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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations

DOCKET NO. 20-035-04

PHASE II – COST OF SERVICE

PREFILED DIRECT TESTIMONY OF SARAH WRIGHT

ON BEHALF OF

UTAH CLEAN ENERGY

PHASE II COST OF SERVICE

SEPTEMBER 15,2020

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I. INTRODUCTION AND QUALIFICATIONS

- 2 Q. Please state your name and business address.
- 3 A. My name is Sarah Wright. My business address is 10142nd Avenue, Salt Lake City, Utah
- 4 84103.

- 5 Q. By whom are you employed and in what capacity?
- I am the Executive Director of Utah Clean Energy, a non-profit public interest organization
- 7 whose mission is to lead and accelerate the clean energy transformation with vision and
- 8 expertise. We work to stop energy waste, create clean energy, and build a smart energy
- 9 future.
- 10 Q. On whose behalf are you testifying?
- 11 A. I am testifying on behalf of Utah Clean Energy ("UCE").
- 12 Q. Please review your professional experience and qualifications.
- I am the founder and Executive Director of Utah Clean Energy. Through my work with
- 14 Utah Clean Energy over the last 20 years, I have been involved in a number of regulatory
- dockets, including Integrated Resource Planning, rate cases, tariff filings, and other dockets
- relating to energy efficiency, renewable energy, integrated resource planning and net
- metering. For 15 years prior to founding Utah Clean Energy, I was an occupational health
- and environmental consultant, working on occupational health and ambient air quality
- issues for a wide variety of commercial, industrial, and governmental clients across the
- west. I have a BS in Geology from Bradley University in Peoria, Illinois and a Master of
- Science in Public Health from the University of Utah in Salt Lake City.

II. PURPOSE OF TESTIMONY

- Q. What is the purpose of Utah Clean Energy's direct testimony on the cost of service/pricing phase of the rate case?
- A. The purpose of Utah Clean Energy's testimony is to respond to Rocky Mountain Power's

 ("RMP" or the "Company") proposed changes to schedule 6A, General Service Energy

 Time of Day Option, and schedule 11, Street Lighting Company Owned System. The

 absence of testimony on any other issues should not be construed as my support or

 opposition to those issues.
- 30 III. SCHEDULE 6A GENERAL SERVICE ENERGY TIME OF DAY OPTION
- 31 Q. What is your recommendation related to RMP's proposal for schedule 6A?
- A. UCE supports RMP's proposed revisions to schedule 6A, but we recommend that the current schedule 6A remain open to customers. We recommend adding the new proposed schedule 6A as an additional option: schedule 6B.
- 35 Q. Please explain how the proposed schedule 6A would work.
- A. RMP is proposing to replace the current schedule 6A with a new tariff based on an
 alternate rate design. The new rate design charges the first 50 kWh for each kW of demand
 at a higher rate and all additional kWh-per-kW at a lower rate. According to Company
 witness Mr. Meredith, "[i]In effect, this structure allows the Company to charge customers
 an average energy price that declines as load factor increases, much like demand charges
 do, but puts a cap on how high that average cost can be for low load factor customers."

¹ Meredith Direct Testimony, lines 790 - 792.

Mr. Meredith says that this change is necessary "[f]or customers with very low load factors [because] the demand charge can raise a customer's average cost per kWh to very high levels. For some types of processes with sporadic loads, such as direct current electric vehicle fast charging and arc welding, the cost per kWh can be very high. The kWh per kW block charge makes energy more expensive for lower load factor customers, but puts a cap on how high the average per kWh cost can go."²

Q. Who will benefit from this new rate design?

A. Based on RMP's testimony, customers wishing to take service under schedule 6A with a load factor under 6% will significantly benefit from the proposed schedule 6A over the existing schedule 6A.³ As shown in Mr. Meredith's Figure 3, current schedule 6A customers with a load factor under 6% can be subject to extremely high average energy costs.⁴ Further, customers wishing to take service under schedule 6A with a load factor over 29% will nominally benefit from the proposed schedule 6A over the existing schedule 6A.⁵

Q. Will the proposed 6A increase rates for any customers?

A. Yes, customers with load factors between 6% and 29% will see a rate increase under the proposed schedule 6A.⁶

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² Meredith Direct Testimony, lines 794 - 799.

³ Exhibit RMP (RMM-0) UT Sch 6A Redesign-2020 GRC.

⁴ Id.; Meredith Direct Testimony, lines 834.

⁵ Id.

⁶ Id.

Q. Do you support the proposed schedule 6A?

- A. Yes. The proposed 6A will help promote the adoption of EV charging infrastructure and will more fairly charge lower load factor customers for their demand on the system. The current schedule 6A may deter some customers from installing EV charging out of fear that their energy costs will be very high if the EV charger is not used frequently, and thus lowers their load factor.
- Q. Do you believe replacing the existing schedule 6A with the proposed 6A will result in the fairest rate structure moving forward?
- A. No. The customers who will benefit from the proposed schedule 6A the most are those with load factors at or below 6%, which is a very narrow window. Many customers who adopt

 EV charging infrastructure, or other sporadic loads as Mr. Meredith calls them, have load factors between 6% and 30%. For these customers the proposed schedule 6A will impose higher costs. If the proposed schedule 6A replaces the existing schedule 6A, it may hamper electrification efforts by penalizing some customers who's load factor shifts to between 6% 30% after adopting EV charging infrastructure.
- Q. How could RMP create a more durable rate structure moving forward for schedule 6 that better accommodates electrification?
- A. By keeping the current schedule 6A and adding the proposed 6A as schedule 6B RMP can

 create a more durable, flexible rate structure for schedule 6 customers moving forward.

 Deciding which of these schedules is more beneficial to customers depends on a customer's load factor. The availability of both schedules provides customers more flexibility.

 Customers with load factors under 6% and over 30% will benefit more from the proposed

schedule 6A, but those customers between 6% - 30% load factors would benefit more from the existing schedule 6A. Further, as customers adopt EV charging infrastructure, or, to use another example from RMP's testimony, are welding technology, the customer's load factor may change over time as usage of their equipment changes. This unpredictable variability in load factors prevents us from knowing whether the proposed 6A is in fact more cost effective for customers wishing to adopt sporadic loads, including EV charging infrastructure. By maintaining both the current and proposed schedule 6A rates, customers will be able to choose which schedule allows them to sustainably adopt new technologies.

IV. SCHEDULE 11 - STREET LIGHTING COMPANY OWNED SYSTEM

- Q. Please summarize your testimony related to RMP's proposed schedule 11 changes.
- 91 A. Utah Clean Energy supports RMP's proposed changes to schedule 11 and recommends
 92 adding a mechanism that allows schedule 11 customers to initiate a regulatory proceeding
 93 to evaluate the cost-effectiveness of RMP selling street lighting infrastructure served
 94 through schedule 11 to communities.
 - Q. Please explain why you support RMP's proposed changes to the Schedule 11 rate structure.
- 97 A. RMP's proposed simplification of the schedule 11 provides a better incentive for

 98 municipalities to install energy efficient LEDs in streetlights and is easier to understand

 99 than the existing rate structure. Under the current rate structure, rates are based on the

 100 specific lighting technology currently installed. These technologies include mercury vapor,

 101 incandescent, and LED lights, each of which is served through its own specific rate. RMP

 102 proposes to consolidate all rates under one structure that charges customers based on the

level of LED equivalent lumens provided. This proposed rate structure acknowledges that LED lights are the most efficient and cost-effective lighting technology, and it provides a clear and strong incentive for RMP and schedule 11 customers generally to convert their streetlights to more efficient LEDs, if they have not already done so. Mr. Meredith says in his direct testimony that "[u]ltimately, what the Company provides street and area lighting customers is a level of light to a specific area. The Company therefore proposes that Company-owned street and area light prices be based on the level of lighting services that the Company provides irrespective of technology or lamp type." Further, the proposed rate structure is far easier to understand than the existing rate structure.

Q. Please explain RMP's proposed "customer-funded conversion" rate.

The "customer-funded conversion" rates provide much needed flexibility for schedule 11 customers to more quickly transition their streetlights to LEDs. Mr. Meredith recognizes that "[w]hile the Company plans to convert the lights to LED when it makes sense to do so, that may be too slow for some customers who want the most energy efficient street lights in their community now."8 The "customer-funded conversion" option allows schedule 11 customers to pay for LED upgrades to their streetlights if they wish to receive the benefit of the more efficient technology faster than RMP is willing to convert the streetlights.

Customers who pay for the upfront cost of the LED upgrades will be charged lower rates under the "customer-funded conversion" section of the proposed tariff to account for RMP's lower marginal costs resulting from the customers' decision to pay for their own streetlight upgrades.

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⁷ Meredith Direct Testimony, lines 1211–1214.

⁸ Meredith Direct Testimony, line 1254–1256.

Q. Do you support this alternate rate?

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Yes, but I do not believe that it provides enough flexibility to schedule 11 customers who want to go beyond installing LEDs. As Mr. Meredith acknowledges in his testimony, certain schedule 11 customers would like to transition to more efficient technologies faster than RMP would otherwise do so. There are several efficiency technologies for streetlights other than LEDs that many communities would like to invest in, but cannot because RMP owns the streetlights and will not allow their installation. Examples of these technologies include intelligent lighting controls that adjust lighting output based on ambient light conditions and the presence of pedestrian or car traffic, lighting fixtures which direct light more efficiently to areas that the community would like illuminated, and dark sky compliant lights and fixtures. Further, by owning its own streetlights a city could use this infrastructure to invest in other "Smart City" technologies that improve the safety and efficiency of the community, including technologies like better sensors and video equipment to monitor weather, air quality, and traffic density. Some cities are even using these technologies to better evaluate accidents or emergencies in the community, which allows the first responders to identify the most open route to take to the scene.

Q. What do you propose to address this issue?

I propose the creation of a mechanism within schedule 11 that would allow schedule 11 customers to initiate a regulatory proceeding before the Public Service Commission to analyze whether it would be cost effective for RMP to sell its streetlighting infrastructure to the communities in which the streetlights are located. The purpose of the proceeding would be to determine if RMP's Utah ratepayers would be harmed, or potentially benefit, if RMP sold the streetlights to the communities in which the lights are located. Under this

mechanism, a schedule 11 customer would make a formal filing with the Public Service Commission that contains the following information: cost effectiveness analysis showing that it would be more cost effective for the schedule 11 customer to own its own streetlights; a sufficient basis for the Public Service Commission to determine that the schedule 11 customer can ensure that the streetlights are maintained in good working condition, including compliance with any applicable codes or standards; and a showing that all other RMP customers would be held harmless if RMP sold the streetlights to the schedule 11 customer.

Several Utah communities wish to install the additional efficiency and smart city technologies that I discussed above but cannot because RMP's ownership of the streetlights precludes them from doing so. This restriction forces the schedule 11 customers to consume more energy than they would need to if allowed to install the measures, and prevents these communities from pursuing important local policies and interests. Further, it may be cost effective for all RMP's Utah customers if the Company sold the streetlights within a city's' jurisdiction to that city. This proposed mechanism creates an opportunity to decide whether it would be in the public interest for RMP to sell the streetlights to a petitioning community, while still ensuring all customers are held harmless and reliable service is maintained. UCE recommends that the Public Service Commission require RMP to work with interested stakeholders to develop and install this mechanism withing schedule 11.

V. CONCLUSION

Q. Please summarize your testimony and recommendations.

A. RMP's proposed schedule 6A provides a stronger incentive for customers to adopt sporadic loads such as EV charging infrastructure that may result in a lower load factor. Combining it with the existing schedule 6A, however, would provide a much stronger and durable rate structure for customers to sustainably incorporate sporadic loads. We recommend keeping the existing schedule 6A and adding the proposed Schedule 6A as an additional rate structure.

Further, I support RMP's proposed standard and customer-funded conversion rate structures under schedule 11. However, I recommend adding a mechanism within schedule 11 that allows customers taking service under this schedule to initiate a regulatory proceeding to evaluate the cost effectiveness of purchasing street lighting infrastructure from RMP.

180 Q. Does this conclude your testimony?

181 A. Yes.

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