# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

#### **UM 1730**

In the Matter of	)	COMMENTS OF THE
IDAHO POWER COMPANY,	)	COMMENTS OF THE COMMUNITY RENEWABLE
	)	ENERGY ASSOCIATION AND
Application to Update Schedule 85	)	THE RENEWABLE ENERGY
Qualifying Facility Information	)	COALITION
	)	

#### I. INTRODUCTION AND SUMMARY

The Community Renewable Energy Association ("CREA") and the Renewable Energy Coalition ("Coalition") (collectively, the "Joint QF Groups") file these comments regarding Idaho Power Company's ("Idaho Power" or the "Company") application to update its Schedule 85 qualifying facility ("QF") information.

Idaho Power's avoided cost rate update follows acknowledgement of its 2021

Integrated Resource Plan ("IRP"). The Joint QF Groups submit comments to reiterate a recommendation that a standard solar-plus-storage rate be adopted, as has now been recommended in multiple proceedings. As with all three Oregon utilities, standard rates offered to small QFs are heavily influenced by the IRP's assumed capacity contribution value of the proposed QF resource type as compared to the utility proxy upon which the avoided costs are estimated, and Idaho Power—similar to Oregon's other two utilities—has recently been estimating significantly lower capacity contribution values for new solar facilities. At the same time, battery storage technology has advanced to the point

where small QFs could incorporate it into solar facilities to enhance the capacity value delivered to the utility.

Thus, the Joint QF Groups support allowing the rates proposed to go into effect immediately, but urge the Oregon Public Utility Commission ("OPUC" or "Commission") to take additional action to encourage development of solar-plus-storage OFs as follows:

- (1) The Commission should require a standard solar-plus-storage rate. Idaho Power's IRP provides a capacity contribution value for solar-plus-storage facilities, and without such a standard rate small-scale solar-plus-storage facilities are unlikely to be developed. Therefore, the Commission should hold Idaho Power's application here open and require Idaho Power to promptly offer a standard solar-plus-storage rate for inclusion in its avoided cost rate schedule, subject to further review and approval by the Commission in this docket.
- (2) In the alternative, in recognition of Staff's commitment in the Staff Report to work with all three utilities to develop standard solar-plus-storage rates before the May 1<sup>st</sup> update this year, the Joint QF Groups urge the Commission to provide clear direction that it expects development of a solar-plus-storage rate in the near term, and approval of Idaho Power's avoided cost rates at this time does not prejudice adoption of such a rate before the next IRP cycle. While the Joint QF Parties differ with Staff's conclusion that the adoption of a solar-plus-storage rate should not be ordered immediately for Idaho Power at this time, the Commission should at least provide clear direction as to its expectations and ensure procedural impediments do not delay adoption of such a standard rate.

#### II. COMMENTS

A. Idaho Power Now Estimates a Low Contribution to Peak Capacity Value for Solar QFs, and the Resulting Standard Rates Have Not Encouraged Development of Small Solar QFs.

As has been the trend with Oregon utilities, Idaho Power's latest IRP assigns a very low contribution to peak capacity value for solar resources but acknowledges that the addition of battery storage to solar projects significantly increases the capacity value. The 2021 IRP used for calculating the avoided cost rates at issue here estimates that the "average [Effective Load Carrying Capacity ('ELCC')] value for future stand-alone solar projects was 10.2%." In contrast, Idaho Power estimates that the "average ELCC value applied the future solar-plus-storage projects was 97% with 4-hour storage durations."

This trend of declining stand-alone solar capacity values has become entrenched and is resulting in lower avoided cost rates offered to solar QFs. To illustrate the trend, it is useful to examine the capacity contribution that Idaho Power estimated for solar facilities in the relatively recent past. Idaho Power's 2015 IRP and 2017 IRP assigned a peak solar capacity credit of 45.5 percent for fixed southwest orientation and 51.3 percent for a tracking solar facility.<sup>3</sup> Notably, the Oregon Department of Energy reported several IRP cycles ago that the National Renewable Energy Laboratory estimated "a capacity credit of 87 percent for a single-axis tracking system, compared to 71 percent for a flat plate system, in Boise to meet [Western Energy Coordinating Council]-wide loads." Put

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<sup>&</sup>lt;sup>1</sup> Idaho Power's 2021 IRP, p. 53.

Idaho Power's 2021 IRP, p. 53; *see also* Idaho Power's 2021 IRP, Attachment C, p. 99 (containing all resource types forecasted)

<sup>&</sup>lt;sup>3</sup> Idaho Power's 2015 IRP, pp. 50-51, Docket No. LC 63 (June 3, 2015); Idaho Power's 2017 IRP, pp. 130 & Appendix C, p. 77, Docket No. LC 68 (June 30, 3017).

Oregon Department of Energy Comments, Docket No. LC 58, p. 4 (Oct. 8, 2013).

simply, solar was viewed as a high capacity value renewable resource, especially for a summer-peaking utility like Idaho Power. As noted above, Idaho Power's 2021 IRP now estimates just a 10.2-percent capacity contribution value for incremental stand-alone solar facilities. However, Idaho Power's 2021 IRP confirms that Idaho Power still considers its *existing* QF solar portfolio of several hundred megawatts has a contribution to peak capacity value of 62.3 percent,<sup>5</sup> and thus the distinction here is that Idaho Power—similar to other Oregon utilities—forecasts that stand-alone solar has a lower incremental capacity value going forward. Indeed, in Idaho Power's current IRP, a future stand-alone solar facility's contribution to peak capacity is the lowest of all measured resources, including even wind facilities.<sup>6</sup>

Idaho Power's low contribution to peak capacity values for future solar has been reflected in low standard avoided cost rates for solar QFs. As is reflected in Idaho Power's application, the solar on-peak rates are the lowest rates offered, even though Idaho Power is a summer peaking utility that would be expected to receive significant value from solar power. It also appears that the development of small-scale solar facilities utilizing standard rates offered by Idaho Power has decreased in recent years, even though Idaho Power and Oregon's other utilities have increasing capacity needs in the near term. Based on information supplied by Idaho Power to the Coalition through discovery in the 2021 IRP proceeding, Idaho Power has not executed a standard contract with standard rates with a solar QF in Oregon in the almost four years. The Joint QF

Idaho Power's 2021 IRP, Attachment C, p. 99.

Idaho Power's 2021 IRP, Attachment C, p. 99.

Idaho Power identified the proposed Durkee Solar facility as the most recent standard contract executed with an Oregon solar QF on April 29, 2019, in Response to

Parties suspect that this decline in development under the standard solar rates is due in large part to the low standard rates offered to solar QFs.

## B. The Commission Should Require a Standard Solar-Plus-Storage Rate.

The Commission should require Idaho Power to offer a higher standard rate for solar-plus-storage QFs to encourage development of higher capacity value solar resources. As the Joint QF Groups explained in PacifiCorp's avoided cost rate update proceeding last year and more recently in comments in generic proceedings, small-scale developers are interested in pursuing solar-plus-storage projects, but the lack of a standard rate and the unreasonably low stand-alone solar rates make such development unlikely to be successful without proactive action by the Commission.

The Commission's rules provide that the utility's "standard rate may differentiate among qualifying facilities using various technologies on the basis of supply characteristics of the different technologies." Thus, it is appropriate to offer higher standard rates to new QF types that can supply higher capacity value.

At the time the Commission created capacity differentiation for resource types in Order No. 14-058, the only three resource types used were baseload, wind, and solar. However, in subsequent years, PacifiCorp added a new rate class for tracking solar, as opposed to just fixed solar, due to the ability to model the enhanced capacity value tracking solar offers and to encourage development of tracking solar. So, there is

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the Coalition's Data Request No. 1 in Docket No. LC 68. The Joint QF Groups acknowledge that Idaho Power also reports that it executed two non-standard PPAs with proposed Oregon solar QFs in 2021, but these comments are directed at standard contracts and rates.

<sup>8</sup> OAR 860-029-0040(4)(c).

precedent for including newer resource types other than the three limited categories in Idaho Power's filing, which provides only baseload, wind, and solar options.

Further, as noted above, Idaho Power's 2021 IRP has already calculated the capacity contribution of solar-plus-storage. Based on Idaho Power's 2021 IRP, adding four-hour battery storage to a solar QF would increase the capacity value supplied to the utility from 10.2 percent to 97 percent. Idaho Power is not alone in this regard. For example, in PacifiCorp's 2021 IRP, PacifiCorp has calculated the capacity contribution of Lakeview, Oregon-sited solar-plus-4-hour-storage to be 82 percent in summer and 93 percent in winter. That is substantially higher than the corresponding measure for Lakeview, Oregon-sited stand-alone solar of just 13 percent in the summer and 18 percent in the winter, which was used PacifiCorp's rate offering to Oregon solar QFs. At a time of critical capacity need in the region, and strong state policy to develop Oregon-based renewable energy, there is no reasonable basis not to encourage further development of solar-plus-storage facilities through the adoption of a standard solar-plus-storage rate offered to QFs.

The Oregon utilities have suggested at various points that a solar-plus-storage QF would need to be subject to certain dispatch or delivery conditions in its contract to be entitled to the higher capacity rate. But, as the Joint QF Groups have argued in Docket Nos. AR 631 and UM 2000, adoption and implementation of a contract addendum to address the delivery requirements of such a solar-plus-storage QF could be implemented

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<sup>&</sup>lt;sup>9</sup> Idaho Power's 2021 IRP, p. 53.

PacifiCorp's 2021 IRP, Vol. II, App. K, Table K.2 at 221.

PacifiCorp's 2021 IRP, Vol. II, App. K, Table K.1 at 220.

if there was a will to do so. Such a storage contract addendum was developed in the largest QF market in the nation—North Carolina—for Duke Energy affiliates. The Duke storage addendum is less than two pages long and demonstrates that this issue is not too complicated to implement in a standard contract. Thus, the Commission could approve rates at this time and, to the extent a contract addendum is deemed necessary, make such rates available at such time as the Commission approves an addendum to the utilities' standard contract to implement such rates. The Joint QF Groups stand ready to cooperate in good faith in development of any necessary contractual addendum.

Further, at least in the case of Idaho Power, there is even precedent for offering a standard solar-plus-storage rate in Oregon's neighboring state of Idaho, under a framework that may not even require any contract addendum to implement the storage pricing. Specifically, the Idaho Public Utilities Commission ("IPUC") has required Idaho Power to offer a standard storage rate to small QFs, which is readily available on the IPUC's website. Instead of implementing a specific dispatch protocol in the standard PPA (through an addendum or otherwise), the IPUC adopted a method that uses

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In re Staff Investigation into PURPA Implementation, Docket No. UM 2000, Comments of CREA, NIPPC, and the Coalition on Staff's Process Proposal and Scope at 4-5, Attachment A (Dec. 22, 2022) (citing In re Biennial Determination of Avoided Cost Rates For Electric Utility Purchases From Qualifying Facilities, N. Carolina Pub. Util. Comm'n Docket No. E-100, Sub 175, Exhibit 3 at Exhibit A, available at: https://starw1.ncuc.gov/NCUC/ViewFile.aspx?Id=926af082-16cf-4468-9c95-0de17b02f7b1, and containing the Duke Energy storage addendum). North Carolina has the highest level of solar QF installations of any state. See Manussawee Sukunta, North Carolina has more PURPA-qualifying solar facilities than any other state, Energy Information Administration (Aug. 23, 2016), https://www.eia.gov/todayinenergy/detail.php?id=27632.

<sup>&</sup>lt;sup>13</sup> IPUC-approved avoided cost rates for Idaho Power are available at: <a href="https://puc.idaho.gov/Page/Standard/15">https://puc.idaho.gov/Page/Standard/15</a>.

significantly larger capacity prices paid to storage resources for energy delivered during peak and premium peak hours, which the IPUC determined would appropriately compensate storage facilities for the valuable capacity they deliver to the system. <sup>14</sup> For example, the initially proposed options were use of "Peak Hours" of 1:00 pm to 10:00 pm in July and 3:00 pm to 8:00 pm in August, or use of more limited "Premium Peak Hours" of 6:00 pm to 10:00 pm in July and 4:00 pm to 8:00 pm in August. <sup>15</sup> The IPUC adopted use of the more relaxed Peak Hours for standard rate QFs, <sup>16</sup> and the currently effective standard rates for energy delivered during those hours begin at \$409.51/MWh in 2023 and escalate to \$572.86/MWh in 2046. <sup>17</sup> In contrast, the capacity rate for all other hours, including the much more expansive set of traditional "on-peak" hours would be zero—thus sending price incentives to deliver during the times of highest need. Although the IPUC-approved standard storage rate is only technically available in Idaho to QFs up to 100 kW in capacity, the IPUC also appears to be applying this same basic storage rate calculation and payment method to larger solar-plus-storage facilities. <sup>18</sup>

In the Matter of Idaho Power's Petition to Determine the Project Eligibility Cap for Published Avoided Cost Rates and the Appropriate Contract Length for Energy Storage Qualifying Facilities, IPUC Case No. IPC-E-20-02, Order No. 34913, p. 6 (Feb. 5, 2021) (stating: "By identifying its Peak Hours and Premium Peak Hours, the utility sends a price signal to energy storage QFs to dispatch energy at the times the utility most needs the energy. Because energy storage QFs can alter their output to respond to price signals, identifying and pricing high-value hours accordingly can encourage QF development and help the utility avoid higher-cost resources, benefiting ratepayers.").

<sup>15</sup> *Id.* at pp. 2-3.

<sup>16</sup> *Id.* at p. 7.

See supra note 13.

The IPUC recently ordered use of the same payment structure to develop the capacity credit in a green tariff structure for a solar resource that is intended to charge a battery storage facility. See In the Matter of Idaho Power Co's Application for Approval of a Replacement Special Contract with Micron Technology, Inc. and Power Purchase Agreement with Black Mesa Energy, LLC, IPUC Case No. IPC-E-22-06, Order No.

There are, of course, other ways to structure the storage rate paid to QFs based on the capacity contribution value in Idaho Power's IRP as an alternative to the IPUC-approved structure. For example, the utility could pay a fixed \$/kW capacity payment and adopt a standard dispatch protocol that could be easily implemented through a contract addendum. The Joint QF Groups remain open to discussion of different rate structures for Oregon QFs. However, the fact that Idaho Power's majority jurisdiction state already has a standard storage rate demonstrates that development of such a rate is certainly possible and should also be developed for Oregon, where state policy directs the Commission to support QF development to the "highest degree possible." <sup>19</sup>

In sum, the technology to develop small-scale, standard-rate-sized solar-plus-storage QFs exists today, and the impediment to development of such resources is the lack of a standard rate offering for such resources. Without a standard rate, would-be developers of small-scale solar-plus-storage facilities will be deterred by the difficulty and prohibitive expense of attempting to negotiate a non-standard rate and non-standard PPA with Idaho Power. Thus, given that Idaho Power's IRP now supplies the necessary calculations to easily calculate a standard rate, the Commission should require Idaho Power to offer such QFs a standard rate.

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<sup>35482,</sup> p. 17 (Aug. 1, 2022) (stating: "We find it fair, just, and reasonable that the [Renewable Capacity Credit] utilize the rate and payment structure for IRP-based energy storage projects. Under this structure, avoided cost payments are based on actual energy delivered to the system during system peak and premium peak hours, regardless of the source of energy. This method aligns with established principles and ensures accountability in compensating resources for the capacity avoidance they deliver. In addition, applying this structure provides a consistent methodology for future, anticipated resource combinations (wind plus battery and/or solar plus battery) under the Black Mesa PPA and additional [Clean Energy Your Way] projects.").

Finally, the Joint QF Groups understand that Staff's Report states Staff will work with parties to develop a standard solar-plus-storage rate for all three utilities before the May 1<sup>st</sup> Updates, and, in the absence of agreement, Staff states it expects to file a proposal by the end of this year.<sup>20</sup> Thus, the Joint QF Groups make an alternative recommendation in this avoided cost rate filing. Specifically, the Joint QF Groups urge the Commission to provide clear direction that it expects development of a solar-plusstorage rate in the near term and that approval of Idaho Power's avoided cost rates at this time does not prejudice adoption of such a rate before the next IRP cycle. The Joint QF Groups believe information and policy basis exists to adopt a solar-plus-storage rate today and disagree with Staff's suggestion that there is no harm to solar QFs in the interim. As noted above, the solar rates are impeding small-scale solar development, and in the absence of a standard solar-plus-storage rate small-scale solar-plus-storage QFs are very unlikely to be developed. Staff's suggestion that small-scale solar-plus-storage developers can simply negotiate a non-standard contact if they seek storage rates is unsupported because Staff cites no examples of any solar-plus-storage non-standard contracts containing reasonable compensation for the added value of storage, much less any evidence that a small-scale project could successfully negotiate such a contract on its own. However, the Joint QF Groups do support developing a standard solar-plus-storage rate as soon as possible. Thus, in no case should the decision not require such a rate now result in postponement of such a rate until after the next IRP cycle two or three years from now.

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<sup>20</sup> Staff Report, p. 4 (Feb. 13, 2023).

### III. CONCLUSION

For the reasons stated above, the Joint QF Groups recommend the Commission require implementation of a standard solar-plus-storage rate be included in Idaho Power's avoided cost schedule.

Dated this 17th day of February 2023.

Respectfully submitted,

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