Don Marsh, Member Technical Advisory Group for PSE's 2019 IRP 4411 137th Ave. SE Bellevue, Washington 98006

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Mark L. Johnson, Executive Director and Secretary Washington Utilities and Transportation Commission P.O. Box 47250 1300 S. Evergreen Park Drive SW Olympia, Washington 98504-7250 Keceived Records Management 01/29/19 08:07 State Of WASH. UTIL. AND TRANSP. COMMISSION

Re: Docket UE-161024: Comments of a Coalition of Ratepayers in Response to Notice of Opportunity to Submit Written Comments on Public Utility Regulatory Policies Act, Obligations of the Utility to Qualifying Facilities

Dear Mr. Johnson,

Thank you for the opportunity to comment on draft rules regarding the Public Utility Regulatory Policies Act and the obligations of utilities and qualifying facilities. Our comments will focus on the question of which "qualifying facilities" may or may not be included in the Commission's RFP bidding process.

These comments are filed on behalf of a Coalition of organizations that collectively represent thousands of PSE ratepayers and stakeholders:

- **CENSE** (Coalition of Eastside Neighborhoods for Sensible Energy), a Washington non-profit organization advocating energy solutions for Eastside neighborhoods that deliver reliable electricity at reasonable prices, while also minimizing safety risks, environmental harm, and impact on neighborhoods.
- **350 Eastside**, a local chapter of the international organization 350.org, which promotes the replacement of fossil fuels with 100% renewable energy sources on the Eastside and abroad.
- **Citizens' Climate Lobby**, the Bellevue chapter of a non-profit, nonpartisan, grassroots advocacy organization focused on national policies to address climate change.
- **Protectors of the Salish Sea**, a nonprofit indigenous organization which seeks to end all fossil fuel expansions and bring long-lasting wellness, harmony and true peace amongst all beings back to the Salish Sea and beyond through traditional knowledge and direct action.
- Vashon Climate Action Group, which performs concrete actions to combat climate change and mitigate its harmful effects. The group's areas of work include lobbying legislators, conducting research, educating and communicating with the general public, coordinating with local partners, and coaching Vashon residents on sustainable choices in our community.
- Somerset Community Association, a non-profit organization representing over 1,500 homeowners living in the Somerset neighborhood of South Bellevue. The Association is especially concerned about potentially significant impacts from PSE's "Energize Eastside" transmission line project.

• **Olympus Homeowners Association**, an association of 268 homes located in Newcastle, Washington, who would also be impacted by the "Energize Eastside" transmission project.

Our individual organizations have varying outlooks and missions. However, we are united in our understanding that the decision-making process for Washington's investor-owned utilities (such as PSE) can impact the reliability of our electricity, its cost, the health of the local and global environment, the safety of our loved ones, and the beauty and quality of life in our neighborhoods.

Competition for delivery projects

We applaud section (1) of the proposed WAC 480-107-065, which states: "A conservation and efficiency resource supplier may participate in the bidding process for *any resource need*." (emphasis added)

With no further qualification, this language appears to mandate a bidding process that includes conservation and efficiency for all resources, including generation and delivery. However, this enlightened policy is apparently contradicted by the proposed WAC 480-107-015.4.b, which exempts projects from the RFP process when a "utility's identified resource need is for **delivery system resources**."

Which of these contradictory sections should become the policy of Washington State?

Our Coalition believes that exempting delivery resources from a bidding process would perpetuate an existing problem. At present, a delivery project can be built without assurance that it is necessary, technically sound, or the best possible solution to address the need. Investor-owned utilities can propose expensive and harmful transmission projects without any requirements to issue an RFP for alternative solutions. Nor are investor-owned utilities required to submit projects for independent technical review by government agencies such as EFSEC (Energy Facility Site Evaluation Council), which are better suited than local city councils to perform technical reviews. An open and transparent RFP process would help all stakeholders understand the need and appropriateness of a delivery project. This understanding is currently hampered because investor-owned utilities are not required to respond to public information requests.

Evaluating delivery alternatives

In PSE's response to this same docket dated December 14, 2018, the company says, "Today, demand growth is not a given, and changes in the *generation* market have introduced a wider range of technologies with which a utility may meet its capacity needs." We heartily agree and point out that the same low growth trends and steady march of technology has also created alternatives for *delivery projects*.

Delivery projects need a competitive bidding process to allow fair consideration of alternatives. Some cities, like Bellevue and Newcastle, attempt to open the door to alternatives through land codes. For example, section 20.20.255.D.3.a of Bellevue's land use code requires a utility to "Describe the range of technologies considered for the proposed electrical utility facility" (a transmission line is included in the definition of electrical utility facilities). Unfortunately, *description* of alternative technologies is not as effective as *competitive bids* for those technologies. If the utility has a strong preference to build a transmission line, then evaluations of alternative technologies may be negatively biased.

Does the Coalition believe alternative technologies have matured sufficiently to provide attractive alternatives to transmission lines? In a growing number of cases, the answer is unequivocally, "Yes!"

An op-ed published in the May 2018 issue of PV Magazine explains how energy storage is changing investment decisions: "Utilities are realizing that there are certain cases where energy storage can defer investments in a variety of fundamental, single-function grid assets like wires, poles, transformers and substations, and in the process help utilities get the most value from the T&D [transmission and distribution] lines they already own and use."¹

The article shows how smaller, incremental investments in energy storage better match demand growth than an expensive transmission line (see Figure 1):



Figure 1 – Different ways to serve growing loads

Besides serving load growth, a storage solution can provide cost savings, improved reliability, and environmental benefits.

¹ <u>https://pv-magazine-usa.com/2018/05/29/why-big-bets-on-transmission-and-distribution-infrastructure-are-no-longer-necessary/</u>

Non-wire alternatives

Energy storage is just one option in a growing toolkit of technologies known in the industry as "distributed energy resources" (DERs) and "non-wire alternatives" (NWAs). The proposed language of WAC 480-107-065 would let "conservation and efficiency suppliers" participate in the bidding process for any resource need. Expanding the definition in WAC 480-107-065 to include DERs/NWAs would clarify the present wording.

Utilities have used distributed energy resources to avoid specific transmission projects since the early 1990s. Since 1995 the technology, programs, and resources to provide non-wire alternatives have grown exponentially. Over 1,000 MW of US transmission capacity has been avoided with NWAs. According to a 2017 report for the Vermont Public Service Commission, in the last five years 1,900 MW of transmission and distribution capacity upgrades are being implemented or evaluated with NWAs.² States which mandate utilities hold an RFP or use an independent evaluator for "delivery service resources" include California, Arizona, New York, Hawaii, Vermont, Massachusetts, Connecticut, Minnesota, Maine, and Vermont.

WAC 480-107-015.4.a proposes to exempt resource needs less than 80 megawatts from the RFP bidding process. This is problematic for our Coalition and ratepayers in general, because system peak demands have been falling or flat for nearly a decade. If peaks begin to grow again, the increases will likely be in increments less than 80 MW. Distributed Energy Resources are well suited for meeting capacity resource needs in smaller increments. Exempting utilities from RFPs when the need is less than 80 MW will prohibit DER vendors and third parties from participating in the substantial percentage of Washington's energy marketplace served by investor-owned utilities. Navigant predicts the global market for DERs will reach nearly 530,000 MW by 2026.³ A level playing field for DER-providers would encourage new-technology business investment and cleantech jobs in Washington.

² <u>https://www.vermontspc.com/library/document/download/5936/GTMR_-_Non-Wires_Alternatives_Projects.pdf</u>

³ <u>https://www.navigantresearch.com/news-and-views/global-capacity-of-distributed-energy-resources-is-expected-to-reach-nearly-530-gw-in-2026</u>

Energy storage examples

Energy storage is an interesting example of the potential of DERs/NWAs. The rapidly declining price of storage batteries has enabled deferral or cancelation of transmission and distribution projects in Washington State and elsewhere:

- In May 2017, Bonneville Power Administration canceled a 79-mile, \$722 million transmission project in southwest Washington. The agency found a combination of energy storage, demand response, and flow control would save customers hundreds of millions of dollars and avoid impacts on local communities. Elliot Mainzer, BPA's administrator and CEO, wrote, "My decision today reflects a shift for BPA from the traditional approach of primarily relying on new construction to meet changing transmission needs, to embracing a more flexible, scalable, and economically and operationally efficient approach to managing our transmission system."⁴
- In August 2017, Arizona Public Service needed to serve peak demand in the town of Punkin Center for 20 or 30 days each year. The utility found an 8 MWh storage battery would cost half as much as a 20-mile transmission line. According to Erik Ellis, transmission and distribution manager for technology assessment and integration, "It means we're evolving toward a more sustainable and effective grid where we're no longer forced to make investments in these large, significant steps. We can take much smaller incremental steps to manage the need as it arises and not have to over-invest in some cases, as utilities have traditionally had to do in the past."⁵
- In November 2017, National Grid announced it would use a 6 MW/48 MWh Tesla battery to serve growing loads on the island of Nantucket and defer the need to install a third transmission line for decades. Terron Hill, director of National Grid's network strategy said, "Energy storage is really becoming more and more a viable solution on the grid. We're starting to see the economics compete more and more with what I would call 'traditional solutions' many utilities are putting forward. ... As we look at how we plan and operate our system, energy storage is one of those solutions we constantly look for as a resource we could take forward." ⁶
- In July 2018, a neighborhood in Beecher, Illinois suffered a power outage during a thunderstorm, except for three homes that were connected to a microgrid backed up by a battery. David Chiesa, senior director of global business development for S&C Electric Company, sees broad potential for utilities and customers. "We should want the public utility commissions to make utilities evaluate these non-wires alternatives," Chiesa said. "That's how you see microgrids and microgrid-like distributed energy resources start to happen. You're going to see this proliferate more and more throughout the Illinois territory because the PUC is looking at the best way to spend taxpayers money." ⁷

The Commission can create a level playing field for alternatives by requiring RFPs for delivery projects.

⁴ <u>https://tdn.com/news/local/bpa-abandons-sw-washington-power-line-project/article_4ca96cd7-6aa3-5c37-ae49-eeb65822ab52.html</u>

⁵ <u>https://www.greentechmedia.com/articles/read/aes-buys-energy-storage-for-less-than-half-the-cost-of-a-wires-upgrade#gs.ZwiqjFHQ</u>

⁶ <u>https://www.utilitydive.com/news/there-once-was-an-energy-storage-system-on-nantucket/513650/</u>

⁷ <u>https://energynews.us/2018/11/15/midwest/how-batteries-could-replace-the-need-for-some-backup-transmission-lines/</u>

Scope of the problem

At the January 9, 2019 meeting of the Technical Advisory Group assisting with the 2019 IRP, PSE displayed a summary of the major delivery projects that are currently planned or in various stages of completion:

PSE planned major projects

Multiple delivery projects in-flight in various stages: planning, implementation, or closeout

Project Name	Est in Svc.
White River – Electron Heights 115 kV Line Re-rte to Alderton (Phs 2)	2018
Pierce County Transformer Addition	2018
Talbot 230 kV Bus Improvements (Phase 2)	2018
Bellingham 115 kV Substation Rebuild	2019
Lake Hills – Phantom Lake New 115 kV Line	2019
Sammamish – Juanita New 115 kV Line	2020
Energize Eastside	2020
Electron Heights – Enumclaw 55-115 kV Conversion	2020
Sedro Woolley - Bellingham #4 115 kV Rebuild and Reconductor	2021
Bainbridge Island Transmission Project	2021
Lynden Substation Rebuild and Install Circuit Breaker 2023	2022
Kent / Tukwila New Substation	2023
Black Diamond Area New Substation	2023
Issaquah Area New Substation	2023
West Kitsap Transmission Project	2023
Bellevue Area New Substation	2024
Spurgeon Creek Transmission Substation Development (Phase 2)	2024
Electron Heights - Yelm Transmission Project	2024
Inglewood – Juanita Capacity Project	2025



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Figure 2 – List of current and future delivery projects

Figure 2 lists nineteen delivery projects currently exempt from competitive bidding. Exempting these projects would add nearly a billion dollars to the rate base, burdening PSE's ratepayers for decades. By requiring such projects to compete in an RFP process, the Commission would ensure the transparency, competition, and oversight required to protect ratepayers from bearing the cost of imprudent projects.

Sincerely,

Marsh

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