

Rocky Mountain Power  
Docket No. 16-035-36  
Witness: William J. Comeau

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Direct Testimony of William J. Comeau

March 2019

1 **Q. Please state your name, business address, and present position with PacifiCorp**  
2 **dba Rocky Mountain Power (“the Company”).**

3 A. My name is William J. Comeau and my business address is 1407 West North Temple,  
4 Suite 330, Salt Lake City, Utah 84116. I am currently employed as the Director of  
5 Customer Innovations for Rocky Mountain Power.

6 **QUALIFICATIONS**

7 **Q. Briefly describe your educational and professional background.**

8 A. I have a Bachelor of Science from Weber State University and a Master of Business  
9 Administration from Keller University. During my 19 years of working in the utility  
10 industry, I have held multiple responsibilities including economic development,  
11 customer service, demand side management, customer solutions, and since May 2018,  
12 Director of Customer Innovations.

13 **Q. What are your responsibilities as Director of Customer Innovations?**

14 A. My primary responsibilities include helping customers implement innovative energy  
15 solutions, such as new technology requests from customers.

16 **PURPOSE OF TESTIMONY**

17 **Q. What is the purpose of your testimony in this proceeding?**

18 A. The purpose of my direct testimony is to support the Wasatch Development Partnership  
19 Project for Battery Demand Response (“Battery Demand Response Project”), described  
20 in the Application and in Exhibit RMP\_\_(WJC-1). The Company respectfully  
21 requests the Commission authorize \$3.27 million in Sustainable Transportation Energy  
22 Plan’s (“STEP”) funds for the Battery Demand Response Project pursuant to U.C.A. §  
23 54-20-105(1)(h), as an innovative utility program.

24 **BACKGROUND**

25 **Q. Please describe the historical events that lead to the partnership with Wasatch**  
26 **Development for the Battery Demand Response Project.**

27 A. In January 2018, Wasatch Development (“Wasatch”) approached the Company with a  
28 proposal to partner with the Company to make an innovative solar and battery solution  
29 possible with the development of a 600 unit multi-family community (“Soleil”). The  
30 Company and Wasatch worked together throughout 2018 to develop a mutually  
31 beneficial battery concept for utilization of the batteries. The concept allows the  
32 Company to have full control of the batteries for advanced grid management, including  
33 demand response.

34 **BATTERY DEMAND RESPONSE PROJECT**

35 **Q. Please describe the Battery Demand Response Project.**

36 A. The Battery Demand Response Project, if authorized, will provide a unique opportunity  
37 for the Company to partner with Wasatch and the battery manufacturer to implement  
38 an innovative approach to solar and battery integration, along with advanced  
39 management of the grid and peak/off-peak energy use. The Battery Demand Response  
40 Project will involve the development of a 600 unit multi-family community, with  
41 individual batteries, manufactured by Sonnen, for each unit. The solar facilities will  
42 charge the batteries during the day and the Company will have control of the batteries  
43 to provide energy for the residents during peak periods in the evening and at night.  
44 During system needs, the batteries will be utilized for demand response, similar to the  
45 Company’s residential air conditioner demand response program, Cool Keeper.  
46 Leveraging the Soleil community batteries will create opportunity in the following

47 areas:

- 48 • **Demand Response** – This partnership project will enable the Company to utilize  
49 each individual battery for demand response 24 hours per day throughout the year.  
50 This has the potential to offset all of the peak grid loads from the Soleil apartment  
51 complex and will reduce peak loading on the electric system.
  
- 52 • **Load Shaping** – The Company will examine the value of having behind-the-meter  
53 grid-optimized solar and battery storage interconnected to the Company’s electrical  
54 system. The Company typically has limited behind-the-meter data, so this  
55 experience will help the Company prepare for large scale integration of such  
56 technology/projects, which are expected to become available options for customers  
57 as technology prices decline.
  
- 58 • **Rate Design** – The Company’s current rates are not optimized for battery storage  
59 applications. Evaluating behind-the-meter battery behavior will help guide and  
60 inform future rate design for customers with batteries.

61 Exhibit RMP\_\_\_(WJC-1) which accompanies my testimony provides additional details  
62 and support for the Battery Demand Response Project.

63 **Q. Why is Wasatch willing to partner and allow the Company to control the use of**  
64 **the batteries?**

65 A. Due to batteries being an emerging technology, Wasatch needed the Company  
66 partnership to optimize the use of the batteries with the distribution grid. In addition,  
67 the STEP funding for battery hardware and integration is necessary to make the  
68 batteries financially viable to implement.

69 **Q. Please provide details of the project costs.**

70 A. The total cost of the Battery Demand Response Project is estimated to be \$34.3 million,  
71 of which approximately \$12 million is for the purchase of the batteries. The Company  
72 is requesting \$3.27 million of STEP funds to be allocated for this project. The \$3.27  
73 million of STEP funds provides full access to data and control of the batteries for the  
74 life of the project, approximately 20 years. Without the partnership and funding,

75 Wasatch does not intend to move forward with the installation of the batteries. A  
 76 breakdown of how the \$3.27 million will be allocated is provided in the table below.

77 **Table 1 – Estimated Battery Demand Response Project Costs**

Cost Estimates	2019	2020	2021	Total
RMP Energy Management System (EMS) integration	\$100,000	\$100,000	N/A	\$100,000
Battery hardware and integration - Soleil	\$1,250,000	\$1,250,000	N/A	\$2,500,000
Utility portal software integration and license fees - Sonnen	\$100,000	\$150,000	N/A	\$250,000
3 <sup>rd</sup> party analysis	N/A	N/A	\$150,000	\$150,000
Internal labor costs	\$20,000	\$20,000	\$30,000	\$70,000
Contingency:	N/A	\$50,000	\$50,000	\$100,000
<b>Total:</b>	<b>\$1,470,000</b>	<b>\$1,570,000</b>	<b>\$230,000</b>	<b>\$3,270,000</b>

78 **Q. What benefits will the Battery Demand Response Project provide?**

79 A. The Battery Demand Response Project will benefit customers by enabling the  
 80 Company to explore options to expand innovative technology options, such as  
 81 batteries, to improve service options to customers. By partnering with Wasatch for the  
 82 Battery Demand Response Project, the Company will be able to test the feasibility and  
 83 economic benefit of battery demand response and study behind-the-meter battery  
 84 behavior for a fraction of what it would normally cost. The grid will be utilized  
 85 optimally through daily peak usage reductions, which could lead to cost savings for  
 86 customers and reduce transmission congestion during summer peak loading periods.  
 87 The Battery Demand Response Project also provides a renewable and battery grid  
 88 management solution that can be used to help inform future micro-grid type solutions.  
 89 The batteries will provide back-up power during grid power outages for each individual  
 90 apartment, and the first-hand experience gained with behind-the-meter energy storage

91 information will inform optimized rate design for customers with batteries, and help  
92 the Company prepare in advance of large scale integration of such technology.

93 **CONCLUSION**

94 **Q. Please summarize the proposal for the Battery Demand Response Project.**

95 A. As battery storage technology develops and becomes more available to customers, the  
96 Company will need to be prepared for large scale integration of such technology. The  
97 Battery Demand Response Project will help the Company prepare for this type of  
98 integration. This project also provides an opportunity for demand response solutions,  
99 and will help inform future rate design for customers with batteries.

100 **Q. In your opinion, is the Battery Demand Response Project consistent with the STEP  
101 Act and in the interest of Rocky Mountain Power customers?**

102 A. Yes.

103 **Q. Does this conclude your direct testimony?**

104 A. Yes.