State of Utah
Department of Commerce
Division of Public Utilities

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MEMORANDUM

To: Public Service Commission

From: Chris Parker, Director
Artie Powell, Energy Section Manager
Carolyn Roll, Utility Analyst
Joni Zenger, Technical Consultant
Thomas Brill, Technical Consultant

Date: April 19, 2012

Re: Docket No. 09-035-23, Division's Audit of PacifiCorp's 2011 Fuel Inventory Policies and Practices

RECOMMENDATION

The Division has reviewed PacifiCorp's (the Company) fuel inventory policies and procedures and finds that the Company has adhered to the Commission's directive in this docket. No further action is required.

ISSUE

In the course of the general rate case proceedings in Docket No. 09-035-23, and as a result of the Electric Lake Settlement in February of 2008, the Division raised the issue of the appropriate coal inventory levels that the Company should maintain at its Utah plants.[1] The Division noted that a review of the Company's coal procurement policies and practices had not been conducted

[1] Docket No. 09-035-23, Direct Testimony of Michael J. McGarry, Sr., DPU Exhibit 3, October 8, 2009.

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for more than 15 years.[2] As a result, the Commission determined that the Company should have a regularly reviewed and updated Company Coal Policy in place.[3]

The Division issued its first review of the Company's fuel inventory management policies, procedures, and actual practices on March 31, 2011. This memorandum reports on the Division's second annual audit and associated findings of the Company's 2011 fuel management policies, procedures, and actual practices, as directed by the Commission. This report does not preclude the Division's analysis of coal inventory levels or any associated net power costs issues and making further recommendations in the current general rate case, Docket No. 11-035-200.

DISCUSSION

In conducting its audit, the Division met with the Company's Fuel Resources Department on March 20, 2012 and again on March 23, 2012. At the meetings, the Division discussed in detail the assumptions and inventories at each of the Company's owned and affiliate plants. The Division reviewed confidential documents at both meetings, including PacifiCorp's Coal Inventory Policies and Procedures (the Manual) dated September 30, 2010 signed by Ms. Cindy A. Crane, Vice President of Interwest Mining & Fuels (the Company's Fuels Department). There have not been any changes to the 2010 Manual, and the Company continues to follow the fuel inventory policies and practices as stated in the Manual.

The Division notes that the Company in 2009 retained Pincock, Allen & Holt (PAH) to analyze the coal inventory policies associated with its plants in Utah and Wyoming. The PAH assignment resulted in two separate reports. The first report (Phase I of the assignment) dated August 13, 2009, addressed the Carbon, Huntington, and Hunter plants in Utah.[4] The second report (Phase II) dated January 28, 2010, covered the Wyodak, Dave Johnston, Jim Bridger, and

[2] Confidential Response to DPU # 26.4, September 18, 2009. (In 1991 and in 1995 Energy Ventures Analysis, Inc. was retained by an inter-jurisdictional task force to review PacifiCorp's coal procurement policies and management practices.)
[3] Docket No. 09-035-23, Report and Order on Revenue Requirement, Cost of Service and Spread of Rates, February 18, 2010, p. 106.

[4] Coal Inventory Policies for Coal-Fired Power Plants in Utah, PAH, dated August 13, 2009.

Naughton plants in Wyoming.[5] The Division reviewed both confidential consultant reports. Originally the PAH review was going to include Phase III and IV-- a PAH assignment to review the jointly owned plants. The Company has interests in the Cholla plant in Arizona and the Craig and Hayden plants in Colorado. However, since the inventory levels for these plants are determined collectively by the plant owners and PacifiCorp is a minority owner in these plants, Phases III and IV of the PAH assignment were canceled.

Lastly, the Division reviewed spreadsheets containing inventory data for each plant. Average stockpile levels were reviewed and compared to the Company's targeted inventory levels to determine if the Company met its targets. The Southwest Wyoming inventories were below targeted levels due to underground mine production issues. Inventory levels are projected to return to target levels by the first half of 2012. Due to reduced coal burns, the Dave Johnston plant experienced inventory levels above target, leading the Company to exercise contract volumetric flexibility in an effort to reduce inventory to target level. The Division also ensured that the Company has in place tracking and monitoring requirements associated with its policy.

FINDINGS

First, the Division determined that the Company's goal and commitment to provide low-cost power to its customers drives its fuel procurement practices. The Company's Manual states that the Company's strives to optimize delivered fuel costs and ensure supply reliability, while providing appropriate fuel supplies and qualities based on the particular needs at each generating plant. The objectives of the Company's fuel management activities as presented in the Manual are to provide the lowest cost of fuels over the long run, maintain adequate inventory levels at each thermal generation station, and build a portfolio of fuels. Consideration is given to the delivered cost of fuel, reliability of supply, fuel quality, environmental impact, financial or risk exposure, operational cost, transportation, and flexibility.[6]

[5] Coal Inventory Policies for Coal-Fired Power Plants in Wyoming, PAH, dated January 28, 2010.
[6] Here and elsewhere in the Division's Audit report, the Division paraphrases the Company's Manual to protect confidential information.

During its 2011 review, the Division identified issues that affect the Company's inventory and procurement policies. These include: coal quality degradation, geologically complex mines, the dynamics of the coal industry, and changes in mining regulations due to increased safety concerns. Each of the coal basins is managed as a system, although each coal basin is unique. Therefore, the Company employs a diversified coal supply strategy, particularly for its short-term strategy. This is due to a decrease in coal suppliers, the need to blend lower-quality coal with higher-quality coal in order to get optimized fuel burn, plant outages, higher rail rates, higher spot coal prices, and third-party coal contract revisions, re-openers, or escalation clauses.

In 2011 the Company dealt with problems such as responding to the effect of variable generation resources, specifically wind and hydroelectric generation. The Company had to back down coal-fired generation due to overall higher than predicted wind capacity levels coupled with associated transmission system bottlenecks, especially at the Dave Johnston plant. High water levels at the Company's hydroelectric plants also affected Company coal operations resulting in a reduction in the coal burn across most coal plants. The only exception was at the Naughton coal plant, which increased its coal burn. In addition, at times actual generation fell below budget levels at the non-Company owned plants, which resulted in inventory levels being over target.

Even though the past winter resulted in generally mild temperatures, weather-related situations affected specific coal plants. Freezing of rail deliveries and the inability to effectively thaw railroad deliveries stalled coal supplies, especially at the Cholla plant. The Company also dealt with a force majeure event at the one of its plants, reducing its inventory levels temporarily. Finally, the Company is preparing for the expiration of one of its labor agreements, which historically has resulted in labor stoppages. This has resulted in the Company managing its coal inventories in preparation for the expiration of the coal labor contract. The Company is tracking and monitoring all of these issues in its policies for procurement and for establishing stockpile target levels at each plant.

In the longer term the Company is analyzing and planning for emerging environmental regulations, long-term basin depletion, coal quality, financial stability of Utah coal companies, and a market that is not liquid.

The PAH consultant reports recommended maintaining coal inventory levels of two to three months at its three Utah plants and a somewhat lower range at its four Wyoming plants. The consultant reports also considered potential coal supply disruption scenarios, such as a mine disaster resulting from natural causes such as earthquakes or landslides or due to labor disputes. The consultant reports identified high operating levels, matched with highly variable coal supply, given an admittedly rare mine disaster leads to relatively high recommended inventory levels.

PAH used an inventory simulation model that covers each day of a one-year period. An analysis of coal inventory policy involves five steps: 1) developing a quantitatively accurate inventory model; 2) quantifying typical fluctuations in coal delivery and consumption and how they affect prudent inventory levels; 3) assessing relatively unlikely events that affect inventory levels; 4) determine prudent coal inventory ranges; and 5) recommend appropriate plant-specific inventory policies.

During the course of the year 2011, there were a couple of plants where at times inventory levels exceeded or were below targeted inventory levels, but the Division believes that these deviations were fully explained as part of the Company's fuel management strategy and fell within the Company's policies and procedures that were reviewed.

Developments since the previous Division March 31, 2011 coal inventory memorandum include the Company's September 21, 2011 Confidential Supplemental Coal Replacement Study that was filed with the Commission as part of the PacifiCorp 2011 Integrated Resource Plan (IRP) in Docket No. 11-2035-01 as well as the Company's March 30, 2012 IRP Update and Action Plan, which provides updated coal replacement study results and an action plan to close the Carbon plant. We expect comments to be filed on the coal replacement study update and its results in the IRP docket.

CONCLUSION

The Division finds that the Company is in compliance with the Commission's directives in its 2009 Report and Order with respect to fuel inventory policies. The Division has reviewed the Company's Manual, the third-party reports, and has conducted its own analysis of target levels versus actual inventory of coal at the Company's generation plants. The Company has adopted and implemented PAH's findings for Phase I and Phase II of its assignment into its own Manual. The Division again concludes that (1) the Company has formal policies and procedures in place for its fuel procurement and coal inventory levels; (2) the Company has adhered to its policies and procedures in 2011, as formally stated in its Manual; (3) the Company is in compliance with its target inventory ranges for the year 2011; and (4) the Company's policies provide some flexibility to react to favorable market conditions.

The Company's Fuel Resources Department has adopted guidelines that state that the Company plans to review and revise its coal inventory Policies and Procedures when necessary and applicable or to otherwise meet its commitment to provide low-cost power to its customers through its fuel procurement practices. The Division again recommends that when changes are made to the Company's Manual, the Company should forward a copy of the revised or updated Manual to the Division.

The Division also recommends that the Commission determine that the Company is in compliance with its 2009 General Rate Case Order and directive. Inasmuch as the Division will perform the same or similar audit each year, the Division again recommends the Commission clarify the proper docket numbering for its future annual reports to the Commission.

CC Dave Taylor, Rocky Mountain Power
Michele Beck, Office of Consumer Services