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Division of Public Utilities

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ACTION REQUEST RESPONSE

TO: Public Service Commission

FROM: Division of Public Utilities:
Chris Parker, Director,
Artie Powell, Energy Manager
Charles Peterson, Technical Consultant
Doug Wheelwright, Technical Consultant

DATE: October 24, 2013

RE: Purchase Power Agreement between PacifiCorp, dba Rocky Mountain Power, and Kennecott Utah Copper LLC, (Smelter) Docket No. 13-035-153.

RECOMMENDATION (Correct Pricing and Resubmit)

The Division of Public Utilities (Division) recommends that the Commission **not** approve the Non-Firm Purchase Power Agreement (Agreement) between PacifiCorp (Company) and Kennecott at this time. As discussed below, the Division believes that the Agreement pricing was incorrectly calculated and recommends that the Commission order the Company to resubmit the Agreement with corrected pricing.

In addition, the Division recommends that the Company continue to provide, at least quarterly, the hourly power purchased so that the Division can continue to monitor this contract.

ISSUE

Since there are multiple PPA contracts with Kennecott, this contract is informally referred to as the Kennecott-Smelter QF. On September 13, 2013, PacifiCorp filed an Application for Approval of a Power Purchase Agreement with Kennecott Utah Copper LLC (Kennecott). The

effective date of the agreement is January 1, 2014 and replaces a current contract that is scheduled to expire on December 31, 2014. On September 24, 2013, the Commission issued a Scheduling Order requiring comments from the Division of Public Utilities (Division) and any other interested parties by October 24, 2013. This memorandum is intended to serve as the Division's comments and recommendations in this matter.

ANALYSIS

General

Included with the application is a copy of the Non-Firm Purchase Power Agreement between PacifiCorp and Kennecott that is unsigned and undated, however the application indicates that the contract was signed September 11, 2013. Kennecott owns, operates and maintains a waste heat-fired steam cogeneration facility for the generation of electric power located at the Magna, Utah smelter.[1] The nameplate capacity rating of the plant is 31.8 megawatts (MW) with an expected average monthly output of approximately 18.5 MW. The Kennecott facility is operated as a qualifying facility (QF) as defined by 18 C.F.R Part 292[2] and Kennecott has previously provided its FERC self-certification to PacifiCorp. All interconnection requirements have been met and the Kennecott facility is fully integrated with the PacifiCorp system.

Under the terms of the QF contract Kennecott has the option, but not the obligation, to deliver the net output to PacifiCorp at the point of delivery. Kennecott is not permitted to sell any portion of the net output to parties other than PacifiCorp; however, it is allowed to offset their own retail load before selling any excess power. Kennecott estimates that the average net monthly output of the facility will be approximately 14,000 megawatt-hours (MWh) pursuant to the scheduled maintenance.[3]

The Division understands that like the existing contract, there is an expectation that Kennecott will not sell power to PacifiCorp under this proposed contract. For the first two quarters of 2013,

[1] PPA, page 1.
[2] Op. Cit. page 5, section 3.2.6
[3] Op. Cit. page 1

Kennecott did not sell power to PacifiCorp under the current contract. To date the Division has not received information on power sales, if any, in the third quarter of 2013. While the prices under this Agreement are higher than in the agreement negotiated in 2012, prices remain low relative to the current retail rates. For Kennecott it may be advantageous to offset its own load requirements before selling to PacifiCorp. It is anticipated that this condition will continue through 2014 resulting in limited energy deliveries from QF facilities.

<u>QF Pricing Issue</u>

The Company determined the avoided cost pricing through its dispatch model GRID. One of the inputs is the expected energy output of the QF facility. The Agreement states that the "expected average monthly output of about 18.5 MW…."[4] The Division understands this phrase to mean that, on average, the facility will generate 18.5 megawatts. The nameplate capacity of the facility is given as 31.8 MW.[5] The 18.5 MW is consistent with the average of the actual output that historically has been reported to the Division. However, in developing the pricing the Company input was an assumed generation output that averaged about 27 MW. The Company had no explanation other than it typically assumes an 85 percent capacity factor for this type of facility. The Division requested a new GRID run assuming the 18.5 MW output. This new GRID run shows that avoided costs would average $0.97 (97 cents) higher per MWh over the year than the costs based on the original GRID run.[6] The Division considers this to be a material difference. Given the lengthy operating history available for this facility, the Division believes there is no reasonable basis for assuming that the average output will be 27 MW as the Company did in its original GRID analysis. Therefore the Division recommends that the Commission order the Company to resubmit a new Agreement that corrects the pricing to reflect the expected 18.5 MW output.

[4] Agreement, page 1.
[5] Ibid.
[6] The price is higher because the GRID model will defer dispatch of the highest cost resources first. This means that deferral of generation for the first18.5 MW will be at a higher average cost, than the next 1 MW of generation deferred. Therefore averaging the cost of the first 18.5 MW with the next 8.5 MW (18.5 plus 8.5 equals the 27 MW used in the original calculations) will result in a lower overall average cost or price to Kennecott.

Daylight Savings Time

Exhibit E of the Agreement sets for a pricing structure in terms of high load hours (HLH) and low load hours (LLH), i.e. on-peak and off-peak hours, along with holidays that is intended to mimic Schedule 9. However, the Agreement omits the Schedule 9 language regarding daylight savings time. This creates the potential for an arbitrage opportunity for Kennecott during roughly the first two weeks in April and the first two weeks in November when the Agreement and Schedule 9 hours are not synchronized. Based in part on discussions with Company representatives and given that this Agreement is for a term of just one year, the Division does not believe at this time that this is a material problem. The Division does recommend that the Company ensure that this potential for arbitrage is eliminated in future agreements.

Avoided Line Losses

Under the terms of the Commission order in Docket No. 03-035-14, non-firm QF resources are not entitled to a capacity payment, therefore, this Agreement contains energy-only prices. The total purchase price is calculated as the contract price per MWh plus 3.97% as an adjustment for avoided line losses. This adjustment factor is based on a rate of 4.26% for real power losses as set forth in Schedule 10 of PacifiCorp's Open Access Transmission Tariff (OATT) approved in FERC Docket No. ER11-3643-000.

Other Comments

The proposed Agreement will remain in place for a term of 12 months beginning January 1, 2014 and ending December 31, 2014. The general terms and conditions of the Agreement appear to be generic in nature and are similar to previous contracts. The primary differences appear to be the pricing and the adjustment factor for avoided line losses. Except as noted above, the non-price related conditions within the Agreement appear to be reasonable and consistent with previous contracts.

This Agreement constitutes a "New QF Contract" under the PacifiCorp Inter-Jurisdictional Cost Allocation Protocol and, as such, the costs of those QF provisions are allocated as a system resource unless any portion of those costs exceed the cost PacifiCorp would have otherwise incurred acquiring comparable resources. In that event, the Revised Protocol assigns those excess costs on a situs basis to the State of Utah. PacifiCorp represents that the cost of this Agreement does not exceed the cost that would have been incurred from acquiring other market resources. The Division accepts this representation based upon its prior analysis of the Company's avoided cost reports.

CONCLUSION

The Division concludes that the terms of the Kennecott (Smelter) Power Purchase Agreement comply with the Commission's guidelines and order in Docket No. 03-035-14. With the exception of the pricing terms and the daylight savings issue of the Agreement as described above, the other contractual arrangements and facts in this matter, in particular the method for calculating the avoided energy costs, have been previously found to be just and reasonable and in the public interest. However, the Division believes that the pricing issue is a material flaw. The Division recommends that the Commission order the Company to correct the pricing to reflect 18.5 MW of average generation and resubmit the Agreement.

cc: Michele Beck, Committee of Consumer Services
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