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Division of Public Utilities

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## MEMORANDUM

**To:** Public Service Commission

**From:** Chris Parker, Director  
Artie Powell, Energy Section Manager  
Carolyn Roll, Technical Consultant  
Joni Zenger, Technical Consultant

**Date:** June 30, 2016

**Re:** Docket No. 16-035-11, Division's Audit of PacifiCorp's 2015 Fuel Inventory Policies and Practices.

### RECOMMENDATION

The Division has conducted an audit of PacifiCorp's (the Company) fuel inventory policies and procedures and finds that the Company has adhered to the Commission's directive. No further action is required.

### ISSUE

In the course of the general rate case proceedings in Docket No. 09-035-23, the Commission determined that the Company should have a regularly reviewed and updated coal policy in place. As a result, the Commission directed the Division to conduct an annual audit of the Company's fuel inventory management policies, procedures, and actual practices and provide a summary of its audit and associated findings to the Commission by no later than March 31 of each year for

the previous year's activity.<sup>1</sup> This year the Division filed a request for an extension of time, and on March 30, 2016 the Commission granted an extension until June 30, 2016 to file this year's report. This memorandum is in response to the Commission's directive and reports on the Division's sixth annual audit and associated findings of the Company's 2015 fuel management policies, procedures, and actual practices.

The Division has reviewed the Company's 2015 fuel management policies, procedures, and updates to its policies and provides this report to the Commission. This report does not preclude the Division's analysis of coal inventory levels or any associated net power costs issues in the current Energy Balancing Account filing (Docket No. 16-035-31) or in upcoming general rate case proceedings.

## **DISCUSSION**

In conducting its review, the Division met with the Company's Fuel Resources Department on April 12, 2016. At the meeting the Division discussed the assumptions and inventories at each of the Company's owned and affiliate plants. The Division reviewed confidential documents, including the December 2015 coal inventory levels and PacifiCorp's Coal Inventory Policies and Procedures (Manual) dated January 1, 2016. The Division looked at both historic and average stockpile levels, compared these to the Company's targeted inventory levels, and determined if the Company met its targeted levels. The Division also ensured that the Company has in place tracking and monitoring requirements associated with its policies and procedures. The Fuel Resources Department monitors inventory levels, and aerial surveys are performed quarterly for PacifiCorp operated coal plants.

A third-party review of the Company's coal procurement policies and management practices was first performed in 1991 and again in 1995 by Energy Ventures Analysis, Inc. (EVA), who were

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<sup>1</sup> Docket No. 09-035-23, Report and Order on Revenue Requirement, Cost of Service and Spread of Rates, February 18, 2010, p. 106.

retained by an Inter-Jurisdictional Task Force to review PacifiCorp's fuel management and coal supply practices.<sup>2</sup> As part of the EVA recommendations, PacifiCorp established stockpile targets for each of its coal generating plants. A subsequent overall review took place in the 2009 to 2010 timeframe when the Company 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.<sup>3</sup> The second report (Phase II) dated January 28, 2010, covered the Wyodak, Dave Johnston, Jim Bridger, and Naughton plants in Wyoming.<sup>4</sup> The Division reviewed both confidential consultant reports.

Although the Company has interests in the Cholla plant in Arizona and the Craig and Hayden plants in Colorado, these reports were targeted to be Phase III and Phase IV of the PAH assignment. 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 II and IV of the PAH assignment were canceled.

In the Division's March 31, 2014 audit report to the Commission, the Division noted several changing conditions that suggested the need for an updated audit and third-party review of the coal inventory policies for PacifiCorp's coal-fired power plants in Utah and Wyoming.<sup>5</sup> Therefore, the Division recommended that the Company undertake an updated analysis of the Company's current coal inventory policies and update the stockpile target levels at its Utah and Wyoming coal operating plants. As a result, the Company retained the consulting firm Runge, Pincock, Minarco (RPM), (PAH's successor) to conduct the analysis and report. The RPM report was completed on September 15, 2015, and the Company filed this report with the Commission on March 14, 2016 for inclusion in this year's audit. The Company updated its

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<sup>2</sup> Confidential Evaluation of the Coal Procurement Policies and Coal Management Practices of PacifiCorp, prepared by Energy Ventures Analysis, Inc., January 1991; Confidential Update to Evaluation of the Coal Procurement Policies and Coal Management Practices of PacifiCorp, prepared by Energy Ventures Analysis, Inc., July 1995.

<sup>3</sup> Coal Inventory Policies for Coal-Fired Power Plants in Utah, PAH, dated August 13, 2009.

<sup>4</sup> Coal Inventory Policies for Coal-Fired Power Plants in Wyoming, PAH, dated January 28, 2010.

<sup>5</sup> DPU 2013 Fuel Inventory Report, Docket No. 14-035-35, March 31, 2014.

2016 Coal Inventory Policies and Procedures after the RPM Coal Inventory Study was completed.

## **FINDINGS**

The Division has reviewed the Company's updated Coal Inventory Policies and Procedures and has conducted its own analysis of target levels versus actual inventory of coal at the Company's generation plants. The Company's commitment to the goal of providing low-cost power to its customers drives its fuel procurement practices. The Company's Manual states that the Company 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 practices as presented in the Manual are to provide the lowest cost 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 impacts, financial or risk exposure, impact on operations and/or operational costs, transportation, and flexibility.<sup>6</sup>

The Division identified issues that currently affect the Company's inventory and procurement practices. 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, and third-party coal contract revisions, re-openers, or escalation clauses.

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<sup>6</sup> PacifiCorp's Confidential Coal Inventory Policies and Procedures, January 1, 2016 (Here and elsewhere in the Division's Audit report, the Division paraphrases the Company's Manual to protect confidential information.)

The Division determined that the Company is factoring in its longer-term analyses and planning for emerging environmental regulations, continuing labor negotiations, long-term basin depletion, coal quality, the financial stability of coal companies in Utah, and the fact that the market is not liquid. The Division notes that the coal industry in general has experienced a tumultuous year with plant shutdowns, increased industry concentration, layoffs, bankruptcies, etc. A large part the industry has been affected by new or revised federal and state environmental policies, such as the Clean Power Plan, Clean Air Act, Regional Haze rules, and revised renewable portfolio standards. The Division determined that the Company's fuel procurement policies and practices provide some flexibility in order for the Company to react to changing market conditions.

The Division's audit identified the following key findings:

1. The Company has formal Coal Inventory Policies and Procedures in place that it adheres to. The Company's goal and commitment to provide low-cost power to its customers drives its fuel procurement practices.
2. PacifiCorp coal procurement strategy is adaptive and has been updated as a result of many recent changing factors, some which are listed below:
  - a. The closure of the Deer Creek Mine contributed to the increasing concentration of the Utah coal industry. RPM notes that in 2014 there were five producers operating eight mines.<sup>7</sup>
  - b. The sale of Canyon Fuel Company to Bowie Resources created additional uncertainty about PacifiCorp's coal supply plans and supports increased inventory levels.

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<sup>7</sup> Docket No. 16-035-11, Confidential Coal Inventory Study for Coal-Fired Power Plants in Wyoming and Utah, September 15, 2015, p. 16.

- c. A new contract with Bowie Resources and the sale of certain PacifiCorp assets to Bowie will affect coal storage capacity located near the Hunter Power Plant.
  - d. The April 15, 2015 closure of the Carbon power plant increases delivery risk and suggests higher prudent inventory levels.
  - e. Chevron Mining Inc. completed the sale of its Kemmerer mine to Westmoreland Coal Company, injecting additional risk and uncertainty into the coal supply chain.
  - f. The installation of scrubbers to Naughton Unit #1 and Unit #2 made it possible for all Naughton units to use the same coal quality, thus easing supply restrictions.
3. Overall the 2015 inventory levels of PacifiCorp's Utah fleet are within the newly established target levels. Coal supplies for the Utah fleet are becoming increasingly constrained with the closure of the Deer Creek mine in December 2014 and the West Ridge Mine in late 2015. Utah lost approximately 3 million tons of coal productive capacity from 2014 levels in 2015.<sup>8</sup>
4. With regard to the Company's Southwest Wyoming plants, PacifiCorp announced in its 2015 Integrated Resource Plan Update<sup>9</sup> that retiring its Naughton Unit #3 thermal plant at the end of 2017 is a lower cost alternative to the previously planned repowering it to natural gas. The Company established new inventory targets in 2015 and is in the process of gradually building inventory to meet newly established levels. The short/intermediate term inventory levels are consistent with targeted levels for 2015. However, the Company plans to put in place a long-term inventory target once Naughton Unit #3 is retired. The flexibility of this target will be beneficial as the Company closes

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<sup>8</sup> Utah's Extractive Resource Industries 2014, Circular 120 Utah Geological Survey, 2015, p. 19.

<sup>9</sup> Docket No. 15-035-04, PacifiCorp's IRP Update, March 31, 2016.

Unit #3 and also works through take-or-pay contract commitments. In Wyoming, the Jim Bridger inventory levels were within targeted levels at year end 2015.

5. Powder River Basin plants have experienced severe rail transportation issues since 2014 that interrupted service and supplies out of the Powder River Basin. However, during 2015 railroad service issues subsided. The Company gradually increased inventory levels throughout the year, but inventories are still below the newly established inventory targets recommended in the RPM consultant report. The Company will continue to increase inventory to reach targeted levels by the end of 2016.
6. Inventory levels at the Company's joint-owned plants were above target levels due to a slight decrease in coal consumption. As a minority owner PacifiCorp has limited influence over the inventory levels at those plants, as inventory levels are determined collectively by the plant owners. The plant owners realize the importance of reducing inventory levels and are collectively working on an inventory reduction plan.

With respect to the Division's overall audit, the Division recognizes that dynamic conditions require some of the Company's coal plants to be within or slightly below targeted inventory levels.

In its 2014 audit report, the Division noted that it had been approximately six years since the coal inventory policies for PacifiCorp's Utah and Wyoming coal-fired power plants had been formally reviewed and updated by a third-party consultant. At the time of the 2009 report, there were six mining companies operating nine mines in Utah. Since that time the number of mining companies, the number of operating coal mines, and annual coal production have all decreased in Utah. In Utah the supply and demand for coal have both changed since the 2009 report, as there are currently only four mining companies and six mines operating in Utah.

The Company updated its 2016 Coal Inventory Policies and Procedures after the RPM Coal Inventory Study was completed. The Division has reviewed the updated Policies and

Procedures, dated January 1, 2016. The Division finds that the Company is in compliance with the Commission's directive in its 2009 Report and Order with respect to its fuel inventory policies and procurement practices.

## **CONCLUSION**

The Division 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 2015, and as amended with an effective date of January 1, 2016; and (3) the Company's policies provide some flexibility to react to changing market conditions. The Company's Manual states that the Company 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 practices 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.

The Division has reviewed the Company's Coal Inventory Policies and Procedures and has conducted its own analysis of target levels versus actual inventory of coal at the Company's generation plants. The Division notes that the Company is in compliance with its policies and procedures or has plans to do so in the near future.

CC Bob Lively, Rocky Mountain Power  
Michele Beck, Office of Consumer Services