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Division of Public Utilities

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REPLY COMMENTS

To: Public Service Commission of Utah

From: Utah Division of Public Utilities
Chris Parker, Director
Artie Powell, Energy Section Manager
Bob Davis, Utility Analyst

Date: September 29, 2017

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. Phase Four – Smart Inverter and Microgrid Innovative Utility Programs.

Recommendation

The Division of Public Utilities (Division) recommends that the Commission reject Western Resource Advocates' (WRA) and Utah Clean Energy's (UCE) proposed additional program requirements to the proposed Smart Inverter and Microgrid programs. The Division is concerned that the additional program requirements proposed by WRA and UCE for the Smart Inverter and Microgrid programs will add research time, costs, and complexity, to both programs.

Issue

On August 15, 2017, the Division, Office of Consumer Services (OCS), WRA and UCE filed comments recommending approval of Rocky Mountain Power's (Company) fourth tranche of the Sustainable Transportation and Energy Plan (STEP) – Smart Inverter and Microgrid Innovative Utility Programs. The Division and OCS recommended approval of both programs. WRA and UCE recommend additional study areas for the programs. The following are the Division's reply comments to those recommendations.

Discussion

The Company is asking the Commission to approve \$450,000 for the Smart Inverter program and \$250,000 for the Microgrid program. Both programs will be part of the Innovative Utility Program budget. The Smart Inverter program is designed to last one year and the Microgrid program is designed to last between two and three years.

WRA Comments

WRA supports the Smart Inverter and Microgrid programs as proposed by the Company. However, WRA recommends the following additions: (1) the Company should add the study of hybrid smart inverters to the Smart Inverter Program; (2) the Company should contemplate a customer-sited field trial of smart inverters as a second phase to the Smart Inverter Program; and, (3) the Company should consider testing a production-scale microgrid project as a second phase to the Microgrid Program. Finally, WRA recommends the Commission consider opening a new docket in the first quarter of 2019 to amend interconnection rules and policies to take best advantage of smart inverters and microgrids.¹

The Division understands the value in WRA's recommendations. However, should the Company decide to add these recommendations to its research for both programs, or the Commission directs the Company to do so, the Division is concerned the main points of the research programs, as designed, will be under-funded, not given the proper amount of research time needed, or both. This could lead to less useful research results. The Division is concerned WRA's recommendation to study a customer-sited field trial will add time and costs. Finally, the Division does not see the need for WRA's recommendation that a separate docket be opened to amend interconnection rules and policies of smart inverters and microgrids. If rule changes are needed, a more simple comment and compliance review approach might lead to better use of time and resources.

UCE Comments

UCE did not comment on the Microgrid Program. UCE is supportive of the Smart Inverter Program. However, UCE recommends the Company facilitate ongoing participation in this program from interested stakeholders by providing timely updates for interested stakeholders, solicit stakeholder feedback on key research areas relating to the Smart Inverter program, and share proposed research plans and preliminary findings for specific research areas with

¹ Kenneth L. Wilson, Comments of Western Resource Advocates, In the Matter of The Application of Rocky Mountain Power to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act, September 15, 2017, at page 8.

stakeholders. Specifically, UCE requests the Company provide stakeholders with the following opportunities:

- review preliminary findings from the Smart Inverter Standards and Policy Update when available (research area A);
- review a summary research plan for the Smart Inverter Selection and Laboratory Testing study (research area B), including detailed information about the inverters, batteries, and battery management software to be tested; and
- review the findings from research areas C, D, and E when available.²

The Division understands UCE's reference to the research areas A-E listed above as relating to the project tasks listed on page 7 of the Company's Smart Inverter application. Although the Division supports open communication between the Company and stakeholders with programs such as this one, UCE's recommendations would likely add significant time and cost to the program. The Division is concerned this added level of intermediate feedback and reporting could be burdensome.

UCE recommends that the Company keep stakeholders involved in the Smart Inverter research because the findings will be relevant to other distributed generation proceedings in Utah. Specifically, UCE expects that the smart inverter research will inform stakeholders how the costs and benefits of smart inverters may impact the export credit proceeding should the Commission open the docket.³

In order to have a nuanced and sophisticated discussion about the quantifiable costs and benefits [sic] it will be important for stakeholders to have access to data gathered for the purpose of this Program and insight into the findings from the Program.⁴

The Division supports an open dialog of information between the Company and stakeholders, but does not support UCE's request for its intended purpose. The Smart Inverter research design may explore similar areas of concern as those anticipated in the proposed distributed

² Kate Bowman, Comments of Utah Clean Energy, In the Matter of the Application of Rocky Mountain Power to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act, September 15, 2017, at pages 1-2.

³ Docket No. 14-035-114, In the Matter of the Investigation of the Costs and Benefits of PacifiCorp's Net Metering Program, Rocky Mountain Power's Settlement Stipulation, page 9, ¶ 28.

⁴ Kate Bowman, Comments of Utah Clean Energy, In the Matter of the Application of Rocky Mountain Power to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act, September 15, 2017, at page 3.

generation export credit docket. However insightful those findings may be, the Smart Inverter program is not designed to determine costs and benefits of smart inverters used on distributed generation systems for the purpose of export credits. The program is designed to study the interaction between distributed generation and the distribution system, and how to make smart inverters more operationally effective. The Division feels that changing the scope of research to include costs and benefits, as suggested by UCE, will add time and complexity to the program. The Division suggests that at the conclusion of this research program, and after optimal smart inverter interconnection parameters are determined, the Company might seek Commission approval for a program to determine the costs and benefits of smart inverter impacts to the distribution system.

Conclusion

The Division understands the relevance of the recommendations proposed by WRA and UCE. However, the Division's concern with these recommendations is the possibility of added time, costs, and complexity to both programs. The Company's application includes the budgetary needs for each research program as currently designed. The Division made its original recommendation to approve the programs based on those designs. If the Company can complete the studies within the respective time frames and budgets in consideration of the recommendations, the Division would not be opposed. If not, the Division requests additional time to review any modifications to the research programs before recommending approval.

The Division's original approval recommendation of these programs was conditional on the same reporting requirements and treatment of potential OMAG expenses ordered by the Commission in previous phases of this docket. The reporting requirements and treatment of OMAG expenses is well established in this docket. Pending the Commission's final approval of the Company's reporting plan, the Division concludes the Company's reporting plan will suffice for this phase of the docket. The Division supports any communication to stakeholders the Company deems necessary for this phase of the docket but does not recommend the Commission require the Company follow UCE's recommendations.

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