

- BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH -

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

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DOCKET NO. 16-035-36

REPORT AND ORDER

ISSUED: June 28, 2019

SYNOPSIS

The Public Service Commission of Utah (PSC) approves Rocky Mountain Power's (RMP) Application to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act ("STEP Act") using previously approved Other Innovative Technology Program and Other New Technology Programs funds, and unused Utah Solar Incentive Program (USIP) funds. The PSC also approves additional STEP Act reporting and meeting requirements.

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**I. BACKGROUND AND PROCEDURAL HISTORY**

This docket arises out of RMP's Application to Implement Programs Authorized by the Sustainable Transportation and Energy Plan Act ("Application") filed on March 8, 2019.

In March 2016, Utah enacted the STEP Act, now codified at Utah Code Ann. §§ 54-7-12.8, 54-20-101, et seq.<sup>1</sup> The PSC has adjudicated RMP's previous applications to implement programs under the STEP Act in earlier phases of this docket. This Application proposes three innovative utility programs under the STEP Act:<sup>2</sup> (1) the Power Balance and Demand Response to Optimize Charging at Intermodal Hub Project (the "Intermodal Hub Project"); (2) the Wasatch Development Partnership Project for Battery Demand Response (the "Battery DR Project"); and

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<sup>1</sup> The PSC's Phase One Report and Order in this docket, dated December 29, 2016, contains a relatively broad overview of the STEP Act. This Report and Order discusses only those aspects of the law pertinent to this phase of the docket.

<sup>2</sup> See Utah Code Ann. § 54-20-105.

(3) the Advanced Resiliency Management System Project (the “ARMS Project”).<sup>3</sup> For these projects, RMP requests funding of approximately \$2 million, \$3.27 million, and \$16.52 million, respectively, with an effective date of July 1, 2019.

On May 14, 2019, the Division of Public Utilities (DPU), the Office of Consumer Services (OCS), Western Resource Advocates (WRA), and Utah Clean Energy (UCE) filed comments, and on May 31, 2019, RMP, UCE, and the Utah Association of Energy Users (UAE) filed reply comments. The PSC held a hearing on June 17, 2019 to consider RMP’s Application, at which RMP, the DPU, the OCS, UCE, and WRA provided testimony.

## **II. RMP’S APPLICATION**

### ***Intermodal Hub Project***

RMP’s proposed Intermodal Hub Project is a partnership with Utah State University’s Sustainable Electrified Transportation Center and Utah Transit Authority (UTA) to develop a power balance and demand response system, including chargers with outputs up to 400 kW, to be installed at UTA’s Intermodal Hub located in Salt Lake City, Utah. The Intermodal Hub Project is designed to address the high cost of grid infrastructure needed for high output chargers by researching methods to adaptively manage power flow between the grid and various electric charging needs. The project will combine a diversity of electric charging needs (light rail, bus, passenger, truck, and ride hailing services) at an intermodal transit center to create a multi-megawatt, co-located, coordinated, and managed charging system.<sup>4</sup>

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<sup>3</sup> If the ARMS Project is approved, \$1.5 million remains unallocated in the Conservation, Efficiency and Other New Technology Programs budget.

<sup>4</sup> Application at 5.

RMP anticipates the Intermodal Hub Project will serve as a model for the future deployment of power management systems and enable it to develop tools to optimize system design. RMP requests approval to use \$2.00 million of the remaining Other Innovative Technology Projects funding for the Intermodal Hub Project.

***Battery DR Project***

As proposed, the Battery DR Project is a partnership between RMP and Wasatch Development for the installation of individual batteries in each unit of the 600 unit Soleil multi-family development in Herriman, Utah. The batteries will be charged by solar facilities, and RMP will have control of the batteries to deploy them for system-wide demand response, similar to RMP's Cool Keeper program.<sup>5</sup> RMP states the Battery DR Project is an innovative approach to provide it experience with solar and battery integration, along with advanced management of the grid and peak/off-peak energy use. The Battery DR Project will also (1) allow RMP to study the value of having behind-the-meter grid-optimized solar and battery storage interconnected to RMP's distribution system, (2) help RMP evaluate potential rate design options for customers with batteries, and (3) allow RMP to prepare for (the expected future) larger-scale deployment of battery storage technology and integrate such technology into RMP's distribution system.<sup>6</sup> RMP

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<sup>5</sup> The Cool Keeper program is an air conditioner direct load management program targeting residential and qualifying commercial customers (equipment size equal to or less than 15 tons) who cool their homes and businesses with electric central air conditioners. On select summer weekday afternoons, when electricity demand is at its highest, the Cool Keeper control equipment installed on a participating customer's cooling equipment is sent a signal to cycle the operation of the air conditioner's compressor "off and on" for brief periods each hour in coordination with the air conditioners of other participating customers.

<sup>6</sup> Application at 6.

requests approval to use \$3.27 million of the remaining Other Innovative Technology Project monies to fund the Battery DR Project.<sup>7</sup>

***ARMS Project***

RMP's proposed ARMS Project includes the installation of encoder receiver transmitter (ERT) electric meters (also known as automated meter reading, or AMR, facilities), installation of communication radios on distribution line equipment, and deployment of additional line sensor technology on distribution circuits connecting critical customers (e.g., hospitals, trauma centers, and police and fire dispatch) to enable real-time communication with RMP's control center.<sup>8</sup> In addition, the project will allow RMP to review the deployment of line sensor technology on distribution circuits that have traditionally had poor reliability to improve outage response.

RMP asserts the ARMS Project will provide benefits by allowing control center operators real-time access to information during major outages to restore service as quickly as possible to critical facilities responsible for public safety and emergency response, while also providing outage information for most other customers in Utah. According to RMP, installation of the ERT meters will also allow residential and small commercial customers access to interval energy data, which can allow those customers to make better financial decisions regarding their energy usage. RMP states the project is an opportunity to develop experience with technologies that can be used for grid modernization applications, including distribution automation, outage management,

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<sup>7</sup> If both the Intermodal Hub and Battery DR Projects are approved, approximately \$1.4 million remains unallocated in the Other Innovative Technology budget category.

<sup>8</sup> Application at 7.

data analytics, and demand-response programs. RMP estimates the ARMS Project will provide approximately \$71 million in reliability benefits to Utah customers over the next 25 years.<sup>9</sup> RMP requests approval for \$16.52 million for this project, funded by \$13 million of unused USIP funds and \$3.5 million from the Conservation, Efficiency, and Other New Technology Program budget.<sup>10,11</sup>

### **III. COMMENTS**

#### ***a. Parties generally support the Application with various conditions***

Parties generally support the Intermodal Hub, Battery DR, and ARMS Projects and, with the following exception, recommend the PSC approve them as filed subject to various meeting, reporting, notification, and process requirements. UCE, while supportive of the ARMS project, suggests it is more appropriately funded through general rates rather than by STEP funds in light of RMP's stated approximately \$71 million of anticipated net customer benefits.

#### ***b. RMP's reply comments***

RMP agrees to the DPU's and the OCS's general recommendations as follows: (1) quarterly stakeholder project update meetings; (2) certain reporting on Operations & Maintenance and Administrative & General (OMAG) expenses, *i.e.*, providing an estimate of ongoing project costs at the time a project is proposed; and (3) an exit strategy meeting during the fourth quarter of 2019.

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<sup>9</sup> In its May 31, 2019 Reply Comments, RMP clarifies that the approximately \$71 million in benefits over the life of the program referenced in the Application is primarily a customer benefit due to reduced outage times, rather than a direct financial benefit to RMP's revenue requirement and its customers.

<sup>10</sup> The proposed cost to develop and deploy the AMR system is \$11.29 million and the cost to develop and deploy the Fault Circuit Indicator and ERT Gateway network is \$5.23 million.

<sup>11</sup> Table 1 of the Application provides RMP's updated STEP Act funding budget, at 4.

For the Intermodal Hub Project, RMP agrees to provide a report on risk mitigation issues as requested by the OCS and, at the conclusion of the project, a final report including a detailed cost-benefit analysis and an assessment of the potential for future deployment of the technology at other sites. Regarding the Battery DR Project, RMP will add language to the contract with Wasatch Development indemnifying RMP and its ratepayers from any legal actions resulting from the batteries. In addition, RMP will provide Wasatch Development's local approval and/or permitting for the residential battery installations once it is available. Regarding the ARMS Project, RMP states it will not implement additional Advanced Metering Infrastructure (AMI) beyond the scope of this project using STEP Act funds and it does not intend to use the data gathered in isolation to develop rate design.

As an alternative to WRA's request for information pertaining to the Intermodal Hub Project,<sup>12</sup> RMP suggests that the STEP Annual Report<sup>13</sup> include progress on achieving the project's four tasks outlined in the Application.

Regarding the OCS's recommendation for annual reporting of ongoing costs related to existing STEP Act projects, RMP recommends discussion of this topic at the exit strategy meeting later this year to determine a mutually agreeable way this information could be reported.

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<sup>12</sup> WRA recommended RMP provide the following: (1) information about how the planning and operation tools will be used to demonstrate the cost effectiveness of replicating the project at other sites; (2) information about and plans for applying project results to other sites, including cost-effectiveness evaluations; (3) information on whether and how the project is informing plans for electric vehicle charging infrastructure and distribution planning; (4) reports about the hardware, software, and power control technologies RMP is employing to control and schedule vehicle charging; and (5) documentation of the benefits gained from this project.

<sup>13</sup> The PSC-required STEP Annual Report presents the overall accounting detail for the STEP program as well as information on the individual STEP projects, using the reporting template approved by the PSC in this docket on October 12, 2017.

Pertaining to the Battery DR Project, in response to WRA, RMP proposes to provide performance updates on the project mid-year annually, followed by a more comprehensive report to be submitted with the STEP Annual Report. In response to UCE's comments, RMP states it does not intend to use the data gathered in isolation to develop rate design.

Regarding the ARMS Project, RMP states it will not implement additional AMI beyond the scope of this project using STEP funds. In response to UCE's recommendation that the ARMS project be funded through general customer rates, RMP disagrees stating it "is evaluating future AMI projects, but is not proposing or moving forward with additional projects at this time. In response to UCE's comments, [RMP] believes that it is important to recognize that the benefits analysis shows that approximately \$71.1 million in benefits over the life of the program is primarily a customer benefit due to reduced outage times, rather than a direct financial benefit to [RMP's] revenue requirement and its customers. When comparing the net present value of these benefits to the initial project cost, the project is not [cost effective], and would not be appropriately funded through general customer rates."<sup>14</sup> Further, RMP asserts the project will utilize innovative technology components that are currently not commercially available and are expected to provide critical information and experience to enable future deployment of grid modernization projects.

Finally, regarding WRA's proposal for developing an integrated distribution planning ("IDP") process, RMP recommends waiting for the STEP Act program to end before pursuing distribution system planning. RMP maintains the projects undertaken in the STEP Act program

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<sup>14</sup> RMP's May 31, 2019 Reply Comments at 4.

are expected to provide additional information that will contribute to its grid modernization strategy and therefore to future distribution system planning efforts.

#### **IV. DISCUSSION, FINDINGS, AND CONCLUSIONS**

We understand no dispute exists and all parties support the relief RMP seeks pertaining to the Intermodal Hub Project and the Battery DR Project. Parties all agree the proposed programs would be of value to ratepayers, and the DPU asserts the projects are in the public interest. Based on our review of the filing and comments in this docket, and given the unanimity of opinion of the parties, we find these two programs are of value to ratepayers, are consistent with the STEP Act, and are in the public interest, and therefore we approve them. In light of the STEP Act's statutory mandates, we find these proposals to be just, reasonable, and in the public interest.

The DPU, the OCS, WRA, and UAE support the ARMS project as proposed. UCE, while supportive of the project, recommends it should be funded through general ratepayer funds instead of STEP Act funds. To the extent RMP is implementing an innovative software solution, we find the ARMS Project is experimental in nature and therefore conclude it satisfies the requirements of the STEP Act and is a reasonable use of those funds.<sup>15</sup> We approve the ARMS Project as proposed by RMP.

Based on RMP's reply comments, we conclude RMP has addressed many of the reporting, meeting, process recommendations, and other commitments recommended by the DPU, the OCS, WRA, and UCE as follows: (i) RMP agrees to provide quarterly updates on all

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<sup>15</sup> We conclude that for purposes of this approval, it is not necessary to make findings on the perspectives of RMP and UAE on the type of ratepayer benefit the ARMS Project will provide. Both RMP and UAE agree some ratepayer benefit exists, and we conclude that the type of ratepayer benefit argued by UAE would not disqualify the ARMS Project under the STEP Act.

three projects throughout the remainder of the STEP Act program, including all accounting associated with the projects; (ii) RMP agrees to provide an estimate of any ongoing costs at the time it proposes any new projects; (iii) with respect to the Intermodal Hub Project, RMP agrees to provide a report on risk mitigation issues and, at the conclusion of the Intermodal Hub Project, a final report including a detailed cost-benefit analysis together with an assessment of the potential for future deployment of the technology at other sites; (iv) with respect to the Battery DR Project, RMP will provide the approval or permitting for the residential battery installations once it is available, will add language to the contract with Wasatch Development indemnifying RMP and its ratepayers from any legal actions resulting from the batteries, will provide performance updates mid-year on an annual basis followed by a more comprehensive report to be submitted with the STEP Annual Report, and does not intend to use the data gathered in isolation to develop rate design; (v) with respect to the ARMS Project, RMP will not implement additional AMI beyond the scope of this project using STEP Act funds; and (vi) with respect to the STEP Act exit strategy, RMP agrees to meet with the DPU and other interested parties prior to the end of 2019 to discuss the conclusion of the STEP Act program.

As to these issues, we find RMP's proposals adequately address the concerns and recommendations of the parties and therefore we accept and adopt them, and incorporate them, as applicable, in the STEP Act program's overall requirements. In particular, we find that efforts to proactively address a STEP Act program exit strategy are in the public interest. Going forward, we request RMP include a summary of any exit strategy meeting(s) in future STEP Annual Reports.

We now address those reporting and process issues where parties did not reach consensus. During the June 17, 2019 hearing, no party responded to the alternate proposals RMP provided in its reply comments.

Regarding the OCS's request for ongoing OMAG annual reporting for existing projects, RMP recommends discussion of this topic at the STEP exit strategy meeting later this year to determine a mutually agreeable way to report the requested information. We find RMP's proposal reasonable to ensure parties agree on the type, granularity, format, and timing of information to be provided. We request RMP provide a summary of the discussion in the next STEP Annual Report.

Regarding the Intermodal Hub Project, WRA recommends RMP provide various information, reports, and other documentation as part of the STEP Act program reporting requirements. RMP believes the STEP Annual Report will provide much of the information requested by WRA. Alternatively, RMP suggests the STEP Annual Report include progress on achieving the project's four goals outlined in the Application and supporting testimony. Based on our review of the parties' comments and WRA's support for the project, and absent WRA's opposition to RMP's proposal at hearing, we find RMP's proposal reasonably and adequately addresses WRA's recommendation, particularly in light of WRA's ability to submit comments in future STEP Annual Report dockets on the adequacy of information RMP provides.

WRA proposed, and UCE supports, that we require RMP to undertake an IDP process. In its reply comments and at hearing, RMP alternatively recommended waiting for the STEP Act program to end before pursuing distribution system planning. According to RMP, the projects deployed under the STEP Act program are expected to provide RMP with additional information

that will contribute to its grid modernization strategy and would become part of any distribution system planning effort.

Having considered the parties' comments and testimony on this issue we conclude that imposing a new planning requirement at this time is premature. Further, we conclude that using a STEP Act funding docket to impose such a requirement would not provide all interested parties with an adequate opportunity to evaluate and comment on such a proposal. We therefore do not adopt WRA's request.

**V. ORDER**

1. We approve the Intermodal Hub Project as proposed in the Application with a budget of \$2.00 million.
2. We approve the Battery Demand Response Project as proposed in the Application with a budget of \$3.27 million.
3. We approve the ARMS Project as proposed in the Application with a budget of \$16.52 million.
4. We modify RMP's STEP Act program reporting requirements to include all of the reporting commitments RMP agreed to provide in its reply comments and in testimony at hearing, as discussed in this Order.
5. We direct RMP to meet with the DPU and other interested parties to establish a process and timeline to develop a STEP Act program exit strategy plan or process. We further direct RMP to include a summary of discussions related to the exit strategy in future STEP Annual Reports.

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DATED at Salt Lake City, Utah, June 28, 2019.

/s/ Michael J. Hammer  
Presiding Officer

Approved and Confirmed June 28, 2019, as the Order of the Public Service Commission  
of Utah.

/s/ Thad LeVar, Chair

/s/ David R. Clark, Commissioner

/s/ Jordan A. White, Commissioner

Attest:

/s/ Gary L. Widerburg  
PSC Secretary  
DW#308913

Notice of Opportunity for Agency Review or Rehearing

Pursuant to Utah Code Ann. §§ 63G-4-301 and 54-7-15, a party may seek agency review or rehearing of this written order by filing a request for review or rehearing with the PSC within 30 days after the issuance of the order. Responses to a request for agency review or rehearing must be filed within 15 days of the filing of the request for review or rehearing. If the PSC fails to grant a request for review or rehearing within 20 days after the filing of a request for review or rehearing, it is deemed denied. Judicial review of the PSC's final agency action may be obtained by filing a Petition for Review with the Utah Supreme Court within 30 days after final agency action. Any Petition for Review must comply with the requirements of Utah Code Ann. §§ 63G4-401, 63G-4-403, and the Utah Rules of Appellate Procedure.

CERTIFICATE OF SERVICE

I CERTIFY that on June 28, 2019, a true and correct copy of the foregoing was delivered upon the following as indicated below:

By Electronic-Mail:

Data Request Response Center ([datarequest@pacificorp.com](mailto:datarequest@pacificorp.com))  
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