WRA Data Request 10.1

In light of the Company's response to WRA 3.5 and 9.1(d) (copied below), please address the following:

Please confirm whether the Company's existing CSS can accept billing determinants from AMI meters?

> **RMP response to WRA 3.5:** The automatic meter reading (AMR) meters, along with the ERT Gateway Mesh, will provide one hour energy data for residential customers. The data is fed into the meter data management system (MDMS) that will provide for the creation of billing determinants as well as creation of the daily usages for display on the customer website. MDMS will be able to provide billing determinants for advanced rate designs for customers with AMR meters. However, the Company's existing CSS system does not have the ability to accept these determinants and will require a major overhaul or replacement before advanced rates can be appropriately calculated and billed.
>
> **RMP response to WRA 9.1(d):** The installation of AMI capability will enable time of use rates for those customers who receive an AMI meter, because the Company will be able to remotely reprogram these customers' meters to measure energy and/or demand to record time varying consumption.

Response to WRA Data Request 10.1

The Company's existing customer service system (CSS) cannot accept billing determinants from advanced metering infrastructure (AMI) meters.

WRA Data Request 10.2

In light of the Company's response to WRA 3.5 and 9.1(d) (copied below), please address the following:

If the existing CSS can accept billing determinants from AMI meters, please explain how and why the existing CSS can accept billing determinants from an AMI meter but not from the meter data management system for customers with AMR meters.

> **RMP response to WRA 3.5:** The automatic meter reading (AMR) meters, along with the ERT Gateway Mesh, will provide one hour energy data for residential customers. The data is fed into the meter data management system (MDMS) that will provide for the creation of billing determinants as well as creation of the daily usages for display on the customer website. MDMS will be able to provide billing determinants for advanced rate designs for customers with AMR meters. However, the Company's existing CSS system does not have the ability to accept these determinants and will require a major overhaul or replacement before advanced rates can be appropriately calculated and billed.
>
> **RMP response to WRA 9.1(d):** The installation of AMI capability will enable time of use rates for those customers who receive an AMI meter, because the Company will be able to remotely reprogram these customers' meters to measure energy and/or demand to record time varying consumption.

Response to WRA Data Request 10.2

Please refer to the Company's response to WRA Data Request 10.1.

WRA Data Request 10.3

In light of the Company's response to WRA 3.5 and 9.1(d) (copied below), please address the following:

If the existing CSS cannot accept billing determinants from AMI meters, please explain your answer to 9.1(d).

> **RMP response to WRA 3.5:** The automatic meter reading (AMR) meters, along with the ERT Gateway Mesh, will provide one hour energy data for residential customers. The data is fed into the meter data management system (MDMS) that will provide for the creation of billing determinants as well as creation of the daily usages for display on the customer website. MDMS will be able to provide billing determinants for advanced rate designs for customers with AMR meters. However, the Company's existing CSS system does not have the ability to accept these determinants and will require a major overhaul or replacement before advanced rates can be appropriately calculated and billed.
>
> **RMP response to WRA 9.1(d):** The installation of AMI capability will enable time of use rates for those customers who receive an AMI meter, because the Company will be able to remotely reprogram these customers' meters to measure energy and/or demand to record time varying consumption.

Response to WRA Data Request 10.3

The Company's response to WRA Data Request 9.1 subpart (d) does not refer to billing determinants. It only states that advanced metering infrastructure (AMI) meters can be remotely reprogrammed for time of use (TOU) rates.

OCS Data Request 18.4

Refer to the Direct Testimony of Witness Mansfield at 24. Explain why the Company will be installing 175,000 AMI meters, which customers will be getting AMI meters, and why.

Response to OCS Data Request 18.4

The meters, along with the access points (a pole mounted device), make up the mesh network. The replacement of approximately 175,000 existing Automated Meter Readers (AMR) with Advanced Metering Infrastructure (AMI) meters will enable the Company to build out the mesh network. AMI meters will be installed on all Schedule 136 customers to eliminate manually meter reading at these sites.The remaining meters will be installed at strategic locations that allow the Company to build out the mesh network. The specific locations of these meters are not determined at this time because meter counts, meter locations and meter rate schedules will change prior to AMI meter installations, which alters the optimized mesh network solution.

OCS Data Request 18.5

Refer to the Direct Testimony of Witness Mansfield lines 519-521. Provide a description of all the customer-facing energy efficiency programs that the Company plans to roll out after AMI. Additionally, provide the following:

(a) When each program will be implemented;

(b) Additional investments needed to implement said programs; and

(c) The costs and benefits of each program.

Response to OCS Data Request 18.5

While there may ultimately be new programs proposed after Advanced Metering Infrastructure (AMI), the Company does not currently have any new customer-facing energy efficiency (EE) programs planned after AMI. AMI will improve existing EE programs, such as Home Energy Reports (HER), which will be more accurate and better reflect information unique to each customer. Existing EE programs will be further enhanced by utilizing the improved data from AMI, further refining customer offerings and providing further insight for customers into their energy usage, energy savings, etc.

Any new EE programs, whether rolled out before or after AMI, will be filed for approval by the Public Service Commission of Utah (UPSC). Filings for proposed programs typically include the types of information requested in this data request, namely program overviews, costs and benefits, forecast participation levels, marketing, incentive levels, and cost-effectiveness analyses.

OCS Data Request 18.6

Refer to the Direct Testimony of Witness Mansfield lines 519-521. For each customer class, explain the Company's plan for advanced rate designs (e.g., critical peak pricing and time-varying kWh and kW charges). Include in your explanation, but do not limit it to, the timeline for rollout of advanced rate designs and implementation strategy.

Response to OCS Data Request 18.6

The Company intends to offer different rate designs that will utilize advanced metering functionality, but has no current plan for timing or scope.

OCS Data Request 18.7

Refer to the Direct Testimony of Witness Mansfield. What are the Company's current data sharing practices? Will the Company be changing data sharing practices with the rollout of AMI?

Response to OCS Data Request 18.7

The Company's data sharing practices are outlined in its privacy policy at the link below:

https://www.rockymountainpower.net/privacy.html

The Company has no plans to change its data sharing practices as a result of rolling out advanced metering infrastructure (AMI).

OCS Data Request 18.8

Refer to the Direct Testimony of Witness Mansfield. Will the Company be enabling Green Button Connect My Data with the rollout of AMI? If so, what is the timeline?

Response to OCS Data Request 18.8

The Company currently provides "Green Button" functionality to customers using their online account. At present, the level of information is limited to monthly usage information for residential and small commercial customers. After completion of the advanced metering infrastructure (AMI) project, the level of information will be enhanced making hourly usage information available to customers with AMI and automated meter reading (AMR) meters.

OCS Data Request 18.9

Refer to the Direct Testimony of Witness Mansfield. Will the Company be providing a set of open data access standards to create the ability for third parties to access sets of customer energy use data, either aggregated or anonymized? If not, explain why not. If so, please provide a detailed description of the Company's plan.

Response to OCS Data Request 18.9

No. The Company has not explored open data access due to potential data integrity, cyber security and customer privacy issues.

OCS Data Request 18.10

Refer to the Direct Testimony of Witness Mansfield. Will the AMI meters have Home Area Network (HAN) functionality? If so, will the Company be enabling the functionality from day 1? If not, explain the Company's plan.

Response to OCS Data Request 18.10

No. The Company has no plans to provide Home Area Network (HAN) functionality.

OCS Data Request 18.11

Refer to the Direct Testimony of Witness Mansfield. What are the Company's plans for improving demand response opportunities for customers and how is AMI related to the Company's strategy?

Response to OCS Data Request 18.11

The Company is continually looking to improve and develop demand response programs in an effort to provide additional benefits to customers and the Company. Advanced metering infrastructure (AMI) will provide better data analytics and improved reporting, which will help the Company understand when and how customers are using energy. With the improved data collection and data granularity, it may provide additional opportunities for demand resources to participate in real time markets.

OCS Data Request 18.14

Refer to the Direct Testimony of Witness Mansfield lines 530-537. Explain the functionality of the Company's meter data management system as it varies by customer type and meter. Explain whether implementing advanced rate designs, such as critical peak pricing, will be possible for all customer classes using the current and upgraded MDMS.

Response to OCS Data Request 18.14

The Meter Data Management System (MDMS) will provide for the creation of billing determinants for residential and small commercial customers with advanced metering infrastructure (AMI) and automated meter reading (AMR) meters as well as creation of the daily usages for display on the customer website. For large customers with load profile metering, the system will provide for the storage and delivery of billing determinants. For all customers, the system will store all meter reads, load profile data and meter events.

The MDMS will be able to provide billing determinants for advanced rate designs for customers with AMI, AMR or load profile meters. However, the existing customer service system (CSS) does not have the ability to accept these determinants and will require a major overhaul or replacement before advanced rates can be appropriately calculated and billed.

OCS Data Request 18.15

Refer to the Direct Testimony of Witness Mansfield lines 577-583. If the FAN can read current AMR meters, why does the Company need to upgrade to AMI? Please provide all quantitative analysis the Company conducted on the incremental value between AMR and AMI.

Response to OCS Data Request 18.15

There is no existing field area network (FAN) used to read automated meter reading (AMR) meters. The advanced metering infrastructure (AMI) network is necessary to establish a FAN and read the AMR meters. Please refer to the Company's responses to OCS Data Request 18.4 and OCS Data Request 18.12.

OCS Data Request 18.16

Refer to the Direct Testimony of Witness Mansfield lines 636-649. For each of the objectives listed, provide the following:

(a) The approach for measuring the Company's success (i.e., what performance metrics will the Company use to evaluate its success);

(b) The performance target the Company has set for itself (e.g., the date by which the Company will conduct an equipment sizing analysis that saves $X or a discrete improvement in SAIDI and SAIFI);

(c) The reporting the Company is proposing to demonstrate a successful implementation of AMI and ongoing utilization and performance of AMI; and

(d) Explain what happens if the Company fails to achieve the objective.

Response to OCS Data Request 18.16

While an advanced metering infrastructure (AMI) system provides the foundation upon which smart grid functionalities can be built, only items related to meter reading functions and customer data access were included in the current project. Please refer to the Company's response to OCS Data Request 18.8.

Success metrics have been established in three areas:

- Average daily meter reading (>98% after project completion),
- Meter installations (100% of planned installs), and
- Realization of cost reductions (16 FTE positions will be eliminated per the business case).

Weekly reports will be designed closer to project implementation as we understand and become familiar with the full extent of the performance metrics available from the system to demonstrate successful implementation.

If full metric attainment is not achieved upon project completion (e.g. >98% daily reads), further analysis and reinforcement of the AMI network will be necessary in identified specific locations.

Program development, target dates and metrics for other smart grid functions have not been fully explored and are pending project completion.

OCS Data Request 18.17

Refer to the Direct Testimony of Witness Mansfield lines 648-649. Which of the Company's planned smart grid technologies require real-time communication and/or control?

Response to OCS Data Request 18.17

If enabled, programs such as demand response, conservation load reduction, etc. would require real-time communication.

OCS Data Request 18.18

Refer to the Direct Testimony of Witness Mansfield lines 648-649. Explain what real-time functionality the Company is referring to.

Response to OCS Data Request 18.18

Please refer to the Company's response to OCS Data Request 18.17. The technologies referred to as "yet to be created" have not been identified.

OCS Data Request 18.24

Explain how data from the new communication network and AMI will be integrated into the Company's distribution system planning process and grid operations and the associated benefits. Include in your answer, but do not limit it to, the topics of load forecasting, distributed energy resource interconnection, hosting capacity analysis, non-wires solutions, voltage management, and outage management.

Response to OCS Data Request 18.24

Please refer to the Direct Testimony of Curtis B. Mansfield, including lines 555-575, 651-660. While the data can be used for advanced planning, forecasting, outage management etc., the details surrounding those applications have not been fully explored to date. Those details will continue to be investigated during the course of project implementation to prepare for application after completion.

Once a sufficiently long history of AMI data has been collected, the Company expects that the data will allow for additional insight in actual calendar month usage and potentially sub-monthly frequencies. These enhancements will potentially allow the Company to improve load forecast accuracy.