

## BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION	)	
OF IDAHO POWER COMPANY FOR	)	CASE NO. IPC-E-14-20
APPROVAL OR REJECTION OF AN	)	
ENERGY SALES AGREEMENT WITH	)	
BOISE CITY SOLAR, LLC, FOR THE	)	
SALE AND PURCHASE OF ELECTRIC	)	ORDER NO. 33180
ENERGY.	)	
	)	

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On July 25, 2014, Idaho Power filed an Application with the Commission for approval or rejection of an energy sales agreement with Boise City Solar, LLC, for the sale and purchase of electric energy. The Commission issued a Notice of Application on August 20, 2014. A Notice of Modified Procedure was issued on September 5, 2014, setting a comment deadline of October 31, 2014, and a reply deadline of November 7, 2014. Order No. 33118.

More than 120 public comments were received, including comments filed by the Sierra Club, Idaho Conservation League, Snake River Alliance, and other community leaders. Commission Staff filed comments and Idaho Power filed a reply.

By this Order, we approve the *modified* Agreement between Idaho Power Company and Boise City Solar as submitted by Idaho Power in its reply, and as more fully set out in the body of this Order.

### THE APPLICATION

Idaho Power requests that the Commission accept or reject the Energy Sales Agreement between Idaho Power and Boise City Solar, LLC, under which Boise City Solar would sell and Idaho Power would purchase electric energy generated by the project's 40 megawatt (MW) solar photovoltaic project located in Ada County on South Cloverdale Road between Boise and Kuna, Idaho. The Agreement between the parties was executed on July 17, 2014.

The Agreement is for a term of 20 years. Idaho Power states that the Agreement was executed in compliance with the Commission's Orders directing the implementation of PURPA for the State of Idaho and contains negotiated avoided cost rates based upon the incremental cost, integrated resource plan pricing methodology available to solar projects whose generation will exceed 100 kilowatts (kW). Idaho Power explains that the Agreement also contains negotiated

solar integration charges as directed by the Commission in Order No. 33043, as well as several other negotiated provisions requiring specific Commission approval.

The proposed project is expected to use mono crystalline solar modules with Tier 1 inverters and utilize a dual axis tracking system. The facility has a nameplate rating of 39.989 MW AC. Boise City Solar selected January 16, 2016, as its Scheduled Operation Date. Various requirements have been placed upon Boise City Solar in order for Idaho Power to accept energy deliveries from the project. Idaho Power states that it will continue to monitor compliance with these requirements throughout the term of the Agreement.

Idaho Power explains that this Agreement is the first of its type (along with Grand View Solar) submitted for approval that contains negotiated avoided cost rates based upon the incremental cost, integrated resource plan pricing methodology. Prices were determined on an incremental basis with the inclusion of this project in its queued position of proposed projects on Idaho Power's system. Over the 20-year term of the Agreement, monthly rates vary from approximately \$44/megawatt hour (MWh) for light load hours in early months of the Agreement to as high as \$113/MWh for heavy load hours in the later years of the Agreement. The equivalent 20-year levelized avoided cost rate would amount to approximately \$72.15/MWh.

The Agreement also contains a solar integration charge that was negotiated and agreed to by the parties. Although the integration charge is based on Idaho Power's solar integration study, the study was not yet complete during contract negotiations. However, the most currently available data and analysis from the study was used by the parties in the course of negotiations. The negotiated solar integration charge starts at \$1.34/MWh for the first year of the Agreement (2015) and escalates to \$3.11/MWh in 2036. The equivalent 20-year levelized solar integration charge would amount to approximately \$2.01/MWh. Idaho Power states that the 20-year estimated contractual obligation based upon estimated generation levels, including avoided cost rates and solar integration charges, is approximately \$161,461,924.

The Agreement contains provisions for a 90/110 firmness requirement, as well as a solar integration charge, and a pricing adjustment. Idaho Power affirms that it prefers that 90/110 firmness be included in all PURPA QF agreements and the Company does not consider solar integration charges to be a replacement for the 90/110 requirements. Idaho Power states that 90/110 firmness requirements and solar integration charges address different concerns: 90/110 addresses the Commission definition of firmness for entitlement to an avoided cost rate

determined at the time of contracting for the duration of the contract whereas solar integration charges address the increased system operation costs incurred because of the variable and intermittent nature of the generation. Based on negotiations and an agreed to price adjustment, the Company states that it is comfortable and confident that the Agreement contains provisions to reasonably assure that the project performs in conformance with its generation estimates and, if not, the project receives a reduced price for the non-conforming month's generation. The Agreement allows for a 2% deviation in the monthly Adjusted Estimated Net Energy Amount (as estimated for the 90/110 provisions) from the generation profile estimates without assessing a price adjustment. If the project's actual generation deviates downward by more than 2% of its generation estimates, then a corresponding percentage adjustment to the monthly price is imposed. However, the adjustment is limited to a maximum price reduction of 10%. Idaho Power states that consistent and material deviations from the hourly energy estimates in the generation profile will be considered by Idaho Power to be a material breach of the Agreement.

Idaho Power states that the parties negotiated a deviation from the requirement of only allowing for quarterly adjustments to the Estimated Net Energy Amounts relevant to the 90/110 provisions. The Agreement provides for the ability to change Estimated Net Energy Amounts on a monthly basis. New provisions providing for actual delay damages as opposed to liquidated damages are also included in the Agreement, consistent with Order No. 32697. The Application further states that the parties negotiated a 50/50 split of environment attributes (aka renewable energy credits).

As with all PURPA QF generation, the project must be designated as a network resource (DNR) to serve Idaho Power's retail load on its system. Consequently, the Agreement contains provisions requiring completion of a Generator Interconnection Agreement (GIA), compliance with GIA requirements, and designation as an Idaho Power network resource as conditions of Idaho Power accepting delivery of energy and paying for the same under the Agreement. In order for the project to maintain its DNR status, there must be a power purchase agreement associated with its transmission service request that maintains compliance with Idaho Power's non-discriminatory administration of its Open Access Transmission Tariff (OATT) and maintains compliance with FERC requirements.

Article 21 of the Agreement provides that the Agreement will not become effective until the Commission has approved all of the Agreement's terms and conditions and declared

that all payments Idaho Power makes to Boise City Solar for purchases of energy will be allowed as prudently incurred expenses for ratemaking purposes.

### **COMMENTS**

More than 120 public comments were filed with the Commission regarding this Application, including comments filed by the Idaho Conservation League, Snake River Alliance, Sierra Club and Boise's Mayor Dave Bieter. A large number of comments were submitted by different individuals based on a form letter. Many others were original and thoughtful comments from citizens who are concerned about the environment and optimistic about the contribution that the Boise City Solar project will have on the local economy. We appreciate the public's participation in our process.

#### ***Staff Comments***

Staff acknowledged the potential benefits of a QF, but noted that the Commission's authority with regard to PURPA contracts, and therefore Staff's focus, is to ensure that the rates, terms and conditions contained in proposed power sales agreements are reasonable. The rates in the agreements must accurately reflect the utility's avoided costs, and the terms and conditions must fairly protect both the QFs and the utility and its ratepayers.

Staff explained that rates in the Agreement were determined using the incremental cost IRP methodology. The rates consist of three components: (1) the avoided cost of energy, (2) the avoided cost of capacity, and (3) the solar integration charge. The avoided cost of energy is based upon the incremental costs the utility would incur, but for the addition of the QF resource, to generate power itself or to purchase power from another source. The avoided cost of capacity reflects the cost of constructing or purchasing a generation resource capable of producing that energy. The solar integration charge is intended to account for the expense of integrating solar resources into the utility's distribution and transmission system.

After a detailed review of Idaho Power's application of the incremental cost IRP methodology, Staff identified several concepts used by Idaho Power that Staff believes make the final results deviate significantly from the true avoided cost of energy. First, as proposed, the incremental cost IRP methodology assumes that the resource of the highest displaceable incremental cost always has enough volume to be displaced. Idaho Power acknowledged that "[t]his simplification may introduce some error . . . [I]t will always be in favor of the QF since

Idaho Power begins with the highest incremental cost resource that is displaceable to set the avoided cost for any hour.” *See* Case No. GNR-E-11-03, Bokenkamp, Di. pp. 26.

Staff explained that this simplification introduces significant error that becomes greater as the project size increases. Staff proposed that the Company modify its calculation/methodology by assigning QF capacity to different resources in the order of incremental cost values (i.e., from the highest displaceable to the second highest displaceable to the third highest displaceable) until all the QF capacity is distributed. The final price is the weighted average of a set of incremental costs with different displacements. Staff reasoned that its proposed method takes into account the capacities of the actual resources that the QF generation displaces.

The second issue identified by Staff involves the fuel price used within the incremental cost IRP methodology. Idaho Power’s proposed methodology assigns one fuel price to each year, assuming the fuel price stays the same over the entire year. Staff explained that, while coal prices may not fluctuate within the year, fuel prices for gas-fired plants vary significantly from month to month. When the IRP methodology applies a fixed annual natural gas price without considering the monthly variations, solar QFs are underpaid in the winter and overpaid in the summer. Staff stated that, because solar QFs produce more energy in the summer when natural gas prices are lower, the overall effect is overpayment to solar QFs. Consequently, Staff asserted that it is inappropriate and not an accurate reflection of the Company’s avoided cost to use the annual average natural gas price in calculating the avoided cost of energy.

Staff believed that the negotiated solar integration charges utilized within the Agreement are reasonable. Staff further confirmed that new provisions providing for actual delay damages as opposed to liquidated damages are included in the Agreement and are consistent with Commission Orders. *See* Order No. 32697. Staff believed that the additional contract provisions, including but not limited to, a mechanical availability guarantee, price adjustments, forecasting fees, and ownership of renewable energy credits are reasonable and comply with prior Commission orders.

### ***Idaho Power Reply***

Based on Staff’s recommendations, Idaho Power re-ran its model for pricing Boise City Solar’s generation. Although the Company was able to incorporate Staff’s concepts into its avoided cost price model, the results differed slightly. Idaho Power submitted its revised prices

with reply comments as Replacement Appendix E. Boise City Solar agreed to the revised pricing.

## **FINDINGS AND CONCLUSIONS**

The Idaho Public Utilities Commission has jurisdiction over Idaho Power, an electric utility, and the issues raised in this matter pursuant to the authority and power granted it under Title 61 of the Idaho Code and the Public Utility Regulatory Policies Act of 1978 (PURPA). The Commission has authority under PURPA and the implementing regulations of the Federal Energy Regulatory Commission (FERC) to set avoided costs, to order electric utilities to enter into fixed-term obligations for the purchase of energy from qualified facilities (QFs) and to implement FERC rules. The Commission is also empowered to resolve complaints between QFs and utilities and approve QF contracts.

PURPA requires that utilities purchase generation produced by QFs under a federal rate mechanism (i.e., avoided cost) that is established and implemented by state utility commissions. 18 C.F.R. § 292.304(b)(2); Order No. 32697 at 7. “Avoided costs” are the incremental costs to the electric utility of power which, but for the purchase from the QF, such utility would generate itself or purchase from another source. 18 C.F.R. § 292.101(b)(6). PURPA and FERC regulations direct not only that rates for purchases not discriminate against QFs, but also that avoided cost rates be just and reasonable to the utility’s ratepayers and in the public interest. 18 C.F.R. § 292.304(a)(1). The rates at which Idaho electric utilities purchase QF power must be approved by this Commission. *Idaho Power Co. v. Idaho Public Utilities Commission*, 155 Idaho 780, 789, 316 P.3d 1278, 1287 (2013).

PURPA and FERC regulations mandate that QF projects be compensated according to their ability to provide a utility with needed energy and capacity at a rate that reflects the costs that the utility avoids by purchasing QF generation. As we have stated on numerous occasions, the purpose of utilizing the IRP methodology for large QF projects is to more precisely value the energy being delivered to the utility. The IRP methodology must be implemented in a way that recognizes the individual generation characteristics of each project by assessing when the QF is capable of delivering its resources against when the utility is most in need of such resources.

We recently undertook a detailed review of the implementation of PURPA in Idaho. *See generally* GNR-E-11-03. Specifically with regard to the IRP methodology, we noted that “[t]he IRP Methodology had its inception in 1995 (Case No. IPC-E-95-9) but has seldom been

utilized – even by large QF projects. . . . Therefore, the IRP Methodology has not had the benefit of adjustments over time to ensure that the calculation produces an accurate representation of the utility’s avoided cost.” Order No. 32697 at 17. We intend that the IRP methodology be a flexible tool, taking into account many different variables, and producing a result that accurately values a QF’s capability to deliver resources in relation to the timing and magnitude of the utility’s need for such resources.

We find that the IRP methodology must reflect the incremental cost associated with each project’s unique ability to delivery generation to the utility. We further find that consideration of each displaceable resource based on the capacity of the QF is fair and reasonable. We also find it reasonable to account for monthly variations in natural gas prices – as opposed to use of an annual average. We appreciate Staff’s diligent and detailed review of the variables to be used within a methodology that, thus far, has been under-utilized and, therefore, untested. We find that, based on the proposed and accepted modifications, the resultant pricing is more reflective of the true value of QF energy being delivered to the utility. By utilizing the modified variables within the IRP methodology, we find that the community’s environmental and economic interests can be met without Idaho Power’s ratepayers being harmed.

Therefore, we find that the proposed, modified Agreement, including Replacement Appendix E regarding rates calculated by Idaho Power using Staff’s concepts, is just, reasonable and in the public interest. We approve the modified Agreement between Idaho Power and Boise City Solar, LLC, without material change or condition. We find it reasonable to allow payments made under the Agreement as prudently incurred expenses for ratemaking purposes.

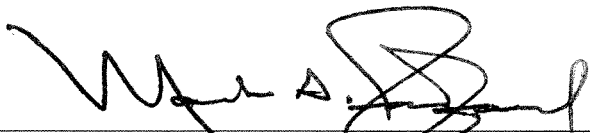
## **ORDER**

IT IS HEREBY ORDERED that the modified Agreement between Idaho Power and Boise City Solar is approved, without change or condition.

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. 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 14<sup>th</sup>  
day of November 2014.

  
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PAUL KJELLANDER, PRESIDENT

  
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MACK A. REDFORD, COMMISSIONER

  
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MARSHA H. SMITH, COMMISSIONER

ATTEST:

  
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Jean D. Jewell  
Commission Secretary

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