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July 1, 2020

Via E-filing

Mark L. Johnson
Executive Director Secretary
Washington Utilities and Transportation Commission
621 Woodland Square Loop S.E.
Lacey, WA 98504

**Re: Puget Sound Energy Request for Proposals for All Generation Sources
Docket No. UE-200414**

Dear Mr. Johnson:

Enclosed for filing in the above-referenced docket, please find comments from Swan Lake North Hydro, LLC ("Swan Lake") and FFP Project 101, LLC ("Goldendale").

Thank you for your assistance. If you have any questions, please do not hesitate to call.

Sincerely,

/s/ Sidney Villanueva
Sidney Villanueva
TROUTMAN SANDERS LLP

*Attorney for Swan Lake North Hydro, LLC
and FFP Project 101, LLC*

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**BEFORE THE WASHINGTON UTILITIES
AND TRANSPORTATION COMMISSION**

UE-200414

In the Matter of

PUGET SOUND ENERGY
COMPANY,

Request for Proposals for All Generation
Sources.

COMMENTS OF SWAN LAKE NORTH
HYDRO, LLC AND FFP PROJECT 101,
LLC

I. INTRODUCTION

Pursuant to WAC 480-07-250, Swan Lake North Hydro, LLC (“Swan Lake”) and FFP Project 101, LLC (“Goldendale”) submit these comments to the Washington Utilities and Transportation Commission (the “Commission”) regarding the 2020 request for proposals for all generation sources (“Draft RFP”) filed by Puget Sound Energy (“PSE”) on May 4, 2020.

Pumped Storage is a cost effective resource that is uniquely capable of providing PSE with reliable and dispatchable zero-emissions capacity that can help the region reliably transition to a decarbonized generation fleet. While PSE has included up to 100 MW of energy storage in the Draft RFP, additional clarification and/or revisions are warranted to account for the unique benefits pumped storage has to offer PSE customers. The Commission should ensure the form agreement, term sheet, contract length and project size requirements allow the unique customer benefits of pumped storage to be fairly evaluated and that all transmission options are considered, including the better utilization of PSE’s existing transmission rights.

II. BACKGROUND

After finding that PSE has sufficient renewable resources to meet its near term Renewable Portfolio Standard (“RPS”) requirements, PSE’s 2017 Integrated Resource Plan (“IRP”) and 2019 IRP Progress Report primarily focused on meeting PSE’s 753 MW capacity need by 2026 at the lowest reasonable cost to customers consistent with Washington State’s Clean Energy Transformation Act (“CETA”).¹ In its Draft RFP designed to meet this capacity need, PSE has expressed a preference for resources with production shapes that align well with PSE’s load or that offer the ability to dispatch to meet that load.² The Draft RFP indicates PSE will perform an initial cost screening as part of its bid evaluation, which will include costs associated with delivering to PSE’s system.³

Swan Lake and Goldendale are both actively engaged in the development of pumped storage hydroelectric projects in the region that will utilize environmentally friendly “closed loop” technology to provide unmatched flexibility needed to integrate variable renewable resources being added to the electric supply system, as well as stacked energy, capacity and other reliability and economic benefits to the region. Swan Lake is developing a 400 MW project in Klamath County, Oregon, which is fully permitted, received its Federal Energy Regulatory Commission (“FERC”) license in 2019 and is scheduled to reach commercial operation by 2025. Goldendale is developing a 1,200 MW project in Klickitat County, Washington, which is scheduled to reach commercial operation by 2028.

¹ Draft RFP at 3.

² *Id.* at 5.

³ *Id.* at 13.

III. COMMENTS

A. **PSE Should Provide a Form Tolling Agreement or Term Sheet for Pumped Storage Projects**

The Draft RFP anticipates a tolling structure for pumped storage proposals, but PSE has not included a form agreement or term sheet that reflects the unique operating characteristics of pumped storage. The Draft RFP expressly allows three types of proposals (ownership arrangements, power purchase agreements, and temporal exchange agreements).⁴ While there is a prototype term sheet for a Gas Tolling Agreement, Swan Lake and Goldendale do not believe it is appropriate for pumped storage projects. The prototype term sheet for a Clean Energy PPA includes storage facilities in its definition of Generating Facility, but the PPA is clearly intended for projects designed primarily for the generation and delivery of energy, with the Contract Price designated in dollars per megawatt hour (“MWh”). Pumped storage is primarily a capacity resource best suited to a tolling agreement with bids structured to include a capacity payment in dollars per kilowatt month. Swan Lake and Goldendale therefore request that the Commission require PSE to include a specific form tolling agreement or term sheet for long-duration storage to enable bidders of such resources to more efficiently shape offers within the context of a set of proposed non-price terms and conditions in the same way bidders of other resource classes are able. This would allow PSE to better evaluate the economic and commercial merits of pumped storage proposals against other resource classes to the benefit of customers.

B. **PSE Should Clarify Whether it Intends to Limit Contract Term**

The Draft RFP does not appear to establish a maximum number of years for a contract term, although the Clean Energy PPA term sheet provides options to select 10/12/15/20 years.

⁴ *Id.* at 10.

Because battery projects have a useful life of less than 25 years, a shorter overall contract term would disadvantage pumped storage projects that have relatively higher initial capital costs with much longer useful lives. Allowing bidders to propose contract lengths of up to 50 or 60 years, the *minimum* useful life for pumped storage, would allow PSE to more accurately compare costs and benefits of pumped storage relative to battery storage. As written, the Draft RFP appears to contemplate longer-term bids, but does not clarify whether any such bids would be screened out by either the Evaluation Criteria⁵ or Proposal Requirements.⁶ Limiting bids based on contract term length effectively precludes some types of storage resources from participating in the Draft RFP by not allowing bidders to propose either tolling contracts with terms of up to the life of the project or build transfer agreements.

Although batteries are more expensive than pumped storage on a levelized cost basis,⁷ they may score better under the shortened time horizons currently contemplated by PSE. The useful life of pumped storage better matches the duration of capacity need for PSE while batteries are a 10-20 year asset that will require re-powering and increase technology risks. Moreover, given the growing peak capacity resource need indicated in PSE's draft 2019 IRP materials,⁸ PSE is not at risk of over-procuring storage and capacity beyond 2026. Because abbreviated term lengths put both pumped storage and PSE customers at a disadvantage, the Commission should ensure PSE is willing to consider more flexible contract length options.

⁵ *Id.* at Exhibit A.

⁶ *Id.* at Exhibit B.

⁷ David G. Victor et al., Pumped Energy Storage: Vital to California's Renewable Energy Future (May 21, 2019), available at <https://www.sdcwa.org/sites/default/files/White%20Paper%20-%20Pumped%20Energy%20Storage%20V.16.pdf>.

⁸ 2019 TAG Meeting #5: Resource Adequacy and Gas Planning Standard at 39 (Feb. 7, 2019), available at <https://pse.com/-/media/PDFs/001-Energy-Supply/001-Resource-Planning/02-IRP-02-07-19-TAG-Meeting-5-Slide-Deck-FINAL.pdf>.

C. PSE Should Clarify Whether Pumped Storage Projects Can Bid Beyond the 100 MW Limit

The Draft RFP requires energy storage bids be no larger than 100 MW, but does not clarify whether that cap would be applicable to pumped hydro. Swan Lake and Goldendale concede that it may make sense to limit battery storage additions to PSE's system, due to the useful-life and technology-risk issues mentioned above, but they submit that pumped storage projects offer unique long-duration capacity and energy products that may better align with PSE's forecasted needs. As written, it is not entirely clear whether pumped storage could bid above the 100 MW limit, to bid separately for energy storage and capacity, or how the unique attributes of such a bid would be evaluated by PSE. The Commission should direct PSE to clarify and/or reconsider the 100 MW limit for pumped hydro projects.

D. PSE Should Consider All Available Options to Utilize its Existing Transmission Rights Rather Than Require Bidders Ensure Deliverability

The Draft RFP advantages projects that are either located within PSE's transmission system or can provide long-term firm transmission rights to deliver to PSE via the Bonneville Power Administration,⁹ which may not provide the best overall value to PSE customers. PSE states that its capacity need forecast accounts for all of PSE's available transmission rights as existing capacity paired with either a specific generation resource or market purchases. According to PSE, there are no other available transmission rights to pair with the proposed resources. Swan Lake and Goldendale are not convinced that is correct.

PSE should work with bidders to reconsider how its existing transmission portfolio might better be utilized. For example, repurposing expensive firm transmission rights that are currently being used for wind and solar projects could unlock significant additional value with a pumped

⁹ Draft RFP at 7; *see also* Evaluation Criteria at Exhibit A.

storage project. PSE also has transmission for a 300 MW exchange agreement with Pacific Gas & Electric (“PG&E”) that could be put to better use with options which may provide increased economic value.¹⁰ Requiring projects to procure transmission solutions to effectively participate in the Draft RFP could “screen out” projects, like pumped storage, that are able to provide other highly desirable benefits to PSE customers and arguably unnecessarily increases the cost of all options available to PSE customers.

Pumped storage offers unique benefits to PSE’s customers due to its longer duration discharge, nine to twelve hours, which can provide energy arbitrage and optimize renewable deployment. Despite this clear advantage,¹¹ we understand that the Swan Lake project may not score as well as the Goldendale project because it will require both network and intertie point-to-point transmission during a time when such transmission service may not be readily available. To fully consider the unique benefits pumped hydro has to offer, the Commission should ensure PSE is considering all available transmission options, including potentially better utilizing its existing transmission system. PSE can evaluate the opportunity cost of transmission in its project selection without requiring bidders to incur potentially unnecessary costs by requiring only those projects selected to the short list to secure transmission to PSE’s system.

IV. CONCLUSION

Swan Lake and Goldendale appreciate the opportunity to comment on PSE’s Draft RFP and look forward to continuing to work with PSE during the course of this proceeding.

¹⁰ Each calendar year PSE exchanges with PG&E 300 MW of seasonal capacity, together with 413,000 MWh of energy, on a one-for-one basis, under this system-delivery power exchange contract. PSE is a winter peaking utility and PG&E is a summer-peaking utility, so PG&E has the right to call for the power in the months of June through September, and PSE has the right to call for the power in the months of November through February. *See* 2017 IRP App D p. D-13, available at https://www.pse.com/-/media/PDFs/001-Energy-Supply/001-Resource-Planning/IRP17_AppD.pdf.

¹¹ We also note that the Draft RFP states PSE will give strong consideration to energy storage proposals with the ability to dispatch over longer periods of time.

Dated this 1st day of July 2020.

Respectfully submitted

/s/ Sidney Villanueva
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*Attorney for Swan Lake North Hydro, LLC and FFP
Project 101, LLC*