## Rocky Mountain Power Response to Utah Public Service Commission October 31, 2011 Order Docket No. 11-035-T06

On October 31, 2011, the Utah Public Service Commission issued an order requesting additional information under Docket No. 11-035-T06. The Commission ordered PacifiCorp, dba Rocky Mountain Power ("Company") to file supplementary information by November 14, 2011 regarding its application of the Commission approved methodology to calculate Schedule No. 37 avoided cost rates ("Commission Approved Methodology"). To comply with the Commission order, the Company provides responses to the following questions:

- a) Provide a direct link between the load and resource plan in the 2011 IRP and the period of resource deficiency identified in the Schedule 37 avoided cost rates;
- b) Explain the basis for including or excluding planning reserve in the calculation of short-run avoided energy cost;
- c) Respond to whether peak and off-peak avoided energy costs during the period of resource sufficiency are correctly valued and correct these values as necessary;
- d) Provide information regarding capacity deficits for all years during the resource sufficiency period.

## **Company Response:**

a) Provide a direct link between the load and resource plan in the 2011 IRP and the period of resource deficiency identified in the Schedule 37 avoided cost rates.

The Commission approved Schedule No. 37 avoided cost methodology requires the Company to calculate two distinct load and resource ("L&R") balances. The first L&R balance is an annual *energy* balance used to determine the periods of resource sufficiency and deficiency. The second L&R balance is a *capacity* balance calculated on a monthly

<sup>&</sup>lt;sup>1</sup> See Docket No 94-2035-03, "In the Matter of the Application of PacifiCorp for an Order Approving Avoided Cost Rates," PacifiCorp Exhibit No. 1 (RW-1), Prefiled Direct Testimony of Roger Weaver, pages 10-11.

basis to determine the number of months on which to base the short-run capacity payment.<sup>2</sup> The Company calculates both of these L&R balances using information produced by its Generation Regulation Initiative Decision ("GRID") model populated with assumptions from its most recently filed Integrated Resource Plan ("IRP") updated for known changes that have occurred subsequent to the IRP filing.

In the 2011 IRP, the Company based its resource need analysis and preferred portfolio selection on a summer capacity L&R. The only reference in the 2011 IRP to a system-wide energy balance was Figure 5.6, "System Average Monthly and Annual Energy Positions," reproduced in this document as Figure 1 which shows that on an annual basis the Company would be energy sufficient through 2014 in heavy load hours and through 2017 on an annual basis. In the June 2011 Schedule No. 37 filing, the calculation from GRID showed that the Company would be energy sufficient through 2014 on an annual basis.

<sup>&</sup>lt;sup>2</sup> See Docket No. 03-035-T10, "In the Matter of the Application of PacifiCorp, dba Utah Power & Light Company, for Approval of Standard Rates for Purchases of Power from Qualifying Facilities Having a Design Capacity of 1,000 Kilowatts or Less," Commission Order, June 1, 2004, page 16. The Commission modified the Schedule No. 37 avoided cost methodology to base capacity payments during years of energy sufficiency on the number of months that the Company projected to be capacity deficient. Previously, a three month capacity payment was included if the Company was capacity deficit at the summer peak.

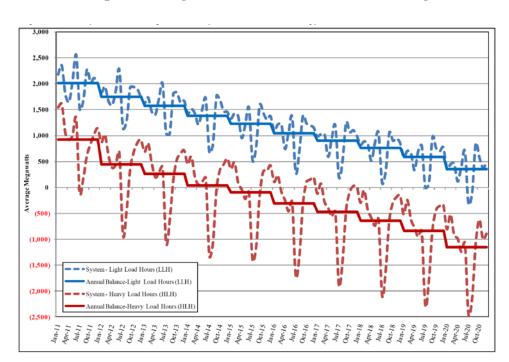


Figure 1. PacifiCorp 2011 Integrated Resource Plan, Volume I, Page 105

Compared to the assumptions used to develop the energy balance in Figure 1 from the 2011 IRP, the energy L&R in the Company's Schedule No. 37 filing reflects updates to its loads and resources as well as market and fuel prices based on information known to the Company when it made its filing. These updated assumptions combined with different approaches to quantifying the energy available from natural gas-fired resources, results in a three year difference in the timing of the Company being energy deficient as compared to the 2011 IRP.

The Commission has acknowledged that the Schedule No. 37 methodology can result in different L&R calculations than the IRP.<sup>3</sup> The primary driver of this difference in timing is how the Company accounts for the energy available from its natural gas-fired resources in the IRP as compared to how the Company accounts for the energy available from its natural gas-fired resources in the Commission approved Schedule No. 37 methodology. Specifically, in the 2011 IRP, the annual energy contribution of natural gas-fired plants was based on their full capability after adjusting for planned and

<sup>&</sup>lt;sup>3</sup> Docket No. 03-035-T10, Commission Order June 1, 2004, page 5.

unplanned outages. Using the Commission approved Schedule No. 37 methodology, the annual energy contribution of natural gas-fired plants is based on the level they are committed in the GRID model. These two approaches result in a lower energy contribution from natural gas-fired plants in the Schedule No. 37 method than what is reflected in the IRP from the same facilities.

## b) Explain the basis for including or excluding planning reserves in the calculation of short-run avoided energy cost.

It is important to include planning reserves in the calculation of short-run avoided energy cost for Schedule No. 37 avoided cost rates for two reasons. First, including reserves is consistent with the Company's IRP methodology. Second, including reserves appropriately takes into consideration not only the reliability requirements the Company must meet according to the Western Electricity Coordinating Council, but also load forecast errors and other planning uncertainties. The IRP uses planning reserves to account for operating reserves, regulating reserves, load forecast errors and other planning uncertainties.<sup>4</sup> The Company's GRID model explicitly includes operating reserves, regulating margins, and thermal derates in an amount that is equivalent to planning reserves. In its current Schedule No. 37 capacity L&R balance, GRID calculated operating reserves, regulating margins and thermal derates that accounted for 1,311 MW, or 12.8 percent of system obligation, roughly equivalent to the 13.0 percent planning reserve margin included in the IRP.

Because the L&R calculation from GRID incorporates requirements for operating reserves, regulating reserves and thermal derates, the capacity and energy L&Rs produced by GRID capture the equivalent impact of the planning reserve margin. As a result, the Company believes that it has correctly applied the methodology authorized by the Commission and that inclusion of planning reserve margins, in addition to GRID modeled operating reserves, regulating reserves, and thermal derates, would incorrectly double count the impact of these parameters.

<sup>&</sup>lt;sup>4</sup> See PacifiCorp 2011 Integrated Resource Plan, Volume I, Page 99.

c) Respond to whether peak and off-peak avoided energy costs during the period of resource sufficiency are correctly valued and correct these values as necessary.

Consistent with its previous Schedule 37 filings, the Company's Schedule 37 filing correctly applied the Commission approved methodology with regard to peak and off-peak avoided energy costs.

d) Provide information regarding capacity deficits for all years during the resource sufficiency period.

For the information requested, please see Confidential Attachment C, provided subject to the terms and conditions of the protective order issued under U.A.C. R746-100-16, as granted in the Commission order dated October 31, 2011.

## **Other Issues Identified by the Company:**

After a further review of the capacity calculation, the Company has determined that the capacity calculation for the 6 month period July 2011 through December 2011 is incorrect. The calculation does not correctly reflect that the capacity payment is paid over a six month period. Revised tariff sheets are attached to this filing to reflect this correction. The corrected avoided cost study is provided as Attachment B.