



April 22, 2022

Filed Via Web Portal

Amanda Maxwell
 Executive Director and Secretary
 Washington Utilities and Transportation Commission
 621 Woodland Square Loop SE
 Lacey, WA 98503

Received
 Records Management
 04/22/22 16:47
 State Of WASH.
 UTIL. AND TRANSP.
 COMMISSION

RE: Docket UE-210183 Relating to Electricity Markets and Compliance with the Clean Energy Transformation Act

Dear Ms. Maxwell:

The Washington Utilities and Transportation Commission (Commission) issued a Notice of Opportunity to File Written Comments on Draft Rules Relating to Electricity Markets and Compliance with the Clean Energy Transformation Act on March 23, 2022 (Notice).

The Public Generating Pool (PGP) is a membership organization representing 11 large consumer-owned electric utilities, with 10 of them located in Washington. PGP appreciates the multiple opportunities it has had to provide comments to the Commission in various dockets addressing the Clean Energy Transformation Act (CETA), including that for the Carbon and Markets Workgroup.

While PGP will not be commenting comprehensively on the draft rules issued by the Commission at this time, PGP would like to respond to the following question posed by the Commission in the Notice:

“1. Washington state utilities with hydroelectricity generation will, to the extent the hydroelectric generation resource has pondage or coordinated dispatch with other hydroelectric generation facilities, purchase off system power during lower load or lower price time periods to meet their load obligations and in turn use the reserved water in hydroelectric generation facilities to facilitate peak hour or peak price off system power sales, including, at times, electricity from their own hydroelectric generation facilities. The Commission requests commenters explain the frequency, magnitude, economic significance, and contribution to reliability of this market driven dispatch to the utility and Washington state’s load service.”

Utility participation in markets benefits Washington customers.

As documented throughout the Commission’s docket for the CETA Carbon and Market Workgroup¹, utility participation in both bilateral and organized electricity markets benefits customers by enabling

¹ Docket UE-190760.
https://www.utc.wa.gov/casedocket/2019/190760/docsets?utm_medium=email&utm_source=govdelivery

utilities to minimize costs and ensure reliability across varying load and generation conditions. Although the wholesale market context in the Northwest is still predominantly bilateral in nature, “there is general acceptance that organized markets, such as an RTO, can help achieve low carbon energy goals, primarily because organized markets maximize efficient use of transmission and provide access to a broad geographic footprint with diverse generation and load”². As the regional market context evolves with the expansion of the Energy Imbalance Market (EIM), the development of organized day-ahead markets, and the consideration of a western RTO, Northwest hydropower resources will continue to serve an important role in both state-level and regional electric grid decarbonization.

Hydropower is a carbon-free generating resource with multiple overlapping benefits.

Hydropower is unique among carbon-free generating resources in that it not only provides bulk, low-cost, renewable energy, but also large-scale flexibility and grid resilience. Hydropower resources “can quickly change both their real and reactive power outputs, and they are well-suited to provide voltage support, inertial response, primary frequency response, spinning, and operating reserves”³. For these reasons, hydropower resources are often crucial in responding to extreme grid events and provide approximately 40% of the country’s black start resources.

Northwest hydropower resources operate primarily in load-following mode but also provide significant regional benefit through participation in markets.

A 2021 study for the HydroWIRES Initiative of the U.S. Department of Energy’s Water Power Technologies Office found that Northwest hydropower resources continue to operate predominantly in load-following mode⁴. This operational pattern is most prominently seen in the utilities and balancing authorities that have yet to join the EIM and may change as organized markets coalesce and appropriate price signals develop. Furthermore, utility customers of the Bonneville Power Administration (BPA) are contractually obligated to utilize all Block resources and required minimum Slice resources to serve load. If a utility fails to meet this contractual obligation, it may be assessed penalties.

To the extent that “market driven dispatch” of hydro resources currently occurs among Washington utilities, it occurs when:

1. There is flexibility to store and release water (“pondage”); and
2. Minimum generation is less than minimum demand.

The frequency with which both these conditions are met is dependent upon stream flows and operational constraints. The “magnitude” of any market driven dispatch relates to the amount of flexibility that exists and the amount by which minimum generation is less than minimum demand. Generally speaking, the lower the flows and the less restrictive the operational constraints, the more frequent and the greater the magnitude in the ability to dispatch.

² Washington Clean Energy Transformation Act Carbon and Markets Workgroup Issues & Alternatives List, Commission staff, April 2021.

<https://apiproxy.utc.wa.gov/cases/GetDocument?docID=205&year=2019&docketNumber=190760>.

³ Hydropower’s Contributions to Grid Resilience, Somani et al, October 2021. PNNL-30554.

https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-30554.pdf

⁴ Hydropower Value Study: Current Status and Future Opportunities, Somani et al, January 2021. PNNL-29226.

<https://www.energy.gov/sites/prod/files/2021/01/f82/hydropower-value-study-v2.pdf>

The ability of hydro resources to operate in this fashion provides economic, environmental, and reliability benefits to Washington customers and to the region by providing low-cost, non-emitting, and flexible resources during periods where fossil resources may otherwise be relied upon to follow variable energy resources or maintain system reliability. The off system power procured in situations of market driven dispatch at any given time are comprised of surplus available resources from various entities. During spring, market purchases are likely excess hydro or wind, even if labeled “unspecified.” In summer, it could be excess California solar, while winter market purchases in the Northwest could be excess wind. In these scenarios, the ability of hydro resources to “store” energy by reserving water actually reduces the curtailment of other zero-carbon energy resources across the Western region.

The Commission’s and the Department of Commerce’s draft CETA rules may impact the market value of Northwest hydropower resources.

Both the Commission’s and the Department of Commerce’s draft rules interpreting “use” under the CETA 2030 GHG Neutral Standard create a potential dichotomy between what a utility *plans* to do to meet its CETA obligations and what it *actually does* in response to operational realities during the planning horizon. The specific market implications of such a dichotomy on the value of Northwest hydro resources are uncertain, but potentially significant, especially in situations where renewable resources are overbuilt to comply with a planning requirement but are not ultimately necessary for compliance. While a comprehensive discussion of the range of potential market implications is beyond the scope of the question posed by the Commission, PGP believes that such a discussion will be necessary as regional markets evolve between now and 2030.

Conclusion.

PGP appreciates the opportunity to respond to the question posed by the Commission. We look forward to participating in future discussions about the role of markets and hydropower in achieving the state’s carbon and clean energy goals.

Sincerely,

/s/ Mary Wiencke

Mary Wiencke
Executive Director
Public Generating Pool