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June 23, 2017

VIA ELECTRONIC FILING

Utah Public Service Commission
Heber M. Wells Building, 4th Floor
160 East 300 South
Salt Lake City, UT 84114

Attention: Gary Widerburg
Commission Secretary

RE: Docket No. 17-035-T07 -- In the Matter of Rocky Mountain Power's Proposed Tariff Revisions to Electric Service Schedule No. 37, Avoided Cost Purchases from Qualifying Facilities

The Company hereby files the presentation discussed during the Technical Conference in this Docket on June 23, 2017.

Rocky Mountain Power respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

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Informal inquiries may be directed to Bob Lively at (801) 220-4052.

Sincerely,

Jeffrey K. Larsen
Vice President, Regulation

Enclosure

Utah Schedule 37 Technical Conference

June 23, 2017

Recent Schedule 37 History

- **Docket 12-035-T10**

- Commission adopted change to resource deficiency definition

“We will rely on the Company’s [Integrated Resource Plan (IRP)] process and the Company’s planned actions as articulated in its IRP or IRP update action plans as the basis for identifying the type and timing of a deferrable resource and therefore the time period in which the proxy plant method will be used to calculate energy and capacity payments for Schedule 37 during the period of resource deficiency.” – Nov. 28, 2012 Order

- Prior to this change, resource deficiency was set using the energy and capacity in the GRID model. The first year in which the Company’s average load exceeded its average resources marked the start of the deficiency period.

- **Docket 13-035-T09**

- Capacity costs are allocated to on-peak hours based on a ratio of 56% of the hours in the year, rather than 57% as was applied previously.

Recent Schedule 37 History

- **Docket 14-035-T04/14-035-55**

- Included integration costs for wind and solar QFs
- Adjusted payments to wind and solar resources for capacity contribution
- Eliminated the option for a QF to be paid a separate rate for its capacity and energy
- Removed future taxes on CO2 from the OFPC used in the calculation of avoided costs

- **Docket 15-035-T06**

- Removed sufficiency period capacity payments based on SCCT costs.
- Previously SCCT costs had been included based on the number of months in which a GRID load and resource balance indicated peak requirements exceeded peak resource capacity.

Recent Schedule 37 History

- **Docket 16-035-T06**

- Integration costs – wind integration updated consistent with 2015.Q2 Avoided Cost inputs compliance filing (docket 15-035-56). Solar integration remained at levels specified by Commission in docket 12-035-100.
- Capacity contribution for solar and wind – updated consistent with the 2015 IRP (unchanged in 2015 IRP Update)

Current Schedule 37 Methodology:

Sufficiency Period:

During the period of resource sufficiency, avoided costs are calculated as the difference between two GRID production cost model runs, based on the on the displacement of purchased power, existing thermal resources and FOTs from the IRP as modeled by the Company's GRID model. Avoided costs are calculated based on a 10 MW baseload resource and are differentiated between on-peak and off-peak rates based on the relationship between Palo Verde on and off-peak market prices.

Until docket 15-035-T06:

- QFs received capacity payments during the sufficiency period based on SCCT costs and the number of months with capacity deficiency based on GRID results.
- QFs did not displace FOTs from the IRP preferred portfolio during the sufficiency period.
- Avoided energy costs were not differentiated between on and off-peak periods.

Current Schedule 37 Methodology

Deficiency Period:

During the deficiency period avoided costs are based on the all-in costs of the next deferrable resource in the Company's IRP or IRP Update. Capacity costs are allocated to on-peak hours. The fixed costs of the proxy resource in excess of the fixed costs of a simple cycle combustion turbine are considered capitalized energy costs and included in energy payments, along with fuel costs based on the proxy unit's heat rate and the Company's Official Forward Price Curve. Capacity costs were allocated to on-peak hours, which are assumed to represent 56% of the hours in the year.

Prior to docket 13-035-T09, capacity costs were allocated assuming on-peak hours were 57% of the year.

Current Schedule 37 Methodology

Load and resource balance:

Since 12-035-T10, the deficiency period for Schedule 37 has been marked by the first major thermal resource in the most recent IRP or IRP Update preferred portfolio.

Renewable Energy Credits (RECs):

RECs are retained by the QF unless the QF and purchasing utility have agreed by negotiated contract to an alternate REC ownership structure. The Commission's October 4, 2013 clarification order in docket 12-035-100 indicated it would be appropriate to revisit this issue when a renewable QF was poised to defer a cost-effective renewable resource.

Pricing options:

Pricing is volumetric (\$/MWh). QFs receive seasonal rates for on and off peak periods and can choose between annual or levelized prices.

The Commission's February 13, 2015 order in docket 14-035-55 eliminated the option for a QF to be paid separately for energy and capacity.

Current Schedule 37 Methodology

Annual Updates

- Official Forward Price Curve – included in GRID and in deficiency period avoided energy costs
- Sufficiency period avoided costs – from current GRID model
- Deficiency period start date – from most recent IRP/IRP Update
- Deficiency period proxy resource capacity costs – from most recent IRP/IRP Update
- Integration costs – from most recent IRP/IRP Update, or other data if available.
- Capacity contribution – from most recent IRP/IRP Update

Proposed Schedule 37 Methodology

Sufficiency Period Avoided Costs - Calculated specific to each resource type rather than using the avoided costs associated with a baseload unit for all resource types. This captures hourly and seasonal timing differences between solar, wind, and baseload units.

Deficiency Period Avoided Costs – Calculated specific to each resource type, inclusive of the effects of the potential QF queue. The deferral of like cost-effective renewables from the IRP preferred portfolio results in timing differences between the various capacity types.

Load and resource balance – No changes

RECs – Proposal results in deferral of cost-effective renewable resources from the IRP preferred portfolio. Revisiting REC ownership is now appropriate.

Pricing options – No changes

Proposed Schedule 37 Assumptions

Annual Updates

- Official Forward Price Curve – dated March 31, 2017
- Sufficiency period avoided costs – from current GRID model
- Deficiency period start date, after accounting for QF queue
 - Baseload: no thermal resource remain in 2017 IRP portfolio
 - Solar: 2035 IRP solar resources
 - Wind: 2031 IRP wind resources
- Deficiency period proxy resource capacity costs – from 2017 IRP
- Integration costs – from 2017 IRP
- Capacity contribution – from 2017 IRP

PSC Staff Questions

- Explain difference between the QF queue in filing and in 2016.Q4 compliance filing.
- The queue was updated to reflect the 2017 IRP
 - The five signed contracts in 2016.Q4 filing were included in 2017 IRP (i.e. removed from queue)
 - Wind and solar capacity contribution was updated to values in 2017 IRP.
- Four newly signed QF contracts with Boswell Wind were moved from the potential to signed queue, as they are not reflected in the 2017 IRP.
- Two newly signed QF contracts with Glen Canyon were included in the potential queue in both filings – moving to signed queue does not impact pricing.
- One potential QF was removed.
- Nine new potential QFs were added.

Queue	Partial Displacement	Delta
2016.Q4	1,235	
Remove signed contracts now in IRP		(55)
Capacity contribution		588
New signed contracts - already in potential queue		-
Removals from potential queue		(48)
New requests added to queue		407
UT Sch37-As filed	2,127	

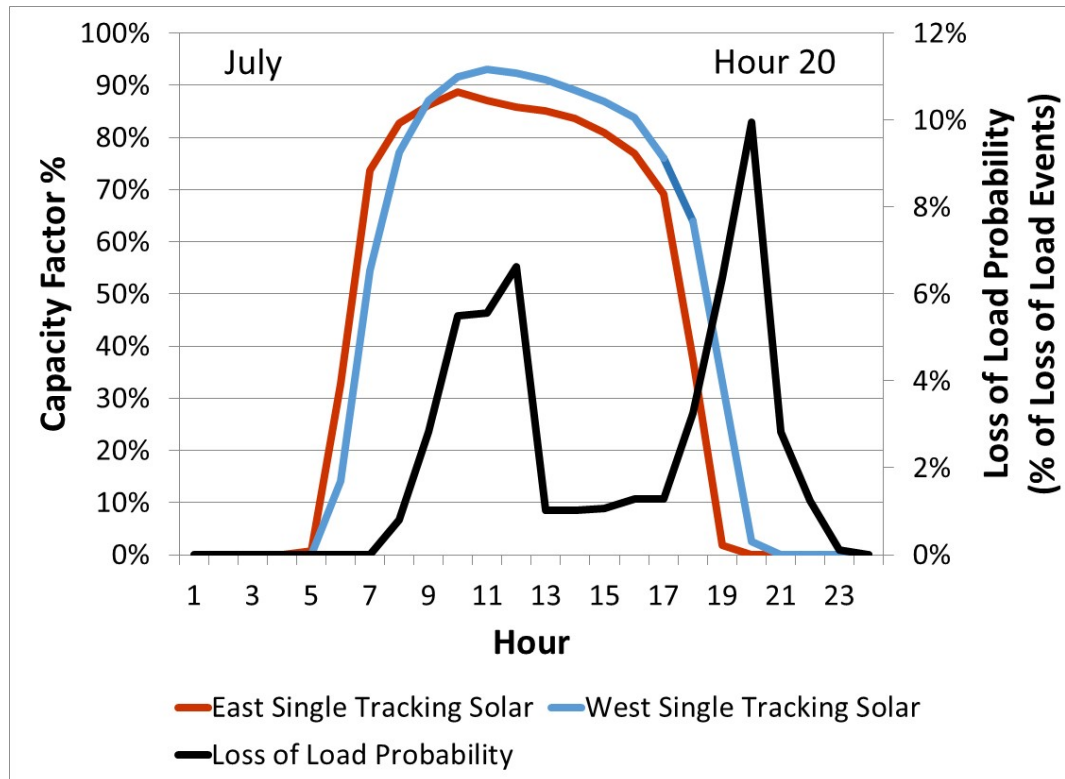
PSC Staff Questions

- Additional details on capacity contribution changes

	East BAA			West BAA		
	Wind	Fixed Tilt Solar PV	Single Axis Tracking Solar PV	Wind	Fixed Tilt Solar PV	Single Axis Tracking Solar PV
2017 IRP Results	15.8%	37.9%	59.7%	11.8%	53.9%	64.8%
2015 IRP Results	14.5%	34.1%	39.1%	25.4%	32.2%	36.7%
Delta	1.3%	3.8%	20.6%	-13.6%	21.7%	28.1%
Capacity impact on 2016.Q4	13	-	479	-	-	96

PSC Staff Questions

Why is capacity contribution lower for east solar than west solar?



PSC Staff Questions

Why are fixed tilt solar resources displaced by tracking solar resources?

- The Commission Order in docket 12-035-100 specified that renewable QF capacity payments were to be based on the capital costs of the next like deferrable renewable resource so long as such a cost-effective renewable resource is present in PacifiCorp's planned resources.
- Fixed tilt solar resources have most of the same characteristics as tracking solar resources: both generate as a function of the daily and seasonal changes in the position of the sun.
- While tracking solar resources have greater output in the early morning and late afternoon, the differences are relatively small, more a matter of degree than a difference in kind. Therefore the Company believes it is reasonable to consider all solar resources as a single type, rather than restrict capacity deferral based on specific technologies.
- Differences between fixed and tracking solar are accounted for in the methodology:
 - Variations in the generation profiles of fixed and tracking solar result in different capacity contribution values.
 - Fixed and tracking resources are displaced on the basis of equivalent capacity contributions, rather than based on nameplate or energy output. This maintains the load and resource balance consistent with the capacity contribution of resources identified in the preferred portfolio.
 - The GRID model captures the difference in energy value between the displaced resource and the proposed QF.

CERTIFICATE OF SERVICE

Docket No. 17-035-T07 / Advice No. 17-08

I hereby certify that on June 23, 2017, a true and correct copy of the foregoing was served by electronic mail to the following:

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