VIA ELECTRONIC FILING

Utah Public Service Commission
160 East 300 South, 4th Floor
Salt Lake City, UT 84111
Via electronic mail to: psc@utah.gov

February 14, 2022

Re: Docket No. 21-035-64: In the Matter of Rocky Mountain Power's Notice of Intent to Use Export Credit Rate Input

Dear Commissioners,

Utah Clean Energy appreciates the opportunity to submit the following comments on Rocky Mountain Power's proposed updated Export Credit Rate.

Background

The credit applicable to exported energy from new rooftop solar systems ("Export Credit Rate" or "ECR") was determined in Docket 17-035-61. In that docket, the Utah Public Service Commission ("Commission") also determined that the ECR shall be updated annually with a target effective date of March 1 and that the annual update shall be based on 12 months of data ending the previous June 30.[1]

On December 1, 2021, Rocky Mountain Power ("the Company" or "RMP") filed a Notice of Intent to Use ECR Inputs and initiated Docket No. 21-035-64. The Company subsequently filed corrected inputs on December 21, 2021, and a compliance filing containing Export Credit Rate calculations on January 28, 2022 ("the 2022 Update").

Utah Clean Energy is filing these comments in response to the Commission's notice that any interested party may submit comments on RMP's filing on or before February 14, 2022.

Summary of UCE Comments

Utah Clean Energy has reviewed RMP's first annual Export Credit Rate compliance filing and we find that:

- RMP's filing contains the information necessary to calculate the Export Credit Rate.
- RMP's inputs are consistent with the Commission's Orders in Docket 17-035-61.[2]

[1] 17-035-61 Public Service Commission Order Approving Annual Export Credit Rate Update Procedures, August 11, 2021, Page 15.
[2] The Commission's Orders were issued on: October 30, 2020, November 25, 2020, December 23, 2020, April 28, 2021, and August 11, 2021.

- The updated capacity contribution value results in a significant reduction in the value of the Export Credit Rate.
- It is unclear whether the export profile input used to calculate the updated capacity contribution is a more reasonable proxy for Schedule 137 customers than the input used to calculate the current capacity contribution.
- The annual update process can result in significant year-to-year changes to the Export Credit Rate that affect the long-term value and risk of investing in rooftop solar.
- In the case of the 2022 Update, the change in value of the Export Credit Rate is driven by a change to the export profile input, and, again, it is unclear whether the new input is a more accurate measure of the value of Schedule 137 customer exports than the current export profile input.
- The Export Credit Rate applies to exports from battery storage, but is based on the export profile of a standalone rooftop solar installation.

Utah Clean Energy has two recommendations for future reports. First, we recommend that the Company more clearly label whether the top 10% of high load hours, hourly exports, and EIM prices are presented in Pacific Standard Time or Pacific Daylight Time. This will make it simpler to confirm that time zones are standardized and data is time-correlated in future Export Credit Rate update proceedings. Second, we recommend that future filings differentiate between customers with storage and those without and provide an export profile that does not include customers with storage. This will allow stakeholders to understand how the inclusion of battery storage affects the Export Credit Rate.

Review of Export Credit Rate Compliance Filing

The Company's compliance filling identifies 11 inputs to the Export Credit Rate, some of which have been updated to calculate the 2022 Export Credit Rate and some of which remain unchanged.

A comparison of the Export Credit Rate approved in October 2020 with the Company's updated 2021 Export Credit Rate filing shows that:

- Transmission capacity costs have increased by 14%.
- EIM prices increased slightly, from an annual average of $28.21[3] hourly to an annual average of $29.40 hourly.
- Line losses have decreased slightly compared to the 2009 analysis of system losses.
- RMP's updated export profile is based on Schedule 136 customers, and Schedule 136 customers exported slightly more energy per kilowatt in the 12 months ending June 30, 2021, compared to the customer export profile from 2019 used to determine the current Export Credit Rate ("2019 Export Profile").
- From July 1, 2020, to June 30, 2021, more of the top 10% of peak load hours occurred in June compared to 2019, and fewer occurred in July, August, and September mornings.
- There were fewer exports by Schedule 136 customers during peak load hours from July 2020 to June 2021 compared to the 2019 Export Profile and 2019 peak load hours, resulting in a 26% decrease to the capacity contribution.

[3] 17-035-61 Rebuttal Testimony of Dan MacNeil, July 15, 2020, Exhibit DJM-1R

- Inputs representing avoided generation capital cost, distribution capital cost, and carrying charges were not updated.

As a result of these changes, the Company's updated Export Credit Rate is reduced by 11% in the summer and 19% in the winter. The reduction is largely driven by the reduced capacity contribution value, as most of the other inputs affecting the calculation (including avoided transmission costs and energy costs) have increased relative to the values used to calculate the current Export Credit Rate.

Discussion

Capacity Contribution

The capacity contribution was a topic of discussion among parties in comments addressing the annual update process for the Export Credit Rate in Docket 17-035-61. The capacity contribution is calculated by using the export profile and the top 10% of load hours to determine the coincidence of customer exports and high load hours. It is difficult to determine the actual capacity contribution of Schedule 137 customer exports because hourly export data for these customers is not available. Utah Clean Energy discussed this issue in reply comments related to the annual update.[4] To address this issue, the Company proposed to use Schedule 136 customer export data as a proxy for the hourly exports of Schedule 137 customers.[5] The Division of Public Utilities ("DPU") recommended that the capacity contribution value remain static, noting that "given the variance in the models, assumptions, and timing of the assumptions the parties believe to be correct in how the capacity contribution is calculated, the Division recommends the Commission not update the capacity contribution annually until such time as deemed necessary…"[6] The Commission's August 11 2021 Order found "RMP's proposed annual update to the capacity contribution value reasonable."[7]

Although the Company's use of Schedule 136 data to determine the capacity contribution for Schedule 137 customers is consistent with the Commission's August 11, 2021, Order, the updated inputs result in a significant change to the capacity contribution value. It is not clear that the updated capacity contribution is a more accurate proxy for the actual capacity contribution of Schedule 137 customers over the prior 12 months. Previously, the Commission approved a capacity contribution value calculated using historical 2019 solar export and load data.[8] The historical 2019 Export Profile used to calculate the current capacity contribution value was developed by Vote Solar witness Dr. Albert Lee using data from more than 37,000 solar customers.[9] Utah Clean Energy recognizes the complexity of Dr. Lee's approach, and that it would be onerous to re-create this export profile for 2020 – 2021. However, the Schedule 136 export profile represents a smaller population of customers (16,416 as of 12/31/2020) and is still just a proxy for the actual hourly exports of Schedule 137 customers, which are unknown.

[4] 17-035-61 Utah Clean Energy Reply Comments, June 29, 2021, Page 5.
[5] 17-035-61 Rocky Mountain Power Comments, June 8, 2021, Page 2.
[6] 17-035-61 Division of Public Utilities Comments June 8, 2021, Page 5.
[7] 17-035-61 Public Service Commission Order Approving Annual Export Credit Rate Update Procedures, August 11, 2021, Pages 14-15.
[8] 17-035-61 Public Service Commission Order on Agency Rehearing, April 28, 2021, Pages 7-8 and 13.
[9] 17-035-61, Vote Solar Direct Testimony of Dr. Albert Lee, March 3, 2020, lines 251 – 314.

As a result of the 2022 Export Credit Rate update, Schedule 137 rooftop solar customers are subject to a significant change in the value of their investment. According to the Company's filing, the value of energy and transmission costs avoided by rooftop solar have increased, yet the Export Credit Rate value has decreased. This change results largely from a lower capacity contribution that is derived from a different sample of solar customers. Without a direct comparison, it's impossible to know how much of the change in capacity contribution from 2019 to 2022 is driven by actual changes in Schedule 137 customer exports, and how much results simply from the use of a different sample of customers to perform the calculation.

Utah Clean Energy continues to remain concerned that the annual update to the Export Credit Rate introduces significant risk and uncertainty that is depressing adoption of rooftop solar in Utah. In the future, we believe that it is important to avoid changing data sets from year to year without first establishing that the new data set will represent the relevant input significantly better than the then existing data set. This will avoid changes in the value of the Export Credit Rate that occur simply as a result of using a new data set. While it is important to ensure that the rate remains accurate, it is reasonable to strike a balance between a rate that is based on the most recent data available and a rate that does not subject customers to severe changes in the value of their investment from year to year.

Energy Storage

The Schedule 137 Export Credit rate applies to a variety of technologies, including battery storage. The Export Credit Rate is calculated using the export profile for rooftop solar customers, and nearly 800 of these customers also have battery storage.[10] Unlike rooftop solar, battery storage is capable of discharging to the grid at any hour of the day as long as the battery is charged. Batteries can also be used to maximize the value of rooftop solar by charging during the day and discharging specifically during peak hours when the value of energy is highest. Using batteries in this way reduces the amount of exported solar energy, and therefore the apparent value of the export profile, yet provides value to the grid as a whole. Using the solar Export Credit Rate for battery storage, which is a much more flexible resource, is likely undervaluing the contributions of battery storage and is inconsistent with the avoided cost that results from battery exports. As the prevalence of battery storage resources grows, Utah Clean Energy recommends re-evaluating the contributions of battery storage to the grid, including energy exports, to determine whether the Export Credit Rate fairly compensates customers with solar and storage for the value they provide. We also recommend clearly differentiating between customers with battery storage and those without so that stakeholders can understand how some customers with battery storage are affecting the Export Credit Rate value for all solar customers.

<u>Recommendations for Future Filings</u>

The Export Credit Rate calculation requires use of time-correlated hourly solar exports, EIM prices, and Utah load hours. The Company's filing provided hourly data for these inputs in two separate files, and the labeling of time zones is not clear and consistent across all tabs and spreadsheets. In future filings, we recommend that RMP more clearly label whether all hourly

[10] 21-035-64 Rocky Mountain Power response to Utah Clean Energy Data Request 2.2.

data is presented in Pacific Standard Time or Pacific Daylight Time so that it is simpler to determine whether time zones are standardized and data is time-correlated. We also recommend that future filings provide an export profile that includes customers with storage and an export profile that does not include customers with storage. This will allow stakeholders to understand how inclusion of battery storage affects the Export Credit Rate.

Respectfully,

/s/ Kate Bowman
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