

DECISION MEMORANDUM

TO: COMMISSIONER KJELLANDER
COMMISSIONER RAPER
COMMISSIONER ANDERSON
COMMISSION SECRETARY
COMMISSION STAFF
LEGAL

FROM: EDWARD JEWELL
DEPUTY ATTORNEY GENERAL

DATE: MARCH 26, 2021

SUBJECT: 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; CASE NO. IPC-E-20-02.

On January 21, 2020, Idaho Power Company ("Idaho Power" or "Company") filed a petition with the Idaho Public Utilities Commission requesting the Commission determine the appropriate project eligibility cap and contract term for energy storage qualifying facilities ("QF" or "QFs") under the Public Utility Regulatory Policies Act of 1978 ("PURPA"). Petition at 11.

On October 2, 2020, the Commission issued a final order. Order No. 34794. On October 30, 2020, the Company made a compliance filing pursuant to Order No. 34794.

On November 24, 2020, the Commission issued a Notice of Compliance Filing. Order No. 34844. Commission Staff filed comments and the Company filed reply comments.

On February 5, 2021, the Commission issued an Order approving the compliance filing. Order No. 34913.

On March 11, 2021, the Commission's attorney sent a letter to Idaho Power asking the Company to verify that Commission Staff had correctly updated the surrogate avoided resource method ("SAR Method") model and calculated the published avoided cost rates for energy storage QFs correctly.

On March 26, 2021, the Company responded that the model had been updated correctly pursuant to Commission directives in Order Nos. 34794 and 34913 and the calculations were correct.

BACKGROUND

The Commission established a new energy storage QF category in Order No. 34794 and determined that energy storage QFs below 100 kW are eligible for published avoided cost rates. In the Order approving Idaho Power's compliance filing, with modification, the Commission stated, "Staff will calculate and publish the SAR Method rates for energy storage QFs as they do for all other resource types." Order No. 34913 at 7. Each year, the Commission updates the SAR Method to account for new natural gas forecasts. *See* Order No. 32697. This update occurs on June 1, or within 30 days of the final release of the U.S. Energy Information Administration's Annual Energy Outlook, whichever is later. Order No. 32802. The Commission has consistently stated that the update is "a relatively simple arithmetic re-calculation." *E.g.* Order No. 33538. Staff believed that waiting until June 1 would be too long of a lag to post the SAR Method energy storage avoided cost rates. So, similar to how Staff has historically updated the SAR Method, Staff sent Idaho Power a letter requesting Idaho Power verify that the method approved by the Commission to calculate energy storage QF published avoided cost rates was applied and calculated correctly. Idaho Power replied that the calculations were correct.

SAR METHOD AND IRP METHOD COMPARISON

While updating and verifying the SAR Method model, Staff compared the avoided cost of capacity ("Capacity Price") for the incremental cost Integrated Resource Plan method ("IRP Method") and SAR Method. In order to explain the different Capacity Prices for the IRP Method and the SAR Method, Staff provides the following analysis:

The total difference in the Capacity Price between the two methods using the example included in the Company's compliance filing is about \$0.19 per kilowatt-hour in 2029, which makes the SAR Method Capacity Price about 73% higher. The cause for differences between the two methods can be attributed to (1) the difference in the surrogates; and (2) the method the Company uses to determine the amount of QF generation during peak using the QF-supplied generation profile.

The surrogate used in the IRP Method is a Simple-Cycle Combustion Turbine while the SAR Method uses a Combined-Cycle Combustion Turbine as the surrogate. The higher cost of the CCCT causes the SAR Method Capacity Price to be about \$0.13 per kilowatt-hour higher, which is about 70% of the total difference.

The other cause for difference in the Capacity Price between the IRP Method and the SAR Method can be attributed to differences in the source of inputs for determining the amount of generation a QF will produce during Peak Hours. The generation amount during Peak Hours in the IRP Method is taken directly from an estimated QF-supplied generation profile. Because this amount, used as the denominator in the Capacity Price equation, is not likely to reflect the same Peak-Hour Capacity Factor Credit used to adjust the avoided cost of the surrogate in the numerator, the terms will not cancel out.¹ However, the SAR Method Capacity Price calculation does not utilize a generation profile and recognizes that the capacity factor at peak is not required in the Capacity Price calculation since they are equivalent in both the numerator and the denominator.

Using the example included in the Company's Compliance Filing, the difference in calculation methods and inputs cause an incremental difference in the Capacity Price between the two methods of about \$0.06 per kilowatt-hour, which is about 30% of the total difference. Depending on the specific QF and how close the Peak-Hour Capacity Factor Credit used to calculate the avoided cost in the numerator is to the peak-hour capacity factor reflected in the generation profile, the difference in the Capacity Price between the two methods could be more or less.

STAFF RECOMMENDATION

Historically, the Commission has issued an order approving the update to SAR Method rates upon confirmation that it was calculated correctly. Similarly, Staff recommends the Commission issue an order approving the SAR Method avoided cost rates included in the March 11, 2021 letter to Idaho Power. Staff recommends the Commission issue an order approving the published avoided cost rates for energy storage QFs, as calculated by Staff and verified by the Company, and post the rates to the Commission's website.

¹ In Idaho Power's compliance filing, a QF's Peak Hour Capacity Factor Credit is determined using the generation during 3:00 pm to 7:00 pm in July as stated in the QF-supplied generation profile with a benchmarking adjustment, while the QF generation amount during Peak Hours uses the timeframe of 1:00 pm to 10:00 pm in July and 3:00 pm to 8:00 pm in August from the same generation profile.

COMMISSION DECISION

Does the Commission wish to issue an order approving the published avoided cost rates for energy storage QFs, as calculated by Staff and verified by the Company, and post the rates to the Commission's website?



Edward J. Jewell
Deputy Attorney General

I:\Legal\ELECTRIC\IPC-E-20-02\IPCE2002_dec memo 4_ej