February 1, 2016

Dear WUTC Commissioners,

The Coalition of Eastside Neighborhoods for Sensible Energy (CENSE) has some questions about PSE's 2015 IRP in relation to the company's "Energize Eastside" project, a 230 kV transmission line that will run for 18 miles through at least four Eastside cities.

1. Why is Energize Eastside not mentioned in the IRP?

The Energize Eastside project is projected to cost \$300 million, financed by 1.1 million ratepayers through increased electricity costs for the next 40 years. This is a major project and a resource that will serve both local and regional needs. As such, its absence from the IRP or any oversight by the WUTC is a disservice to the ratepayers who the WUTC is meant to protect.

2. Why is transmission in general not considered in the IRP?

Washington Administrative Code (WAC) 480-100-238 states that transmission and distribution should be evaluated in the IRP in order to ensure "lowest reasonable cost." The code also mentions emissions of carbon dioxide. This is relevant to Energize Eastside, because locating generation closer to consumption reduces transmission losses, and thereby reduces overall CO2 emissions. If these questions aren't addressed in the IRP, a complete and transparent evaluation of costs and emissions will be missing from the resource plan.

The interplay of generation and transmission is illustrated by the case of the Shuffleton power plant, which provided emergency power generation to the Eastside for decades, until Puget Power dismantled the plant and sold the "surplus property" in the late 1990's. The Shuffleton plant had the capacity to generate up to 90 MW, which would have eliminated the shortfall of 70 MW targeted by Energize Eastside. By dismantling a local generation resource, Puget Power set the stage for building a new transmission resource. Was this in the best interest of PSE's customers? This is an appropriate subject for the WUTC to consider in the context of the IRP.

3. What obligation do PSE's customers have to supply energy to Canada?

In the central planning document that justifies Energize Eastside, the "Eastside Needs Assessment," PSE assumes that 1,500 MW must be transmitted to Canada under all circumstances, even when the company is serving winter peak loads under N-1-1 contingency scenarios. PSE claims this is a requirement thrust on them by NERC and the Columbia River Treaty.

We find this difficult to believe because

- 1. NERC grid reliability coordinators would almost certainly reduce power flows from the Northwest to Canada under these conditions,
- 2. We don't think there is a firm requirement to deliver this power, because the Columbia River Treaty was amended in 1999 to allow Canada to sell their share of Columbia power in the US,
- 3. We find no historical record of flows of this magnitude occurring simultaneously with temperatures below 23 degrees F.

To determine what effect this flow of electricity to Canada has in PSE's load flow simulations, we asked Bellevue's independent analyst, Utility System Efficiencies, to run a load flow simulation without the Canadian flow. Their results show at least 4 of the 5 overloads in PSE's system were eliminated when the Canadian flow was excluded. The magnitude of the only remaining overload was not mentioned in the analyst's report, but we

have since learned that it was relatively minor, about two percent over its rating. We therefore conclude that at least 80% of the need for Energize Eastside is attributable to the assumption of large flows to Canada.

According to the Federal Energy Regulatory Commission, in their rejection of a complaint that CENSE filed regarding the Energize Eastside project, "neither Puget Sound, nor any other eligible party, requested to have the project selected in the regional transmission plan for purposes of cost allocation." In other words, the cost of providing Canadian power has been placed solely on PSE's ratepayers, rather than being spread throughout a wider region that should bear responsibility for sending increasing amounts of power to Canada. We believe this is within the WUTC's authority to verify.

In different settings, PSE has variously claimed that Energize Eastside has nothing to do with Canadian power, or that the requirement to deliver the power is just a requirement of being part of a regional grid. We think that the true motivation for the project is stated in a BPA press release from 2012 (and signed by Gretchen Aliabadi, who plays an important role on the Energize Eastside team):¹

Energy demand projections for the Puget Sound area and **the potential for additional energy delivery from the Northwest to Canada** have transmission system planners projecting increased curtailments by the end of this decade. [emphasis added]

We ask why additional energy must be delivered to Canada, and why PSE's ratepayers are responsible for 100% of the transmission cost of providing it.

4. Have energy efficiency and demand response been accurately evaluated and forecast?

CENSE questions PSE's forecast of demand side resources. All cost-effective DSRs should be evaluated in the IRP, including demand response and distributed generation. The cost of DSR technologies declines at a rapid pace, while cost of transmission and traditional thermal generation increases over time. It appears these cost curves are not reflected in IRP forecasts. From reviewing IRP, it is hard to tell the source of DSR cost information and if forecasts of cost reduction are reflected.

If winter peak capacity is indeed an issue on the Eastside, we would expect more cost effective DSR to be targeting this area in the IRP. DSRs can address capacity needs and alleviate need for transmission and thermal generation.

Our concerns are reinforced by the Northwest Power and Conservation Council 7th Power Plan that will be released this month:²

Under a wide range of future conditions, energy efficiency consistently proved the least expensive and least economically risky resource. In more than 90 percent of future conditions, cost-effective efficiency met all electricity load growth through 2035. It's not only the single largest contributor to meeting the region's future electricity needs, it's also **the single largest source of new winter peaking capacity.** [emphasis added]

Sincerely,
Don Marsh, President
CENSE.org

¹ https://www.bpa.gov/news/newsroom/releases/Documents/20120124-PR-5-12-Joint-transmission-system-projects-to-improve-system-reliability.pdf

https://www.nwcouncil.org/energy/powerplan/7/draftplan/