

16-035-36 / Rocky Mountain Power
April 8, 2019
WRA Data Request 5.2

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Intermodal hub project

“The system could serve as a model for deployment of highly efficient and intelligent power management systems to additional UTA and other customer sites.” Direct Testimony of James A. Campbell, page 4.

- a. Please describe how the company will demonstrate that this project could be replicable at other locations both electrically and economically.
- b. If this project is replicable, how will the Company demonstrate cost-effectiveness?
- c. By conducting this project, will the Company learn or be able to evaluate whether additional projects are cost-effective?

Response to WRA Data Request 5.2

- a. The project will develop planning tools and real-time operation tools. The project will show how the planning tools can be used to evaluate other locations to determine the benefits of applying the project results at those locations. The real-time operation tools are used to actively manage EV chargers at various power levels and for multiple modes of transportation. They operate in response to data inputs throughout the system. The project will develop generalized algorithms that are used by these real-time operation tools at the project demonstration site as an example of how to use the tools at a specific site with specific EV charging hardware. Best practices and lessons learned through the project evaluation and demonstration will facilitate replicating the results at other sites using the project tools.
- b. The planning tools developed on the project will provide cost-benefit analysis as an output to show the cost effectiveness of applying the project results to other locations.
- c. Yes. The project results will be used to validate the planning and real-time operation tools. These tools can be used to evaluate the cost-effectiveness of applying the results to other locations.

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Battery demand response project

“The Company will examine the value of having behind-the-meter grid-optimized solar and battery storage interconnected to the Company’s electrical system.”
Direct Testimony of William J. Comeau, page 3.

- a. Is the Company going to evaluate the value of future, independently developed projects? Would future projects permit (or be required to permit) RMP to have operational access/control?
- b. Does the Company plan to have operational control over other, independently developed distributed battery systems?
- c. Are they looking into operational control as a requirement? What are best practices? See also RMP_WJC-1, page 2 re load shaping.

Response to WRA Data Request 5.19

- a. If the project is successful the intent is to find a path forward to help integrate all batteries with the overall system that is beneficial for customers. The data and experience gained from the Battery Demand Response Project will help determine financial benefits and feasibility of battery demand response technology. If proven successful, the Company will have experience utilizing batteries in its service territory, and will continue pursuing/evaluating other possible projects for its customers. All batteries not owned by the Company would require customer permission for the Company to have access and control of the batteries for demand response.
- b. Not at this time, although if a customer approached the Company to partner with them similar to the Soleil project we would be open to working with them.
- c. For the batteries to be used as a demand response product the Company would need the ability to control the dispatch of the batteries. Not only is it best practice for utilities to have the ability to control demand response devices, it is a necessary component of demand response programs.

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Battery demand response project

Is this project replicable/scalable cost-effectively? Is the Company planning to evaluate that as part of this effort?

Response to WRA Data Request 5.29

Since this project is using STEP funds that are limited, it is not replicable as designed. The Company plans to utilize the project to evaluate and develop a scalable demand response solution for batteries.

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Battery demand response project

“The Company will hire a third party consultant to assist in quantifying the benefits achieved from the energy storage system for both the host customer and the company. In addition to project reporting the selected consultant will assist in developing a cost-benefit computation methodology.” Utah Battery Demand Response Project – Behind the Meter, RMP_WJC-1, Page 5, Section 9 second paragraph. By what process will this be evaluated/approved?

Response to WRA Data Request 5.30

The Company intends to either issue work to one of its pre-qualified vendors for evaluation services, or establish a new contract for these services through a competitive RFP.

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Battery demand response project

Does each of the 621 Sonnen battery systems have its own Battery Management System (BMS)? Are each of the 621 Sonnen battery systems controlled independently, in groups, or as a whole for demand response purposes? For charge and discharge cycles?

Response to WRA Data Request 5.33

Each system has its own system and can be controlled individually and in groups.

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Battery demand response project

Will the battery system be capable of exporting energy to the distribution grid or will they be configured as non-exporting storage systems?

Response to WRA Data Request 5.34

The battery system is capable of exporting energy to the grid for demand response situations, but the batteries will not be configured to do so at this stage due to safety and operational concerns. The batteries for the Battery Demand Response project were specifically chosen however, to optimize charging from the solar panels while minimizing solar energy exports to the grid.