

February 22, 2016

## **CITY COUNCIL STUDY SESSION ITEM**

### **SUBJECT**

Review of Energize Eastside Phase I Draft Environmental Impact Statement (DEIS) with regard to City Council scoping comments.

### **STAFF CONTACT**

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### **POLICY ISSUES**

The Energize Eastside Phase I Draft Environmental Impact Statement (DEIS) was issued on January 28, 2016. The City Council submitted scoping comments on behalf of the City and its citizens to help ensure that the EIS adequately considers sufficient feasible and reasonable alternatives to the project under the State Environmental Policy Act. See Attachment 1.

Council noted that the DEIS should provide a detailed statement of purpose and need. Council comments requested the examination of the other potential solutions to the demonstrated need including alternative infrastructure solutions; alternatives to a wired solution (including advancements in new technology alternatives); and alternative alignments for the 230kV option known as the Energize Eastside Project. Key details to be addressed included public safety impacts, more detail in the statement of purpose and need, alignment priorities, transmission line technology standards, and combined or hybrid alternatives.

After review of the Draft EIS, staff conclude that the Phase I DEIS is responsive to Council comments, and considers the breadth of reasonable alternatives suggested by the Council in its June 8, 2015, scoping comment letter. The DEIS strikes a balance between the trade-offs inherent amongst the different alternatives.

These conclusions are detailed in Background/Analysis.

### **DIRECTION NEEDED FROM COUNCIL**

Action  
 Discussion  
 Information

Staff recommends that additional comments on the Phase I DEIS are not needed for clarity or additional information, and that Council next take the opportunity to submit comments during the forthcoming Phase II DEIS scoping comment period. See Recommendations below.

## **BACKGROUND/ANALYSIS**

How did the DEIS address the June 8, 2015, comments?

- **Details of statement of purpose and need (Comment letter p.1, p.2 Section 1.c and 1.d)**

The DEIS summarizes project purpose and need in Chapter 1 Section 1.3: What is the purpose and need for the Energize Eastside project? To detail the statement of purpose and need, the consultant team included the following in the DEIS:

  - Independent examination of the documentation used by PSE in its needs assessment analysis; obtained qualifying FERC security clearance to examine data redacted in the needs assessments; produced a reference memorandum (Stantec, 2015) confirming that PSE’s needs assessment was conducted in accordance with industry standards for utility planning.
  - Examining impact on elements of the environment of designing the Proposal to NERC Transmission Planning Standards TPL-001-4, with reference to the Stantec Study and its role in such analysis.
  - Transmission line technology representing an industry standard amongst alternative infrastructure solutions, utilizing proven technology which can be controlled and operated at a system level (p. 2-10 Section 2.2.2.3).
  - An understanding of the need for the project to obtain a thorough understanding of the project’s objectives in Chapter 2, linking PSE’s objectives with evaluative and statutory electrical criteria, system contingencies and their frequencies, and the ability of the alternatives to meet all of the objectives (p. 2-1 Project Alternatives).
- **Prioritizing alignment (Comment letter p.2 Section 1.a.i)**

Regarding project alternatives, how did the DEIS treat prioritizing alignment through areas driving growth and need? The DEIS examined the impacts of all of the alternatives on area land uses including the predominant single family residential land use in the study area—the areas driving growth and need. The DEIS identifies the use of existing utility corridors or properties already owned by PSE to limit impacts and minimize conversion of other land uses (p. 10-31 Section 10.8 Land Use and Housing mitigation measures).
- **Collocation—health and safety and seismic events (Comment letter p.2 Section 1.a.ii)**

Regarding project alternatives, how did the DEIS treat options for collocation with existing or proposed infrastructure that consider environmental health and physical safety impacts including those impacts associated with seismic events?

Collocation refers to combining utility and public infrastructure in the same corridor. The DEIS studied options for collocation, and examined the potential environmental health and public safety impacts of those options, especially those from seismic events.

### ***Where is the Olympic Pipeline addressed in this EIS?***

*A number of chapters in this EIS address potential impacts associated with the Olympic Pipe Line Company’s petroleum pipelines through the combined study area. See Chapter 3 (Earth - seismic conditions), Chapter 10 (Land Use – compatibility and policy consistency), Chapter 15 (Public Services -*

*emergency response), and Chapter 16 (Utilities - potential impacts to pipelines and transmission lines). p. 8-3 Chapter 8 Environmental Health, Public Safety Risks.*

This Phase I DEIS examined at a high-level the impacts of any of the alternatives which would collocate electrical infrastructure in the Olympic pipeline corridor and its easement. These include Alternative 1 Options A and D, Alternative 2 Distributed Generation, energy storage component, and peak generation component and Alternative 3.

Collocation impacts are examined in detail in the Environmental Health and Public Safety chapters. Environmental health and physical safety risk is summarized on page 1-32 and on page 1-46 under the effect of collocation on factors of the environment for health and public safety. The DEIS examined the effect of collocation of any of the applicable Alternatives with OPL and reached conclusions about the environmental impacts of constructing and maintaining each facilities when contemplating such collocation:

#### **8.2.2.2 Natural Phenomena**

*Local governments have regulations in place to address structural design and stability, including earthquakes as discussed in Chapter 3. Each study area community also implements codes conforming to International Building, Mechanical, and Fire Codes, which have been enacted to safeguard public health, safety, and general welfare. These codes address issues such as structural strength, stability, and protection of life and property from fire and other hazards. Projects in known seismic hazard areas require special geotechnical review.*

Seismic risk is summarized in Earth on page 1-22: “Under all alternatives there is unavoidable seismic risk. None of the alternatives increase that risk. New facilities built to current standards reduce that risk, and no significant impacts are likely.”

The DEIS identified local governments and the land use policies they have adopted regarding co-location of utilities and development adjacent to hazardous materials pipelines, which would ensure that the proposed transmission lines would be constructed in areas safe to maintain and operate (p. 8-27, Environmental Health Chapter, Section 8.5.3.1.2 and p. 8-40, Section 8.6.3.1.2.) As noted in the DEIS “Appendix F includes some of the planning policies of King County and the Eastside cities that directly address co-location of gas pipelines and other developments. The study area communities could interpret and apply their policies to the project when PSE applies for permits.” (King County, Bellevue, Kirkland, Redmond, Renton, Newcastle plan summaries pp. 8-5 and 8-6.)

The Earth chapter examined the potential for failure of steel transmission poles due to geologic hazards, concluding that it was low (p. 3-13 Earth Chapter Section 3.6.1.3 construction impacts/seismic hazards to the power line; Section 3.6.1.5 construction impacts to OPL; and Section 3.7.1.3 seismic hazards issues during operations).

- **Energy demand and use forecast methodologies (Comment letter p.2 Section 1.b)**

In analyzing energy demand and use forecast methodologies among the alternatives, including methodologies for determining “right size” extent of need for new transformer and transmission line, the DEIS detailed how the alternative provided capacity to meet identified need and based on PSE’s objectives for the solution.

- **Impacts of undergrounding (Comment letter p.2 Section 1.e)**

The DEIS explored as part of Alternative 1 the impacts to the environment of undergrounding the transmission line including submerged routes (lake location), and including the entirety of a proposed alignment or segments.

- **Pole design (Comment letter p.2 Section 1.f)**

The DEIS identified pole design considerations (height, form, location) on p. 2-22 Chapter 2, and analyzed them in the context of impacts to views (p. 11-1 Chapter 11 Views and Visual Resources, summarized on p. 1-38.) Significant impacts to views are expected if any new corridor is developed. Other impacts to visual character could be mitigated by collocating new lines in existing corridors, although with trade-offs for the affected communities.

- **Combining or hybrid alternatives (Comment letter p.3 Section 3.a)**

The DEIS addressed combining or hybrid alternatives which should be identified and explored in Alternative 2: Integrated Resource Approach, which proposes a combination of generation and delivery to provide power, and where the DEIS considered the environmental impacts of combining or blending one or more elements of each of the four alternatives in light of the proposed objectives. For example, combinations of demand-side reduction and use of new transformers and existing transmission lines or regional alternatives was included in Alternative 2 analysis. However, the DEIS also disclosed the types of facilities included in the analysis as well as the types of facilities not included in the analysis (p. 2-37 to 2-39, 2.3.3.3.1 generation facilities included in the DEIS and 2.3.3.3.2 facilities not included in the analysis.)

- **Other alternatives—PSAST (Comment letter p.3 Section 3b)**

The DEIS examined the discussion of other alternatives examined through the Puget Sound Area Study Team (PSAST) in the Stantec Report, including regional alternatives to determine transmission facility expansions to address south-to-north transfers (Chapter 2 Project Alternatives Section 2.4.1 pp. 2-50 to 2-51) [and] including the existing Seattle City Light transmission line (Maple Valley-SnoKing 230kV) \*.

The DEIS identified the use of an existing BPA High-Power Transmission Line as an Alternative Considered But Not Included (Chapter 2 Project Alternatives Section 2.4.1) including “Tapping the BPA Maple Valley-Sammamish 230kV and the SCL SnoKing-Maple Valley 230kV line, and looping a new 230kV—115kV Lakeside substation between the tapped lines” because the source is outside of the deficiency area and solutions to connect it to the deficiency area (pp. 2-50 to 2-51)) were “...found to overload either transmission lines or transformers” and would thus not address relevant PSE equipment violations.

\* Please note that using the overhead 230kV transmission line owned by SCL within the deficiency area is included in the DEIS as Option B - Alternative 1 (Chapter 2 Project Alternatives Section 2.3.2.3 p. 2-26).

- **AC/DC conversion technologies (Comment letter p.3 Section 3.c)**

The DEIS identifies this conversion technology as an Alternative Considered But Not Included (Chapter 2 Section 2.4) noting that “although switching to DC would potentially address the problem by marginally increasing the capacity of the lines...it would have adverse impacts to the reliability

and operating characteristics of PSE's system" (p. 2-52) and thus be in violation of PSE's Planning Standards and Guidelines (p. 2-54).

- **Financial impacts to ratepayers (Comment letter p.3. Section 3.e)**

Examine the feasibility of alternatives, including potential practical barriers to implementation and the potential financial impact to ratepayers of choosing one of the alternatives over the other alternatives in Chapter 2 Section 2.2.2.4 Reasonable Project Cost (p.2-11).

Impacts to adjacent property during and after construction were examined in Chapter 10 Land Use and Housing on p.10-21 at Section 10.7.1.4 Property Values. Overall, the DEIS found that, through extensive literature and study research that research did not support a conclusion that property value shifts would occur that would lead to negative impacts on land uses. Chapter 11 Views analyzed economic impacts to property of the alternatives (p. 11-2 at Section 11.1.2 Property Values, Views and Visual Resources.)

### **ALTERNATIVES**

N/A

### **RECOMMENDATION**

Following completion of the comment period for this Phase I DEIS, the partner Cities will continue to examine more specific impacts and mitigation for the project through the Phase II DEIS. A scoping period will precede development of that DEIS.

Staff recommends that the Council submit a letter to that Phase II scoping process, including requests for examination of not only variations to specific alignments of a 230kV line solution for Energize Eastside, but also further examination of any viable alternative from the Phase I DEIS.

The scoping comment letter would also highlight the particular elements of the environment that should be examined at a closer level of detail, including public safety impacts of collocation with the Olympic pipeline and necessary mitigation measures, impacts to view and aesthetics, including mitigation measures and study of alternative pole design, size, placement and other measures.

### **ATTACHMENT**

1. June 8, 2015, Phase I DEIS Scoping comment letter – Bellevue City Council

### **AVAILABLE IN COUNCIL DOCUMENT LIBRARY**

N/A