SHOR Update of Electric Serv	RT TITLE	lule No. 37 Rates
		ISSUED: September 30, 2009
In the Matter of the Advice Filing No. 09-12 – Annual Update for Schedule 37 Avoided Cost Purchases From Qualifying Facilities (QF)))))	<u>DOCKET NO. 09-035-T14</u> <u>ORDER</u>
)	

SYNOPSIS

The Commission does not approve the rates as filed. PacifiCorp is directed to refile Schedule No. 37 rates and tariff sheets with the adjustments and explanations noted herein.

- 2 -

By The Commission:

INTRODUCTION AND PROCEDURAL BACKGROUND

On August 4, 2009, PacifiCorp, dba Rocky Mountain Power ("Company"), filed proposed changes to Electric Service Schedule No. 37, "Avoided Cost Purchases from Qualifying Facilities" ("Schedule No. 37"), of Tariff P.S.C.U. No. 47 with a requested effective date of September 3, 2009. This filing was made in response to the Commission's February 12, 2009, Report and Order Directing Tariff Modification in Docket No. 08-035-78¹ requiring the Company to update Schedule No. 37 annually. Schedule No. 37 establishes standard prices for purchases of power from Utah-located cogeneration Qualifying Facilities ("QFs") with a design capacity of 1,000 Kilowatts (kW) or less and small power production QFs with a design capacity of 3,000 Kw or less. The rates are based on avoided costs developed from the Company's Integrated Resource Plan ("IRP"). Avoided costs are costs the Company would incur to serve its native load "but for" the generation provided by the QFs. Schedule No. 37 prices may also be used to evaluate special contracts, demand side resource programs and form the basis of credits paid under Electric Service Schedule No. 135, the Company's Net Metering Service tariff. Specifically in this filing, the Company updates the rates for known and expected changes to system costs.

On August 4, 2009, the Commission requested the Utah Division of Public Utilities ("Division") to investigate and review the proposed changes. On August 27, 2009, the

¹Docket No. 08-035-78, "In the Matter of the Consideration of Changes to Rocky Mountain Power's Schedule No. 135 - Net Metering Service."

- 3 -

Division requested an extension of time, until September 3rd, for its review. Based upon the Division's request, on August 31, 2009, the Commission issued an Order suspending the tariff filing pending further investigation by the Division and comment from interested parties. On September 3, 2009, the Division filed its review and recommendation for the Commission to adopt the Schedule No. 37 rates as proposed. No other party provided comment.

DISCUSSION, FINDINGS AND CONCLUSIONS

The Company's filing of October 4th provides a calculation of avoided costs using the method approved in Docket Nos. 94-2035-03,² 03-035-T10,³ and 06-035-T06.⁴ The approved method differentiates between periods of resource sufficiency and deficiency. The Company identifies the period 2009 to 2013 as one of resource sufficiency, or the "Short Run." Resource deficiency, which the Company identifies as the "Long Run," is marked by resource deficit in annual energy, and both summer and winter peak loads. The Company represents this deficiency occurs in 2014 and beyond.

Consistent with the approved methods, avoided energy cost in dollars per megawatt-hour from 2009 through 2013, is calculated using the Company's production cost model, GRID. The avoided energy cost is calculated as the difference in energy cost between

²Docket No. 94-2035-03, "In the Mater of the Application of PacifiCorp for an Order Approving Avoided Cost Rates."

³Docket 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."

⁴Docket No. 06-035-T06, "In the Matter of the Application of PacifiCorp, dba Utah Power & Light Company, for Approval of Standard Rates for Purchases of Power from Cogeneration Qualifying Facilities Having a Design Capacity of 1,000 Kilowatts or Less or Small Power Production Qualifying Facilities Having a Design Capacity of 3,000 Kilowatts or Less."

- 4 -

the existing system and the cost which occurs when a 10 megawatt zero cost resource is added to the Company's system resources and can be viewed as the highest variable cost incurred to service total system load from existing and non-deferrable resources. The avoided summer capacity cost in dollars per kW-year during this period is based on the fixed cost plus variable operation and maintenance cost of a simple cycle combustion turbine ("SCCT") for the number of months the Company identifies it is capacity deficient. It is the combination of the avoided firm capacity costs and the avoided energy costs which provide the total avoided cost during the short run.

The expected costs of a combined cycle combustion turbine ("CCCT") with ductfiring and of a SCCT are used to estimate avoided capacity and energy costs beginning in 2014 and for the remaining years of the calculation.

For the purpose of comparing the proposed Schedule No. 37 rates to existing Schedule No. 37 rates, the Company levelizes the annual prices using an assumed capacity factor over a 20-year contract starting in 2009. The proposed updated 20-year levelized price, assuming an 85 percent capacity factor, is \$64.16 per megawatt-hour. This proposed price is about twenty percent higher than the 20-year levelized price of \$53.64 per megawatt-hour based on the same 20-year period using current (i.e., not updated) model assumptions. On an annual basis, the proposed rates in comparison to current rates are 5 to 40 percent lower in the years 2009 through 2011, and 17 to 52 percent higher in years 2012 through 2028.

Any estimation of avoided costs requires assumptions of the Company's future loads and resources, the least-cost plant's type, cost and characteristics, inflation and discount

- 5 -

rates, natural gas prices, and wholesale power prices. We review these assumptions and inputs to insure they are consistent with the Company's integrated resource plan and result in reasonable measures of avoided costs over the 20-year time horizon.

Load and Resource Balance

The Company indicates the starting point for the load and resource balance contained in Table 1 - "Load and Resources" ("Table 1") of the filing is that developed for the Company's 2008 Integrated Resource Plan ("2008 IRP"), filed in Utah in May 2009. This balance was then updated using the Company's February 2009 load forecast, which was included in the 2008 IRP as a sensitivity. In addition, Company-owned wind resources and long-term sales and purchase contracts were updated to include information available as of May 2009. This included the addition of new Company-owned wind resources including McFadden Ridge and Three Buttes Wind and of power purchase agreements with the Los Angeles Department of Water and Power ("LADWP") and the CoGen II Qualifying Facility. The new load and resource balance shows a summer peak deficit beginning in 2010, and surplus annual energy until 2014. Winter peak conditions are not identified by the Company.

The Division clarifies the LADWP power purchase agreement is a settlement agreement dated March 27, 2009 between the Company, on one hand, and LADWP and Intermountin Power, on the other hand. The Division concludes, based upon information received in the Company's 2009 general rate case in Docket No. 09-035-23,5 that inclusion of

⁵ Docket No. 08-035-23, "In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations."

- 6 -

this contract into the avoided cost calculation is appropriate. In general, the Division also concludes that the inputs used are either consistent with the assumptions filed in the 2008 IRP or are consistent with anticipated updates.

While the Division concludes the assumptions are reasonable, we note the Company does not provide information in its filing in Table 1 regarding deficit or surplus of winter peak conditions as it has in the previous two Schedule No. 37 avoided cost filings. In addition, the Company does not indicate what planning margin the load and resource balance represents so it is difficult to compare Table 1 with information contained in the IRP. Based upon the representations of the Company and the Division that the changes to the load and resource balance in Table 1 are appropriate, and finding no objection, we accept the Load and Resource Balance. We direct the Company, however, to refile Table 1 with complete information including winter peak conditions (or an explanation of why a winter peak load and resource balance is no longer necessary) and the planning reserve margin the load and resource balance represents.

Avoidable Resource Type, Cost, and Characteristics

During the years 2009 to 2013, PacifiCorp proposes to make a summer capacity payment based on the number of deficit months in the year. The Company uses the estimated capital cost and fixed and variable operation and maintenance ("O&M") costs of a SCCT from its 2008 IRP to value monthly capacity payments from 2009 to 2013. The Company proposes payments based on 1, 4, 7, 9, and 9 months of capacity deficit in years 2009 through 2013, respectively. The Division provides no comment on the number of months identified as resource

- 7 -

constrained. Finding no objection, we accept use of the Company's proposed number of months for calculating avoided costs in this docket.

In the 2008 IRP Preferred Portfolio, the Company identifies a wet-cooled CCCT with duct-firing capability located in Utah as least cost to meet the 2014 resource need. The Company blends the costs of the CCCT and the duct firing resources identified in Table 6.4 - "Total Resource cost for East Side Supply-Side Resource Options, \$8, CO2 Tax" of the 2008 IRP to represent a proxy plant cost. The Division concludes the method used to calculate the avoided costs is consistent with the Commission-approved method.

We observe in Table 4 - "Total Avoided Energy Cost", column c, the Company now uses an energy-weighted capacity factor in its calculation of the Capitalized Energy Costs (i.e., 51.5 percent) as opposed to an 85 percent capacity factor for the blended resource used in Docket No. 06-035-T10. In addition, in this filing in Table 6 - "On- & Off-Peak Energy Prices", column b, the Company now uses an on-peak capacity factor in its calculation of the Capacity Cost Allocated to On-Peak Hours as opposed to an 85 percent capacity factor for the blended resource used in Docket No. 06-035-T10. While it appears these changes may be appropriate, the Company provides no explanation and we have received no comment on the changes. We direct the Company in the updated tariff filing to explain the origin and the reason for using an energy- weighted capacity factor in its calculation of the Capitalized Energy Costs and its effect on the calculation of avoided energy costs. We also direct the Company to explain the origin and reason for using an on-peak capacity factor in its calculation of the Capacity Cost Allocated to On-Peak Hours and its effect on the calculation of on- and off-peak energy prices.

For proxy plant capital and O&M costs during the period of resource sufficiency, the Company assumes a SCCT East Side Resource. For calculation of avoided energy and capacity costs during the period of resource deficiency, the Company uses both the SCCT and the wet-cooled, CCCT with duct firing capability. To determine the capacity and energy costs and parameters for this CCCT, the Company blends the costs and capacities of the CCCT and its duct firing capability identified in Table 6.4 of the 2008 IRP. The Division provides no specific comment on these assumptions and does not recommend any change to these assumptions.

We note in Table 8 - "Total Cost of Displaceable Resources" the Company uses different categories of costs from the IRP to determine variable O&M costs for both the SCCT and CCCT resources used in the avoided cost calculation than in the previous two Schedule No. 37 avoided costs cases (i.e., Docket Nos. 03-035-T10 and 06-035-T06).

As background to this discussion, the 2003 IRP used in Docket No. 03-035-T10, the 2004 IRP Update used in Docket No. 06-035-T06, and the 2008 IRP used in this docket each contain a supply side resource table from which capital, fixed O&M, and variable O&M costs used in the avoided cost calculation are obtained for the proxy resources. Variable costs in this table have been broken out as follows: 1) the 2003 IRP contains five variable costs columns, namely, O&M, Fuel/Other, Total, Tax Credits, and Environmental and in Docket No. 03-035-T10, the Company used only the value in the Variable Costs "O&M" column to determine the variable O&M values used in the avoided cost calculation; 2) the 2004 IRP Update contains four variable costs columns, namely, O&M, Fuel/Other, Tax Credits, and Environmental and in

⁶For the 2003 IRP see Table C.20 on page 214, for the 2004 IRP Update see Table A.5 on page 62, and for the 2008 IRP see Table 6.4 on page 104.

-9-

Docket No. 06-035-T06, the Company summed the values in the Variable Costs "O&M" column and "Fuel/Other" column to determine the variable O&M values used in the avoided cost calculation; and 3) the 2008 IRP contains four variable costs columns, namely, O&M, Gas Transportation/ Wind Integration, Tax Credits, and Environmental and in this case, the Company sums the values in the Variable Costs "O&M" column and the "Environmental" column to determine the variable O&M values used in the avoided cost calculation.

The Company specifies the environmental adders are comprised mainly of a carbon tax. The Company provides no explanation for this change nor why it is in the public interest to include a potential carbon tax in avoided costs payments to qualifying facilities.

Lacking supporting evidence or discussion, we find the Company's inclusion of environmental adders to the variable O&M costs used in the avoided cost calculation constitutes a deviation from the previously-approved methodology. While in our June 28, 1992, Report and Order on Standards and Guidelines in Docket No. 90-2035-01⁷ we directed the Company to include an assessment of environmental risks in the IRP planning process, we have not approved the inclusion of an estimate of the cost of complying with future carbon legislation in the avoided cost calculation. Absent explanation from the Company and comments from parties we decline to approve this change.

As indicated above it appears that through the years the definition of "variable O&M costs" used in the calculation of avoided costs may have varied from filing to filing. It is now time to re-evaluate this parameter to ensure that all appropriate avoidable variable O&M

⁷Docket No. 90-2035-01, "In the Matter of Analysis of an Integrated Resource Plan for PacifiCorp."

- 10 -

costs are included in the calculation including known environmental compliance costs. In order to develop the record for this determination, we direct the Company to provide information which defines what is meant by each column of the Variable Costs columns used in the 2008 IRP; identify all of the costs which are included in the value for each column; indicate which costs are appropriate to include in determining variable costs for the avoided cost calculation and why; and identify and explain changes to the Variable O&M Cost determination from the Docket No. 06-035-T06 and why these changes are appropriate and in the public interest. We are specifically interested in whether or not gas transportation costs are or should be included in variable O&M costs and the magnitude of these costs when compared with the 2004 IRP Update. We direct the Company to recalculate and re-file Schedule No. 37 avoided costs based upon its recommendation. If the Company proposes to include environmental costs in the avoided cost calculation, it shall provide the supporting tables both with and without environmental adders so that a comparison can be made. If the Company declines to include gas transportation costs in its avoided cost calculation it shall provide the supporting tables both with and without gas transportation included as a Variable O&M cost.

Discount Factor and Inflation Rates

In Table 7 - "Comparison between Proposed and Current Avoided Costs" the Company indicates it uses a discount rate of 7.10 percent in the avoided cost calculation. This is different than the Company's after-tax weighted average cost of capital, i.e., 7.4 percent, which is the discount rate used in the 2008 IRP.

- 11 -

In Table 8 - "Total Cost of Displaceable Resources" the Company provides its official inflation forecast, dated June 2009, as follows: 2009 - 0.30 percent; 2010 - 1.10 percent; 2011 and 2012 - 1.80 percent; 2013 and 2014 - 1.90 percent; and after 2014 - 1.91 percent. Inflation rates used in the IRP vary depending on the modeling task and its use. For the System Optimizer model, a single escalation rate value is used. This value, 1.9 percent, is estimated as the average of the annual corporate inflation rates for the period 2009 to 2030, using PacifiCorp's June 2008 inflation curve. For the Planning and Risk model, the full series of annual values from 2009 through 2028 is used.

The Division asserts it reviewed the discount and inflation rates and concludes they are generally consistent with the Company's 2008 IRP or with anticipated updates. Based upon the representations of the Company and the Division, we accept the discount and inflation rates used in the Schedule No. 37 avoided cost calculation.

Natural Gas Prices

The Company specifies the gas prices provided in Table 9 - "Natural Gas Price - Delivered to Plant" used in the avoided cost calculation utilize the Official Forward Gas Curve (a blend of June 30, 2009, market gas curve and long term gas prices) as presented in the Company's Official Market Price Forecast. Gas prices are based upon the Opal gas index. The Company further represents the forecast is a combination of its own projections of natural gas prices, based on market data, through July 2015, and long-term price gas projections from August 2016 and beyond. The two sources are blended in equal portions from August 2015 through July 2016. The natural gas prices begin in 2014 at \$6.57 per million BTU, increase to

- 12 -

\$6.63 per million BTU in 2015, decrease to \$6.44 per million BTU in 2017, increase to \$7.45 per million BTU in 2021, decrease to \$7.34 per million BTU in 2022, then escalate to \$7.72 per million BTU in 2028. The average annual escalation for the resource deficit period from 2014 to 2028 is 1.26 percent per year.

The Division asserts it reviewed the natural gas prices and found them generally consistent with the Company's 2008 IRP or with anticipated updates. Contrary to previous avoided cost filings, we note the Company provides little explanation of how this forecast is developed and direct the Company to provide additional information on how the gas price forecast is developed in the updated filing. In addition, Table 9 does not include natural gas prices in the years 2009 through 2013 therefore we also direct the Company to provide the gas price assumed prior to 2014 in GRID.

Wholesale Power Prices

No specific information is provided by the Company on wholesale power prices. The Division asserts it reviewed the wholesale electric prices and concludes that inputs used are either consistent with the assumptions filed in the 2008 IRP or with anticipated updates. Based on the Division's representation these wholesale power price forecasts are reasonable, and finding no objections, we accept use of the wholesale power price forecasts for calculating avoided costs in this docket. Contrary to previous avoided cost filings we note the Company provides little explanation of wholesale power prices and their use in this filing. In the updated filing we direct the Company to provide information on wholesale power prices as they relate to

- 13 -

this docket. We also direct the Company to provide the wholesale power prices used in GRID during the period of sufficiency.

Having provided a complete review of the bases for these changes in this order, and absent explanations regarding the changes notes above, the changes to Schedule No. 37 are not approved as filed.

ORDER

NOW, THEREFORE, PURSUANT TO OUR DISCUSSION, FINDINGS AND CONCLUSIONS MADE HEREIN, WE ORDER:

- 1. The Company shall provide additional information and clarification and refile the Schedule No. 37 rates sheets, as necessary with the adjustments noted herein within two weeks of the date of this Order. Specifically, these adjustments are:
 - a) <u>Load and Resource Balance</u>: The Company shall update Table 1 with complete information including winter peak conditions or provide an explanation of why a winter peak load and resource balance is no longer necessary for the determination of resource deficiency and sufficiency periods. The load and resource balance shall also be annotated with the planning reserve margin used in the calculation;
 - b) <u>Total Avoided Energy Costs</u>: The Company shall explain the origin of and reason for using an energy weighted capacity factor in the calculation of the Capitalized Energy Costs and its effect on the calculation of avoided energy costs in its updated tariff filing. The Company shall also explain the origin of and the

- 14 -

reason for using an on-peak capacity factor in the calculation of the Capacity Cost Allocated to On-Peak Hours and its effect on the calculation of on- and off-peak energy prices;

- c) Variable O&M Costs: The Company shall provide information defining what is meant by each column of the Variable Costs columns used in the 2008 IRP; identify all of the costs which are included in the value for each column; indicate which costs are appropriate to include in determining variable costs for the avoided cost calculation and why; and identify and explain changes to the Variable O&M Cost determination from the Docket No. 06-035-T06 and why the changes are appropriate and in the public interest. The Company shall recalculate Schedule No. 37 avoided costs based upon its recommendation. If the Company proposes to include a potential carbon tax in its environmental costs in the avoided cost calculation, it shall provide the supporting tables both with and without the carbon tax so that a comparison can be made. If the Company declines to include gas transportation costs in its avoided cost calculation it shall provide the supporting tables both with and without gas transportation included as a Variable O&M cost;
- d) <u>Natural Gas Prices</u>: The Company shall provide additional information on how the gas price forecast is developed and provide prices assumed in years prior to 2014; and

- 15 -

e) <u>Wholesale Power Prices</u>: The Company shall provide information on

wholesale power prices as they relate to this docket and provide the wholesale

power prices used in GRID during the period of sufficiency.

2. The Company shall submit to the Commission the appropriate tariff sheets for

Electric Service Schedule No. 37 that reflect the decisions made herein. The

Division shall review the revised sheets and supporting information for

compliance with this Order and provide its recommendation to the Commission

within one week of the filing of the Company's revised tariff sheets and

supporting information.

DATED at Salt Lake City, Utah, this 30th day of September, 2009.

/s/ Ted Boyer, Chairman

/s/ Ric Campbell, Commissioner

/s/ Ron Allen, Commissioner

Attest:

/s/ Julie Orchard Commission Secretary G#63662