



STATE OF WASHINGTON

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

November 13, 2019

Via Electronic Filing

Chair David Danner
Commissioner Anne Rendahl
Commissioner Jay Balasbas
Washington Utilities and Transportation Commission
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**RE: Docket UE-190663 – Avista Corporation’s PURPA Compliance Filing
Joint Parties Comments for the November 22nd, 2019 Open Meeting**

Dear Commissioners:

Sun2o Partners, LLC (“Sun2o”) and DGEP Holdings, LLC (“DGEP”) (collectively “Joint Parties”) submit these Comments in response to Avista’s Public Utility Regulatory Policies Act (“PURPA”) Compliance Filings submitted in Docket No. UE-190663.

Key deficiencies in Avista’s proposed Tariff will prohibit Qualifying Facility (“QF”) development in Washington by not fairly accounting for capacity contribution of solar and storage resources, limiting the contract length for non-Standard Offer QFs, and omitting the Social Cost of Carbon (“SCC”).

Our comments are limited to these areas which are vital in ensuring that Washington establishes a fair, accurate and transparent marketplace for QFs to transact and supply the associated development benefits to communities, ratepayers, and utilities. We very much appreciate the hard work of the Commission, Commission Staff, and all other stakeholders in the review and implementation of the Rules.



I. QF Capacity Contribution Methodology

Solar PV QFs will contribute meaningful capacity to Avista and are not accurately compensated under the proposed Tariff. Joint Parties propose a new approach to this calculation that we believe puts ratepayers first by not setting pre-determined or inaccurate fixed percentages, but rather bases the contribution percentage on a QF's actual operating production during both winter and summer peak demand hours.

Avista's Tariff currently ascribes a 0% fixed capacity contribution factor to solar. Joint Parties identified the deficiencies in Avista's assumptions in previous comments. In response to the use of the Rathdrum Solar Project, which is ~2kW and over 10 years old, as a reference for a solar project's contribution today, Avista wrote, "Avista uses its 2017 IRP which studies solar potential and defines the capacity contribution. It is not based on Rathdrum." In Exhibit A, the Commission will find an email chain between Avista, Sun2o, and Commission Staff. Avista admits that the 2017 IRP is in fact based on Rathdrum by writing, "The 2017 IRP study shown on page 9-8 is based on Avista's Rathdrum Solar site with corresponding Avista's native load. Unfortunately, the comment on item #35 the final sentence should have read the 2020 IRP is not based on Rathdrum." While the 2020 IRP may not be based on Rathdrum, the current Tariff continues to use the 2017 IRP calculation, which is wholly inaccurate in determining a new solar QF's production profile.

Solar QF's capacity contribution will continue to be inaccurate if only on-peak hours November to February, are analyzed as is proposed in the Tariff. Avista responded to Joint Parties comments regarding its dual peaking, if not summer peaking, profile "Avista will remain a winter peaking utility for the entirety of its long-term forecast", but the data indicates otherwise. Avista experienced a summer peak in four of the past six years, based on IRPs, FERC Form 1s, and Avista commentary. In 2018, the most recent year for which the Joint Parties have FERC Form 1 data, the peak load hours from August and July exceeded any winter peak hour. **Specifically, the peak load hour in August exceeded any winter peak load hour by over ten percent (10%)¹.** Additionally, Solar QFs would have also produced capacity during the Avista's peak winter hour need of 2018, February 21st at 8am. Avista confirmed in Exhibit A that the peak load hour so far in 2019 also occurred in the summer. Avista continues to demonstrate a summer capacity need and summer peak contribution should accrue to solar QF's.

Joint Parties propose a new solution to the QFs capacity contribution question that is based partly on Avista's proposed Tariff. A QFs contribution can be calculated by analyzing on-peak operating production in November to February, as well as in May to August. This is comparable to the methodology proposed by Avista for calculating the contribution of operating non-solar and non-wind resources in its Tariff. Avista's peak need hours, in both summer and winter, will be pre-determined by the Commission and a QF's capacity contribution percentage for any given calendar year will be the average delivery during the identified peak hours of the three preceding operating years. For the first operating year of a solar QF, the recorded output of Avista's Adams Neilson solar project during the identified peak hours could be used until a project has a year of operating data itself. Using a QF's actual production during on-peak need hours would not discriminate by resource type and ratepayers would only pay if the QF is contributing. This is in-line with how the Michigan PSC has decided the calculate

¹ 2018 FERC Form 1, pg. 401b. August peak load of 1,716MW and February peak load of 1,555MW.



capacity contribution under PURPA for QFs and is based on MISO Zonal Resource Credit capacity rules². Additionally, this approach allows a solar project paired with energy storage to be accurately paid without the Tariff including a provision for energy storage resources. Under this methodology, neither the Commission, Avista, nor developers, would determine an arbitrary contribution percentage that would be locked in for the entirety of the PPA. If the capacity contribution calculation is transparent, a QF can be designed to maximize contribution and Avista's ratepayers will only pay for what the QF provides. It should be noted that this is not how Avista would determine the rate impact of its owned resources and exemplifies the benefits independent QFs create.

In summary, Avista's flawed analysis used to value solar QFs capacity contribution at 0% is not a fair nor accurate method of valuation and will harm QFs, ratepayers and WA stakeholders. Solar QFs online in 2018 would have contributed beneficial capacity during Avista's peak load hours, both winter and summer, yet been paid \$0 under Avista's Tariff.

Joint Parties strongly encourage the Commission to take action to revise the Tariff and determine accurate summer and winter capacity contribution for new solar QFs. The inaccurate methodology currently proposed in the Tariff will continue to prohibit the development of any independent QFs after years of hard work by the Commission, Staff, and stakeholders.

II. Social Cost of Carbon

Avista's Tariff should be revised to include an adder for the Social Cost of Carbon ("SCC") avoided by renewable QFs. Currently, Avista proposes to use the deterministic Mid-C market forecast energy price scenario from their Draft 2020 IRP. Avista is not using the Draft 2020 IRP scenario that includes SCC in dispatch and is not proposing to compensate QFs for avoided greenhouse gas emissions resulting from energy generated by carbon free QFs.

The Commission has now established the SCC rates and Joint Parties urge the Commission to require Washington IOUs to revise their tariffs to include this avoided cost for QFs that are paid for energy based on market rates that do not account for greenhouse gas emissions, as required by SB 5116.

III. Energy Storage Inclusion

Joint Parties encourage the Commission to open access for QFs that are incorporating energy storage. Should the Commission determine the Joint Parties proposed capacity contribution methodology, referenced above herein, is an appropriate approach, a change to the Tariff to include energy storage schedules is not necessary. However, if the Commission determines a different approach is more appropriate, Joint Parties encourage the Commission to require a schedule for solar QFs paired with energy storage by various duration hours be added to the Tariff.

IV. Contract Length for Greater than Five Megawatt QFs

Avista's new Tariff only provides a five-year contract length for QFs greater than 5MW. As documented throughout the Commission's multi-year PURPA proceeding, five years is wholly insufficient to attract capital and the term should be revised to conform to that of the contract term for

² Michigan Public Service Commission Case No. U-18090.



less than 5MW QFs; fifteen years from contract execution. Avista does not charge its ratepayers over a five-year term and without a long term contract, independently developed projects like those owned by the utility itself, simply cannot be built. Joint Parties urge the Commission to require Avista to modify the contract length for greater than 5MW QFs in its Tariff.

Sincerely,

/s/ Corey Kupersmith
Managing Partner
Sun2o Partners, LLC
203-292-1883 x 102
Corey@sun2o.com

/s/ Mike DellaGala
Manager
DGEP Holdings, LLC
mike@dgepm.com



Exhibit A

From: Gall, James <James.Gall@avistacorp.com>
Sent: Thursday, October 17, 2019 2:51 PM
To: Corey Kupersmith <Corey@sun2o.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewicz, Kyle (UTC) <kyle.frankiewicz@utc.wa.gov>
Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>
Subject: RE: [External] RE: PURPA Questions

More answers below in red

From: Corey Kupersmith [<mailto:Corey@sun2o.com>]
Sent: Thursday, October 17, 2019 8:33 AM
To: Gall, James <James.Gall@avistacorp.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewicz, Kyle (UTC) <kyle.frankiewicz@utc.wa.gov>
Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>
Subject: RE: [External] RE: PURPA Questions

Hi James,

This is very helpful, thanks! Please see below in black for follow-up questions.

Thanks,

Corey

Corey Kupersmith

T: 203-292-1883 ext. 102 | M: 203-912-4909

From: Gall, James <James.Gall@avistacorp.com>
Sent: Monday, October 14, 2019 1:28 PM
To: Corey Kupersmith <Corey@sun2o.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewicz, Kyle (UTC) <kyle.frankiewicz@utc.wa.gov>
Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>
Subject: RE: [External] RE: PURPA Questions

Hi Corey, Answers are below in red.

From: Corey Kupersmith [<mailto:Corey@sun2o.com>]
Sent: Monday, October 14, 2019 5:37 AM
To: Gall, James <James.Gall@avistacorp.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewicz, Kyle (UTC) <kyle.frankiewicz@utc.wa.gov>
Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>
Subject: RE: [External] RE: PURPA Questions



James,

Got it, thanks for the quick follow-up and the level of detail is much appreciated. A couple of additional questions, if you don't mind:

- 1) For the 2017 IRP solar analysis, Avista writes Table 9.3 is calculated "using output from the Rathdrum Solar Project." In the response to our comments, Avista wrote that the 2017 IRP calc was not based on Rathdrum. Can you help clarify this? **The 2017 IRP study shown on page 9-8 is based on Avista's Rathdrum Solar site with corresponding Avista's native load. Unfortunately, the comment on item #35 the final sentence should have read the 2020 IRP is not based on Rathdrum.** So to confirm, the 2017 Solar Capacity Contribution is calculated using the output from the Rathdrum Solar Project? For 2020, how is a solar system's output profile determined? Can you provide the assumptions on yield, tilt, DC/AC ratios, etc.? **We are using our data from our Adams-Neilson Solar site near Lind, WA. Specifics of this site our under an NDA with the IPP.**
- 2) Are you able to share that ELCC study for solar and storage or is it released publicly anywhere? **Yes, follow the link below and go to TAC 2 <https://myavista.com/about-us/our-company/integrated-resource-planning>. In this presentation list, go to the pdf page 53 for the presentation "Resource adequacy and ELCC". Solar is discussed on page 12 of the presentation.** Thanks – I see that the 3rd party ELCC analysis was not included for distribution. Is there anywhere I can find this report or output? **This study is from E3, see this link <http://www.publicgeneratingpool.com/e3-carbon-study/>. Keep in mind this study is regional not Avista.**
- 3) This may be a naive question, but if Avista's yearly peak is sometimes in the winter and sometimes in the summer, why wouldn't Avista be considered a dual-peaking utility? I'm also looking at Avista's 2018 System Assessment which states, "This phenomenon has transformed Avista into a dual peaking utility" to inform our view here. **From a planning perspective Avista is Winter Peaking do to the fact the winter is the utility's highest load period using weather adjusted load with historical temperatures. Further, from a LOLP point of view winter is Avista's primary focus for reliability, this is illustrated in the same presentation referenced in response #2 on pages 6 and 7.** From the data I can find, over the last 5 years it appears Avista's peak load occurred in the summer 3 times and in the winter 2 times. Can you provide the month of Avista's peak load for 2019 to date? From a reliability and LOLP, I understand the winter focus. From a capacity need, however, Avista appears to need both summer and winter capacity beyond 2026. Solar can contribute significantly to the summer peak, which Avista is continuing to experience, but would not be compensated under the proposed rates. Would it be unrealistic to consider splitting the capacity payment by attributed 50% to summer contribution and 50% to winter contribution given the dual peaking load profile and continued growth of summer peak? Lastly, in the Storage Results Slide of the TAC 2 presentation can you provide the implied capacity credit for the 25MW 4hr duration storage and 50MW solar? Is taking the LOLP difference from a 25MW CT, -.7 vs -1.5 in this case, the proposed calculation? If so, I'm showing ~47%, but want to confirm I understand this correctly. Thanks **Our technical peak so far in 2019 in the summer. But the peak hour is not the issue for Avista, our issue is a sustained load event, which is why I pointed you to the resource adequacy data set showing winter as the primary issue. In the winter when we have sustained dark cold days without wind with high loads. These are the events we plan for. While summer can have high loads as well, but when we plan to meet our winter loads, we can also meet our summer loads with added generation. We cannot split capacity payments between seasons, as we would not be able to adequately supply our winter peak. Regarding your last question, storage capacity credits all depend on the resources**



available in the system and the duration of the storage system. We are re-working all of this analysis now and it will not be available until the draft of the IRP document. Also one thing to note on this study is the battery assumed can charge from any source to earn the capacity credits shown. Also as noted in the E3 study, storage plus solar capacity credits are higher for the first amount of storage+solar, then fall fast- they claim in the long run the capacity credit is around 10%. Our earlier analysis showing the 40% range is just for the first 25 MW. We have not conducted any studies yet beyond this amount.

- 4) Regarding the published system load data, does Column E “Firm Network Service for Self” not isolate the data to Avista only? Avista’s native peak load is on page 401b, column d of FERC FORM 1. This data is load data isolated to Avista. The Column E reference, has more to do with native load with firm rights on the transmission system. For more information on that you will need to contact someone in our Transmission Department. Thanks – this is helpful.

Best,

Corey

Corey Kupersmith

T: 203-292-1883 ext. 102 | M: 203-912-4909

From: Gall, James <James.Gall@avistacorp.com>

Sent: Thursday, October 10, 2019 2:13 PM

To: Corey Kupersmith <Corey@sun2o.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewich, Kyle (UTC) <kyle.frankiewich@utc.wa.gov>

Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>

Subject: RE: [External] RE: PURPA Questions

Corey,

My answers are below in Red. Thanks for your interest in our IRP process.

James

From: Corey Kupersmith [<mailto:Corey@sun2o.com>]

Sent: Thursday, October 10, 2019 10:53 AM

To: Gall, James <James.Gall@avistacorp.com>; Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Frankiewich, Kyle (UTC) <kyle.frankiewich@utc.wa.gov>

Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>; Victor Stolt-Nielsen Holten <victor@sun2o.com>

Subject: RE: [External] RE: PURPA Questions

James,

Thanks for this. I have a few quick follow-up questions if you’re able to help:

1. For solar, is Avista using table 9.3 in the 2017 IRP to evaluate its capacity contribution? For the 2017 IRP, the table in 9.3 was created to show the monthly capacity credits for solar. Meaning how much our load could be offset with solar in the peak hours. Given Avista is a winter peaking utility the capacity credit resulted in zero capacity credit. In the current 2020 IRP, Avista uses a ELCC (Effective Load Carrying Capability) method resulting in a 2% capacity credit.



2. Slide 364 of the Appendix “Resource Capacity” mentions storage and that it can be used to meet peak load. I understood Avista’s recent comments to imply that storage would need to have multi-day duration to contribute to capacity, but in this slide Avista writes that a 3-hr winter peak is used for planning. Can you explain the difference? **During the 2017 IRP process, Avista had not conducted any reliability studies regarding storage’s contribution to reliability planning. In the current IRP planning process, Avista conducted ELCC analysis for storage and found it takes significant duration of storage to provide moderate levels of capacity due to our sustained cold period in the winter. The contribution levels depend greatly on the duration of the battery along with the amounts of other generation in the system.**
3. Lastly, I want to make sure the 2018 FERC Form 1 data we mentioned in our comments is accurate. Did Avista experience a higher summer peak than winter peak hour in 2018? Additionally, February 23rd from 8-9am is showing as the peak winter load on Avista’s transmission system. Is this accurate?

In 2018, Avista’s peak hour was in the summer. Avista from time to time can be summer peaking. This is discussed in the 2017 IRP, chapter 3. In some years warm winters can result in higher summer peak loads, see Figure 3-22. but from a planning perspective considering the range in temperatures, Avista must plan its system and acquire resources based on its winter peak, but also make sure it has adequate resources in the summer. Typically the resources acquired for the higher winter peak also meets the summer peaks.

Further, published area load data is for the control system which includes both Avista system loads and other utilities within our balancing area. These loads may not perform in the same way as Avista’s customers. Regarding your questions on February 23rd, I am not sure what you mean by the transmission system load.

Thanks!

Corey

Corey Kupersmith

T: 203-292-1883 ext. 102 | M: 203-912-4909

From: Gall, James <James.Gall@avistacorp.com>

Sent: Wednesday, October 9, 2019 2:30 PM

To: Reynolds, Deborah (UTC) <deborah.reynolds@utc.wa.gov>; Corey Kupersmith <Corey@sun2o.com>; Frankiewicz, Kyle (UTC) <kyle.frankiewicz@utc.wa.gov>

Cc: Kalich, Clint <Clint.Kalich@avistacorp.com>; Silkworth, Steve <steve.silkworth@avistacorp.com>

Subject: RE: [External] RE: PURPA Questions

Deborah,

Our avoided cost discussion in the 2017 IRP is on pages 11-18 and 19, the summary table is on page 11-19. The energy portion of the avoided cost is based upon the market price forecast which is described in chapter 10 of the document. In the appendix there is slides from our public meeting discussing avoided costs this is on page 488. If you have any further questions, please feel free to give me a call or email.

James



From: Reynolds, Deborah (UTC) [<mailto:deborah.reynolds@utc.wa.gov>]
Sent: Wednesday, October 09, 2019 11:16 AM
To: Corey Kupersmith <Corey@sun2o.com>; Frankiewich, Kyle (UTC) <kyle.frankiewich@utc.wa.gov>;
Gall, James <James.Gall@avistacorp.com>
Subject: [External] RE: PURPA Questions

James,

Can you please provide the citation to the supporting tables in the IRP on the capacity calculation? I believe they are in an appendix?

Thanks,

Deborah Reynolds (she/her)

Assistant Director, Conservation and Energy Planning

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Utilities and Transportation Commission

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