BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

Consolidated Docket Nos. UE-130617, UE-130583, UE-131099, UE-131230 In the Matter of the Application of Puget Sound Energy, Inc. For an Order Authorizing the Sale of the Water Rights and Associated Assets of the Electron Hydroelectric Project in Accordance with WAC 480-143 and RCW 80.12

BENCH REQUEST NO. 3

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On page 67 of Exhibit No. MM-1HCT, PSE states "that the long-term rebuild alternatives and the Electron Facility sale are attractive options compared to other 2011 RFP proposals." Considering the new conditions of the sale agreement, please provide a detailed response whether PSE considers the capacity from the Electron Power Purchase Agreement to have the same value and reliability as the capacity of the contracts listed in Table 5 on a per megawatt basis.

Please respond to this Bench Request no later than Monday, July 21, 2014, by 5:00 p.m., with an original and seven (7) copies. If you have any questions concerning this request, please contact Administrative Law Judge Marguerite E. Friedlander at 360-664-1285 or via e-mail at <u>mfriedla@utc.wa.gov</u>.

Response:

Table 5 on page 67 of the Prefiled Direct Testimony of Mr. Michael Mullally, Exhibit No. (MM-1HCT) summarizes Portfolio Screening Model (the "Screening Model") results from the 2011 Request for Production (the "2011 RFP") conducted by Puget Sound Energy, Inc. ("PSE") and multiple disposition alternatives for the Electron Hydroelectric Project (the "Electron Facility"). PSE conducted this analysis to compare the financial benefits and costs of various options with respect to the Electron Facility with other generation alternatives received in response to the 2011 RFP.

Seven of the thirteen projects/scenarios depicted on Table 5 are options applicable to the Electron Facility. Three of the seven projects/scenarios involved long-term redevelopment plans at various flows; three of the seven projects/scenarios involved short-term redevelopment plans at various flows; and the remaining project/scenario involved the sale of the Electron Facility and purchase of the output pursuant to a power purchase agreement. Of these seven options, the sale of the Electron Facility and purchase agreement had the lowest costs to PSE and its customers.

The remaining six projects/scenarios depicted on Table 5 involve options for the acquisition of or purchase of power from existing thermal generating resources in the Pacific Northwest. It should be noted that PSE has entered into two of the six remaining options depicted—PSE has (i) entered into a Coal Transition Power Purchase Agreement with TransAlta Energy Marketing (U.S) Inc. for the purchase of coal transition power from the Centralia facility and (ii) purchased the Ferndale Generating Station.

PSE's 2011 RFP process involved multiple internal stakeholder groups that assisted with quantitative and qualitative assessments of the proposals submitted for bid. These subject matter experts review submitted documentation as well as responses to idiosyncratic inquiries about a particular project. At the end of the review process, pertinent feedback is summarized in a project memorandum. Please see Exhibit No. (MM-3HC) for a copy of the 2011 RFP Evaluation Document and Appendices, which summarizes the qualitative and quantitative analyses undertaken by PSE with respect to the 2011 RFP. Please see Exhibit No. (MM-4HC) for a copy of the July 2012 Memorandum regarding Evaluation of New and Revised Offers.

A review of the 2011 RFP materials with respect to the six existing thermal resource options depicted on Table 5 yielded positive or neutral (i.e., no feedback) commentary. The absence of negative feedback indicates that PSE engineering staff was unable to identify material issues that would impact reliability during the duration of the proposed terms associated with those options.

For purposes of the analysis summarized in Table 5, PSE analyzed the Electron Facility using a utilization factor of 56%. Utilization is an imprecise measure of reliability because the metric is dependent on engineering estimates and specifications prior to the existence of a hydroelectric resource.

Although reliability is hard to objectively measure, one of the factors contributing to the efforts by PSE to sell the Electron Facility has been the deterioration of the flume floor and sidewalls, which make the flume prone to leaks and blowouts, necessitating regular repairs by plant crews. PSE has limited the amount of water allowed to enter the flume to prevent more frequent failures, but this, in turn, has limited plant output to less than 8 MW. In addition to the flume, the original 1904 penstocks are also in need of repair or replacement. PSE engineers and contractors provided a condition assessment in 2009 indicating that the penstocks should be repaired or replaced as soon as feasible to reduce the risk of failure. Due to the condition of the flume and penstocks, the Electron Facility will not be able to continue to operate without significant capital investment. See Prefiled Direct Testimony of Mr. Paul K. Wetherbee, Exhibit No. (PKW-1CT) at page 23, lines 6-15.

Uncertainty with respect to the long-term redevelopment options identified on Table 5 exists due to the fact that the PSE operates the Electron Facilities pursuant to a Resource Enhancement Agreement with the Puyallup Tribe, and such agreement will expires on December 31, 2026. The Resource Enhancement Agreement provides for a

series of resource enhancement measures to benefit fisheries resources, including the following:

- Minimum in-stream flows below the Electron Facility dam;
- Ramping rate targets below the Electron Facility powerhouse;
- Capital contributions toward the Puyallup Tribe's construction of rearing ponds and a fish ladder;
- Annual operations and maintenance contributions related to rearing ponds, a fish ladder, downstream trap and haul facilities, and activities performed by the Puyallup Tribe related to upstream fish passage; and
- Maximum water diversion of 400 cubic feet per second ("CFS").

Under the terms of the agreement, PSE must notify the Puyallup Tribe no later than 2018 of PSE's decision either to upgrade or retire the Electron Facility by 2026. The Resource Enhancement Agreement defines upgrades to the Electron Facility as construction or major modification that increases the Electron Facility's head, generating capacity, or otherwise significantly modifies the Electron Facility's pre-1935 design and operation. The Resource Enhancement Agreement Agreement defines retiring the Electron Facility to mean permanently discontinuing the generation of electricity at the project and removing the Electron Facility dam from the Puyallup River. See Prefiled Direct Testimony of Mr. Paul K. Wetherbee, Exhibit No. (PKW-1CT) at page 24, line 9, through page 25, line 13; see also Exhibit No. (PKW-9C) for a copy of the Resource Enhancement Agreement between PSE and the Puyallup Tribe.

PSE evaluated the risk / return profile of undertaking ongoing repairs and necessary upgrades associated with the Electron Facility and concluded that a third party would be better suited to attempt to address the engineering issues at the Electron Facility. PSE evaluated the experience of the Electron Hydro, LLC ("Electron Hydro") team and concluded that the team's experience level made them a practical choice for renewing the Electron Facility.

Electron Hydro is a joint venture that is 25 percent owned by Electron Management, LLC and 75 percent owned by Electron Holdings, Inc. Electron Management, LLC is 90 percent owned by Thom Fischer, and the remaining 10 percent is owned by Steve Marmon. Electron Holdings, Inc. is a-wholly owned subsidiary of JAVA Hydro Electric, Inc., which in turn is a wholly owned subsidiary of JAVA Holdings Ltd. JAVA Holdings Ltd. is wholly owned by 1428802 Alberta Ltd., which, in turn, is wholly owned by Victor Budzinski.

Electron Hydro is affiliated with Black Creek Hydro, Inc. ("Black Creek"), the owner and operator of the 3.8 MW Black Creek Hydroelectric Project (the "Black Creek Facility"). Black Creek is wholly owned by Valtec Power, LLC ("Valtec Power"). Valtec Power is 25 percent owned by Tollhouse Energy Company ("Tollhouse") and 75 percent owned by JAVA Holdings Ltd. Tollhouse is wholly owned by Thom Fischer and currently is in the process of developing three hydroelectric projects in the states of Washington and Montana. Tollhouse has obtained preliminary permits from the Federal Energy Regulatory Commission ("FERC") for two hydroelectric facilities: (1) White River Hydro, LLC (FERC Project No. 13804); and (2) Black Canyon Hydro, LLC (FERC Project No. 14110). Tollhouse has also obtained a FERC original license for the Gibson Dam Hydroelectric Company, LLC (FERC Project No. 12478).

Since PSE sold Black Creek in January of 2010, Valtec Power has improved the output of the Black Creek Facility beyond that which existed prior to such sale. PSE indirectly owned the Black Creek Facility (through Hydro Energy Development Corporation (HEDC), a former subsidiary of PSE) for the first sixteen years of the facility's existence, and the Black Creek Facility generated, on average, 6,086 megawatt-hours (MWh) annually. Since Valtec Power purchased Black Creek in January 2010, the Black Creek Facility has generated, on average, 12,363 MWh annually. Based on this experience, PSE believes that the Electron Hydro team, which is substantially similar to the Valtec Power team, has a proven track record to increase the output and reliability of the Electron Facility.