducting a two-phase Draft EIS process under SEPA for PSE's Energize Eastside project, as allowed under Washington Administrative Code (WAC) 197-11-060(5).

The Phase 1 Programmatic Draft EIS was published on January 28, 2016. It evaluated, at a more general level, the environmental impacts of alternative methods to address the electrical transmission capacity deficiency identified by PSE.

The Phase 2 Draft EIS is currently being prepared and will include a project-specific and geographically referenced review of PSE's proposal, along with other reasonable alternatives.

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Figure 1. Project Map

# WHAT IS THE ENVIRONMENTAL REVIEW PROCESS FOR THIS PROJECT?

The City of Bellevue determined, and PSE agreed, that an EIS is needed for the proposal. On January 28, 2016, the City published the Phase 1 Draft EIS, which evaluated alternative methods to achieve PSE’s project objectives. The Phase 1 Draft EIS broadly described the types of impacts that the alternatives could have and mitigation that could minimize or avoid such impacts.

The Partner Cities began Phase 2 of the EIS process with the initial Phase 2 Draft EIS scoping comment period, which ran from April 14–May 31, 2016. The scoping process was reopened on June 30, 2016 for additional comment on new alternatives proposed by PSE and closed on August 1, 2016.

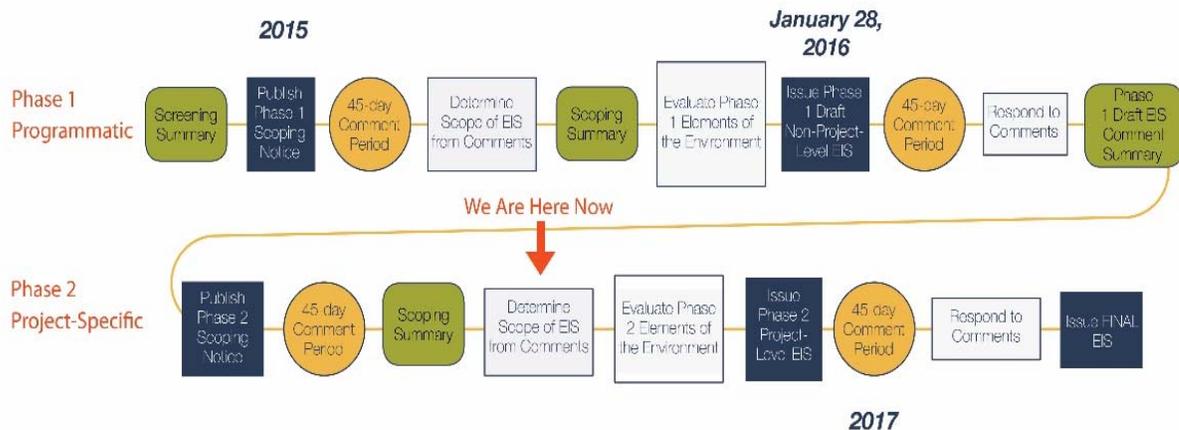
The Phase 2 Draft EIS is currently being prepared. Following publication of the Phase 2 Draft EIS, anticipated in early spring 2017, another 45-day comment period will be provided (see Figure 2). A summary report of the comments received on the Phase 2 Draft EIS will be prepared, along with general responses. After the close of this comment period, a Final EIS will be prepared that responds to the comments received on both the Phase 1 Draft EIS and Phase 2 Draft EIS in greater detail. See the Scoping Comment Summary Report, Part 1 for more detailed information on the phased process and past comment periods.

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## What is a Reasonable Alternative?

WAC 197-11-440(5)(b) defines a reasonable alternative as an action that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation. Reasonable alternatives may be those over which an agency with jurisdiction has authority to control impacts, either directly or indirectly through requirement of mitigation measures.

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**Figure 2. Two-Phase Draft Environmental Impact Statement Process**

## WHICH ALTERNATIVES WILL BE STUDIED IN THE PHASE 2 DRAFT EIS?

The alternatives listed below were shaped by the comments received during the Phase 1 scoping period, the Phase 1 Draft EIS, and the scoping periods for Phase 2. The action alternative has been determined to substantially meet PSE’s stated project objectives and purpose.

### Alternative 1

Alternative 1 includes a new substation (Richards Creek) and approximately 18 miles of new 230 kV electrical transmission line to connect two existing bulk energy systems (the Sammamish substation in Redmond, and the Talbot Hill substation in Renton). For the Phase 2 Draft EIS, the proposed 230 kV transmission line corridor is divided into six main segments (some of which include multiple route options). Segments were established to aid in the analysis and organize material for the decision-makers. Figure 3 shows the overview of all portions of Alternative 1. PSE proposes to use the existing 115 kV corridor, replacing the existing poles and conductors with new poles and conductors for a large portion of the project. In the two segments where route options are proposed, PSE has identified its preferred alignment for the Phase 2 Draft EIS. In the other segments of the corridor, no additional route options are proposed.

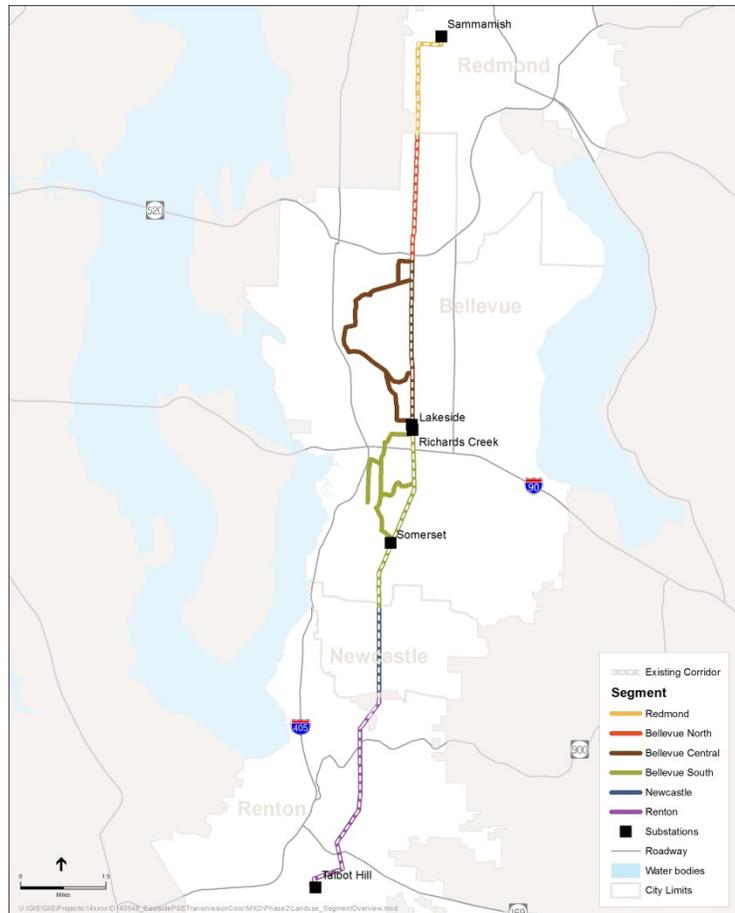


Figure 3. Alternative 1 Overview Map

### No Action Alternative

As required by SEPA, the No Action Alternative must be evaluated in an EIS. The No Action Alternative will include ongoing maintenance that PSE can do without requiring state or local permits. No new 230 kV transmission lines or substations would be built, and PSE would continue to manage its system in the same manner as at present. PSE conducts routine maintenance on all lines and transformers, including real-time monitoring of transformer loading and dissolved gas analysis of transformer oil to monitor breakdowns in insulation. This maintenance reduces the likelihood of equipment failure, and includes stockpiling additional equipment so that in the event of a failure, repairs could be made as quickly as possible. Increasing maintenance frequency would not improve PSE’s ability to serve the growing demand for electricity (electrical load). If no action is taken, load shedding (forced power outages within the Eastside) would likely be needed during the highest

demand periods in the near future. The No Action Alternative represents the most likely outcome if the project is not implemented, and it is considered the baseline condition.

### **Alternatives Considered but not Included**

The Phase 2 Draft EIS will identify alternatives from the Phase 1 Draft EIS and Phase 2 scoping comments that do not require or merit more detailed project-level impact review; furthermore, it will articulate the reasoning and basis if one or more alternative(s) are not being carried forward.

## **WHICH POTENTIAL IMPACTS WILL BE STUDIED IN THE PHASE 2 DRAFT EIS?**

Based on the scoping comments received, and the potential for significant impacts from the proposed alternatives, the environmental analysis in the Phase 2 Draft EIS will include the elements described below. The descriptions that follow are a summary of the topics that will be covered for each element. The elements will be presented in two main chapters within the document: long-term (operational) impacts and short-term (construction) impacts. The long-term (operational) impacts chapter will include all the elements described below, and each will follow a similar organization throughout the chapter that includes an introduction and a description of methods used to identify existing conditions and potential long-term (operational) impacts related to all alternatives within the selected study area for each element. Mitigation measures to avoid or minimize impacts will be identified within the element section. Mitigation measures, as required by SEPA (see WAC 197-11-660), must be reasonable and capable of being accomplished with the purpose of addressing adverse impacts related to the project proposal. The Phase 2 Draft EIS will also include a presentation of short-term impacts related to construction of the project, cumulative impacts, and a discussion of any potential significant and unavoidable adverse impacts relating to each element.

### **Land Use and Housing**

The Phase 2 Draft EIS will include an analysis of the potential impacts to land use, shorelines, and housing for parcels within the study area. This section will describe existing land uses, zoning districts, shoreline designations, subarea plan applicability, and comprehensive plan land use policies and designations in the study area, as well as broader land use patterns. The existing conditions discussion will note whether electrical transmission facilities are allowed within zoning districts in the study area, and if they are subject to a conditional use permit. The number of single-family and multi-family housing within the study area will be listed as well. The impact analysis will state whether the project would be consistent with zoning regulations and applicable plans, and if there would be an effect on current or future land use. If any single-family or multi-family residences would be removed for project construction or operation, this will be noted in the housing impact analysis. Where the project crosses Shorelines of the State, the section will evaluate the proposal's consistency with the requirements of the jurisdiction's Shoreline Master Program.

### **Scenic Views and the Aesthetic Environment**

The Phase 2 Draft EIS will include an analysis of the potential impacts to scenic views and the aesthetic environment. Visual resources associated with the study area were identified in the Phase 1 Draft EIS based on study area plans, regulatory codes, and scoping comments. These include scenic views of the Olympics, the Cascades, Mount Rainier, Cougar Mountain, Lake Washington, Lake Sammamish, and the downtown Bellevue and downtown Seattle skylines. The aesthetic environment is what influences human perception of the world. It is comprised of the natural environment (e.g.,

topography, vegetation, water bodies) and built environment (e.g., buildings, utility infrastructure). The Phase 2 Draft EIS will analyze views seen from neighborhoods within the study area, and views from vehicles on I-90. This assesses areas where the project transmission line would be within the foreground view, which is where viewers are most likely to experience changes in the scale of the project and observe details and materials.

## **Water Resources**

The Phase 2 Draft EIS will provide an analysis of potential impacts from construction or operation of the project alternatives on water resources, including streams, rivers, wetlands, and groundwater within the study area, and where water quality and critical areas permits would be required. This section will also discuss applicable regulations for stormwater management, surface waters (including critical area buffers), and groundwater. The impact analysis will discuss whether the project would increase stormwater runoff; decrease groundwater infiltration; and whether there would be impacts on streams, wetlands, and buffers. The analysis will consider whether the removal of vegetation or other project actions could significantly affect groundwater or surface water quality or movement. If a segment or option crosses a water resource that is considered a Shoreline of the State, a discussion of the impacts to the shoreline will be included.

## **Plants and Animals**

The Phase 2 Draft EIS will provide an analysis of potential impacts to wildlife, fish, and plant communities within the study area. These resources include various vegetation cover types, including herbaceous, scrub-shrub, forest, agricultural, and woody and herbaceous wetland vegetation types, as well as associated upland and aquatic wildlife species. The types of vegetation found in the study area will be described, including existing tree cover, as well as the wildlife habitat provided by the existing vegetation. A summary of the applicable regulations and policies will be a part of the section, including a description of PSE's current vegetation management program. The types of animal species known to be living in or migrating through the study area, including aquatic species, will be described, along with whether any of those species are specifically regulated, requiring special protection. The section will describe potential impacts to plant and animal species that can be attributed to the project construction or operation, specifically impacts related to vegetation clearing, wildlife habitat loss, or sensitive species.

## **Greenhouse Gases**

The Phase 2 Draft EIS will present the potential loss of greenhouse gas sequestration due to tree removal, and annual emissions of sulfur hexafluoride from substation equipment. The sequestration loss analysis is based on PSE's estimate of tree loss required for construction of the transmission line, and will focus on the areas where the project would directly or indirectly result in greenhouse gas emissions or where the project could result in a reduction of carbon sequestration.

## **Recreation**

The Phase 2 Draft EIS will include an analysis of potential impacts to recreation sites within the study area, including both public and private sites. All parks, natural areas, open spaces, trails, and playfields, as well as amenities such as community centers, playground equipment, school play fields, and private recreation facilities (e.g., golf clubs) within the study area will be identified. The potential types of impacts to recreational facilities will be assessed and discussed, including whether the alternatives would alter access to or use of those facilities in either the short or long term.

Impacts, either direct or indirect, arising from direct effects to other environmental elements (such as vegetation and aesthetics) will be a part of the impact assessment to the degree that they would have an effect on the use and enjoyment of recreational facilities.

## **Historic and Cultural Resources**

The Phase 2 Draft EIS will analyze potential impacts to known and potential historic and cultural resources for parcels within the study area. The section will include a summary of the steps taken to identify the potential for encountering unevaluated historic resources or unrecorded archaeological resources. Historic and cultural resources exist belowground and aboveground and can be archaeological sites, buildings, structures, or objects. The potential types of impacts to these resources from construction and operation of the project will be described as well as the types of mitigation available if needed.

## **Environmental Health (Electric and Magnetic Fields, or EMF)**

The Phase 2 Draft EIS will analyze the potential health and safety impacts related to EMF. The analysis will describe both existing conditions for representative areas along the segments and options, and projected magnetic field levels for representative areas. The analysis will rely on the Phase 1 Draft EIS discussion regarding the state of the science and what is known about potential health impacts related to EMF (specifically pregnant women, children, the elderly, and animals), including potential interference with medical equipment and radio frequencies. This section will describe the relevant EMF regulations and policies, and the levels of EMF currently found in the study area. The impact analysis will discuss what the post-project EMF levels would be and if those levels exceed regulations or exposure guidelines.

## **Environmental Health (Pipeline Safety)**

This section of the Phase 2 Draft EIS will evaluate the human health, safety, and environmental risks associated with the existing Olympic Pipelines located within the study area, and identify the increased risks associated with the project. It will focus on the area potentially affected by a leak, explosion, or fire caused by or related to the project. The Phase 2 Draft EIS will include the results of a risk assessment from EDM Services and provide an analysis of the long-term impacts on environmental elements in the event of a pipeline incident caused by the project. This section will also present the results of a corrosion study to be provided by PSE.

## **Economics**

While economic assessment is not a required element of a SEPA EIS, three economic aspects of the project will be described and analyzed in the Phase 2 Draft EIS based on comments received during the scoping period. These aspects include:

- Potential loss of property tax revenue to the smallest affected city (Newcastle) due to reduced property values.
- Cost to the community requesting the undergrounding or placing the 230 kV transmission line underground as mitigation.
- Value of lost ecosystem services (defined as the ecological benefits provided by trees, including the ability of trees to improve air quality by absorbing carbon dioxide and potentially harmful gases, such as sulfur dioxide and carbon monoxide, from the air, and releasing oxygen) due to reduced tree cover.

## WHERE CAN INTERESTED PARTIES GET MORE INFORMATION?

The City of Bellevue, or any of the Partner City representatives, is available to answer questions and provide information about the SEPA process for the proposed project. Information is available on the project website, hosted by the City of Bellevue on behalf of the Partner Cities, at: [www.EnergizeEastsideEIS.org](http://www.EnergizeEastsideEIS.org).

Interested parties may also contact Heidi Bedwell, Energize Eastside EIS Program Manager, at the City of Bellevue, at 425-452-4862, or by email: [info@EnergizeEastsideEIS.org](mailto:info@EnergizeEastsideEIS.org).

### Next Steps

The immediate next steps in the Energize Eastside EIS process will be to prepare the Phase 2 Draft EIS, scheduled for publication in early spring 2017.