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January 31, 2019

Mark L. Johnson, Executive Director and Secretary Washington Utilities and Transportation Commission P.O. Box 47250 1300 S. Evergreen Park Drive S.W. Olympia, Washington 98504-7250

Re: Competitive Resource Acquisition by Request for Proposals (RFP), WAC 480-107. Docket UE-161024

Dear Mr. Johnson:

1. Introduction

Invenergy appreciates this opportunity to provide additional comments regarding the Commission's revised draft rule WAC 480-107 Competitive Resource Acquisitions by RFP. Invenergy previously submitted comments to the Commission on this subject on September 21, 2018, and October 26, 2018.

In addition to these comments, and to the extent they are consistent with these comments, Invenergy supports the comments being submitted by the Northwest & Intermountain Power Producers Coalition (NIPPC) and Renewable Northwest, of which Invenergy is a member.

2. Background on Invenergy

Invenergy is North America's largest independent, privately held renewable energy provider. The Company develops, owns and operates large-scale renewable and other clean energy generation and storage facilities in North America, Latin America, Japan and Europe. Invenergy has contracted, started construction, or operates 12,772 MW of wind projects, 1,249 MW of solar projects, 6,126 MW of natural gas capacity, and 68 MW of energy storage projects.

Invenergy has developed or operates several wind, solar and thermal generating assets in Oregon, Washington, Idaho, Montana, and California. Invenergy's regional assets in

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operation include the Willow Creek (OR), Vantage (WA), Wolverine Creek (ID), and Judith Gap (MT) wind farms; the Desert Green (CA) solar installation; and the Grays Harbor Energy Center (WA) natural gas-fired combined-cycle combustion turbine project.

3. Invenergy Concurs with the Commission's Intentions for the Revised Rule

Invenergy agrees with and supports the following statement in the Commission's December 31, 2018, letter providing Notice of Opportunity to File Written Comments:

The revised rule intends to address the transparency and fairness of the bidding process, clarify requirements regarding utility self-build resources, add flexibility to reduce common exemptions from the rule, clarify the timing and differentiate the application of the requirement for competitive bidding to various resources, promote technology-neutral RFPs, and incorporate a new requirement for independent evaluation in certain circumstances.

4. The Revised Rule Should Also Promote Utility Resource Adequacy and Risk Management Across a Range of Wholesale Power Market Conditions

Unregulated commodity markets tend to cycle from periods of oversupply, through (typically brief) periods of balance, into periods of undersupply, and back again. Sudden, unpredictable shifts in the supply-demand balance are a hallmark of competitive markets. The Western Energy Crisis of 2000-2001 provided a harsh demonstration that volatility in the availability and price of power supplies in the short-term wholesale power market can cause extreme consequences for electric utilities and retail consumers.

Therefore, Invenergy encourages the Commission to design the revised rule governing competitive resource acquisition to be effective across a broad range of wholesale power market conditions. This requires addressing more than procedural objectives such as transparency, fairness and administrative efficiency. To be robust, the revised rule should also help drive utilities to fulfill their obligations to acquire adequate electric resources, at lowest reasonable cost, while protecting against risks of excessive exposure to volatility in wholesale power market supplies and prices.

In particular, the revised rule should not enable utilities or the Commission to be lulled into a false sense of confidence that a large share of a utility's resource portfolio can prudently be supplied with ongoing reliance on purchases from the short-term wholesale power market. The revised rule also should not provide a means for regulated utilities to pursue the dangerous and disproven speculative strategy of attempting to "time" the wholesale market. Finally, the revised rule should not allow utilities to rely on the market to an unreasonable extent, so much so that the only "feasible" option to meet their needs in time would be for the Commission to approve self-build of new fossil fuel fired generation.

5. Comment on Revised Requirement for Solicitation Process (WAC-480-107-105 (3))

The revised draft rule includes the following requirement for the resource acquisition solicitation process:

(3) The solicitation process in this section is required whenever a utility's most recently acknowledged integrated resource plan demonstrates that the utility has a resource need within three years.

Invenergy Comment

Invenergy considers requiring a solicitation process whenever the utility has a resource need within three years to be somewhat reasonable.

However, Invenergy notes that the development process for new power resources can often take longer than three years, which may create a risk that needed new resources may not be available in that amount of time. The three-year timeframe would also limit the range of resource alternatives available to the utility and thus could bias utility resource choices toward self-build options. Invenergy would suggest a five-year horizon.

Comments on the Revised Rule Allowing Exemptions from Issuance of an RFP (WAC 480-107-015 (4))

The revised draft rule includes the following option, under certain circumstances, for a utility to choose not to issue an RFP:

- (4) Utilities may choose not to issue an RFP without requesting a petition for exemption from the requirements in this section under following circumstances. Commission grant of an exemption from an issuance of an RFP under this section or pursuant to WAC 480-07-110 does not expressly or implicitly determine the prudence of the utility's actions under the exemption or its choice to seek an exemption:
 - (a) The utility's identified resource need for capacity is less than 80 megawatts;
 - (b) The utility's identified resource need is for delivery system resources;
 - (c) The utility has previously issued an RFP for the same precisely defined resource need in accordance with WAC 480-107-065, or has previously issued an RFP for the same precisely defined resource need within the last 12 months; or
 - (d) The utility plans to satisfy its identified resource need for capacity with short-term market purchases, so long as:
 - (i) The utility, in its IRP, considered all available information on sufficient regional adequacy and expressly modeled and considered the risk of high market prices

- that can result from changes in existing capacity available in the markets from which the utility expects to purchase capacity to meet its capacity needs; and
- (ii) Sufficient regional adequacy to support these forecasted market purchases has been identified by the Northwest Power and Conservation Council in their latest published power supply adequacy assessment over the entire period of the utility's resource need or the next five years, whichever period is shorter.

General Comments on Exemptions

Invenergy does not have comments at this time regarding subsections (4)(a) - (4)(c) of revised draft WAC 480-107-015.

Invenergy is somewhat encouraged that subsection (4) of revised draft WAC 480-107-015 would not relieve the utility from Commission review of a utility decision under subsection (4)(d) to exempt itself from the requirement to issue an RFP, or its actions under the exemption.

However, Invenergy remains concerned that an exemption that allows a utility to meet significant firm resource needs with short-term market purchases could lead a utility to place itself, and especially its retail electric customers, at significant continuing exposure to the risks of power supply shortages and extreme high power costs. To put this in perspective, if a utility relying on the short-term market needs to purchase 1,500 megawatts of power per hour for one month during a market price excursion of \$250 per megawatt-hour, the added cost borne entirely by ratepayers would be \$274 million.

If a utility pursues an exemption from issuing an RFP to meet its resource needs, the Commission should require the utility to demonstrate that it is prudently managing the risks associated with relying on the short-term market. This should include ongoing reporting on the utility's energy risk management studies and its portfolio forward hedging activities.

Revised draft WAC 480-107-015 (4)(d)(i) would require a utility to expressly model and consider the risk of high market prices that can result from changes in existing capacity available. Invenergy believes this requirement is useful but not sufficient. For example, the rule should require a utility intending to rely on the short-term market to supply its firm resource needs to perform explicit stress-test analyses to address market price and supply availability risks in scenarios such as a cold winter event with extreme low temperatures and calm wind conditions, occurring during a very low hydroelectric year.

Invenergy agrees with other parties who have previously provided comments to the Commission that reliance on the short-term market by multiple parties could lead to "double counting" of resources, thereby causing adequacy issues.

In sum, given the potential magnitude of adverse consequences of utility over-reliance on the short-term market, Invenergy continues to encourage the Commission to be very cautious about creating an RFP exemption mechanism that would allow utilities to rely on short-term market purchases to serve a large portion of their resource needs.

Question Regarding Commission Granting of RFP Exemptions

The wording of Section (4) of revised draft WAC 480-107-105 appears contradictory. The section begins by stating that "Utilities may choose not to issue an RFP without requesting a petition for exemption from the requirements in this section..." It continues, "Commission grant of an exemption from an issuance of an RFP under this section ..." If a utility chooses not to issue an RFP and instead rely on short-term market purchases, would it or wouldn't it be required to obtain a grant of exemption from the Commission? If a Commission grant of exemption would be required, how would the request and consideration of grant process work?

Comment on Defining Utility Needs for Resources

Invenergy notes that revised draft WAC 480-107-105 appears to define utility needs for resources only in terms of "capacity", measured in megawatts. We recommend that the Commission broaden the rule to clarify that utility needs for resources may include capacity (measured in megawatts), energy (measured in megawatt-hours), and/or flexibility (measured in rates of change in megawatts). This is important because the relative availability and prices for each of these types of power can vary significantly in the short-term market.

Comment on Regional Resource Adequacy Studies

Invenergy recognizes the Northwest Power and Conservation Council's assessments of Pacific Northwest resource adequacy as a worthwhile "early warning system". The Council's adequacy studies can help identify potential future regional shortages of power resources.

However, Invenergy does not believe that the results of Council resource adequacy studies provide a sufficient basis for utilities to plan to meet their future needs for resources with purchases from the short-term wholesale power market.

As noted previously, wholesale power markets are inherently uncertain and subject to volatility, including rapid shifts in the load-resource balance, as well as potential extreme price events.

It is important to understand that the Council's resource adequacy studies do not consider the economics of planned new resource additions, including fixed costs. As such, they do not fully capture the risks of high market prices.

Further, the reliability of any assessment of regional resource adequacy is limited by inherent uncertainties in the power system, such as decisions to accelerate retirement of existing coal-fired power plants. Consequently, it is possible for different studies of regional resource adequacy to reach different conclusions.

As an example, a study by Energy+Environmental Economics (E3) published January 4, 2019, entitled *Resource Adequacy in the Pacific Northwest* (http://www.publicgeneratingpool.com/wp-content/uploads/2019/01/E3 NW RA Presentation-2018-01-05.pdf reached the following conclusions that raise concerns that regional resource adequacy risks are increasing:

- 2018 system is in very tight load-resource balance (slide 25)
- The Northwest system will need 8 GW of effective new capacity by 2030 (slide 29); If all coal is retired, then 16 GW new capacity is needed (Slide 28)
- Many LSEs rely on front-office transactions that risk double-counting available surplus generation capacity (Slide 70)
- Current planning practices risk underinvestment in new capacity required to ensure Resource Adequacy at acceptable levels (Slide 73)

Invenergy's primary point here is not that either the Council's most recent regional resource adequacy study is 'incorrect' or that E3's newer report is 'correct'. Both studies are informative and useful. They also demonstrate that the results of any regional resource adequacy study do not provide a dependable basis for a utility to plan to meet a large share of its retail load with power purchases from the short-term market, or for the Commission to adopt a rule that would allow exemption from RFP requirements.

Additionally, the E3 study addressed the effective capacity contribution (effective load-carrying capability or ELCC) from new resources:

 Wind, solar and storage all exhibit diminishing ELCC values as more capacity is added (slide 63)

This conclusion reinforces Invenergy's recommendation that the revised rule define capacity in a more robust manner than a metric measured in undifferentiated megawatts.

In light of the concerns expressed above, Invenergy urges the Commission to proceed carefully in formulating a revised WAC 480-107-105. We look forward to further participation in the Commission's rulemaking process, Docket U-161024.

Sincerely,

Orijit Ghoshal Senior Manager, Regulatory Affairs Invenergy LLC