State of Utah
Department of Commerce
Division of Public Utilities

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Memorandum

TO: Public Service Commission

FROM: Division of Public Utilities:
Philip Powlick, Director,
Artie Powell, Energy Manager
Charles Peterson, Technical Consultant
Doug Wheelwright, Utility Analyst

DATE: November 15, 2010

RE: Purchase Power Agreement between PacifiCorp, dba Rocky Mountain Power, and Kennecott Utah Copper LLC, Docket No. 10-035-113.

RECOMMENDATION (Approval)

The Division recommends that the Commission approve the PPA between PacifiCorp and Kennecott.

The Division recommends that the Company continue to provide, at least quarterly, the hourly power purchased under this contract so that the Division may monitor the contract and be better prepared to make recommendations in the future.

ISSUE

On or about October 7, 2010, PacifiCorp (the Company) filed an Application for Approval of a Power Purchase Agreement (PPA) with Kennecott Utah Copper LLC (Kennecott). The effective date of the agreement is January 1, 2011.

This is a new facility that has been constructed at Kennecott and is informally referred to as the Kennecott-Refinery qualifying facility (QF). Consequently, this is the first time a contract for this facility has been presented to the Commission for approval. The Public Service Commission (Commission) issued an action request on October 12, 2010 to the Division of Public Utilities (Division) requesting a response by December 13, 2010. The following Recommendation and Analysis are intended to serve as the response to the aforementioned action request. A second Kennecott (PPA) agreement was submitted under Docket No. 10-035-112 and is informally referred to as the Kennecott-Smelter (QF). Information and analysis of this contract will be submitted under a separate memo.

As with the other QF agreements, the Division recommends that the Company provide, at least quarterly, the hourly power purchased under this contract so that the Division may monitor the contract and be better prepared to make recommendations in the future.

ANALYSIS

As stated above, this is a new QF facility. Kennecott filed its self-certification as a QF for Kennecott-Refinery with the Federal Energy Regulatory Commission (FERC) on or about August 17, 2010. As a courtesy, Kennecott filed a copy of these documents with the Commission on August 18, 2010. In its filing with the FERC, Kennecott describes the Kennecott-Refinery QF as follows.

> The qualifying facility is a topping-cycle cogeneration facility located at the KUC refinery in Magna, Utah. Waste heat from a Taurus 70-10301S Axial natural gas-fired turbine from Solar Turbines will provide heat to a natural gas/waste heat CB Energy boiler to produce steam to fulfill the refinery's steam requirements that were previously fulfilled by natural gas boilers. The steam is used to maintain metal refining process fluid temperatures that provide heat to equipment in the KUC refinery facilities. The 6.2 MW electricity expected to be generated will provide a part of the KUC refinery power needs, reducing the amount of power imported from

> the utility grid. Supplemental firing by a natural gas-fired duct burner using the waste heat may also be used to maximize the efficiency of the facility and can be used as a back-up source and to meet high-peak periods.
>
> The utility interconnecting with the facility, purchasing the useful electric power output, and providing supplementary power, backup power, maintenance power, and/or interruptible power service is Rocky Mountain Power, a division of PacifiCorp.[1]

The PPA between PacifiCorp and Kennecott is dated October 6, 2010. The agreement states that Kennecott "owns, operates and maintains a waste heat-fired steam cogeneration facility for the generation of electric power located in and about the town of Magna, Utah…."[2] The nameplate capacity rating of the plant is 7.54 megawatts (MW); the average output is expected to be about 5.4 MW.[3] The Kennecott facility is operated as a qualifying facility (QF) as defined by 18 C.F.R Part 292.[4] All interconnection requirements have been met and the Kennecott facility is fully integrated with the Company's system.

Kennecott estimates that the average net monthly output of the facility will be about 3,900 megawatt-hours (MWh) to PacifiCorp.[5] Kennecott has the option, but not the obligation, to deliver the net output of the facility to PacifiCorp.[6] Pricing for this contract varies by month. Other than monthly variations, there is no variation in price for time-of-day. Kennecott has indicated that it tentatively plans for maintenance downtime of approximately four days in May and for six days in "October or November."[7]

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[1] Kennecott Utah Copper LLC, "Notice of Self-Certification of Qualifying Facility (QF) Status For A Cogeneration Facility." August 17, 2010, p. 1.
[2] PPA, page 1.
[3] Ibid.
[4] Op. Cit. page 5, section 3.2.6
[5] Op. Cit. page 1
[6] Op Cit. section 4.2.
[7] PPA, Exhibit D.

The Agreement before the Commission is expected to run for a term of 12 months: beginning January 1, 2011 and ending December 31, 2011. This contract contemplates that Kennecott will sell to PacifiCorp all of its electric generation.[8]

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. As set forth in Section 5 and Exhibit E of the contract, the price per megawatt hour (MWh) varies by month. The average annual price is approximately $35.00 per MWh.[9] To this MWh price is added an adjustment for avoided line losses. The avoided line losses payment amounts to an additional 3.63 percent added to the price per MWh.[10] The relatively high prices during the months of July through September provide an incentive for Kennecott to provide as much power as possible during those months of relatively high demand on PacifiCorp's system.

The prices for next year's contract are based upon PacifiCorp's June 2010 forecast price curves. In June 2010 energy prices were significantly down from the historical during the previous year. The general terms and conditions of the agreement appear to be generic in nature and closely mirror those in similar contracts. The price to be paid for delivered energy is also similar to other contracts and appears reasonable to the Division. The non-price related conditions within the Agreement appear to be generic and reasonable.

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

[8] PPA, Sections 4.3.
[9] PPA, Exhibit E. And Exhibit 1
[10] PPA, Section 5, p. 6.

resources. The Division accepts this representation based upon its prior analysis of the Company's avoided cost reports.

In recent years the Division has questioned the avoided line loss adjustment that is included in the current contract. However, pursuant to the Division's research into this matter in early 2010, it accepts the applicability of and the methodology used to develop the avoided line loss adjustment factor.[11]

CONCLUSION

The Division concludes that the terms of the Kennecott Power Purchase Agreement for the Kennecott-Refinery QF generally are generic and comply with the Commission's guidelines and order in Docket No. 03-035-14. 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. The Division recommends that the Commission approve the Power Purchase Agreement between Kennecott and PacifiCorp.

cc: Michele Beck, Committee of Consumer Services
Cheryl Murray, Committee of Consumer Services
Dave Taylor, PacifiCorp
Paul Clements, PacifiCorp
Daniel Solander, PacifiCorp
Robert Reeder, Parsons Behle and Latimer, attorney for Kennecott

[11] Division of Public Utilities, "Research Memorandum", filed with the Utah Public Service Commission, dated July 21, 2010.