

**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

**IN THE MATTER OF IDAHO POWER’S ) CASE NO. IPC-E-20-02**  
**PETITION TO DETERMINE THE PROJECT )**  
**ELIGIBILITY CAP FOR PUBLISHED )**  
**AVOIDED COST RATES AND THE ) ORDER NO. 34794**  
**APPROPRIATE CONTRACT LENGTH FOR )**  
**ENERGY STORAGE QUALIFYING )**  
**FACILITIES )**

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On January 21, 2020, Idaho Power Company (“Idaho Power” or “Company”) petitioned the Commission to determine avoided cost rates, contract terms, and conditions applicable to energy storage qualifying facilities (“QF” or “QFs”) under the Public Utility Regulatory Policies Act of 1978 (“PURPA”).

On February 10, 2020, the Commission issued a Notice of Application and Notice of Intervention Deadline. Order No. 34552. No parties intervened.

On June 23, 2020, the Commission issued a Notice of Modified Procedure. Order No. 34699. The Commission set an initial comment deadline of July 16, 2020, a deadline for interested persons to respond to the initial comments and requests for public input of August 6, 2020, and a deadline of August 27, 2020 for the parties to file follow-up comments. Renewable Northwest, Idaho Conservation League, and Clenera, LLC filed responses to Staff’s request for public input.

On September 3, 2020, the Company filed a motion and reply comments. Now, the Commission issues this final order granting the Company’s requested relief.

**PURPA BACKGROUND**

PURPA requires the Federal Energy Regulatory Commission (“FERC”) to “prescribe, and from time to time thereafter revise, such rules as it determines necessary to encourage cogeneration and small power production . . . of not more than 80 megawatts capacity[.]” 16 U.S.C. § 824a-3(a). State commissions, such as this one, are tasked with implementing the FERC rules in their respective jurisdictions. 16 U.S.C. § 824a-3(f)(1). PURPA “establishes a program of cooperative federalism that allows the States, within limits established by federal minimum standards, to enact and administer their own regulatory programs, structured to meet their own particular needs.” *Idaho Power Co. v. Idaho Public Utilities Comm’n*, 155 Idaho 780, 782, 316 P.3d 1278, 1280, *citing FERC v. Mississippi*, 456 U.S. 742, 767 (1982).

PURPA requires electric utilities to purchase energy and capacity made available by small independent power producers that meet the statutory and regulatory criteria to be a QF. 16 U.S.C. § 824a-3(a). This “must-purchase” provision addresses one of the main issues that Congress sought to fix when enacting PURPA. Congress “felt that two problems impeded the development of nontraditional generating facilities: (1) traditional electricity utilities were reluctant to purchase power from, and sell power to, the nontraditional facilities, and (2) the regulation of these alternative energy sources by state and federal utility authorities imposed financial burdens upon the nontraditional facilities and thus discouraged their development.” *FERC v. Miss.*, 456 U.S. 742, 750-51 (1982).

PURPA requires that the rates for purchases from QFs must be “just and reasonable to the electric consumer of the electric utility and in the public interest[,]” must not “discriminate against qualifying cogeneration and small power production facilities[,]” and must not “exceed[] the incremental cost to the electric utility of alternative energy.” 16 U.S.C. § 824a-3(b). “Incremental cost of alternative electric energy” is defined as “the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source.” 16 U.S.C. § 824a-3(d). FERC regulations refer to the incremental cost to the utility as the utility’s “avoided costs.” 18 C.F.R. § 292.304(a)(2). In its regulations implementing PURPA, FERC lists factors that states may consider when setting avoided cost rates. 18 C.F.R. § 292.304(e).

Within the broad contours outlined by Section 210 of PURPA for determining avoided cost rates, as implemented by FERC’s Subchapter C regulations, states have broad authority to determine the rates and contractual relationships between utilities and QFs.

We agree that PURPA delegates to the states broad authority to implement *section 210* of the statute. Section 210(f) of PURPA instructs the states to implement any rule prescribed by [FERC] under section 210(a). 16 U.S.C. § 824a-3(f). Section 210(a), in turn, directs the Commission to prescribe rules that require utilities to purchase electric energy from and sell electric energy to cogenerators. 16 U.S.C. § 824a-3(a). Thus, the states play the primary role in calculating avoided costs and in overseeing the contractual relationship between QFs and utilities operating under the regulations promulgated by the Commission.

*Independent Energy Producers Ass’n, Inc. v. Cal. Pub. Util. Comm’n*, 36 F.3d 848, 856 (9th Cir. 1994) (emphasis in original).

FERC rules require state commissions to establish “standard” or “published” avoided cost rates for QFs with a nameplate capacity of 100 kilowatts ("kW") or less. 18 C.F.R. § 292.304(c)(1). The state commissions, in their discretion, may establish published avoided cost rates for QFs greater than 100 kW. 18 C.F.R. § 292.304(c)(2). The standard avoided cost rate is intended to ensure that the transaction costs associated with negotiating a contract with the utility do not render QFs of 100 kW or less uneconomic. 45 Fed. Reg. 12214, 12223 (Feb. 25, 1980). In GNR-E-10-04 and GNR-E-11-03, the Commission established a 100-kW project eligibility cap for wind QFs and solar QFs to receive published avoided cost rates in Idaho. Order Nos. 32262 at 8, 32697 at 13. In Idaho, all other QF types have a 10 average Megawatt ("aMW") project eligibility cap for published avoided cost rates. *See* Order No. 32697 at 14.

Published avoided cost rates in Idaho are calculated through the Surrogate Avoided Resource method ("SAR Method"), which is based on the assumed cost of a hypothetical combined cycle combustion turbine natural gas plant. *See* Order No. 32697 at 17. Negotiated rates, which are available for QFs above the project eligibility cap, are calculated using the incremental cost Integrated Resource Plan method (“IRP Method”). The IRP Method calculates the marginal value of energy on the Company's system on an hourly basis given the Company's actual resource stack and a QF-specific forecasted generation profile. *See* Order No. 32697 at 20-21.

Besides eligibility for published avoided cost rates, the project eligibility cap determines the length of contract for which a QF is eligible. QFs above the project eligibility cap in Idaho are entitled to two-year contracts. Order No. 33357 at 25. QFs below the project eligibility cap in Idaho are entitled to twenty-year contracts. *See* Order No. 33253 at 4.

### **BACKGROUND ON ENERGY STORAGE QFs IN IDAHO**

In IPC-E-17-01, the Commission determined five energy storage QFs were entitled to the terms and conditions available to solar QFs because the energy storage QFs were charged by solar generation and the generation profiles of those energy storage QFs aligned closely to the generation profiles of solar QFs. Order Nos. 33785 at 11-12, 33858 at 3. The Commission stated,

Electric input is required to produce electric output from a storage facility. . . . For this reason, in order to qualify as a PURPA resource, the primary energy source behind the battery storage must be considered. We must, then, look to Franklin’s and Black Mesa’s primary energy sources in order to determine their eligibility under PURPA. The primary energy source for Franklin and Black Mesa is solar generation. Moreover, the energy generation output profiles

for the battery storage facilities are a direct reflection of the solar generation that operates as the primary energy source for the battery storage facilities . . . . Accordingly, we find it appropriate to base Franklin’s and Black Mesa’s eligibility under PURPA on its primary energy source – solar.

Order No. 33785 at 11-12.

In *Franklin Energy Storage One, LLC, et al. v. Kjellander, et al.*, 2020 WL 265278 [hereinafter *Franklin Energy*], the United States District Court for the District of Idaho held that the Commission could not determine energy storage QF rights within Idaho’s implementation of PURPA based on the resource that charged the energy storage QF. The district court held, “By ‘looking behind’ Plaintiffs’ QF status to examine the proposed input power generation profile of the facilities, the Commissioners violated PURPA by questioning Plaintiffs’ qualifications for eligibility under PURPA, and by then deciding, for all substantive purposes, that each is a solar QF rather than an energy storage QF entitled to treatment as an ‘other QF.’” *Franklin Energy* at \*14. The district court went on to find, "Classifying such facilities as 'solar QFs' is outside the Commissioners' authority as state regulators and therefore in violation of federal law." *Id.* at \*18. While finding that the Commission could not treat these energy storage QFs as solar QFs, the Court specifically declined "to order [the Commission] to require utilities under their jurisdiction to afford energy storage QFs all rights and privileges afforded to 'other QFs' under the IPUC's PURPA implementation plan." *Id.*

### **THE PETITION**

Idaho Power stated that, as of the time it filed its petition, it had received seven applications from energy storage QFs:

- Franklin Energy Storage One, LLC submitted an application for a 32 MW energy storage QF;
- Franklin Energy Storage Two, LLC submitted an application for a 32 MW energy storage QF;
- Franklin Energy Storage Three, LLC submitted an application for a 32 MW energy storage QF;
- Franklin Energy Storage Four, LLC submitted an application for a 32 MW energy storage QF;

- Black Mesa Energy, LLC submitted an application for a 20 MW energy storage QF, which was later submitted as Black Mesa Energy 1, a 20 MW energy storage QF, and Black Mesa Energy 2, another 20 MW energy storage QF.

Idaho Power stated that the four Franklin Energy Storage facilities are located immediately adjacent to each other and Black Mesa 1 and Black Mesa 2 are located next to each other. Idaho Power asserted these projects are segmented into 10 aMW QFs for the sole purpose of receiving 20-year published rate contracts. *Id.* at 10.<sup>1</sup>

Idaho Power maintained that during the period from April 2019 to the time it filed its Petition in January 2020, it received requests from multiple developers proposing 615 MW of wind, 574 MW of solar, and 150 MW of battery storage. Petition at 6. Idaho Power claimed there are currently just under 6,000 MW of wind, solar, and battery storage requests to interconnect to its system in Idaho in its generator interconnection queue. *Id.*

Idaho Power argued that the potential output profiles from energy storage QFs vary greatly and that it is only through “the project-specific avoided cost determinations of the [IRP Method] and the negotiated rate and contract process required of proposed QFs that exceed the published rate eligibility cap where it may be possible to determine the value of proposed energy storage QFs in a manner that protects utility customers.” *Id.* at 10. Idaho Power contended that there are multiple potential technologies, configurations, and ways to operate an energy storage QF, which will impact its output profile. Idaho Power stated that to date, all proposed battery storage QFs have submitted a generation profile substantially the same as a solar generator and would therefore not provide any of the potential benefits of an energy storage facility.

The potential benefits and possible promise of economically viable, utility-scale energy storage facilities is in the unique operational characteristics to, for example: provide ancillary grid services such as reserve capacity, surge capacity, load-balancing, or voltage support; firming of variable generation; or time-shifting generation to match load. However, to realize these benefits, it would first of all be necessary for the project to be configured and operated in such a manner, and secondly it would be necessary for operational control and dispatchability of the facility to be with the utility charged with serving load. When operated as proposed by the Proposed Battery Storage Facilities, it appears to be structured in a way that passes

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<sup>1</sup> A project can have a 32 MW nameplate capacity and still qualify as a resource of 10 aMW or less by limiting its output to no more than 10 MW per hour on average per month.

through as many kW hours as possible in order to maximize revenue under the must-purchase provision of PURPA.

*Id.* at 9.

Idaho Power asked the Commission to determine that energy storage QFs with up to a 100 kW nameplate capacity are entitled to and eligible for published avoided cost rates and a 20-year maximum contract term, and that energy storage QFs over 100 kW are entitled to and eligible for negotiated avoided cost rates determined by the IRP Method and a maximum contract term of two years. *Id.* at 11. Idaho Power encouraged the Commission to adopt a 100 kW published rate eligibility cap for energy storage QFs for two primary reasons:

(1) the IRP methodology based upon the QFs specific hourly generation profile is the only way to protect customers by properly considering the output, which can vary greatly, from the energy storage QF; and (2) the 100 kW published rate cap is the only effective measure to combat the potential disaggregation of energy storage QFs into 10 aMW increments in order to seek published rates over IRP based rates.

*Id.* at 8. Idaho Power noted that energy storage QFs, and particularly battery storage facilities, share the modular and easily disaggregated nature of wind and solar generation resources.

## COMMENTS

### **a. Commission Staff Comments.**

Staff recommended the Commission establish a separate category for battery storage QFs<sup>2</sup> because battery storage QFs have output characteristics reasonably distinct from wind or solar QFs and reasonably distinct from QFs in the “other” category. Staff Revised Comments at 6. Staff noted that battery storage QFs have more limited dispatch durations than baseload resources, are capable of providing ancillary services that other QFs can not provide, have a steeper degradation factor that is more dependent on the manner the QF is used, and are less intermittent than wind and solar QFs. *Id.* Staff recommended the Commission set a 100 kW project eligibility cap for battery storage QFs and give battery storage QFs above the project eligibility cap 10-year contracts. *Id.* at 26.

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<sup>2</sup> Staff recommended this docket focus on the more specific category of battery storage QFs rather than the more general term of energy storage QFs because there is a very broad diversity of characteristics of different energy storage technologies and QF applications received by the Company to date for energy storage projects have all proposed using batteries.

Staff analyzed the relative merits of the IRP Method and the SAR Method and determined that IRP Method rates are a more accurate reflection of the Company's marginal costs than SAR Method rates. Staff stated, "The IRP Method is overall more accurate because it is more sophisticated, includes more variables that affect avoided cost, makes more reasonable assumptions, and is updated more frequently than the current [SAR] Method." *Id.* at 7. Staff explained that the IRP Method "uses a production cost model (AURORAxmp) that simulates the Company's operation of its entire system, capturing the displaceable incremental cost resource at the top of the Company's resource stack for every hour of operation throughout the term of a contract." *Id.* at 8. Conversely, the SAR Method assumes that the marginal resource is always a combined cycle combustion turbine ("CCCT"). Staff determined through a production request that Langley Gulch, the only CCCT on the Company's system, is a marginal resource on the Company's system 9.3% of the time. *Id.* at 8.

Staff analyzed the accuracy of the avoided energy rates using a representative generation profile input for the IRP Method and assuming a 10 MW nameplate capacity project calculated over 20 years. This analysis indicates that IRP Method avoided energy rates are 22% lower for solar QFs and 16.1% lower for "other" QFs than rates calculated using the SAR Method. *Id.* at 10. Because a battery storage QF has the unique ability to vary its output, Staff stated a QF developer would have the opportunity to tailor its generation profile to capture additional value by exporting energy to the grid more during high load hours, and might therefore be able to receive higher IRP Method rates than those analyzed. *See id.* Staff noted that further granularity in the IRP Method would further incentivize the time-shifting capabilities of battery storage QFs. "By fine-tuning the existing IRP Method of calculating avoided cost rates to more closely reflect the Company's system needs, the Commission can align economic incentives for QFs with the Company's needs, thereby ensuring that QFs are fairly compensated and ratepayers are indifferent." *See id.* at 7.

Staff also compared the IRP Method and the SAR Method for determining avoided capacity rates. Staff believes the simple cycle combustion turbine ("SCCT") used by the IRP Method is a better surrogate resource for a capacity value than the CCCT used by the SAR Method because the SCCT is more of a capacity resource whereas the CCCT is more of a baseload resource. *Id.* at 11-12. Similar to the avoided cost of energy, Staff reported that the avoided cost of capacity is updated more frequently under the IRP Method than under the SAR Method. *Id.* at

12. While Staff believes the IRP Method for determining avoided capacity rates is superior to the SAR Method for determining avoided capacity rates, Staff believes there is room for improvement in determining the avoided capacity rate under either method.

Like the avoided cost of energy, the IRP Method of determining avoided capacity rates uses the forecasted generation profile submitted by the QF developer to determine the QF-specific contribution to capacity and corresponding rates. To calculate avoided capacity rates, the Company determines how much energy the QF forecasts it will deliver from 3 to 7 pm during the month of July. *Id.* at 13. The avoided costs are based on a SCCT and capacity payments begin once the utility passes the first capacity deficit date established when the QF obtains a legally enforceable obligation, but the capacity payments are spread across each hour of QF production. *See id.* at 13.

To ensure that the avoided capacity method reflects the capacity costs avoided, Staff proposed to use a method developed by Duke Energy (“Duke Energy Method”). The Duke Energy Method also uses a SCCT as a surrogate for determining costs, but only pays the QF avoided capacity rates for production during hours identified as the Company’s peak hours. *Id.* at 14. Staff recommended the Commission approve this method for both IRP Method avoided capacity rates and SAR Method avoided capacity rates and order the Company to make a compliance filing within 30 days implementing the new method. *Id.*

In addition to comparing the relative merits of the IRP Method and the SAR Method, Staff looked at the ability of energy storage QFs to disaggregate, impacts of previous eligibility cap decreases, and impacts to customers and QF developers. *Id.* at 17-18. Staff determined that Lithium-Ion batteries are predominant in the industry, and that the inverter provides the relevant measure of a single module, which range from about 70 kW to 4 MW. *Id.* at 20. Because battery storage QFs are modular down to 70 kW, Staff determined that battery storage QFs could be easily disaggregated. *Id.* Staff reported that it did not see a significant change in QF development following the establishment of a 100 kW project eligibility cap in Order No. 32262. *Id.* at 21. Nor did Staff find huge discrepancies in the contracting procedures found in Schedule 73 for QFs above and below the project eligibility cap. *Id.* When examining potential impacts on QFs and ratepayers, Staff noted that this Commission has historically focused on accurate rates and not ensuring that QFs are financeable. *Id.* at 22.

Staff recommended the Commission set a ten to fifteen-year contract term for battery storage QFs that are above the project eligibility cap, with a specific recommendation of ten years. *Id.* at 23. Staff based its recommendation of the contract length on a quantitative payback analysis, the expected life of battery storage QFs, and the contract terms in surrounding states. Responses to public input regarding the useful life of batteries ranged from 10 – 25 years and acknowledged that the expected life depends on the frequency of battery cycling. Staff reported that contract lengths in surrounding states range from 10 to 20 years. *Id.* at 25.

**b. Idaho Power Comments.**

In its comments Idaho Power reiterated the requests it made in its petition and added,

Additionally, the Commission should consider as an alternative request setting a 100 kW published rate eligibility cap for energy storage QFs on an interim basis and initiate a broader investigation docket into the overall revision of avoided cost rates and methodologies for the implementation of PURPA in the state of Idaho to include the potential adoption of FERC's recently updated federal rules on PURPA.

Idaho Power Follow-Up Comments at 2. Idaho Power stated that no information received in response to Staff's request for public input refutes the fact that energy storage QFs are easily disaggregated, which affirms the Company's experience with energy storage QFs to date. *Id.* at 2-3.

The Company stated it is premature for the Commission to adopt a contract term longer than two years for QFs that exceed the project eligibility cap. The Company noted that FERC's recent rule revisions allow state commissions to adjust the energy rate throughout the term of the contract, which addresses a major concern expressed by this Commission over the years; that long contract terms at fixed rates lead to payments above avoided costs. Idaho Power stated in its Follow-up Comments,

It may be appropriate to authorize contracts for a term longer than two years – *but only if* – there is an accompanying provision or mechanism that allows for the periodic update of avoided cost rates during the term of the contract. This would be consistent with the authority granted by FERC's revised rules, as well as the IPUC's determination to protect customers from the long-term lock-in of avoided cost rates for the entire duration of the contract or legally enforceable obligation required of PURPA's mandatory purchase requirements.

Idaho Power Motion and Reply Comments at 5. Idaho Power argued that a follow-up docket should be opened and be “broadened to look at the possible revision, refinement, alteration, or abandonment of the existing avoided cost methodologies and establishment of a more refined and accurate avoided cost methodology applicable to all QFs that examines incorporation of the expressed expanded authority granted to state commissions by the recently directed FERC PURPA rule changes.” Idaho Power Follow-Up Comments at 7.

### **COMMISSION FINDINGS AND DECISION**

The Commission has jurisdiction over this matter under *Idaho Code* §§ 61-501, -502 and -503. The Commission is empowered to investigate rates, charges, rules, regulations, practices, and contracts of public utilities and to determine whether they are just, reasonable, preferential, discriminatory, or in violation of any provision of law, and to fix the same by order. *Idaho Code* §§ 61-502 and 61-503. In addition, the Commission has authority under PURPA and FERC regulations to set avoided costs, to order electric utilities to enter into fixed-term obligations for the purchase of energy from QFs, and to implement FERC rules. The Commission may enter any final order consistent with its authority under Title 61 and PURPA.

Having reviewed the record, we find it is fair, just, reasonable, non-discriminatory, in the public interest, and consistent with both the District Court’s ruling and PURPA to establish a separate category for energy storage QFs, establish a 100 kW project eligibility cap for energy storage QFs, and to allow QFs above the project eligibility cap to receive two-year contracts at avoided cost rates calculated by the IRP Method for avoided energy rates and an Idaho-specific version of the Duke Energy Method for calculating capacity. Energy storage QFs below 100 kW will be eligible for 20-year contracts calculated using the SAR Method. Avoided capacity rates will be paid for production during hours identified as the Company’s peak hours rather than the capacity payments averaged over all hours.

#### **a. The Commission Establishes A Separate Category for Energy Storage QFs.**

We find it is reasonable to establish an energy storage QF category. There are a diversity of technologies, configurations, and operational guidelines that will cause the output generation profiles of energy storage QFs to vary greatly even within their own category, further justifying the distinction. Energy storage QFs have the ability to provide less intermittent, less variable, and more predictable energy than wind and solar QFs, but the output duration from energy storage QFs is more limited than the baseload-type resources that make up the “other”

category. As energy storage technologies evolve and additional projects are developed, further distinction between energy storage technologies may be warranted.

**b. The Commission Establishes a 100-kW Nameplate Capacity Project Eligibility Cap for Energy Storage QFs.**

Our decision to establish a 100 kW project eligibility cap is fair and reasonable because of 1) the ability of large energy storage QFs to disaggregate into smaller energy storage QFs in order to take advantage of preferable rates and terms to the detriment of ratepayers; and 2) the IRP Method's superiority to the SAR Method in calculating reasonable avoided cost rates and recognizing project-specific attributes. As we have consistently held, "[I]t would be erroneous, and illegal pursuant to PURPA, for this Commission to allow large projects to obtain a rate that is not an accurate reflection of the utility's avoided cost for the purchase of the QF generation." Order No. 32262 at 8 (citing *Rosebud Enterprises, Inc. v. Idaho Public Utilities Comm'n*, 128 Idaho 609, 623, 917 P.2d 766, 780).

***i. The Ability of the Resource to Unlawfully Disaggregate Is a Reasonable Consideration in Determining the Project Eligibility Cap.***

In GNR-E-11-03, we determined it was fair, just, and reasonable to continue to implement the 100 kW project eligibility cap for wind and solar QFs first established on an interim basis in GNR-E-10-04. We did so fundamentally on the basis that lowering the project eligibility cap was the most effective tool to prevent the disaggregation of large projects into smaller projects to qualify for better rates and contract terms in violation of our responsibility to ensure ratepayer indifference.

[T]o prevent large projects from disaggregating in order to not only become eligible under PURPA but also obtain published avoided rates, and based on the unique characteristics of wind and solar resources to disaggregate, we find that the eligibility cap for published avoided cost rate contracts for wind and solar projects shall be set at 100 kW or less. Congress intended to allow PURPA cogeneration and small renewable projects to produce and sell power without the burden of being regulated as an electric utility. Congress did not intend for multi-national corporations to fund large wind farms for the benefit of their shareholders and the detriment of the utilities' ratepayers. 18 C.F.R § 292.304(a). Indeed, PURPA transactions are intended to hold ratepayers harmless. This finding is just and reasonable and consistent with PURPA and FERC regulations.

Order No. 32697 at 13. The record shows that energy storage QFs are modular and easily disaggregated. *See e.g.*, Staff Comments at 20, Renewable Northwest Comments at 3, Idaho Power Follow-Up Comments at 2-3. Based on credible evidence and well-reasoned analysis, we find that setting the energy storage project eligibility cap at 100 kW is just and in the public interest.

The Idaho Supreme Court has upheld this Commission's decision to determine the project eligibility cap for solar and wind QFs based on the ability of those resources to disaggregate. "IPUC's decision to lower the eligibility cap for wind and solar projects was based upon its concern that large wind and solar projects that did not qualify for the published rates could disaggregate in order to qualify for the published rates and thereby obtain rates that did not accurately reflect the utilities' actual avoided cost." *Idaho Power Co.*, 155 Idaho at 788. The Idaho Supreme Court went on to further endorse the Commission's decision by declaring that "allowing [QFs] to sell power at the published rates would result in Idaho Power being required to purchase their power at more than its actual avoided costs. Requiring Idaho Power to do so would require it to purchase power at rates that are not just and reasonable to its electric consumers and would be contrary to the public interest." *Id.* Preventing energy storage QFs from disaggregating large projects into smaller projects ensures ratepayer neutrality and implements PURPA lawfully.

***ii. The IRP Method Better Recognizes the Individual Characteristics of the QFs.***

The record establishes that the IRP Method is an accurate method to calculate avoided cost rates and more analytically sound based on the unique characteristics of energy storage facilities. *See e.g.*, Idaho Power Follow-Up Comments at 4, Staff Revised Comments at 7. The IRP model uses the actual costs of the forecasted marginal displaceable resource on the Company's system for each hour in a year. The inputs to the IRP model, including load growth forecasts and natural gas price forecasts, are publicly vetted through the Company's Integrated Resource Planning process, and the inputs are updated regularly.

The IRP Method is better suited to account for the negotiation involved in reaching a contract for QFs above the project eligibility cap. It allows the QF and the utility the opportunity to establish project-specific terms and conditions that will reflect the QF's unique characteristics more accurately than a standard contract. We anticipate there will be a wide range of generation output profiles for energy storage QFs given the multitude of resource and storage technologies that can be combined to make an energy storage QF. There will likely also be a wide range of

ancillary services that different energy storage QFs will be capable of providing, depending again on the resource and storage technologies utilized. The IRP Method and contract negotiations will allow more accurate valuation of the energy and services provided by the QF than the SAR Method.

c. **The Commission Establishes a Two-Year Contract Term for Energy Storage QFs Above the Project Eligibility Cap.**

Over the course of four decades of PURPA implementation and counting, this Commission has considered numerous factors and set PURPA contract lengths of varying durations ranging from 35 years when PURPA was first implemented to two-years for wind and solar QFs in IPC-E-15-01. *See* Order No. 33357 at 11. In IPC-E-15-01, we found that setting contract terms at two years “aligns with the intent of PURPA, is consistent with FERC regulations and achieves an appropriate balance between the competing interests of protecting ratepayers and developing QF generation.” Order No. 33357 at 25. We find similarly here that a two-year contract term for energy storage QFs balances the interests of ratepayers and QF developers by providing accurate and up-to-date pricing for the energy provided by QFs. Two-year contract terms greatly reduce the likelihood and potential magnitude of forecasting error, ensuring the avoided cost rates paid to the QF are a reasonable reflection of the costs the QF is allowing the utility to avoid.

Many of the principles that led the Commission to establish a two-year contract term for wind and solar QFs in IPC-E-15-01 equally apply to energy storage QFs. We based our decision there on a finding that “20-year contracts exacerbate overestimations to a point that avoided cost rates over the long-term period are unreasonable and inconsistent with federal and state law for multiple reasons.” Order No. 33357 at 23. We identified potential benefit for ratepayers and QFs through more frequent adjustment of the contract prices. “By adjusting avoided cost rates more frequently, avoided costs become a truer reflection of the actual costs avoided by the utility and allow QFs and ratepayers to benefit from normal fluctuations in the market.” *Id.* (emphasis in original). We also noted that PURPA’s must-purchase obligation requires the utility to continue purchasing energy from the QF beyond the two-year contract term. *Id.* All of these principles apply to energy storage QFs and lead us to the same conclusion: a shorter contract length appropriately balances the interests between QFs and ratepayers by ensuring that the avoided cost rates are a reasonable reflection of the utility’s avoided costs over

the long term. Certainty for QFs comes from the must-purchase obligation and the fact that the avoided cost rates will be set at the Company's marginal cost of energy. *Id.* at 23.

We will continue to establish reasonable contract terms and rates that are both consistent with the Act and balance the public interest in Idaho. PURPA does not require the Commission to set terms and rates assuring specific profits or payback periods for the QF. When the avoided costs are properly set, the QF will be legally compensated for avoided energy and capacity as is required by the law. It is inconsistent with our legal obligations to establish contract terms or rates based on QF payback calculations. Comparison of QF standards and contract terms in other states can be considered for illustrative purposes, but such standards are not binding on this Commission.

To properly compensate QF projects for capacity during the hours when capacity costs can be avoided, the avoided cost of capacity should be paid only on production during the hours identified as the Company's peak hours. The Duke Energy Method is one method that will accomplish this objective. It will provide greater compensation to QF projects during the hours when generation is needed to actually avoid capacity costs and will replace the averaging of capacity payments over all hours. We direct the Company to make a compliance filing within 30 days implementing this new method. An energy storage QF will continue to lock-in the first capacity deficit date when it establishes a legally enforceable obligation or signs a contract with the utility. As long as the QF renews its contract and continuously sells power to the utility, the QF is entitled to capacity based on the capacity deficiency date established at the time of its initial contract. Order No. 33357 at 25-26. The approach taken by this Commission is also consistent with the approach taken by FERC in Order 872. Setting shorter term contracts allows the energy component of avoided cost rates to be updated periodically, ensuring a more accurate calculation of avoided cost rates. Establishing a capacity deficit date at the outset of the contract provides the QF with some certainty regarding its revenue stream.

**ORDER**

IT IS HEREBY ORDERED that a separate energy storage QF category is established.

IT IS FURTHER ORDERED that the project eligibility cap for energy storage QFs is set at 100 kW. Energy storage QFs above the project eligibility cap are entitled to IRP Method pricing and 2-year contract terms. Energy storage QFs below the project eligibility cap are entitled to SAR Method pricing and 20-year contract terms.

IT IS FURTHER ORDERED that the Company file, within 30 days, an updated avoided capacity methodology as more specifically described herein.

THIS IS A FINAL ORDER. Any person interested in this Order may petition for reconsideration within twenty-one (21) days of the service date of this Order with regard to any matter decided in this Order. Within seven (7) days after any person has petitioned for reconsideration, any other person may cross-petition for reconsideration. *See Idaho Code* § 61-626.

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 2<sup>nd</sup> day of October 2020.

  
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PAUL KJELLANDER, PRESIDENT

  
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KRISTINE RAPER, COMMISSIONER

  
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ERIC ANDERSON, COMMISSIONER

ATTEST:

  
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Jan Noriyuki  
Commission Secretary

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