BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of Rocky Mountain Power's Proposed Tariff Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases From Qualifying Facilities	))))	Docket No. 17-035-T07 Docket No. 17-035-37
In the Matter of Rocky Mountain Power's 2017 Avoided Cost Input Changes Quarterly Compliance Filing	)))	DPU EXHIBIT 1.0 Direct

Direct Testimony of

Abdinasir M. Abdulle, Ph.D.

Division of Public Utilities

October 3, 2017

INTRODUCTION

Q. Please state your name, business address, and employment for the record.

A. My name is Dr. Abdinasir M. Abdulle. My business address is 160 E. 300 South, Salt Lake City, Utah 84114; I am employed by the Utah Division of Public Utilities (Division or DPU).

Q. On whose behalf are you testifying in this proceeding?

A. I am testifying on behalf of the Division.

Q. Would you summarize your education background for the record?

A. I have a Ph.D. in Economics from Utah State University. I have been employed by the Division for about 16 years.

SCOPE OF TESTIMONY

Q. What is the purpose of your testimony?

A. As is explained in the direct testimony of Mr. Daniel MacNeil, Rocky Mountain Power (the Company) is proposing some changes to Electric Service Schedules 37 and 38. My testimony will provide the Division's response to the Company's proposed changes.

Schedule 38

Q. What changes to Electric Service Schedule 38 is the Company proposing?

A. In its Avoided Cost Input Changes Quarterly Compliance Filing (2017.Q1) dated June 21, 2017, and the Direct Testimony of Company witness, Mr. Daniel MacNeil, the Company proposed four routine and two non-routine updates. The routine updates were:

- Updating the GRID for the 2017 IRP;
- Updating the Official Forward Price Curve (OFPC) to the curve dated March 31, 2017 (1703 OFPC);
- Updating the load forecast to the forecast dated October 4, 2016; and
- Updating the qualifying facility (QF) queue to reflect current signed and potential QFs.

The non-routine updates were:

- Updating the Renewable Energy Credits (REC) ownership assumption.
- Updating the post-IRP resource expansion plan pricing.

Q. Would you please comment on the Company's proposed routine updates?

A. Yes. The routine updates are intended to update the basic model inputs to keep the GRID model current. They represent changes in operating data that are expected and measurable. The Division believes that that these updates are correctly designated as routine and does not oppose them.

Q. What does the Company propose regarding the Renewable Energy Credits (RECs) ownership assumption?

A. The Company proposes that it should retain the RECs associated with the QF output during that period in the QF contract when the QF receives a capacity payment based on deferring or avoiding a renewable resource of the same type. The QF will keep the RECs when the avoided capacity payments are not based on the costs of a renewable resource.

Q. What REC ownership ruling is currently in place in Utah?

A. In its Order on Phase II issues dated August 16, 2013, in Docket No. 12-035-100, the Commission ordered the "RECs shall be retained by the QF unless the QF and purchasing utility have agreed by negotiated contract to an alternate REC ownership structure."[1] This ruling was later upheld by the Commission in its Order dated October 4, 2013, in the same Docket.[2]

Q. Why is the Company proposing a change in the REC ownership now?

A. Actually, the REC ownership issue is not new. In its petition for review and clarification in Docket No. 12-035-100 dated September 16, 2013, the Company requested that,

> The Commission should make an express finding that when avoided cost payments are based on the capital costs of a Company-owned/developed renewable resource that the QF is deferring, the QF retains the RECs only when avoided costs payments are based on the capital costs of a non-renewable thermal resource.

[1] In the Matter of the Application of Rocky Mountain Power for Approval of Changes to Renewable Avoided Cost Methodology for Qualifying Facilities Projects Larger than Three Megawatts. Docket No. 12-035-100. August 16, 2013 Order at 43.

[2] In the Matter of the Application of Rocky Mountain Power for Approval of Changes to Renewable Avoided Cost Methodology for Qualifying Facilities Projects Larger than Three Megawatts. Docket No. 12-035-100. October 4, 2013 Order at 15.

In its October 4, 2013 Order in Docket No. 12-035-100, the Commission denied this request. However, in this order, the Commission indicated that,

> PacifiCorp's concerns may be more appropriately addressed and vetted by the Commission when a renewable QF is actually poised to defer a cost-effective renewable resource included in the IRP Action Plan.

The Company is now proposing this change in REC ownership because the 2017 IRP preferred portfolio now contains cost-effective renewable resources.[3]

Q. What is the Division's position regarding the proposed change in the REC ownership assumption?

A. As indicated in the Division's July 12, 2017 Action Request Response in Docket No. 17-035-37, it is reasonable for the Company to keep the RECs associated with production of the QF when it defers or avoids a renewable resource. Keeping these RECs will compensate the Company, and therefore ratepayers, for the RECs lost through the deferral or avoidance of the renewable resource.[4]

[3] 2017 IRP, Volume I. Table 8.17. Page 244.

[4] In the past the Division supported keeping the RECs with the QF developer unless PacifiCorp specifically purchased the RECs. (See, for example, Docket No. 12-035-100. Direct Testimony of Abdinasir M. Abdulle, March 29, 2013, pages 15-19). However, in the past the deferral resource was a thermal resource with no RECs associated with it. Now renewable resources can be deferred, and with them the RECs, of which ratepayers would be expecting to receive the benefit.

In effect, the proposal is for the Company to own the RECs when they have not been factored into the QF price as credit. This is consistent with the PURPA's customer indifference standard.

Q. Regarding post-IRP expansion plan pricing, what does the Company propose?

A. The Company is proposing to increase avoided costs past the period covered by the IRP preferred portfolio by inflating the final year's value at the IRP forecast inflation rate.

Q. What is the Division's position about this Company proposal?

A. The Division supports the Company's proposal. Since the GRID model would not be capable of producing accurate avoided costs beyond the end of the preferred portfolio period, calculating avoided cost by escalating the final year's value at the IRP forecast inflation rate is reasonable.

Q. Since the QF contracts are limited to a 15-year term and the 2017 IRP extends for 20 years through 2036, what QF will be impacted by the Company's proposal?

A. Normally, the Company files its IRP in March of one year and its IRP update a year from that. However, these two filings use the same study term. The most current IRP, the 2017 IRP, was filed with the Commission on March 2017 with a study term that extends through 2036. The 2017 IRP update is expected to be filed on March 2018 and will also run through 2036.

The process for negotiating Power Purchase Agreement (PPA) in Schedule 38 will take approximately 8 months from the date the QF developer receives indicative pricing from the Company to the date the PPA is executed. Furthermore, a Commercial Operation

Date (COD) for a QF must be scheduled for a date not more than 30 months after the execution date of the PPA. This adds up to a total of 38 months. The termination date is 15 years from that date.

Hence, a QF starting negotiating anytime within the second year of the IRP cycle will have a termination date beyond the end of the 2017 IRP study term (March 2036). It is these QFs that the Company's proposal will impact. Those QFs starting negotiation in the first year of the IRP cycle will not be impacted.

Schedule 37

Q. What changes to Electric Service Schedule 37 is the Company proposing?

A. In its compliance filing of Schedule 37, dated May 30, 2017, and in the Direct Testimony of Company witness, Mr. Daniel MacNeil, the Company proposed the following changes:

- Changes to align Schedule 37 pricing method with that of Schedule 38.
- Changes to several avoided cost inputs, including market prices, integration costs and capacity contribution of renewable resources.
- Changes in the assumption regarding the ownership of the Renewable Energy Credits (RECs).
- Revisions to Schedule 37 tariff and supporting documentations recommended by the Division in Docket No. 16-035-T06.

Q. What changes to the Schedule 37 method for calculating avoided costs did the Company propose to align it with the method used for Schedule 38?

A. To align the Schedule 37 method for calculating avoided costs with that of Schedule 38, the Company is proposing to calculate Schedule 37 avoided costs using the partial displacement differential revenue requirement (PDDRR) method, which is the method used to determine avoided costs under Schedule 38. The use of PDDRR method for Schedule 37 will:

i. Change the proxy resource,

ii. Account for the queue of potential QFs, and

iii. Use a 10 MW resource of each type to calculate avoided energy cost.

Q. What is the Division's position regarding the proposed change of the proxy resource?

A. Since the IRP and the IRP updates prior to the 2017 IRP did not contain any cost-effective renewable resources to be deferred by a proposed QF, under the current Schedule 37 method, during the deficiency period, the avoided costs are based on the fixed and variable costs of a proxy (thermal) resource. The current proxy resource is a combined cycle combustion turbine (CCCT).

However, the 2017 IRP preferred portfolio contains some cost-effective renewable resources. Hence, the Company proposed that instead of having QFs defer or avoid the next deferrable thermal resource, to allow the QFs to first defer or avoid the next deferrable cost-effective renewable resource of the same kind. If there are no more cost-effective renewable resources to be deferred and if the QF is not a renewable resource, then defer or avoid the next deferrable thermal resource.

The Company's proposed change of the proxy resource is reasonable. It creates a one-to-one correspondence between the QFs and the proxy unit. That is, since the operating characteristics of the QF and the preferred portfolio resource it defers are the same, then the capacity provided by the QF is equivalent to the capacity it replaces from the IRP preferred portfolio. This proposal preserves the customer indifference standard.

The fact that the use of the PDDRR method allows the replacement of like renewable resource leads to the calculation of a specific avoided cost for each resource type. That is, specific GRID runs will be performed for each resource type, using the specific characteristics of the proposed QF and proxy resource. This will yield more precise avoided costs for each resource type.

Q. What is the Division's position regarding the indicative price queue of potential QFs?

A. The Company is proposing that when a proposed QF is displacing either a cost-effective renewable resource or a thermal resource in the 2017 IRP preferred portfolio, the queue of the potential QFs should be accounted for. This will postpone the beginning of the resource deficiency period. Currently, the Schedule 37 developers are effectively assumed to be at the beginning (or top) of the indicative price queue, giving them a privileged position. The Company is proposing placing the proposed QF at the bottom of the pricing queue.

Since those QFs that signed contracts with the Company and those actively negotiating a PPA are included in the GRID model as inputs when calculating avoided costs, their impact on the starting dates of the deficiency period should not be ignored. It will delay the acquisition of the next resource and therefore, the beginning of the deficiency period. Therefore, the Division supports making changes to the Schedule 37 to account for the pricing queue. However, the Division does not necessarily support moving the Schedule 37 developers from one extreme position in the queue to the other extreme. Given that Schedule 37 developers are accepting a fixed tariff price and the fact that we do not know when the "average" developer will come through the door to accept pricing, a position somewhere between the two extremes in the pricing queue is a fairer assumption for developing the tariff rates in Schedule 37. Therefore the Division recommends that, in the interest of gradualism, the effective position in the indicative pricing queue be adjusted and that the initial position be set at the midpoint of the queue. Adjustment from the midpoint should be evaluated in future years, in a separate proceeding as appropriate based on the number of QFs in the queue and the impact of the queue on the price.

Q. The Company proposed to use a 10 MW resource of each type in calculating the avoided energy costs. Can you comment on this proposal?

A. Yes. In calculating the avoided energy cost of each type of resource, the Company is proposing using the expected output from a like 10 MW resource in the GRID model instead of a 10 MW thermal resource. For example, the pricing for a wind QF would be based a 10 MW wind resource.

Since the 2017 IRP preferred portfolio contains some cost-effective renewable resources, it is no longer appropriate to base the calculations of the energy costs of the renewable resources on the energy cost of thermal resource. Therefore, the Division supports the Company's proposed use of 10 MW of the specific resource under consideration.

Q. Would you comment on the Company's other proposed avoided cost input changes?

A. In addition to the changes intended to make the Schedule 37 method of calculating avoided costs consistent with that of Schedule 38, the Company made some other input changes. These changes include updating market prices for electricity and gas to reflect the Company's March 31, 2017 Official Forward Price Curve (OFPC), integration costs for wind and solar QFs, and capacity contribution values for intermittent QFs updated to reflect 2017 IRP. The Division considers these changes as routine and has no objection.

Q. Regarding the ownership of the renewable energy credits (RECs), what does the Company propose?

A. As it did for Schedule 38, the Company proposes that it will keep the RECs associated with the QF's output during that period in the QF contract when the QF is receiving capacity payment based on deferring a renewable resource; otherwise, the RECs will remain with QF. In other words, the Company will retain the RECs when they are not factored into the QF price as credit.

Q. Does the Division have any concern about this proposal?

A. No. The Division has no concern about this proposal. For detailed discussion about this issue, refer to the above discussion about the RECs under Schedule 38.

Q. Does this conclude your direct testimony?

A. Yes.