

STATE OF WASHINGTON

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

March 29, 2019

Via Electronic Filing

Mark L. Johnson
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Washington Utilities & Transportation Commission
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COMMISSION

RE: Rulemaking regarding the Public Utility Regulatory Policies Act, Obligations of the Utility to Qualifying Facilities, WAC 480-106, WAC 480-107, Docket U-161024

Sun2o Partners' Comments

Dear Mr. Johnson,

Pursuant to the Notice of Opportunity to File Written Comments on Proposed Rules ("Proposed Rules") issued by the Washington Utilities & Transportation Commission ("Commission") on February 22, 2019, Sun2o Partners ("Sun2o") files these comments regarding the Public Utility Regulatory Policies Act ("PURPA") and Obligations of the Utility to Qualifying Facilities ("QF"). Sun2o is a developer of solar energy and energy storage projects across the U.S., including opportunities in Washington State, and is grateful for the opportunity to submit comments on the Proposed Rules. In addition, Sun2o appreciates the hard work of the Commission, UTC Staff, and all other stakeholders in moving this important Rulemaking forward. Overall, Sun2o is in firm support of the implementation of the Proposed Rules and is excited to work to bring the benefits of renewable QFs to Washington.

Sun2o's comments are limited to specific areas of the Proposed Rules that are vital to QFs' ability to deliver cost competitive clean energy in Washington and Sun2o understands that some of these considerations have been brought to the attention of the Commission by stakeholders previously. Sun2o encourages the Commission to move as quickly as possible to implement the Proposed Rules. Following a successful adoption hearing, it will be important for the Commission to expedite the release of Washington investor-owned utility ("WA IOU") avoided cost pricing tariffs and a draft power purchase agreement ("PPA"). Delays in the implementation of the Proposed Rules could have a detrimental impact on QFs as the Federal Investment Tax Credit step-down will diminish QFs ability to secure project financing. Successful implementation of the Proposed Rules will bring cost-competitive energy, economic development, and environmental benefits to ratepayers and stakeholders throughout Washington State.

Thank you for the consideration of our comments.

I. Legally Enforceable Obligations (“LEO”)

Sun2o recommends that the Commission’s final rules address the formation of a LEO by a QF and establish a quantifiable test that relies fundamentally on a QF committing to sell its output to a WA IOU. The determination of a LEO is central to PURPA implementation. While states are granted authority under PURPA to determine the criteria for LEO formation,¹ any state requirement that is inconsistent with FERC regulation is invalid.² Sun2o urges the commission to provide LEO guidance to QFs that is consistent with precedent FERC rulemakings.

FERC has not set a clear standard for the establishment of a LEO in all circumstances, but has provided strong guidance that a LEO is formed when a QF has unequivocally committed itself to sell its output to a utility.³ It is important that LEO criteria cannot depend solely on factors in the control of a WA IOU, such as an executed PPA or interconnection agreement. For example, FERC found that the Idaho PUC’s requirement that a PPA be executed by one or both parties in order to form a LEO was inconsistent with PURPA.⁴ Additionally, FERC determined in a Montana rulemaking that, because “the establishment of a [LEO] turns on the QF’s commitment, and not the utility’s actions,”⁵ the Montana commission’s requirement that an interconnection agreement be released to a QF was inconsistent with FERC’s regulations.⁶ In a recent Oregon PURPA proceeding, neighboring Portland General Electric (“PGE”) confirmed this statute by stating, “FERC’s orders hold that a state commission violates PURPA if it conditions the existence of a LEO on: (a) a fully executed PPA, (b) a fully executed interconnection agreement...”⁷ Thus, any Commission defined LEO requirement that hinges on procedural steps that are within a WA IOU’s control, is not valid.

In conflict with this FERC precedent is the Proposed Rules statement that “contracting procedures shall provide that a legally enforceable obligation must be memorialized in an executed written contract between the utility and the qualifying facility prior to commercial operation.”⁸ The proposed rules do not define the substance of the written contract, but the requirement that it be executed by both the WA IOU and the QF is not in line with FERC precedent. While the Proposed Rules do provide that, “A legally enforceable obligation may exist prior to an executed written contract”⁹, dispute resolution would require a QF to petition the Commission for relief. This would be discriminatory to small QFs that do not have the resources to initiate and litigate a LEO proceeding against a WA IOU. Additionally, FERC has established that a state commission cannot require a QF to prevail on a complaint proceeding in order to establish a LEO.¹⁰

LEO precedent in neighboring Oregon could serve as a helpful guide for the Commission. In *Snow Mountain Pine v. Maudlin*, the Oregon Court of Appeals declared that the utility's purchase obligation is not created by common law concepts of contract law, but rather "created by statutes, regulations and

¹ West Penn Power Co., 71 FERC ¶ 61,153 at 61,495 (1995).

² Cedar Creek Wind, LLC, 137 FERC ¶ 61,006 (2011).

³ JD Wind 1, LLC, 130 FERC ¶ 61,127 (2010).

⁴ Cedar Creek Wind, LLC, 137 FERC ¶ 61,006 (2011); Grouse Creek, LLC, 142 FERC ¶ 61,187 (2013); Rainbow Ranch Wind, LLC, 139 FERC ¶ 61,077 (2012); Murphy Flat Power, LLC, 141 FERC ¶ 61,145 (2012).

⁵ FLS Energy, Inc., 157 FERC ¶ 61,211 at pg. 24 (2016).

⁶ *Ibid*, at pg. 23-26.

⁷ UM 1878, PGE Comments, 04/06/2018, at pg. 2.

⁸ Draft 480-106 (OTS-1246.1), at pg. 4.

⁹ *Ibid*, at pg. 4.

¹⁰ Grouse Creek, LLC, 142 FERC ¶ 61,187 (2013).

administrative rules.” The court concluded that a QF has the power to determine the date for which avoided costs are calculated by obligating itself to provide power.¹¹ In Order No. 16-174, the Oregon PSC decided to adopt its Staff’s proposal that “a LEO exist when a QF signs a final draft of an executable standard contract that includes a scheduled commercial on-line date and information regarding the QF’s minimum and maximum annual deliveries”, while still providing that a QF could establish a LEO prior to its execution of a PPA should there be delays or obstruction in the establishment of the contract.¹²

FERC has made it clear that a utility cannot be allowed to control whether and when a LEO exists.¹³ Thus, Sun2o recommends that the Commission find a QF to have established a LEO when the following milestones, which demonstrate a QF’s commitment to sell its output to a WA IOU, are completed:

- 1) QF tenders an executed PPA in the form established by this Rulemaking to the applicable WA IOU
- 2) QF obtains and provides written documentation confirming site control to the applicable WA IOU
- 3) QF submits a complete generator interconnection application to the applicable WA IOU
- 4) QF provides system details to applicable WA IOU including scheduled commercial on-line date and information regarding the QF’s expected minimum and maximum annual deliveries

Importantly, the QF should still be able to establish a LEO on a case by case basis if it can show WA IOU delays or obstruction in the establishment of an executable PPA or completed generator interconnection application. If the Commission decides to approve the Proposed Rules LEO framework, Sun2o urges the Commission to rule that the written contract memorializing the LEO only needs to be executed by the QF for a LEO to be established.

The Proposed Rules LEO guidelines are likely to cause conflict during the implementation of the Rulemaking, could be considered in conflict with FERC precedent, and can be discriminatory to small QFs. Sun2o understands that stakeholders may differ as to the best way to ensure that a state’s LEO policy is fair and consistent with FERC’s guidance. At a minimum, however, Sun2o recommends that the Commission acknowledge that it is the QF, rather than a WA IOU, that controls the establishment of a LEO, and that no state or utility process can prevent a QF from creating one.

It is important that when a QF is committed to sell its output, a utility does not have the ability to unilaterally avoid the creation of a LEO. A LEO is the primary mechanism for protecting QFs against a WA IOU’s refusal to comply with the PURPA obligations established through this Rulemaking by delaying negotiations indefinitely or refusing to execute contracts. Thus, Sun2o urges the Commission to establish a clear LEO framework that is specifically designed to preempt WA IOUs from avoiding their obligations under PURPA.

II. Contract Length

QFs should have the option to select up to fifteen-year PPAs starting at the QF’s commercial operation date (“COD”) and the right to select a COD three years from contract execution, so long as the QF can complete commercially reasonable milestone events. Long-term contracts are essential to a QFs ability

¹¹ Snow Mountain Pine Co. v. Maudlin, 84 Or App 590, 598 (1987).

¹² UM 1610, ORDER, 05/13/2016, at pg. 27.

¹³ FLS Energy, Inc., 157 FERC ¶ 61,211 (2016).

to secure project financing and necessary to comply with PURPA's intent to encourage the development of QFs. FERC has stated that QF contracts must be "long enough to allow QFs reasonable opportunities to attract capital from potential investors."¹⁴ In Sun2o's experience, fifteen years is the minimum time period historically needed to allow most projects to obtain project financing. This financing requirement is why it is imperative to allow QFs the ability to begin their contracts upon COD rather than upon contract execution. If the contract term begins upon execution rather than upon COD, as written in the Proposed Rules, the QF only has twelve-years of fixed pricing. The Oregon Public Utility Commission confirmed fifteen-year PPAs started at a QF's COD by stating, "Prices paid to a QF are only meaningful when a QF is operational and delivering power to a utility. Therefore, we believe that, to provide a QF the full benefit of the fixed price requirement, the 15-year term must commence on the date of power delivery."¹⁵ For QFs to receive project financing, it is important that the Commission determine that the fifteen-year contract term begin upon a QF's COD.

A period of up to three years after contract execution is necessary to ensure the completion of development milestones out of the control of a QF. The main timing uncertainty is the interconnection study process, which is controlled and dictated by the applicable WA IOU. Interconnection feasibility is a major development barrier and needed for a QF to achieve commercial operation. It would not be fair to penalize a QF for the WA IOU's inability to complete interconnection studies and upgrades in a timely manner.

Lastly, long-term contracts provide certainty in uncertain times. WA IOU owned generation typically lasts for over 30 years and is paid back by ratepayers regardless of future market pricing. Fifteen-year operational pricing is necessary for QFs and Sun2o urges the Commission to revise the Proposed Rules accordingly.

III. Avoided Cost of Energy Rate Methodology

Various methods could potentially produce reasonable future energy price forecasts, and as such Sun2o encourages the Commission to select the most transparent methodology. Sun2o recommends that WA IOUs use publicly available and independently published third-party data to drive the avoided cost rate schedules. The data of the U.S. Energy Information Administration ("EIA") has been chosen by other Commissions in PURPA proceedings and Sun2o encourages the Commission to require the use of it by WA IOUs in this Rulemaking. The Michigan Public Service Commission ("MPSC") stated in its May 31, 2017 Order regarding Consumers Energy Company's ("Consumers") compliance with PURPA, that "As it has discussed previously, the Commission has a preference for publicly available information, which is consistent with EIA information"¹⁶ and MPSC Staff found that "EIA data is reasonable and publicly available, whereas the company's information may be less reliable because Consumers is an interested party."¹⁷

Similarly, WA IOUs are interested parties to this Rulemaking and Sun2o believes it would be in the best interest of all stakeholders for the Commission to mandate the use of independent, publicly available data, such as EIA, for setting avoided cost of energy pricing. If WA IOUs use proprietary and often

¹⁴ Windham Solar LLC & Allco Fin. Ltd., 157 FERC ¶ 61,134 (2016).

¹⁵ UM 1805, ORDER, 7/13/2017, at pg. 4.

¹⁶ U-18090, ORDER, 5/31/2017, at pg. 31.

¹⁷ Ibid, at pg. 21.

confidential computer model simulations to estimate avoided cost of energy prices, the result could be discriminatory to QFs and hinder QF development in Washington.

IV. Energy Storage

FERC has ruled that energy storage is eligible to be incorporated into QFs.¹⁸ As such, solar plus energy storage QFs can create flexible, dispatchable generation assets that are able to perform during WA IOU's peak demand hours and provide a wide range of reliability services with renewable energy. QFs that incorporate energy storage should be compensated for the value it delivers ratepayers at avoided cost rates.

In *Luz Development and Finance Corp.*, FERC ruled that energy storage projects that are charged by renewable energy can self-certify as QFs under PURPA, so long as at least 75% of the charging energy is from qualifying renewables.¹⁹ Relevant to this Rulemaking, in an Idaho PUC docket Avista Corp. stated that battery storage facilities using wind or solar as their primary energy source should be treated as wind or solar QFs.²⁰ Thus, Washington QFs should have the right to incorporate energy storage and be compensated accordingly.

The market for energy storage has experienced substantial growth over the past few years due to cost reductions, improved technical performance and increased deployment of renewable energy. Energy storage has and is being deployed in a wide range of applications, including: ancillary services support, avoidance of transmission and distribution upgrades, and peak demand capacity. Arizona Public Service's ("APS") announcement in February 2019 to add 850MW of battery storage, much of which paired with existing or new solar generation, highlights the value that solar plus storage can bring to WA IOUs and ratepayers. APS plans to provide its ratepayers with "solar after sunset" and the same can be true for solar plus storage QFs in Washington. As Jeff Burke, APS's Director of Resource Management said, "What we're really excited about is how we're transitioning to more of a solar with storage [model] to meet some of our peaking needs." Additionally, in APS's recent peaking capacity RFP, battery storage projects beat the traditional fossil competition as Brad Albert, Vice President of Resource Management for APS describes, "It was a straight-up selection, comparing the virtues of batteries and gas resources — and we selected batteries."²¹

Sun2o encourages the Commission to open access for QFs incorporating energy storage to be compensated for the beneficial attributes of storage by pricing it into WA IOU avoided cost tariffs and PPA rates.

V. QF Capacity Payment Rules

Sun2o supports the Proposed Rules requirement that QFs be compensated for capacity between the QF in service date and the date of a WA IOU's next planned generating unit addition, so long as a shortfall is projected in the next ten planning years. Sun2o, however, urges the Commission to provide clarity on Schedules of Estimated Avoided Costs Section (c) Levelized Avoided Cost Pricing. When a QF begins operation, it delays, reduces or eliminates the WA IOU's future capacity need and should be

¹⁸ *Luz Development and Finance Corp.*, 51 FERC ¶ 61,172 (1990).

¹⁹ *Ibid.*

²⁰ CASE NO. 1PC-E-17-01, ORDER NO. 33785, 07/13/2017, at pg. 7.

²¹ <https://www.greentechmedia.com/articles/read/aps-battery-storage-solar-2025#gs.1t14mv>

compensated accordingly. Sun2o’s proposed structure, which may be as intended in the Proposed Rules, would start with identifying any projected capacity need in the next ten years. For Avista, this occurs in 2027 at a cost of \$171/kW-yr.²² This nameplate capacity value would then be discounted at Avista’s Commission approved weighted average cost of capital (“WACC”) for the QF in-service years before the next capacity addition. At an estimated 7.5% WACC and 2020 in service date, the starting nameplate capacity value would be \$103/kW-yr, progressively rising back to \$171/kW-yr by 2027. The QF capacity contribution methodology, discussed below, would then be applied to this nameplate value to determine the final QF capacity payment.

Relevant to the Commission’s decision on QF capacity payment rules is the MPSC’s statement in its November 29, 2017 order regarding Consumers’ compliance with PURPA, “The Commission further found that because Consumers uses at least a 10-year planning horizon to project its own capacity needs, the same horizon should be used for the purpose of determining whether QFs should be compensated for capacity.”²³ Washington IOUs similarly have long-term capacity planning horizons and QFs should be paid in all contract years at the full avoided cost of capacity rate for the value they are providing by avoiding, reducing or delaying future capacity additions.

VI. QF Capacity Contribution Methodology

Sun2o encourages the Commission to adopt a methodology that fully captures the capacity value that a QF provides to WA IOUs. The Commission has not yet offered direction as to acceptable methodologies to calculate the capacity value of solar resources. As a result, WA IOUs can use methodologies to establish capacity value that undervalues the contribution of solar resources to system capacity by estimating capacity value on a small subset of hours that may not be significant on a going-forward basis.

Analyzing PSE, PacifiCorp, and Avista’s solar capacity value IRP statements demonstrate the need for regulatory clarity. In PacifiCorp’s 2017 IRP, a Peak Capacity Contribution Study was performed which determined capacity values for solar in its western Balancing Area Authority of 53.9% for fixed tilt solar PV and 64.8% for single axis tracking solar PV.²⁴ PSE in its 2017 IRP, however, concluded that solar provides no peak capacity value because it is a winter peaking utility.²⁵ Similarly, in Avista’s 2017 IRP the utility states avoided capacity credit methodology is determined by the capacity contribution of the resource at the time of the winter peak hour.²⁶

Sun2o urges the Commission to direct WA IOUs to use a robust methodology for calculating the capacity value of solar resources and other QFs. Specifically, Sun2o recommends the Effective Load Carrying Capability (“ELCC”) methodology that is used to value QF and new generation resource capacity contributions in other markets. As the California Public Utilities Commission (“CPUC”) Staff describes in its proposal for calculating ELCC of wind and solar resources, “ELCC is a percentage that expresses how well a resource is able to meet reliability conditions and reduce expected reliability problems or outage events (considering availability and use limitations). It is calculated via probabilistic reliability modeling,

²² Avista Corp 2017 IRP, 11-19.

²³ U-18090, ORDER, 11/29/2017, at pg. 32.

²⁴ PacifiCorp 2017 IRP, Volume II, at pg. 316.

²⁵ Puget Sound Energy 2017 IRP, 2-8.

²⁶ Avista Corp 2017 IRP, 11-9.

and yields a single percentage value for a given facility or grouping of facilities.”²⁷ Importantly, CPUC Staff notes that, “For wind and solar resources, monthly ELCC values are calculated to reflect seasonal variation in both generation profiles and system needs.” The same methodology can be applied effectively in Washington.

While Avista and PSE experienced winter peak demand in 2017, this has not always been the case and may not be the case in the future. Avista revealed in their 2017 IRP that while the 2017 peak system demand occurred in the winter, the peak demand for 2016 and 2015 occurred in the summer and that summer peak load is projected to grow at a faster rate than winter peak load.²⁸ Avista even stated that, “Looking forward, the highest peak loads are most likely to occur in the winter months, although in some years a mild winter followed by a hot summer could find the annual maximum peak load occurring in a summer hour.”²⁹ Additionally, Avista stated in their 2018 System Planning Assessment that, “Air conditioning loads have created some summer months where peak loads exceeded those of winter. This phenomenon has transformed Avista into a dual peaking utility.”³⁰ Finally, global warming is leading to on average warmer winters and more extreme summer heat. According to the NOAA, the ten warmest years on record have all occurred since 1998, and the four warmest years on record have all occurred since 2014. Sun2o encourages the Commission to create a capacity contribution methodology that evaluates capacity based on seasonal on-peak system needs and generation profiles, which will allow for projected and expected changes in future peak demand and a varying seasonal resource mix.

Additionally, we urge the Commission to set clear ELCC guidelines that allow for the contribution of energy storage when paired with QFs. Solar QFs paired with storage should be eligible to receive full capacity credit value at the nameplate storage capacity at the avoided capacity cost rate. The capacity value contribution of energy storage is clear, and recently emphasized in Astrape Consulting’s March 2019 Report on NYISO ELR Capacity Values. Astrape concluded that, “Our findings were clear and consistent: in the New York Control Area, energy-limited resources with at least 4-hours of continuous operation capability provide comparable reliability value to that of conventional resources without energy limits for the foreseeable future.”³¹

Lastly, the ELCC methodology should be fixed upon contract execution or LEO formation. A fixed methodology or calculation is essential to a QF’s ability to secure project financing as the MPSC found in its PURPA ruling by stating, “In essence, ELPC is proposing to fix for the term of the contract the method for calculating ELCC that MISO is implementing at the time the contract is executed, notwithstanding any potential future changes to that method. In balancing the QF’s need for certainty for project financing purposes, with the possibility that the method for calculating ELCC may undergo changes (which may result in a modest increase or decrease in capacity payment), the Commission finds that ELPC’s language is reasonable and should be included in the Standard Offer.”³² Sun2o urges the Commission to fix the capacity contribution methodology for the length of the QF contract, whether the Commission ultimately decides ELCC or another methodology is most reasonable.

²⁷ ELCC and Qualifying Capacity Calculation Methodology for Wind and Solar Resources, 01/16/2014, at pg. 1.

²⁸ Ibid, 3-22.

²⁹ Ibid, 3-19.

³⁰ Avista 2018 System Planning Assessment, at pg. 19.

³¹ Astrape ELR Capacity Value Study, 03/18/2019, at pg. 13.

³² U-18090, ORDER, 11/29/2017, at pg. 28.

Standalone solar and solar plus storage QFs will provide valuable capacity to the WA IOUs. Undervaluing the capacity contribution of variable resources is not in the public interest. Sun2o urges the Commission to set clear guidelines for determining technology and project capacity contributions that adequately value their contribution across all months of the year.

VII. Large QFs

Sun2o agrees that for QFs larger than 5MW (“Large QFs”) a standardized rate approach, as proposed for QFs less than 5MW (“Standard Offer QFs”), does not work. Sun2o agrees with the Proposed Rules framework requiring that a “utility shall file and obtain commission approval of its avoided cost rate methodology for qualifying facilities with capacity greater than five megawatts”³³ and consider a wide range of factors in the all-in rate determination.

Sun2o encourages the Commission to set standard ELCC percentages by technology by month for all Standard Offer QFs. For Large QFs, however, Sun2o believes project specific ELCC percentages by month are more appropriate and in-line with the Proposed Rules standard offer contract size separation. Project specific ELCC percentages can be based on a QF’s actual design, availability, and performance under the determined ELCC calculation. This would be burdensome for Standard Offer QFs, but reasonable for Large QFs.

Sun2o supports the Proposed Rules statement that “All utilities shall post upon the utility's web site nonbinding term sheets with limited contract provisions for qualifying facilities with capacities greater than five megawatts.”³⁴ Importantly, Large QFs should still be entitled to contracts and terms that are consistent with the rules for Standard Offer QFs as dictated in the Proposed Rules. For example, Large QFs should have the right to 15-year contracts. Thus, Sun2o urges the Commission to confirm that the Proposed Rules established for Standard Offer QFs provide the starting point for Large QF contract negotiations.

Sincerely,



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³³ Draft 480-106 (OTS-1246.1), at pg. 8.

³⁴ Ibid, at pg. 5.