

June 19, 2019

Dear PSE and Technical Advisory Group,

To clarify the need and purpose of the Energize Eastside transmission project, TAG members have ten questions which PSE did not adequately address at Bellevue's Public Hearing in March.

We would appreciate written answers by July 23 so the group has adequate time to prepare for the TAG meeting on August 6. We want to be sure that Energize Eastside is a prudent investment of hundreds of millions of dollars.

Our questions fall into four categories:

- Is Energize Eastside still needed?
- What is the purpose of the project?
- How does recent state legislation change the forecast and the need?
- What else has changed in the last six years?

Is Energize Eastside still needed?

1. **Winter need.** Given the trend of declining winter peak consumption of energy, is Energize Eastside still needed to address winter peak demand? To help us understand trends specific to the Eastside, please provide ten years of winter peak demand on Eastside substations, including peak magnitude, date, and time.
2. **Summer need.** How fast are summer peaks growing on the Eastside? Please provide ten years of summer peak demand on Eastside substations, including peak magnitude, date, and time.

*Background: At Bellevue's public hearing, PSE showed a **system-wide** graph of recent summer peaks. It is critical to understand what is happening specifically in the Eastside area.*

3. **Forecasts.** The 2013 Eastside Needs Assessment¹ projected customer demand growing at 1.7% annually. The 2015 update² raised the expected rate of growth to 2.4% annually. However, PSE has lowered forecasts for the company's service territory in each IRP since 2013. Has peak demand also moderated on the Eastside? Are winter and summer peaks growing at different rates?

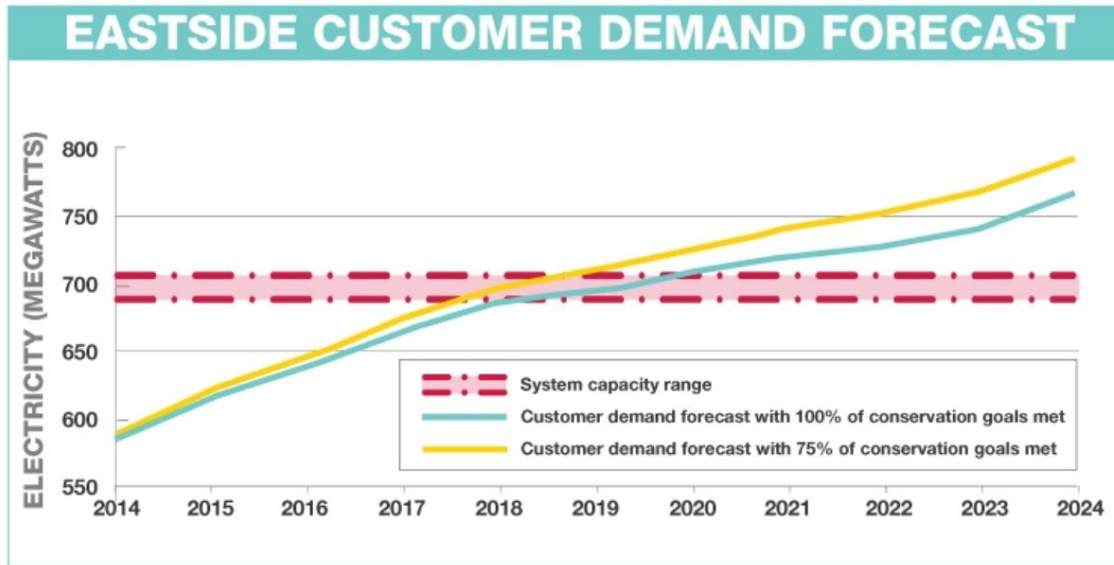
Background: The 2015 "Eastside Customer Demand Forecast" for winter peaks is shown below. Three years ago, PSE removed this graph from the Energize Eastside website. An updated forecast showing historical peak demand on the Eastside would help the public understand the need for the project given many changes in technology, conservation, and consumption patterns.

1

https://energizeeastside2.blob.core.windows.net/media/Default/Library/Reports/Eastside_Needs_Assessment_Final_Draft_10-31-2013v2REDACTEDR1.pdf

2

https://energizeeastside2.blob.core.windows.net/media/Default/Library/Reports/SupplementalNeedsAssessmentReport_Redacted_April2015.pdf



From Energize Eastside website, July 2016

What is the purpose?

4. **Reliability benefit.** PSE warns that rolling blackouts might occur if Energize Eastside is not built. How much is Energize Eastside expected to improve SADI and SAFI reliability metrics? More simply, how often would the typical Eastside customer suffer a blackout caused by PSE's N-1-1 outage scenario, and how long would the average blackout last?
5. **Close calls.** Has PSE suffered a system blackout related to transmission deficiencies in the last decade? If so, please describe the failure in detail. If there was a close call, describe the circumstances, how PSE responded, and how Energize Eastside could have alleviated the risk.
6. **Segmentation.** In the City of Bellevue Development Services Department Land Use Staff Report, PSE answers staff questions about dividing Energize Eastside into north and south segments. PSE states, "The south segment of the Project provides additional capacity that addresses the Project need and could function whether or not the north segment is built. The north segment would provide redundancy in the supply of 230 kV power to the substation."³

Is PSE still planning to build the north segment of the transmission line? If so, when will permit applications be submitted? When is the line intended to be in service?

Would the north segment enable greater flow of electricity to satisfy the Columbian River Treaty or flows from Canada to points south of the Puget Sound region?

³

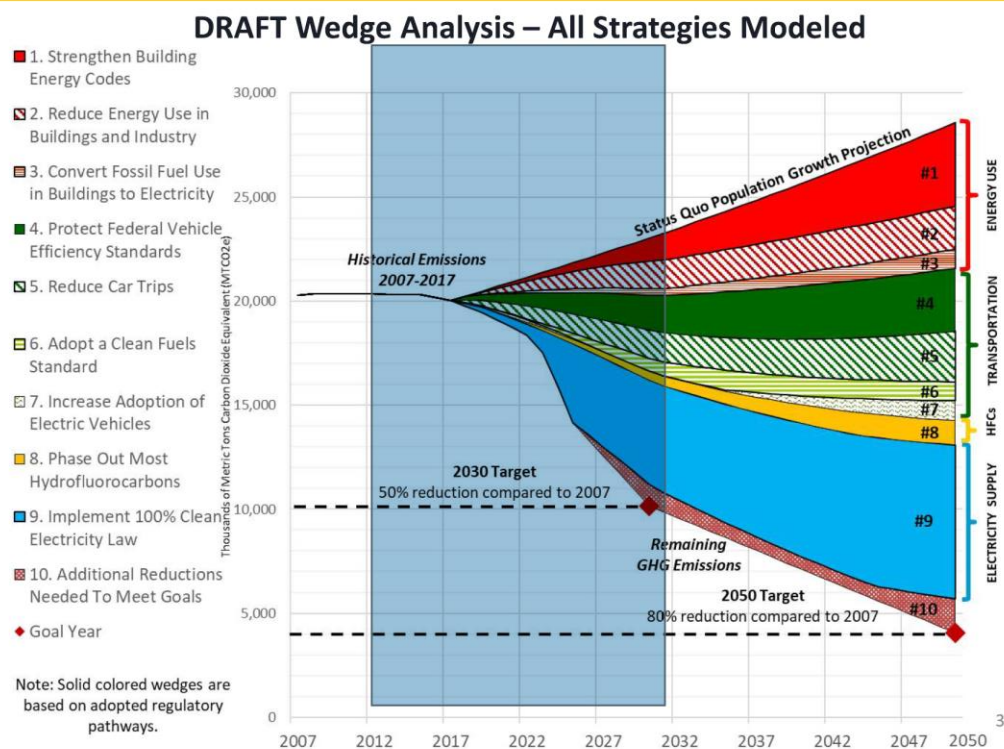
https://development.bellevuewa.gov/UserFiles/Servers/Server_4779004/File/pdf/Development%20Services/EnergizeEastside/Staff%20Report%20FINAL%201242019.pdf, page 111

Recent legislation

7. **CETA.** In May 2019, the Washington state legislature passed the Clean Energy Transformation Act (CETA).⁴ This ambitious law is an essential part of plans by the King County Cities Climate Collaboration (K4C) to achieve an 80% reduction in greenhouse gas emissions by 2050.

On June 10, K4C presented draft plans to elected officials to show how substantial reductions might be realized. These plans are a work in progress that will be finalized next year, but it's useful to understand the most current thinking. A "DRAFT Wedge Analysis" lists 10 strategies that may be used to reduce emissions over time:⁵

King County Greenhouse Gas Emissions: Achieving Shared Targets



At least four of the K4C strategies would tend to reduce demand for electricity (1, 2, 9, and 10), while two might increase demand (3 and 7). K4C mentioned two responses to CETA (strategy 9) that may reduce demand (supporting conservation and advanced technologies and installing solar on facilities).

As the state and counties implement programs to reduce greenhouse gas emissions, does PSE expect these efforts will change demand for electricity on the Eastside?

⁴ <http://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/Senate%20Passed%20Legislature/5116-S2.PL.pdf>

⁵ The decision to close Colstrip 1 & 2 was made after the Wedge Analysis was completed and will probably alter the chart somewhat.

8. **House Bill 1257.** “The legislature therefore determines that it is in the state's interest to maximize the full potential of energy efficiency standards, retrofit incentives, utility programs, and building codes to keep energy costs low and to meet statutory goals for increased building efficiency and reduced greenhouse gas emissions.”⁶

According to K4C, energy use in buildings is the largest source of greenhouse gas emissions in King County – almost half of the county’s total emissions. The next largest source is transportation, with vehicles and airplanes producing about 35% of total emissions.

Has PSE quantified how the efforts listed in HB 1257 might affect demand for electricity and the date when Energize Eastside is needed?

What else has changed?

9. **Long-term trends.** During the past six years, trends such as flat demand, improved technology, and changes in regional plans appear to diminish the need for Energize Eastside. Can PSE provide evidence of counter trends that increase the need for higher capacity transmission through the Eastside?

Background:

- *According to NERC planning standards, studies more than five years old cannot be used to justify construction of transmission facilities, unless the utility can demonstrate that no substantial changes have occurred during that time period.⁷ Quanta’s 2015 Eastside study update is based on data that is now five years old.*
- *Energize Eastside was announced in 2013, when PSE’s IRP forecast steady growth of electricity demand. Technology and conservation have flattened the growth trend in PSE’s 2017 IRP. Recent IRPs from Seattle City Light and Tacoma Power anticipate **declining demand** for the foreseeable future.*
- *Canada recently decided to proceed with construction of the Site C hydro project, which will add 5.1 gigawatt-hours per year to British Columbia’s energy portfolio. When it comes online in 2024, the dam will reduce Canada’s need to import electricity from the Puget Sound area during the winter. Such energy transfers were a fundamental assumption justifying the need for Energize Eastside. Canada does not want to rely on the U.S. for its energy supply, and Site C will help them achieve energy independence.*
- *Advances in technology and declining demand for electricity caused BPA to cancel a large transmission project along the I-5 corridor between southwest Washington and Oregon. BPA found that deployment of flow control devices, demand response, and energy storage would be less costly for ratepayers. This decision may alter grid performance and reduce the need for Energize Eastside. It would be prudent and in accord with NERC reliability requirements to update studies and verify that Energize Eastside is still needed, given the changes that have occurred in the past five years.*

⁶ <http://lawfilesexternal.wa.gov/biennium/2019-20/Pdf/Bills/House%20Passed%20Legislature/1257-S3.PL.pdf>, p. 2

⁷ NERC Standard TPL-001-4, <https://www.nerc.com/files/TPL-001-4.pdf>, section 2.6.

10. **Cost.** According to the Energize Eastside website, “We don’t yet know the total cost of the project, but estimates range from \$150 million to \$300 million. Once we determine the final design and alignment, we will have a better idea of the total cost.”⁸

According to FERC filings, PSE has already spent at least \$60 million studying and promoting Energize Eastside. Delays and bifurcation of the project may have added to the budget. What are PSE’s latest estimates of the total cost to ratepayers for construction of the south and north segments?

Sincerely,



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⁸ <https://energizeeastside.com/faqs> (as of June 19, 2019)