

January 17, 2019

VIA ELECTRONIC FILING

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

Attention: Gary Widerburg
Commission Secretary

RE: Docket No. 16-035-36

In the Matter of the Application of Rocky Mountain Power to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act
Reply Comments

On November 28, 2018, the Public Service Commission of Utah (“Commission”) issued a Scheduling Order and Notice of Hearing (“Notice”) regarding Rocky Mountain Power’s (“Company”) Application to Modify Funding Amounts Previously Authorized by the Sustainable Transportation and Energy Plan Act, and to Allocate Additional Funds to the Solar and Energy Storage Technology Project filed on November 13, 2018 (“Application”). On January 3, 2019, the Division of Public Utilities (“Division”), the Office of Consumer Services (“Office”) and Western Resource Advocates (“WRA”) each filed comments. The Division, the Office and WRA will sometimes be referred to individually as a “Party” and, collectively, as “Parties”. Consistent with the Notice, the Company responds to the Parties in its reply comments below.

Summary

Rocky Mountain Power appreciates the time and effort the Parties have spent evaluating the Company’s Application. No Party objected to the reallocation of Clean Coal Technology Funds. The Division recommends the Commission reject the proposed changes to the commercial line extension program, while the Office makes recommendations regarding additional reporting requirements, if approved. The Division and WRA recommend the Commission approve the Company’s request to increase the Solar and Energy Storage Project funding by \$1.75 million for a total program cost of \$8.75 million due to the unique benefits the project provides. The Office recommends the Commission reject the request for additional funding due to a lack of supporting information. The Company has provided additional supporting information to the Office since its comments were filed, and, in addition, responds with additional information regarding each of the Office’s concerns below. The Company continues to believe that each of these projects meet the goals of the STEP program, and are in the interest of its customers, as more fully explained below.

Clean Coal Technologies

The Division and the Office both recommend approval of the Company's request to reallocate \$1,161,501 in Clean Coal Technology funds, which were previously approved for the discontinued Alternative NOx project, to the Woody Waste Co-Fire and Cryogenic Carbon projects in the amounts of \$748,980 and \$412,521, respectively. The Office reiterates its recommendation that the existing accounting and reporting requirements for the Clean Coal Technology STEP projects also apply to the additional funds approved in this docket. The Company has no objection to such recommendation.

Commercial Line Extension Pilot Program

The Division raises concerns with the Company's proposal to increase the maximum incentive amount from \$50,000 to \$250,000 and recommends that the Commission reject the Company's request. The Division notes that the "intent of the STEP Program is to use ratepayer-supplied funds to promote innovative technology and incentivize infrastructure that may prove beneficial in the long run."¹ As mentioned in the Application, increasing the incentive level is consistent with the original program goal of promoting the use of electric vehicles by facilitating installation of electric vehicle charging stations. The Company is not proposing to increase the incentive limit merely to ensure the funds are used. Rather, after two full years of running the Commercial Line Extension Pilot Program, the Company found that the participation rates are lower than anticipated. The goal of the program is to encourage the growth in electric vehicle infrastructure by providing for electrical conduit extensions to parking areas in commercial developments that have been identified as potential electrical vehicle charging station locations. This goal also enhances the effectiveness of the Plug-in Electric Vehicle Pilot Program. The benefits of the Commercial Line Extension Program remain the same regardless of the size of the installation. Increasing the incentive also broadens the visibility of the program to a wider group of potential developments and developers. Based on the Company's experience, it is unlikely that one developer or project will monopolize all or most of the incentive, even if the limit is increased. To date, the Company has provided incentives to eleven projects, the largest of which is approximately \$20,000.

The Office questions the reasonableness of the increase, but declines to make specific recommendations. It recommends, however, that if the request is approved, the Company include additional information in its annual STEP annual report, including:

- number of applications submitted;
- the number of applications selected to receive incentives; and
- identify if recipients have received multiple incentive awards.

The Office further recommends that the Company report the following information for each incentive awarded:

- size of the project;

¹ Division of Public Utilities, Docket No. 16-035-36, Comments and Recommendations, January 3, 2019, p. 5.

- cost of the project;
- amount of the incentive awarded; and
- number of charging stations added.

The Company does not object to including this information in future annual STEP reports.

Solar and Energy Storage Technology Project (SSTP)

The Division recommends the Commission approve the Company's request to increase the Solar and Energy Storage Project funding by \$1.75 million for a total program cost of \$8.75 million. The Division notes that although the costs may be higher than originally planned and the alternatives presented, the project offers unique benefits beyond the needed voltage support including providing:

- an opportunity to study a non-wires solution for the Company's current system;
- valuable information on the design, commissioning, operation, and maintenance of technologies such as this for use elsewhere on the system; and
- the opportunity to understand behavioral response of the technology under varying grid conditions, and apply learnings to other similar projects undertaken by the Company and its customers.

WRA also supports the Company's request for additional funds as reasonable given the project's size. WRA believes that, even with the increase in cost, the project is still in the interest of Utah customers because it provides valuable experience with operating the technology and notes that the project is being economically undervalued in the current cost comparison with a traditional transmission upgrade because the value of the energy was not included in the economic evaluation.

The Office recommends the Commission reject the request for additional funding due to a lack of supporting information. Specifically, the Office raised concerns, or requests additional or different information, as follows:

- additional support for 25 percent increase in capital costs;
- additional explanation for increase in operation and maintenance ("O&M") costs for the solar battery option (from \$448k to \$2.88m);
- an explanation of why the operating life of the battery was changed from 12 to 16 years;
- the costs of the projects are based on the RFP response from one bidder;
- including O&M costs in the overall STEP budget;
- analysis of the transmission line rebuild option; and
- consideration of jurisdictional allocations.

While the Company addresses the Office's specific concerns or requests for additional or different information, the Company maintains this project will provide valuable information about new combined battery and solar technology capabilities that are integrated with the Company's distribution system, as generally stated and reiterated by the Division and WRA. The information, combined with the information from the Microgrid and Smart Inverter projects, will

also provide guidance to the Company as it moves with the industry in adopting these new technologies.

The Company does not take its request for additional funding lightly and therefore performed a thorough review of the project and its benefits before submitting it. Rather than canceling the project when the costs exceeded the estimates, as was done for the Alternative NOx project, the Company’s evaluation of the circumstances impacting this project and recognition that there is significant knowledge to be gained from this opportunity that far outweighs the additional costs underly our recommendations to proceed. As Parties are aware, the expressed intent of the STEP legislation is to fund new and innovative technologies that may not always be cost-effective under normal business conditions. The project will provide the Company a platform to objectively study and enhance the operational performance of a technology that is expected to permeate the system as increasing levels of distributed energy resources are connected to the grid. The \$1.75 million in additional funds is reasonable given the unique project benefits and opportunities, which align well with the purpose and intent of the STEP legislation and program. Finally, because the lead time for ordering the battery is 26 weeks from the date of approval of the request, the Company decided the opportunity would be lost if it failed to act expeditiously. Specifically, the project will be cancelled if the request for additional funds is rejected. To date, \$408k of STEP funds have already been spent on the project. The Company responds to the Office’s specific concerns or requests below.

1. *Additional support for 25 percent increase in capital costs.*

The Company’s request to increase the expenditures for the project from \$7m to \$8.75m is an increase in costs of approximately 25 percent. The Office requested additional support from the Company in discovery, and the Company provided the following information, which the Office included in its comments:

TABLE 1. STEP SOLAR AND ENERGY STORAGE PROGRAM COST SUMMARY

STEP Solar and Energy Storage Program Cost Summary				
<u>Costs</u>	<u>Original</u>	<u>Revised</u>	<u>Diff</u>	<u>% Diff</u>
Project Development*	500,000	1,145,000	645,000	129.0%
Interconnection	750,000	308,000	-442,000	-58.9%
Solar Farm	1,950,000	1,820,996	-129,004	-6.6%
Battery	<u>3,800,000</u>	<u>5,476,004</u>	<u>1,676,004</u>	<u>44.1%</u>
Totals	7,000,000	8,750,000	1,750,000	25.0%

*Includes property, environmental and owners engineer (OE) costs

As shown in Table 1 above, the estimates for the 650 kW solar system and the interconnection costs have decreased from original estimates, but general project costs and the costs to purchase the property and owners’ engineer costs increased by \$645k, and the battery

costs increased by \$1.7 million. In its Application, the Company identified the following factors that led to the increase in capital costs, including: (a) the impact of trade tariffs on imported energy storage and solar material; (b) the increase in contractor costs due to solar and storage integration and commercial risks; (c) increased costs for battery storage due to high demand and limited supply; and (d) higher construction costs due to low unemployment and higher labor costs. In its response to data request OCS 21.1, the Company attributed the \$645k increase to general cost increases due to the protracted development of the project over a three year period. The Company attributed the \$1.7 million battery costs to tariffs, high market demand and limited manufacturing capacity, and the small size of the project, which is competing with larger, more profitable projects in the marketplace.

2. Additional Explanation for increase in Operation and Maintenance (“O&M”) costs for the solar battery option (from \$448k to \$2.88m).

The initial estimated O&M costs for the solar and battery option were based on a calculation tool that was developed by an external vendor. The estimated O&M costs were approximately \$37k per year for 12 years for a total of approximately \$448k. The Engineer Procure Contract (“EPC”) bid the Company received included O&M costs of \$180k per year for the life of the project for a total of \$2.88m. The Company acknowledges that in aggregate the difference in O&M costs is significant, and attributes the difference to the Company’s limited experience with forecasting battery technology O&M at the time of the initial filings.

3. Explanation of why operating life of the battery was changed from 12 to 16 years.

The operational life of the battery is 15 years. Based on conversations with multiple energy storage vendors, the Company assumed that O&M costs would be covered under the warranty period, which typically is around 2-3 years. However, the EPC bid received by the Company does not cover O&M costs under the warranty period. The economic analysis was subsequently updated to cover 16 years to include the full life of the battery, which is 15 years.

4. The costs of the projects are based on the RFP response from one bidder.

The Office is concerned that although the Company released its RFP to nine pre-qualified vendors, only one submitted a final bid because the vendors were interested in larger, more profitable projects. The Office found it “troubling that Utah ratepayers are on the hook for the costs of this SESP project when they are based on the RFP response from only one bidder.”²

The Company agrees that having costs for a project that are sourced from a RFP with one bidder is not ideal. Although part of the increase requested in the Application is a direct result of the fact that vendors are interested in larger, more profitable projects, the Company believes this circumstance is exactly the reason why the project should move forward. The purpose of the project is to provide insight that can be used to potentially acquire similar, larger scale projects that are more cost effective in the future. The additional costs that are caused by a relatively

² Office of Consumer Services, Docket No. 16-035-36, Reply Comments, January 3, 2019, p. 8.

small market are small compared to the probable benefits from the opportunity to study the technology.

There are several companies that have the capability and experience to install stand-alone solar and battery projects. However, integrated solar and battery projects are not common and few vendors have the expertise in deploying such projects. In addition, the Company requested bids from vendors that could contract for ongoing operations and maintenance services until the Company gains sufficient expertise to build these services internally. The Company believes that significant construction work created in Utah and neighboring states for several large-scale solar and wind projects has exhausted regional resources and driven contractors to take opportunities in developing larger projects instead of the Company's proposed smaller project.

5. Including O&M costs in the overall STEP budget.

Citing the December 29, 2016 Phase One Report and Order in this docket, in which the Commission directed the Company to include all STEP-project related O&M expenses in the STEP budget, the Office recommends that the Company be required to update its total budget, including available remaining funds, to incorporate all O&M costs through 2021.

Once the Commission issues its order in this case, the Company anticipates filing for approval of new STEP projects and is willing to provide the Office's recommended information in such filing. The Company reiterates the commitment made in the rebuttal testimony of Company witness Mr. Steven R. McDougal that the Company bears the risk for any STEP funds that are spent over and above the statutory STEP collection levels.³ The Office cites ongoing O&M costs as a reason for rejecting the project. However, the Company reiterates that any ongoing expenses that are incurred after the conclusion of STEP surcharge will be included in a future rate case and will be subject to review. Also, as noted by WRA, the output of the solar system will also benefit customers for many years after the conclusion of STEP. Importantly, however, the purpose of the STEP projects is to gain knowledge in emerging technologies that might not otherwise be possible. The design of this project and the insights gained from the execution of this technology will benefit the Company and its customers as adoption of this technology continues to grow.

6. Analysis of the transmission line rebuild option.

The solar/battery option appears more costly than the transmission line rebuild option with the net present value ("NPV") of costs for the transmission line being \$1.6 million less than the solar/battery option. The Company explained in response to the Office's data request 21.1 – 1st Supplemental that, in addition to changes in costs for these projects, other assumptions, such as the reduction in the federal corporate tax rate and changes in bonus depreciation, have also changed. The NPV model was provided to the Office in data request 21.1 – 2nd supplemental.

³ Rebuttal Testimony of Steven R. McDougal, Docket No. 16-035-36, March 28, 2017, lines 18-26.

7. Consideration of jurisdictional allocations

The Office notes that the NPVs in Table 1 above do not account for the difference in how costs are actually allocated for an investment in the distribution system compared to an investment in the transmission system. The costs for the solar/battery option are allocated to the distribution system; thus, they would be situs assigned to Utah customers. In contrast, the costs for the transmission rebuild option would be shared by all customers. About 12 percent of the costs of a transmission investment would be covered by wholesale transmission customers and about 42 percent of the remaining 88 percent of the transmission rebuild costs would be allocated to Utah customers. The Office claims this makes the solar/battery option about \$5.5 million more expensive for Utah customers than the transmission rebuild option on an NPV basis.

Economic analysis is performed to determine the best economic alternative for all customers. Allocation by state is not included in the economic analysis. Distribution projects are assigned to the respective states, while transmission projects are allocated to all states. Again, the project has many benefits that are outside the normal scope of the “best economic alternative.” How the costs will be allocated should not be a determining factor.

Conclusion

For the reasons set forth above, the Company respectfully requests that the Commission approve its request to:

- Reallocate \$1,161,501 in Clean Coal Technology funds previously approved for the Alternative NOx to the Woody Waste Co-Fire and Cryogenic Carbon projects in the amounts of \$748,980 and \$412,521, respectively;
- Increase the incentive limit for the Line Extension Pilot to \$250,000 from the currently approved amount of \$50,000; and
- Increase the approved budget of \$7 million for the SSTP from \$1.75 million to \$8.75 million.

Sincerely,



Joelle Steward
Vice President, Regulation

CC: Service List – Docket No. 16-035-36

CERTIFICATE OF SERVICE

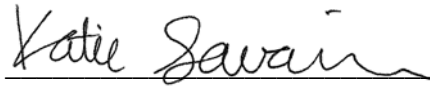
I hereby certify that on January 17, 2019, a true and correct copy of the foregoing was served by electronic mail on the following:

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