

# State of Utah DEPARTMENT OF COMMERCE Office of Consumer Services

MICHELE BECK Director

To: Utah Public Service Commission

From: Office of Consumer Services

Michele Beck, Director Dan Gimble, Manager Béla Vastag, Utility Analyst

Date: June 20, 2014

Re: In the Matter of PacifiCorp's 2013 Integrated Resource Plan Update

Docket No. 13-2035-01

## **Background**

On March 31, 2014, PacifiCorp (the Company) filed its 2013 Integrated Resource Plan Update (IRP Update). The IRP Update adjusts the load forecast, slightly revises the preferred portfolio and does not modify the Action Plan of the original 2013 IRP, which was filed on April 30, 2013. On April 16, 2014, the Public Service Commission of Utah (Commission) issued an order setting the schedule for comments on the IRP Update filing with initial comments due June 20, 2014. Accordingly, the Office of Consumer Services (Office) submits its initial comments on the IRP Update.

# **Summary of Noteworthy Changes to the Preferred Portfolio**

As noted above, the Company did not modify the IRP Action Plan between the 2013 IRP and the 2013 IRP Update. However, there were some modest changes in the makeup of the preferred portfolio of the IRP Update. The principle drivers underlying the portfolio changes are a lower load forecast and the removal of the federal renewable portfolio standard (RPS) assumption. The Company's updated annual coincidental peak load is on average 277 MW lower per year for the first ten years of the planning horizon (2014 to 2023) than in the 2013 IRP.<sup>1</sup> The lower load forecast results in an average decline in peak resource need of 320 MW per year for the period 2014-2023.<sup>2</sup> This reduction in resource need and the elimination of the federal RPS has led to the following changes in the IRP Update preferred portfolio:

<sup>&</sup>lt;sup>2</sup> Page 4 of the 2013 IRP Update. The decline in resource need includes a 13% planning reserve margin.



<sup>&</sup>lt;sup>1</sup> Page 27, Table 3.8 of the 2013 IRP Update. 277 MW is the average of the "Total" column in Table 3.8.

- 1. Front Office Transactions (FOTs) are down an average of 241 MW per year during the initial ten years (2014-2023). See Table 1 below.
- 2. Wyoming wind is down 170 MW, from 650 MW to 480 MW (2024 & 2025). The contribution of wind to peak load in the IRP Update is set at 4%. Therefore, it appears that this reduction in wind is driven not by the lower peak load growth but by the elimination of the federal RPS.
- 3. Class 2 Demand Side Management (DSM), aka energy efficiency, is lower by a total of 55 MW in the first ten years (2014-2023) of the planning horizon or about 6% from the 2013 IRP.
- 4. Natural gas combustion turbine (CT) resources changed slightly and total 3,351 MW in the IRP Update versus 3,175 MW in the 2013 IRP through the 20-year planning horizon. However, with the lower peak load forecast, the first CT (423 MW) in the preferred portfolio now shows up three years later in 2027 versus 2024 in the 2013 IRP. Also noteworthy is that the IRP Update preferred portfolio places a 420 MW combined cycle combustion turbine (CCCT) in the west side of the Company's system in 2031. The 2013 IRP did not have any new gas resources on the Company's west side.

### Comments

Front Office Transactions (FOTs)

Table 1 below compares the amount of FOTs in the 2013 IRP and the IRP Update.

Table 1
Preferred Portfolio Annual Front Office Transactions - FOTs (MW)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
2013 IRP	709	845	983	1,102	1,209	1,323	1,420	1,191	1,333	1,427
2013 IRP Update	445	583	701	831	931	1,027	1,261	1,042	1,098	1,210
2013 Update vs. 2013 IRP	-264	-262	-282	-271	-278	-296	-159	-149	-235	-217

As noted earlier, the Company's reliance on FOTs is reduced in the IRP Update due to the lower load forecast. However, levels of FOTs still increase significantly from 2014 to 2018 such that the Company's reliance on market purchases of power is at a considerable level from 2019 and beyond. With large lead times to build new capacity resources and the possibility of rapid changes in power market conditions, the Office remains concerned about the Company's ability to effectively respond to sudden upward pressure on power prices. The Office reiterates its recommendation from its comments on the 2013 IRP that the Company should develop a FOT contingency plan in the event that market supplies tighten and prices increase significantly.<sup>3</sup> In its Order on the 2013 IRP, the Commission encouraged the Company to examine the Office's recommendation for such a contingency plan in the 2015 IRP cycle.<sup>4</sup>

### Wind Resources and the Need for the full Energy Gateway

The amount of Wyoming wind resources in the preferred portfolio dropped from 2,100 MW in the 2011 IRP to 650 MW in the 2013 IRP. As noted above, Wyoming wind in the IRP Update has dropped even further, to 480 MW. In our comments on the 2013 IRP, the Office questioned the need for the far-reaching east to west segments of the Energy Gateway transmission project without this wind in the preferred portfolio, especially when the Company has indicated in the past that these transmission segments were needed for the development of Wyoming wind resources. With the amount of wind in the IRP Update being further reduced, the Office again raises questions of need and cost allocation with respect to the Gateway West and South projects. <sup>5</sup>

It may be the case that these transmission projects will primarily benefit wholesale rather than retail customers and from a cost causation standpoint, the allocation of costs should follow benefits. If indeed these transmission resources are primarily needed to serve retail customers, then there should be a strong link between the new generation resources in the IRP preferred portfolio and the proposed new Energy Gateway transmission investments.

### Lack of PVRR Data

The IRP Update does not provide any data on the Present Value of Revenue Requirement (PVRR) of the IRP Update's preferred portfolio. It would be informative to compare the PVRRs for the IRP Update portfolio with the values from the portfolios modeled in the 2013 IRP. Data on PVRRs from System Optimizer and the Planning and Risk (PaR) models should be included. Useful information from PaR on cost includes stochastic mean PVRR, risk-adjusted mean PVRR and 20-year customer rate impact. Additional information from PaR that would be helpful is Energy Not Served and Cumulative CO<sub>2</sub> Emissions.

<sup>&</sup>lt;sup>3</sup> Office of Consumer Services' Comments on the PacifiCorp 2013 IRP, September 9, 2013, pages 8 – 9.

<sup>&</sup>lt;sup>4</sup> Docket No. 13-2035-01, Report and Order, January 2, 2014, page 22.

<sup>&</sup>lt;sup>5</sup> According to the Company's Open Access Transmission Tariff (OATT) formula, retail customers would incur most of the costs of the Company's new transmission investments. (See PacifiCorp 2013 OATT rate formula. Tab ATT 9a – Load Divisor. PacifiCorp's share of load divisor (Ave 12CP) is <u>87.6%</u>. Go to: <a href="http://www.oasis.oati.com/PPW/PPWdocs/2013\_Projection\_Variance\_Analysis.xlsx">http://www.oasis.oati.com/PPW/PPWdocs/2013\_Projection\_Variance\_Analysis.xlsx</a>)

### CO<sub>2</sub> Price Assumption

The Company did not change its assumptions on future CO2 taxes in the IRP Update despite the ongoing actions of the Environmental Protection Agency (EPA) to implement the June 2013 Presidential Memorandum on regulating greenhouse gases (GHG). Initially, the Office was concerned that the Company did not accelerate the IRP assumptions on carbon taxes based on the EPA's current activity. However, the Company did explain in Appendix F of the IRP Update why it chose not to change these CO<sub>2</sub> assumptions. The Office also reviewed the timelines in the EPA's proposed rule issued June 2, 2014 on emission guidelines for existing fossil fuel-fired electric generating units (known as the 111(d) rule). The EPA proposes full compliance with the guidelines by 2030 along with a "10-year performance period" with a January 1, 2020 start date.6

Based on what was known at the time, the Office believes that retaining the 2013 IRP assumption of a CO2 tax beginning in 2022 for the 2013 IRP Update was a reasonable approach. However, the impact of the EPA's proposed 111(d) rule on the CO2 price assumptions for the 2015 IRP should be fully vetted with stakeholders.<sup>7</sup> A 2020 or earlier start date for updated assumptions on the cost of CO<sub>2</sub> regulations may be appropriate.

## Recommendations

Based on our review of the 2013 IRP Update, the Office makes the following recommendations:

- The Company should prepare a contingency plan in the event that the cost of FOTs increase significantly and provide this contingency plan in the 2015 IRP.
- In future IRP Updates, the Company should include information on the preferred portfolio's PVRRs from SO and PaR models.

Chris Parker, Division of Public Utilities

Jeffrey K. Larsen, Rocky Mountain Power

<sup>&</sup>lt;sup>6</sup> EPA Proposed Rule, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, June 2, 2014, Section VIII.B.2.c., pages 407 to 411.

<sup>&</sup>lt;sup>7</sup> The Office notes that one of the topics for the July 17-18 IRP Public Meeting is "Environmental Policy"; and, the Company has indicated that EPA 111(d) will be discussed.