

November 4, 2019

To: Irena Netik – Puget Sound Energy (PSE) Director of Energy Supply Planning and Analytics

Cc: Jay Balasbas – UTC Commissioner

Rachel Brombaugh – King County Executive Energy Policy & Partnerships Specialist

Brad Cebulko – UTC Staff

Carla Colamonici – Regulatory Analyst, Public Counsel Division

David Danner – Utilities and Transportation (UTC) Commission Chair

Lisa Gafken – Assistant Attorney General, Public Counsel Unit Chief

Steve Johnson – UTC Staff

Ann Rendahl – UTC Commissioner

Deborah Reynolds – UTC Staff

Kathi Scanlan - UTC Staff

2019 IRP Technical Input – Use latest renewable energy costs for IRP analyses

Note: The TAG acknowledges the WUTC Staff petition for an IRP schedule exemption. This technical input is submitted in response to PSE's commitment to "continue to ... maintain and respond to public input". This technical input should be considered an integral part of the collection of 2019 PSE IRP documents. We appreciate PSE's commitment to also include these technical inputs in the 2021 PSE IRP.

On May 13th of this year, you and PSE Resource Planning team members Michele Kvam and Phillip Popoff met with a small group of TAG members on Vashon Island to discuss your vision for how PSE's Integrated Resource Plan (IRP) should be modified to comply with the recently signed Clean Energy Transformation Act (CETA), SB 5116. The TAG attendees included Rob Briggs, Kevin Jones, Virginia Lohr, and myself.

I discussed with your team the remarkably low renewable energy bid prices we (Public Interest Organizations) had gathered from actual bids across several western states, and we shared the data with your team in spreadsheet format. The prices we cited were from fully negotiated, all-in bids that had already resulted in purchase contracts and/or construction, and were as low as \$17.48/MWh and \$20.63/MWh for wind without and with battery storage (4 hours), respectively, and \$21.55/MWh and \$26.50/MWh for solar without and with battery storage (4 hours), respectively. We also discussed PSE VP David Mills' remarks at the April 18th meeting of the Committee on Regional Electric Power Cooperation (CREPC, which I attended), in which he remarked that PSE had an open all-source RFP, which also yielded remarkably low bid prices for renewable resources. We asked your team if you would use your recent bid prices to inform the forward cost projections for your IRP. Philip's response was that PSE would not do so, as PSE projected that renewable energy prices would increase rather than decrease over time. Philip

cited his concerns about renewable energy cost increases based on the then newly imposed tariffs on China¹.

On May 22nd, I testified at PSE's Listening Session, held in Bellevue. I reiterated the low renewable energy and storage prices that we have compiled, and mentioned David Mills' remarks from the CREPC meeting held in Salt Lake City. PSE's assertion that renewable energy costs will rise in the future is contrary to many significant authorities that track such pricing trends for public purpose. These include the Energy Information Administration, Lawrence Berkeley National Labs, National Renewable Energy Labs, and WECC; financial sector journalists such as Forbes, Bloomberg News, and Utility Dive; and specialized energy economics consulting firms such as E3, Lazard LTD, Strategen Consulting, and Synapse Energy. Further evidence of the declining cost trend for renewables and storage is available at [Clean Energy Cost Revolution](#) (see Articles & References).

My last point of reference is a meeting held on June 14th, 2019 among TAG members and Lisa Gafken, Assistant Attorney General and Public Counsel Unit (PCU) Chief, and several of her staff. TAG members included Doug Howell, Sierra Club; Noah Roselander, Vashon Climate Action Group; and myself. We shared the recent renewable energy and storage bid prices compiled by PIOs and expressed our concern that PSE may plan to use conservatively high forward pricing assumptions for renewables and storage in its IRP modeling. We asked PCU to request PSE's current RFP bid responses under a Nondisclosure Agreement (NDA). PCU complied with our request, but PSE has refused to share the data with PCU – even under an NDA.

As TAG members, we have grave concerns about PSE's lack of responsiveness and transparency in this process. As of this date, we have no response to specific remarks made by TAG members at any of the above referenced meetings, and only an indication that some, but not all of the May 22nd Listening Session stakeholder comments will be included in responses from PSE.

We formally request that PSE post this letter on their 2019 IRP website and provide a written response to these questions:

- Will PSE comply with the Washington Public Counsel Unit's request for disclosure of PSE's current RFP bid data under NDA, and if not, the justification for noncompliance?
- In light of the many energy economist expert projections that renewable energy and energy storage resource prices will continue to decline, will PSE provide substantive data to support its assertions that renewable energy/storage costs will increase during the IRP planning horizon?

¹ I subsequently consulted the solar and wind trade associations, Solar Energy Industries Association (SEIA) and the American Wind Energy Association (AWEA), and both refuted that claim. Further, entities such as NextEra Energy asserted during a quarterly analysts' call in 2018, that expiration of the Investment Tax Credit will not outpace the continued cost reductions due to technological advances (via personal discussion with Mark Ahlstrom, VP Renewable Energy Policy, and President of the board, Energy Systems Integration Group).

- Will PSE provide justification for its assertions that low-cost renewable energy and battery storage is not the most prudent course of action?
- Will PSE provide evidence that responsive demand bids should not be a part of its future RFP inquiries, given that responsive demand will play an integral part in balancing essential flexibility between demand and load resources?
- Can PSE provide evidence that refutes the projections of the aforementioned industry experts on forward cost reductions for renewable energy and storage?

Respectfully submitted:

Kate Maracas,
Managing Director,
Western Grid Group