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State of Utah
Department of Commerce
Division of Public Utilities

FRANCINE GIANI *Executive Director*
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ACTION REQUEST RESPONSE

REDACTED

TO: Public Service Commission

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

DATE: November 3, 2014

RE: Power Purchase Agreement between PacifiCorp, dba Rocky Mountain Power, and Kennecott Utah Copper LLC, (Refinery) Docket No. 14-035-122.

RECOMMENDATION (Make Corrections and Resubmit)

The Division of Public Utilities (Division) recommends that the Commission not approve the Non-Firm Power Purchase Agreement (Agreement) between PacifiCorp (Company) and Kennecott Utah Copper LLC (Kennecott) until the Company files a corrected Agreement that includes the correct percentage figures for the avoided line loss adjustment. The Division recommends that the Commission order the Company to include the language, or similar language, found in Schedule 9 regarding Daylight Savings Time in future power purchase agreements that contain seasonal and high load/low load hour pricing schemes.

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

ISSUE

Since there are multiple contracts with Kennecott, this contract is informally referred to as the Kennecott "Refinery" QF. On September 19, 2014, PacifiCorp filed an Application for Approval of a Non-Firm Power Purchase Agreement with Kennecott. The effective date of the agreement is January 1, 2015 and replaces a current contract that is scheduled to expire on December 31, 2014. On September 25, 2014, the Commission issued a Scheduling Order requiring comments from the Division of Public Utilities and any other interested parties by November 3, 2014. 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 dated September 3, 2014. Kennecott owns, operates and maintains a waste heat-fired steam cogeneration facility for the generation of electric power located at the Magna, Utah refinery.[1] The nameplate capacity rating of the plant is 7.54 megawatts (MW) with an expected average monthly output of approximately 5.4 MW.[2] However, Exhibit A of the Agreement indicates that the generator can provide only 6.2 MW. In response to a Division data request, it was explained that the nominal nameplate capacity is 7.54 MW, but as installed and configured at the Kennecott site, only 6.2 MW output can be obtained.

The Kennecott facility is operated as a qualifying facility (QF) as defined by 18 C.F.R Part 292[3] 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.

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

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 its own retail load before selling any excess power. Kennecott estimates that the average net monthly output of the facility will be approximately [REDACTED], because of the scheduled maintenance.[4]

[REDACTED] With rising costs, we will likely see more sales to PacifiCorp under this new contract than in the recent past.

QF Pricing

Last year there was a pricing issue wherein the Company calculated avoided cost for the Refinery, based upon the nominal nameplate capacity of the facility instead of the 6.2 MW capacity as configured. This resulted in lower avoided cost prices to Kennecott. The Company subsequently corrected the pricing and re-submitted the contract. This year the Company appears to have correctly included in its GRID models the practical capacity of this plant. The Division has reviewed the GRID outputs and concludes that the pricing for this current contract reflects the correct facts of this particular facility. The Division also believes that the Company has correctly complied with Commission orders on the methodology used to determine pricing for a contract under Schedule 38.

[4] Ibid., page 1

Daylight Savings Time

There is an issue related to Daylight Savings Time that was brought up by the Division last year, and continues to be a potential problem in the current contract. Exhibit E of the Agreement sets forth 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 previous 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 recommended last year that the Company voluntarily ensure that this potential for arbitrage is eliminated in future agreements. The Division now asks the Commission to order the Company to include language similar to that found in Schedule 9 regarding Daylight Savings Time 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. In response to a Division data request, the Company supplied the detailed calculations determining the avoided line loss percentage. The calculations were based upon the method that the Division, Company, and Kennecott had accepted in prior years.[5] The calculated percentage was

. However, instead of the current calculated percentage, the contract filed with the Commission inadvertently used the calculation for the

[5] The method agreed to is based upon the locations in the Company's transmission topology, i.e. the transmission "bubbles," of the avoided generation sources. The calculation is the ratio of the avoided generation "outside" the bubbles containing the primary load, i.e. the Wasatch Front, to the total generation avoided multiplied by the OATT percentage. The current OATT percentage is 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. For a discussion of the history of the determination of this method, see the Division's memorandum to the Commission dated July 21, 2010 and filed July 26, 2010 in the (Miscellaneous) Docket No. 10-999-01.

previous contract. The Company needs to refile the contract with the corrected avoided line loss percentage.

Other Comments

The proposed Agreement will remain in place for a term of 12 months beginning January 1, 2015 and ending December 31, 2015. The general terms and conditions of the Agreement appear to be generic in nature and are similar to the previous contract. The primary differences appear to be the pricing terms including the adjustment factor for avoided line losses and Exhibits that detail the particular facts about the Refinery facility. 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 there are two issues that need to be dealt with before the Division can recommend approval of the Agreement. The more critical one is the correction of the avoided line loss percentage. The other is the daylight savings issue of the Agreement as described above, which the Division believes could be satisfactorily dealt with by an order from the Commission directing the Company to correct this issue in future contracts. Otherwise, the Division believes that the terms of the Kennecott (Refinery) Power Purchase Agreement comply with the Commission's guidelines and order in Docket No. 03-035-14. Additionally, 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.

cc: Michele Beck, Committee of Consumer Services
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Daniel Solander, PacifiCorp
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