

- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

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In the Matter of the compliance filing to)
February 12, 2009 Order in Docket No. 08-) DOCKET NO. 11-035-T06
035-78 on Net Metering Service, the Utah)
Commission directed the Company to)
“update the avoided cost pricing in Schedule)
No. 37 annually, concurrent with the) ORDER REQUESTING ADDITIONAL
approval and establishment of rates for) INFORMATION
larger commercial and industrial customers)
based on the FERC Form No. 1 method.”)
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ISSUED: October 31, 2011

By The Commission:

On June 28, 2011, PacifiCorp, dba Rocky Mountain Power (“Company”), filed proposed changes to Electric Service Schedule No. 37, “Avoided Cost Purchases from Qualifying Facilities” (“Schedule 37”), of Tariff P.S.C.U. No. 47, with a requested effective date of July 28, 2011. This filing was made in response to the Public Service Commission of Utah’s (“Commission”) February 12, 2009, Report and Order Directing Tariff Modification in Docket No. 08-035-78¹ requiring the Company to update Schedule 37 annually.

Schedule 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 Plan² (“IRP”).

Avoided costs are costs the Company would incur to serve its native load “but for” the generation

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

² The Company’s 2011 IRP was filed with the Commission on March 31, 2011 and is currently under review.

provided by the QFs. Schedule 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 June 30, 2011, the Commission requested the Utah Division of Public Utilities ("Division") to investigate and review the proposed changes. On July 21, 2011, the Division requested an extension of time, until July 28, 2011, for its review. Based upon the Division's request, on July 27, 2011, the Commission issued an Order suspending the tariff filing pending further investigation by the Division and comment from interested parties. On July 28, 2011, the Division filed its review and recommendations. Also on July 28, 2011, Utah Clean Energy and Western Resource Advocates ("UCE/WRA") filed joint comments on the Company's Schedule 37 proposal. On September 21, 2011, the Company filed responsive comments to the issues raised by UCE/WRA.

DISCUSSION, FINDINGS AND CONCLUSIONS

The Company's filing of June 28th is based on its 2011 Integrated Resource Plan ("2011 IRP") and provides a calculation of avoided costs using the method approved in Docket Nos. 94-2035-03³ and 03-035-T10.⁴ This method differentiates between periods of resource sufficiency and deficiency. The Company identifies the period 2011 through 2014 as one of

³ Docket No. 94-2035-03, "In the Matter of the Application of PacifiCorp for an Order Approving Avoided Cost Rates."

⁴ 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."

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 2015 and beyond.⁵

Consistent with the approved method, avoided energy cost in dollars per megawatt-hour, in the short run period 2011 through 2014, is calculated using the Company’s Generation Regulation Initiative Decision (“GRID”) production cost model. The avoided energy cost is calculated as the difference in energy cost between 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 serve total system load from existing and non-deferrable resources. The avoided summer capacity cost in dollars per kilowatt-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 provides the total avoided cost during the short run. The expected costs of a proxy plant, shown to be least-cost in the Company’s IRP, is used to estimate avoided capacity and energy costs beginning in 2015 and for the remaining years of the calculation. The Company represents these costs using a combined cycle combustion turbine (“CCCT”) with duct-firing.

To compare the proposed Schedule 37 rates to existing Schedule 37 rates, the Company provides a levelized annual price using an assumed capacity factor over a 20-year

⁵ The Company’s 2011 IRP indicates a CCCT is selected predominately for 2015 to address the resource deficiency period. The Company notes the timing of this resource is on the “knife edge” and is driven primarily by natural gas prices. Hence, a number of portfolios in the resource selection process set the timing of a CCCT in 2016 or 2018 (see 2011 IRP, p. 206).

contract starting in 2011. The proposed updated 20-year levelized price, assuming an 85 percent capacity factor, is \$64.01 per megawatt-hour. This proposed price is about 12 percent lower than the 20-year levelized price of \$72.47 per megawatt-hour based on the same 20-year period using approved Schedule 37 prices. On an annual basis, the proposed rates in comparison to current rates are about 7 to 27 percent lower in the years 2011 through 2014. Through the period 2015 through 2031, rates decline by an average of about 10 percent, ranging from an increase of about 2 percent to a decrease of 15.5 percent.

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

Load and Resource Balance

The Company contends the load and resource balance depicted in Appendix 1, Table 1 of the filing is based on its 2011 IRP and includes adjustments for certain changes that have occurred since the 2011 IRP was filed. According to the Company, these changes include an update of the Company's load forecast from the November 2010 forecast to the June 2011 forecast. Company-owned wind resources and long-term sales and purchase contracts are also updated to include information available as of early June 2011. In this filing, the additions and revisions to long-term contracts include Clay Basin Gas Storage, Kennecott Refinery QF, Nevada Energy, and Threemile Canyon Wind QF. The new load and resource balance shows a

summer peak capacity deficit beginning in the current year, 2011, a winter peak surplus through the short-run period 2011 through 2015, and a surplus in annual energy until 2015.

Both the Division and UCE/WRA argue there are inconsistencies between the 2011 IRP, and the load and resource depicted in Appendix 1, Table 1. According to the Division, the Company does not provide the planning reserve margin percentage in Appendix 1, Table 1 or in its discussion in Appendix 2. Neither does it show how the planning reserve margin is included in the calculations found in Appendix 1, Table 1. The Division subsequently questioned the Company about this issue. In its response, the Company argues the application of a planning reserve margin is relevant to the IRP process, but is not relevant in the Schedule 37 calculations since the Company does not add resources here to meet a planning reserve margin. The intent of the avoided cost calculation, according to the Company, is to arrive at a reasonable estimate of the cost savings to the Company based upon the addition of a small qualifying facility; it is not intended for complete long-term system planning.

The Company contends the margin, or deficit, to be covered in the avoided cost calculation is represented in Appendix 1, Table 1 by the "Surplus/(Deficit)" calculations which have little to do with the planning reserve margin as applied in an IRP context. Based on the Company's response, the Division agrees the IRP planning reserve margin is not meaningful in the determination of avoided costs and consequently recommends no changes to the Company's filing.

UCE/WRA also contends the Company's reserve margin used in this filing to determine its load and resource balance is not consistent with the planning reserve margin used for determining the load and resource balance in the 2011 IRP. According to UCE/WRA, The

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Commission's December 14, 2009, Order in Docket No. 09-035-T14⁶ ("December Order") states the Company's load and resource plan developed in conjunction with the Company's IRP is the basis for determining the periods of resource sufficiency and deficiency in its calculation of avoided costs and the Company must include in its filing the load and resource plan it uses to develop its proposed avoided costs. UCE/WRA claims the December Order states the load and resource plan must be presented in sufficient detail to demonstrate the proposed periods for resource sufficiency and deficiency are consistent with the Company's most recent IRP or IRP update. According to UCE/WRA, the December Order also directs the Company to label its load and resource balance tables with applicable planning reserve margin assumptions.

UCE/WRA argues the Company uses an operating reserve margin, which is a subset of the planning reserve margin, rather than using the full planning reserve margin to calculate its load and resource balance. As part of the 2011 IRP, according to UCE/WRA, the Company conducted a loss of load study where it indicates 13 percent is an appropriate planning reserve margin to be used in determining the load and resource balance. UCE/WRA asserts the Company does not apply the 13 percent IRP planning reserve to its load obligation for purposes of calculating the avoided costs in this filing. Instead, according to UCE/WRA, the Company calculates the load and resource balance using the current required operating reserve, assumes no reserve obligation for purchased power, and thereby understates its resource need as compared with the use of a 13 percent planning reserve margin. UCE/WRA argues the Company is both energy and capacity deficient beginning in 2011 if a 13 percent planning reserve margin is used.

⁶ Docket No. 09-035-T14, "In the Matter of: In its February 12, 2009 order in Docket 08-035-78 on Net Metering Service, the Utah Commission directed the Company to 'update the avoided cost pricing in Schedule 37 annually, concurrent with the approval and establishment of rates for larger commercial and industrial customers based on the FERC Form No. 1 method.' This filing is in compliance with the direction in that order."

As a result, UCE/WRA recommends the Commission direct the Company to refile using a 13 percent planning reserve margin to calculate its load and resource balance.

In its response to UCE/WRA's comments, the Company contends UCE/WRA misunderstands the intention of certain language in the Commission's December Order. The Company argues the December Order required it to annotate or label its reserve margin in Table 1 in order to provide the Commission with a better understanding of how the Schedule 37 load and resource balances relate to the IRP. The Company argues UCE/WRA provides no evidence the load and resource balances included in the current filing are inconsistent with the method adopted by the Commission and contends UCE/WRA's recommendation represents a change to the reserve margin calculation for Schedule 37, and, therefore constitutes a change to the avoided cost method which is inappropriate in an Advice Filing.

It appears two issues are raised with respect to the role of the planning margin in the Schedule 37 avoided cost method. First is the link between the Company's IRP and identification of the periods of resource sufficiency and deficiency for application of the appropriate avoided cost calculations, i.e., differential revenue requirements or proxy plant, respectively. As noted earlier, the method approved in Docket 94-2035-03 relies on use of the IRP, updated for known changes, as the basis for determining the period of resource sufficiency and the type, timing and costs of a non-deferrable, proxy resource, for the period of resource deficiency.⁷ This period of resource deficiency is determined, in part, by the planning reserve included in the Company's IRP.⁸ We have required the Company to provide a load and resource

⁷ See Docket No. 94-2035-03, Prefiled Direct Testimony of Rodger Weaver, PacifiCorp Exhibit RW-1.

⁸ See the Company resource planning document "Positioning for Competition and Uncertainty, PacifiCorp Resource and Market Planning Program" (RAMPP-3), April, 1994, Page #2-4.

plan which is consistent with the IRP, including the relevant planning margin, to transparently support the period of resource deficiency proposed in the avoided cost filing, with any additional known and measurable changes. It often comes to our attention that the load and resource data provided in Schedule 37 filings do not transparently tie to the Company's IRP, including the relevant planning margin, and the reason is not evident in the record. We direct the Company to provide a transparent link between its 2011 IRP load and resource balance and the load and resource balance supporting the Schedule 37 period of resource deficiency, including known and measurable changes. This link will be provided in a supplementary filing in this case and in all future Schedule 37 rate change filings.

The second issue raised is whether a planning margin is or should be included in calculating the short-run avoided energy costs in GRID. We suspect, but cannot verify, the load and resource balance presented in the Company's Appendix 1, Table 1, is the load and resource plan used in its GRID analysis of Company production costs with and without a 10 average megawatt qualifying facility. This load and resource plan in Appendix 1, Table 1, does not include a planning margin. GRID detail has not been submitted with Schedule 37 filings and therefore the record evidence is unavailable. We have reviewed relevant dockets and have not yet found discussion of whether planning reserve is included or excluded in the short-run avoided energy cost calculation. To clarify the record, we direct the Company to provide a response to this issue in the supplementary filing in this case noted above. We also direct the Division to examine the record and provide comment on this issue.

Avoidable Resource Type, Cost, and Characteristics

The Division states the Company uses cost estimates for two gas-fired resources identified in the 2011 IRP: 1) a 362 megawatt SCCT, 2 Frame “F,” assumed to be available by 2014 and located in Utah; and 2) a 597 megawatt CCCT, Dry “F” 2X1 with duct firing, assumed to be available by 2015 and located in the east side of the Company’s utility system. The Division finds these to be appropriate deferrable resource proxies.

Short-Run Capacity Payments

During the years 2011 to 2014, the Company provides capacity payments based on the number of months in the year in which it is capacity deficit. The Company uses the estimated capital cost and fixed and variable operation and maintenance costs of an SCCT from its 2011 IRP to value monthly capacity payments from 2011 to 2014. The Company proposes payments based on 3, 7, 7, and 7 months of capacity deficit in years 2011 through 2014 respectively.

UCE/WRA notes a large difference between the SCCT fixed costs in 2011 and the years 2012 through 2014. UCE/WRA suggests this is possibly because 2011 begins with July and therefore only three of seven capacity constrained months are included in the calculation of avoided capacity cost. If this is the case, UCE/WRA contends the Company’s short run capacity cost is significantly undervalued and this raises questions about the appropriateness of the method, as the 3/12ths calculation leads to a very low capacity price. However, UCE/WRA argues there is no information in the spreadsheet or other appendices regarding when the Company is short on peak in 2011. UCE/WRA requests the Commission

direct the Company to refile the application and include information regarding the monthly capacity deficits for all years.

Responding to this issue, the Company states it will provide monthly information regarding capacity deficits for all years. The Company states it will provide the requested data on the condition that confidential information is subject to protection. We grant the Company's request for protection of this information pursuant to Utah Administrative Code ("U.A.C") R746-100-16 and direct the Company to provide a supplemental filing with this information.

UCE/WRA also recommends the Commission reexamine the currently approved method for calculating short-run avoided capacity costs. UCE/WRA questions whether this method is designed to capture the costs avoided from building or buying short-term capacity. UCE/WRA argues if the Company must build a resource to provide capacity, then it must build and pay for an entire resource rather than for a fraction of the resource. As a result, according to UCE/WRA, the full cost of a Company-built resource to meet capacity deficiencies should be included in the evaluation. If the Company is avoiding a capacity purchase, UCE/WRA argues the method undervalues the market price of peak capacity because it does not account for variations in market prices between peak and off-peak periods. UCE/WRA expects the average value of twelve months of capacity, divided by five months, is less than the average value of the five most expensive months. UCE/WRA contends it is unlikely the Company can buy five months of peak capacity for the same amount as five twelfths of the annual levelized cost of an SCCT.

The Company argues the short-run capacity payment was the result of a settlement between parties in Docket No. 03-035-14 and then adopted in Docket No. 03-035-

T10. The Company recommends the Commission not implement UCE's recommended change to the approved avoided cost method in this filing. The Company does not respond to UCE/WRA's assertion the method does not account for variations in market prices between peak and off-peak periods.

For the following reasons, we decline to make a change to the valuation of short-run capacity cost avoidance in this docket. First, a valuation for summer capacity purchase, when appropriate, has been part of the method since it was approved in Docket No. 94-2035-03. In Docket No. 03-035-T10, the Company proposed, and no party opposed, use of the capital cost and fixed and variable operation and maintenance costs of an SCCT as a surrogate for the capacity purchases for the months in which the Company was expected to be capacity deficient. Second, there is no evidence that building or owning an SCCT in the short-run is least-cost; the Company's recent IRP's indicate buying this capacity through market purchases is lower cost. Indeed, the forecasted high load hour market prices in Appendix 1, Table 10, are lower than the levelized SCCT costs shown in Appendix 1, Table 8. Finally, UCE/WRA provides no evidence it is lower cost for the Company to own an SCCT than to purchase the capacity in the market.

However, in examining this record, we find further clarification is required to determine whether the Company is correctly valuing peak and off-peak avoided energy costs during the period of resource sufficiency. The Company states Table 2 contains the results of the short run avoided energy costs calculated through GRID. However, these values are labeled as off-peak and treated as off-peak avoided energy costs throughout the period of resource sufficiency. Since these values actually contain average monthly avoided energy costs for all hours, the Company's filed rates may understate on-peak avoided energy costs and overstate off-

peak avoided energy costs. We direct the Company to respond to this issue and make corrections as necessary in the supplementary filing.

Applicability of Approved Avoided Cost Method to Low Capacity Resources

UCE/WRA also questions the applicability of utilizing an avoided cost method which incorporates base load, high capacity resources, 12 hour off-peak and on-peak blocks, and a simple summer and winter delineation as a proxy to assess the avoided costs of low capacity resources, such as solar, which provide energy during summer daytime periods. The Company argues UCE/WRA's comments do not provide sufficient information to address this issue. The Company responds it is open to discussing this issue, but requires additional detail to provide a full response.

We agree more information is needed to conduct a meaningful analysis of this issue. For qualifying facilities eligible for Schedule 38 pricing, we adopted a proxy plant method in all years for wind resources. For the smaller projects eligible for Schedule 37, we have approved a simplified method in order to post prices and provide for transparent update of these prices and therefore have not adopted the methods approved in Docket No. 03-035-14.⁹ We find it is premature to examine a proxy method for renewable qualifying facilities eligible for Schedule 37 rates now but will consider such a docket after Docket No. 11-035-104, "In the Matter of the Investigation into Extending and Expanding the Solar Incentive Program and Possible Development of an Ongoing Program" is completed.

⁹ See Docket No. 03-035-14, "In The Matter of The Application of PacifiCorp For Approval of an IRP-Based Avoided Cost Methodology for QF Projects larger than one Megawatt."

Discount Rates

The Company uses a 7.15 percent discount rate in the calculation of the proposed levelized prices found in Appendix 1, Table 7. The Company represents this input as its “Company Official Discount Rate, Dated March 2011.” The Division contends this discount rate is slightly different from the discount rate used in the 2011 IRP, which is 7.17 percent. The Division is concerned the Company used this discount rate to calculate levelized avoided costs, as found in the filing’s Table 7, while it used the 2011 IRP discount rate of 7.15 percent to calculate the payment factors used in Appendix 1, Table 8, “Total Cost of Displaceable Resources.”

The Division argues the difference between these two rates is negligible and results in no difference within the range of rounding error in the calculated costs. However, the Division expresses concern this may not be the case in future years. To maintain reasonable consistency between the various calculations, the Division concludes the discount rate used in the Schedule 37 factors should be consistent with the rate used in the latest IRP or IRP Update and recommends the Commission order the Company to consistently use the latest IRP or IRP Update discount rates in future Schedule 37 revisions.

We find the Division’s concerns regarding the discount rate used in the Schedule 37 reasonable. Since there is no material difference in levelized avoided costs when either rate is applied, we find no issue at this time. However, in the future, the differences could be material if such rates diverge appreciably. We therefore direct the Company to consistently use the latest IRP or IRP Update discount rates in future Schedule 37 revisions, or to make updates consistent throughout the method and provide supporting evidence for changes in the discount rate.

Price Forecast for Electricity and Natural Gas

The Company indicates electricity and natural gas prices used in this filing are from the Company's Official Forward Price Curve dated March 31, 2011. Both the electricity and natural gas prices are inputs to the Company's calculation of the proposed avoided costs in this filing. Table 9 in Appendix 1 shows the natural gas price used to calculate the fuel costs of an existing natural gas plant in the short run and the CCCT - proxy resource for the Long-Run avoided energy costs. Table 10, Appendix 1 shows the heavy-load hour and light-load hour electricity prices at Mid Columbia and Palo Verde used in the Company's short-run avoided costs calculation.

For the period from April 2011 through April 2017, the Company indicates official forward prices are based on information from market forward transactions. For the period from May 2017 through April 2018, the official forward prices are the average of market information and the long-term price forecast. For the period beginning in May 2018, the official forward prices are based on long-term price forecasts.

None of the parties recommend any change to these price projections. However, UCE/WRA questions how natural gas hedging costs are included in the natural gas price forecasts and how natural gas transportation costs are allocated between energy and capacity. We note the Company's development of energy and capacity costs as found in Appendix 1, Tables 3 through 6, are based upon IRP inputs which include natural gas transportation costs. These inputs are found in Appendix 1, Table 8 and are consistent with the 2011 IRP. Further, Table 3, Appendix 1 shows half of the capital costs of a CCCT in excess of an SCCT are converted to energy payments, which is consistent with the adjustment to the method approved

in Docket No. 03-035-T10. We conclude this information reasonably accounts for the natural gas transportation component in the development of Schedule 37 avoided costs.

In its responsive comments, the Company does not address whether or how natural gas hedging costs are included in the natural gas price forecasts or in the calculation of avoided costs. As noted above, the Company uses GRID to model short run avoided energy costs. In general rate case proceedings, the Company's forecast of hedging costs is included in its GRID study. While it is possible the short-run avoided energy costs, which are calculated through GRID, include hedging costs, there is no evidence in the record to validate this assumption. In future filings, we direct the Company to show how hedging costs relate to the Schedule 37 rates. However, based on the Company's and Division's representation, we find the short-run avoided costs and proxy natural gas price forecasts reasonable, and finding no objections, we accept these forecasts for calculating avoided costs in this docket.

ORDER

NOW, THEREFORE, IT IS HEREBY ORDERED, that:

1. The Company shall file the following supplementary information within 14 days from the date of this order: 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; and d)

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provide information regarding capacity deficits for all years during the resource sufficiency period.

2. The Company shall consistently use the latest IRP or IRP update discount rates in future Schedule 37 revisions, or make updates consistent throughout the method and provide supporting evidence for changes in discount rates.
3. We grant the Company's request for confidentiality per U.A.C. R746-100-16.

DATED at Salt Lake City, Utah, this 31st day of October, 2011.

/s/ Ted Boyer, Chairman

/s/ Ric Campbell, Commissioner

/s/ Ron Allen, Commissioner

Attest:

/s/ Julie Orchard
Commission Secretary
D#210952