

OCS Data Request 1.2

Please explain the cause of the large increases in 15-year levelized on-peak summer prices (shown in the table below) between this Schedule 37 filing and the Company's previous Schedule 37 filing in 2020. Providing details explaining the increases, including specific information for each type of resource would be most helpful. For example, why does Base Load have the largest increase and why did Fixed Solar increase more than Tracking Solar.

15-Year Nominal Levelized On-Peak Summer Prices ¢/kWh			
	2020 Filing	2021 Filing	% Increase
Base Load	4.118	6.005	45.8%
Fixed Solar	1.953	2.667	36.6%
Tracking Solar	2.307	3.086	33.8%
Wind	4.264	5.782	35.6%

Response to OCS Data Request 1.2

There are two effects represented in the on-peak summer prices, but much of both effects is due to the Company's official forward price curve (OFPC). The first effect is the annual avoided cost prepared using the partial displacement differential revenue requirement (PDDRR) methodology approved by the Public Service Commission of Utah (UPSC). A comparison of the annual values for each resource type is shown in tab "Table 3 Comparison" of the Company's Appendix 1 in this filing. Table 3 shows a moderate increase (from a relatively low level) in baseload avoided costs relative to the current values in the first few years, a small increase in the mid-term, and declines over the long term. Changes for other resource types are also shown.

Note: Appendix 1 in Docket 21-035-T05 is publicly available on UPSC's website, and can be accessed by utilizing the following website link:

<https://pscdocs.utah.gov/electric/21docs/21035T05/318526RMPAppendix14-30-2021.xlsx>).

Changes in avoided costs primarily reflect higher prices in the Company's March 31, 2021 OFPC, relative to the December 31, 2019 curve reflected in current rates. The updated rates also reflect the Company's June 2020 load forecast and changes in coal, which contribute to higher avoided costs. Starting in 2031, gas prices are lower in the new price curve, leading to lower avoided costs. Additional details on the OFPC were provided in Appendix 1 on Table 4 and Table 5 and on tab "OFPC Source". For this same information from the prior filing, please refer to the same locations in Appendix 1 from Docket 20-035-T04 / Docket 19-035-18.

Note: Appendix 1 in Docket 20-035-T04 / Docket 19-035-18 is publicly available on UPSC's website, and can be accessed by utilizing the following website link:

<http://pscdocs.utah.gov/electric/19docs/1903518/313010RMPAtt3Appendix1ACStudySum4-9-2020.xlsx>

The degree to which avoided costs for each resource type are impacted by the various input updates is dependent on generation profiles and proxy resource displacements. For example, the baseload qualifying facility (QF) displaces a simple cycle combustion turbine (SCCT) starting in 2026, so starting in 2026 much of the avoided cost reflects fixed costs that have not changed since the prior filing. The baseload avoided cost also is directly impacted by gas prices as a result of the proxy gas resource displacement. On the other hand, the wind QF defers a wind proxy starting in 2023, the same as in the prior filing, so avoided costs reflect only small changes from that point onward, as the wind proxy costs are not impacted by changes to electricity or gas prices. The QF generation of each type results in a rebalancing of the Company's portfolio by the Generation and Regulation Initiative Decision Tools (GRID), with changes primarily to market purchases and sales along with coal and gas fuel costs. For a summary of the characteristics of these GRID avoided cost impacts, please refer to the Company's confidential work papers provided in its filing, specifically file "GRID AC Study", tab "Summary". Note: "GRID AC Study" work papers with "1a" provide results for 2021 through 2030, while those with "1b" provide results for 2031 through 2038. For example, the baseload QF results are provided in the file "21-035-T05 RMP CONF Workpaper 1a - GRID AC Study Thermal 04-30-21.xlsm".

The second effect that impacts summer avoided cost prices is the seasonal and on-peak/off-peak split, which is based on ratio of market prices in the respective periods. This calculation is performed in two steps within the provided non-confidential work papers labeled "QF Pricing Detail". The first step spreads the annual avoided cost to monthly on-peak (heavy load hour (HLH)) and off-peak (light load hours (LLH)) periods based on the Company's OFPC for Palo Verde (PV), as shown in file "QF Pricing Detail", tab "MWH-Split", columns R:X for each resource. The second step aggregates the results into the four pricing periods within the tariff (by on/off and summer/winter), as shown in tab "SourceEnergy", columns S:V. Market prices in the June through September "summer" period have increased significantly since the Company's prior filing, which results in a higher proportion of the annual avoided costs being reflected in the summer period. For a comparison of market prices between the two filings, please refer to Attachment OCS 1.2, tab "Market Price Comparison".

With regard to the relative impacts to summer on-peak avoided cost prices between resource types, the Company would note that annual avoided cost prices (shown in Table 3 of Appendix 1) result in proportionate increases to each price period. Summer on-peak pricing reflects the combination of the annual avoided cost effect with an annual market price weighting of the summer on-peak period.

21-035-T05 / Rocky Mountain Power

May 12, 2021

OCS Data Request 1.2

As shown in Attachment OCS 1.2, tab “Price Weighting”, most of the change in summer on-peak pricing is explained by the annual avoided cost and the market price weighting. The remaining difference is related to the timing of changes within the 15-year levelization period, as levelizing the percent changes is not quite equivalent to levelizing the annual price stream. The relative quantity of deliveries in each period may also play a role, and varies by resource type, as shown in rows 47:50 of Table 3 in Appendix 1.