Exhibit 10-CV

17-035-61 Phase 2 Vote Solar Exhibit 10-CV 3-3-2020 Volkmann



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RE: UT Docket No. 17-035-61

Vote Solar 6th Set Data Request (1-24)

Please find enclosed Rocky Mountain Power's Responses to Vote Solar 6th Set Data Requests 6.3, 6.10, and 6.21. The remaining responses to 6.3.15 and 6.3.16 will be provided separately. Also provided is Attachments Vote Solar 6.3-4. Provided via encryption is Confidential Attachment Vote Solar 6.10-5. Provide to the requesting party only are Attachment Vote Solar 6.10-2 and 6.10-4 and Confidential Attachments 6.10-1 and 6.10-3. Confidential information is provided subject to Public Service Commission of Utah Rule 746-1-602 and 746-1-603.

If you have any questions, please call me at (801) 220-2823.

Sincerely,

___/s/_ Jana Saba Manager, Regulation

Enclosures

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Vote Solar Data Request 6.3

Please provide a spreadsheet containing the following for each of RMP's Utah distribution circuits:

- (9) Peak load (MW) for each of the years 2015, 2016, 2017, and 2018;
- (10) Date and time of peak load for each of the years 2015, 2016, 2017, and 2018;
- (15) Supervisory Control and Data Acquisition (SCADA)? (Y or N);
- (16) Substation load tap changer (LTC)? (Y or N);

Response to Vote Solar Data Request 6.3 (Vote Solar 6.3.15 and 6.3.16 will be provided later.)

- (9) Please refer to Attachment Vote Solar 6.3-4.
- (10) Please refer to Attachment Vote Solar 6.3-4.
- (15)
- (16)

Vote Solar Data Request 6.10

Please provide data that characterizes the transmission system modeling done for RMP's Integrated Resource Plan (IRP) and Integrated Resource Plan Update, including, but not limited to, as applicable and for each resource, for years 2020-2036:

- (1) Type of plant;
- (2) Type of fuel;
- (3) Fuel cost BTU/kWh or \$/kWh;
- (4) Unit heat rate, constant, or curve;
- (5) Minimum up/down times, start time, and other parameters regarding how the unit can be dispatched and committed;
- (6) Ramping capability;
- (7) Forced outage rate;
- (8) The resource's planned maintenance schedule;
- (9) Interconnection point;
- (10) Must-run status and reason for any must-run resources' status;
- (11) Description of any other operational constraint that causes a resource to behave substantially different than if it follows a dispatch signal that is simulated from a production simulation tool;
- (12) Power purchase agreement summaries of delivery and price information;
- (13) Actual and modeled 5-minute data for wind generation, if any, including alternative levels or locations of wind generation in the profiles that correspond to the modeling and data sources;
- (14) Actual and modeled 5-minute data for solar generation, if any, including alternative levels or locations of solar generation in the profiles that correspond to the modeling;
- (15) Assumed location of the solar generation; whether it was on the transmission system or distribution system, and the bus to which it was connected;

- (16) Cite the source of the wind and solar data, along with a justification of why this source was selected;
- (17) Verify that the wind and solar demand data were all from the same calendar year, or explain the reasoning used to justify why these time-series data sets were from different years;
- (18) The discount rate and all other related financial and economic parameters used in the long-term modeling;
- (19) Transmission configuration (lines, ratings/capacities);
- (20) All assumptions and data that describe how the PacifiCorp East and West Balancing Areas interact with the rest of the Western Interconnection, including its interaction with the Energy Imbalance Market (EIM);
- (21) All assumptions and data that describe how PacifiCorp East and West Balancing Areas are coordinated relative to unit commitment and dispatch;
- (22) Any assumptions regarding future changes in the flows between RMP and the rest of the interconnection (including PAC West), and any assumptions/data describing how RMP would potentially interact with the EIM Day Ahead Market;
- (23) Assumptions and corresponding data regarding flow constraints or similar constraints on the transmission network that is different from line capacities;
- (24) All reserve policies for each reserve type that PAC uses, and is present in the model (contingency, flexibility, spin/non-spin, etc.);
- (25) Description that explains the above data sets;
- (26) Description of RMP's operational paradigm, including how the two PAC BAAs interact, and including how PAC/RMP interact with the EIM now and in the future; and
- (27) Description of how planned maintenance schedules are decided.

Response to Vote Solar Data Request 6.10

The Company objects to the data request on the basis that the information is not relevant in this case and therefore not likely to lead to the discovery of admissible evidence. Without waiving the objection, please refer to Confidential Attachment Vote Solar 6.10-1 and Attachment Vote Solar 6.10-2 which provide the confidential and non-confidential data disks supporting PacifiCorp's 2017 Integrated Resource Plan (IRP).

Please refer to Confidential Attachment Vote Solar 6.10-3 and Attachment Vote Solar 6.10-4 which provide the confidential and non-confidential data disks supporting PacifiCorp's 2017 IRP Update.

Note: Confidential Attachment Vote Solar 6.10-1 and Confidential Attachment Vote Solar 6.10-3, as well as Attachment Vote Solar 6.10-2 and Attachment Vote Solar 6.10-4 (ie., the IRP data disks from the 2017 IRP and the 2017 IRP Update) are voluminous and will be provided on a DVD to the requesting party only. Copies can be provided to other parties upon request.

PacifiCorp's IRP is publicly available and can be accessed by utilizing the following website link:

https://www.pacificorp.com/energy/integrated-resource-plan.html

- (1) Please refer to PacifiCorp's 2017 IRP, Volume I, Chapter 5 (Load and Resource Balance), Table 5.3 and Table 5.4 for a list of thermal resources.
- (2) Please refer to the Company's response to subpart (1) above.
- (3) The fuel costs in the IRP are provided on the 2017 IRP / 2017 IRP Update data disks:
 - 2017 IRP Coal Prices Data Disk 2_CONF\Assumptions + Inputs
 Conf.zip\Assumptions + Inputs\Master Assumptions, CONF\Vol III RH5a\
 2017 IRP Alt. Case RH5a 20161212 NAU3 Ret 2018.xlsx\Tab 9 Coal Fuel
 Cost No Refuel
 - 2017 IRP Natural Gas Prices Data Disk 1_PUBLIC\Assumptions + Inputs Public.zip\Assumptions + Inputs\Price
 - 2017 IRP Update Coal Price DATA DISC_Confidential\Assumptions +
 Inputs\Master Assumptions. CONF\17 IRP Pref Por\ Update 2017 IRP Pref
 Port\ Tab 9 Coal Fuel Cost No Refuel
 - 2017 IRP Update Natural Gas Prices DATA DISC_Public\Assumptions + Inputs\Prices
- (4) Please refer to Confidential Attachment Vote Solar 6.10-5.
- (5) Please refer to Confidential Attachment Vote Solar 6.10-5.
- (6) Please refer to Confidential Attachment Vote Solar 6.10-5.

- (7) Please refer to Confidential Attachment Vote Solar 6.10-5.
- (8) The planned maintenance dates are provided in the non-natural price work papers provided on the confidential data disks. Please refer to the Company's response to subpart (3) above, Tab-1d Overhaul.
- (9) Please refer to Confidential Attachment Vote Solar 6.10-5.
- (10) None of the thermal coal and natural gas plants are modeled as must run.

 Renewable resources, wind and solar, are treated as must run using the applicable shape.
- (11) Have annual coal take restrictions but the model reflects expected marginal costs consistent with those.
- Please refer to the Company's response to subpart (1) above. Executed power purchase agreements (PPA) included in IRP analyses are the same among all portfolios evaluated in PacifiCorp's long-term resource plan. Consequently, pricing has no impact in the IRP as it does not affect the comparative cost and risk analysis used to identify a preferred portfolio.
- (13) The IRP models are derived from hourly generation data. Five-minute data is not available.
- (14) The IRP models are derived from hourly generation data. Five-minute data is not available.
- (15) For new resources, please refer to the Stabuild report in the SO model studies that reports the zone location of utility solar connected by transmission. This information is included on the 2017 IRP / 2017 IRP Update data disks:
 - 2017 IRP Data Disk 2_CONF\System Optimizer Output
 - 2017 IRP Update DATA DISC_Confidential\SO Inputs-Outputs
- (16) Hourly wind shapes are derived from calendar year actuals adjusted to match expected output. Hourly solar shapes are modeled on a 12X24 basis in the 2017 IRP and 2017 IRP Update.
- (17) Confirmed.
- (18) Financial information is provided in the non-natural price work papers provided on the confidential data disks. Please refer to the Company's response to subpart (3) above, Tab-17 Financial. The inflation forecasts are 2.22 percent in the 2017 IRP, and 2.27 percent in the 2017 IRP Update.

- (19) Transmission configurations in the IRP are provided on the 2017 IRP / 2017 IRP Update data disks:
 - 2017 IRP Data Disk 2_CONF\Assumptions + Inputs Conf.zip\Assumptions + Inputs\Transmission, CONF
 - 2017 IRP Update DATA DISC_Confidential\Assumptions + Inputs\Transmission, CONF
- (20) Please refer to PacifiCorp's 2017 IRP, Volume I, Chapter 8, page 221 discussing incremental transmission benefits in the energy imbalance market (EIM). Please also refer to PacifiCorp's 2017 IRP, Volume II, Appendix F for a discussion of EIM diversity benefits.
- (21) Reserve requirements are identified specifically for PacifiCorp East (PACE) and PacifiCorp West (PACW). All other aspects of unit commitment and dispatch are modeled consistent with transfer capability on a system-wide basis.
- (22) PacifiCorp has not performed the requested analysis.
- (23) Modeled transmission capacity represents PacifiCorp's energy supply management's (ESM) transmission rights. These transmission rights already take into account other constraints on the transmission network.
- (24) Please refer to PacifiCorp's 2017 IRP, Volume II, Appendix F for a discussion of EIM diversity benefits.
- (25) Please refer to the Company's responses above.
- (26) Please refer to the Company's responses to (20) and (21) above.
- (27) PacifiCorp's IRP does not capture transmission maintenance schedules, which would be the same among any given resource portfolio alternative, and therefore, not a driver to the comparative analysis among portfolios.

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Vote Solar Data Request 6.21

Please respond to the following questions relating to November 9, 2016 Direct Testimony of Douglas L. Marx in Docket No. 14-035-114:

- (2) Provide the actual costs incurred by RMP in each of the years 2014, 2015, 2016, 2017, 2018, and year-to-date 2019 to "increase the local distribution system including distribution transformers, secondary cables, and service conductors to handle the excess generation" from rooftop solar;
- (19) VS6-21.19 Provide the total number of Level 1, Level 2, and Level 3 applications received by RMP in 2014, 2015, 2016, 2017, 2018, and year-to-date 2019 as discussed at lines 160-165; and

Response to Vote Solar Data Request 6.21

The Company objects to the data request on the basis that it seeks information that is or may be dated and data that pertains to the subject of net metering and, therefore, is not relevant to the value of export credits and this docket. Without waiving the objection, the Company responds as follows

- (2) Please refer to the Company's response to Vote Solar Data Request 6.8 subpart (3).
- (19) The Company does not track applications received specifically by level.

 Application levels only define the level of work required for the review and the applications will start at any of the levels but may evolve to a different level.

 Because application review levels may change, the applications are counted only as received, not by application level.

The Company reports Interconnection date and KW information annually in Attachment A of the "Rocky Mountain Power's Customer Owned Generation and Net Metering Report". Please refer to RMP Attachment A – 2018 Customer Generation Report of the Company's July 1, 2019 filing for the most recent report at the link below:

https://psc.utah.gov/2019/07/01/docket-no-19-035-29/