

November 14, 2023

VIA ELECTRONIC FILING

Public Service Commission of Utah Heber M. Wells Building, 4th Floor 160 East 300 South Salt Lake City, UT 84114

Attn: Gary Widerburg

Commission Secretary

RE: Proposed Changes to Schedule 114, Load Management Program - Docket No. 23-035-T11

Enclosed for electronic filing are the proposed tariff sheets associated with Tariff P.S.C.U. No. 51 of PacifiCorp, d.b.a. Rocky Mountain Power (the "Company"), applicable to electric service in the State of Utah. Pursuant to the requirement of Rule R746-405-2(D), the Company states that the proposed tariff sheets do not constitute a violation of state law or Commission rule. The Company respectfully requests an effective date of January 1, 2024 for these changes.

Second Revision of Sheet No. 114.1 Schedule 114 Load Management Program First Revision of Sheet No. 114.3 Schedule 114 Load Management Program

The purpose of this filing is to propose a new Demand Side Management ("DSM") Electric Vehicle ("EV") Demand Response Program ("Program") to be administered as a 3-year pilot offering through Electric Service Schedule No. 114. Proposed changes to the Schedule 114 tariff sheets are included as Exhibit A.

ELECTRIC VEHICLE DEMAND RESPONSE OFFERING

Program Overview

The State of Utah is experiencing significant growth in EV adoption. As of January 2023, there were over 25,000 EVs registered in Utah, representing a 60 percent increase compared to 2022. This growth trajectory is expected to continue as more and more vehicle owners choose electric transportation. With the increase of EV adoption, it has the potential to add significant electricity demand on the power grid. The Company is proposing a new demand response program to control EV charging to reduce demand congestion on the electric grid. The proposed Program will also provide invaluable experience in understanding how EVs may impact the grid.

The Program is designed to provide financial incentives to EV owners who enroll into the program and participate in Company initiated demand response events. The Program may be utilized to provide peak load reduction, contingency reserves, frequency response, and other grid services to assist with effectively managing the overall electric grid. The Program design will work with

Public Service Commission of Utah November 14, 2023 Page 2

customers who own or lease eligible EVs (including battery electric and plug-in electric hybrid vehicles) that can be signaled to stop charging with no advanced notice or limited advanced notice. Limited advanced notices may consist of notifying customers up to several minutes before an event

Program Design and Customer Participation

Company customers with qualified EVs are eligible to enroll in the Program. By enrolling in the Program, EV owners will authorize the Company to automatically stop their EV from charging during a curtailment event. Automated curtailment events for eligible EVs will elicit participation from a broad range of customers as the curtailment request will be sent directly to the EV itself. No manual curtailment at the EV is required via this automation. Demand response events will initially be dispatched via a vendor software application. The Company may support a more automated integration as the Program matures.

Curtailment events are expected to be short in duration (approximately 5-15 minutes) and occur in real-time. The short duration events are expected to have little to no negative impact on customers' charging experience. The real-time nature of the Program will allow the Company to immediately respond to various grid conditions.

Event notifications may be sent to customers through traditional communication channels such as email, text message, and automated phone call. The notification may include the start time and duration of the scheduled event.

Program Marketing and Education

For the Program to be successful, customers must be well educated regarding how the demand response program functions, how long their EV charging session may be interrupted, and why participation in such a program is important. Educational efforts may include a dedicated space on the Company website clearly listing out the Program terms, and adding commentary for how participating in such a program allows EV owners to actively contribute to a healthier grid. The webpage may also incorporate information regarding Time of Use rates, and how participating in both programs, if a customer is eligible, can further reduce strain on the grid.

Currently, the Company has access to contact information for Utah customers that have enrolled in the Time of Use rate or applied for an AC Level 2 charger rebate. Such contact information may be used in a targeted email campaign promoting this Program.

Email recruitment may be sent to customers every other week for the initial recruitment period. Customers can learn about the Program through a program guide provided via email, the Company website, and through the web portal enrollment flow. This includes Program details such as: incentive amounts, incentive frequency, how to earn incentives, and overall Program benefits and goals.

As AMI is rolled out and ingested by the Program Vendor ("Vendor"), EVs will automatically be detected using AMI disaggregation. The Vendor can detect and estimate how much EV charging

Public Service Commission of Utah November 14, 2023 Page 3

occurs. This detection of customers with EVs will enable very targeted marketing for the Program, which will result in higher conversion rates into the Program and reduce marketing efforts.

Additional marketing efforts may include social media campaigns advertising the Program, outreach to car dealerships and community-based organizations, and promoting the Program at EV-centric events throughout the Company's service territory.

Customer Eligibility

Table 1 lists EV makes that may be eligible for participation. This list is non-committal and non-definitive, and may vary based on vehicle model and year. The list of eligible EVs is expected to increase as vehicle manufacturers transition to producing more EVs. A list of supported vehicle makes will be posted on the Company website and will be updated regularly as new EVs are deemed eligible.

Table 1 – Eligible Electric Vehicle Make Examples

Electric Vehicle Make
Ford
Hyundai
Jaguar
Land Rover
Tesla
Toyota
Volkswagen

Event-level eligibility will be based on the current location of the EV; demand response signals are intended to only be sent to enrolled EVs that are currently located within the Company's service territory in the State of Utah. Service territory may be determined based on locational attributes such as zip codes, which will reduce the likelihood of disturbing charging for an enrolled customer who is charging outside of the Company's service territory. Participating customers will have the option to opt-out of events. Opting out of events may impact their incentive, however, as further described below.

Incentives

Participating customers will be compensated annually based on Program enrollment and event participation. Once a year, the Company will apply a bill credit to participating customer accounts based on how many years they have participated in the Program. For partial participation due to mid-year signups or unenrollment, there will be a prorated incentive based on how many months they participated in the Program. Note that participation begins the month a customer enrolls, and a year is based on a 12-month cycle from this initial enrollment month and not the calendar year. Table 2 below includes the maximum "up to" incentive levels for participating in the Program.

Table 2 – EV Demand Response Program Incentives

Participation Year	Participating Equipment	Maximum incentive "up to"
1 Eligible EVs \$120/vehic		\$120/vehicle annually
2+	Eligible EVs	\$60/vehicle annually

Customer incentives will be determined based on the number of years they have been enrolled. The initially offered amounts for Program participation will be set at \$100 per vehicle for the first year of participation and \$50 for any additional years of participation. The offered incentive amounts may be adjusted via 45-day notice posted on the Company's website. Customers will be granted two penalty-free opt-outs, with each additional opt-out resulting in a \$10 penalty from their annual incentive. Customers will not be penalized for not participating in an event if they were not charging at the time of event dispatch or were not charging within the Company's service territory during a dispatch event.

Projected Participation and Costs

The Program is forecast to achieve approximately 7 megawatts ("MW") of curtailable demand response by 2026 and is anticipated to increase as EV adoption grows. Table 3 provides a breakdown of estimated Program costs by category for 2024 through 2026, and Table 4 provides a 3-year outlook of projected participation.

Table 3 – Estimated Program Costs by Category

Cost Category	2024	2025	2026
Program Administration	\$37,500	\$100,000	\$170,000
Customer Incentives	\$45,000	\$90,000	\$180,000
Utility Administration	\$40,000	\$50,000	\$60,000
Marketing	\$20,000	\$25,000	\$30,000
Platform Setup Cost	\$20,000	-	-
Total Program Costs	\$162,500	\$265,000	\$440,000

Customer incentive costs assume all customers from the previous year continue to participate in the following years with no opt-outs.

Table 4 – Estimated 3-Year Program Participation

End of Year	Estimated Customer Participation (Cumulative)	Estimated MW (Cumulative)
2024	500	1.75
2025	1,000	3.5
2026	2,000	7

Dispatch Parameters

The Company shall have the right to dispatch the Program based on the criteria in Table 5:

<u>Table 5 – EV Demand Response Dispatch Parameters</u>

EV Demand Response Program			
Dispatch Period	January 1 through December 31		
Available Dispatch Hours	12:00am to 11:59pm Mountain Time		
Maximum Dispatch Hours Per Year	N/A		
Dispatch Days	Monday – Sunday		
Dispatch Duration	up to 15 minutes		

COST-EFFECTIVENESS

The cost effectiveness analysis for the Program is attached hereto as Confidential Exhibit B, and was based on the maximum "up to" incentive levels. As avoided costs are considered proprietary on load control programs, the cost effectiveness results are provided below with a "pass" designation, which equates to a benefit to cost ratio of 1.0 or better. Due to the nature of demand response, and consistent with the cost effectiveness methodology for other demand response programs, the Participant Cost Test is not applicable. The Program is expected to be cost effective under the other benefit/cost tests in both single-year and three-year outlooks. Sensitivity analyses are also included as Confidential Exhibits C and D. Enclosed with this filing is the Confidential Information Certificate that the Company desires parties in this docket to execute prior to obtaining access to confidential information.

<u>Table 6 – EV Demand Response Program Level Cost-Effectiveness Results</u>

Benefit/Cost Test	Benefit/Cost Ratio
PacifiCorp Total Resource Cost Test (PTRC) + Conservation Adder	Pass
Total Resource Cost Test (TRC) No Adder	Pass
Utility Cost Test (UCT)	Pass
Rate Impact Test (RIM)	N/A
Participant Cost Test (PCT)	Pass

PILOT PROGRAM AND STAKEHOLDER FEEDBACK

On October 19, 2023, the Company held a DSM Steering Committee meeting and discussed the proposed Program. On October 31, 2023, the Company held a follow-up meeting with Steering Committee members for additional review of the Program. As a result of the discussion with Steering Committee members, the Company proposes that the Program be implemented as a 3-year pilot offering. During the 3-year pilot period, the Company expects to obtain additional data that is anticipated to support a full-fledged, cost effective program. Once enough data is gathered to support a full-fledged program, the Company will make a subsequent filing requesting approval to add the Program to its ongoing portfolio. Additionally, if approved, the Company will report on the Program in its annual reporting and also provide regular updates to the DSM Steering Committee.

It is respectfully requested that all formal correspondence and staff requests regarding this matter be addressed to:

By E-mail (preferred): <u>datarequest@pacificorp.com</u>

michael.snow@pacificorp.com

By regular mail: Data Request Response Center

PacifiCorp

825 NE Multnomah St., Suite 2000

Portland, OR 97232

Informal inquiries regarding this matter may be directed to me at (801) 220-4214.

Sincerely,

Michael S. Snow

Manager, Regulatory Affairs

Enclosures

CERTIFICATE OF SERVICE

Docket No. 23-035-T11

I hereby certify that on November 14, 2023, a true and correct copy of the foregoing was served by electronic mail to the following:

Utah Office of Consumer Services

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Second First Revision of Sheet No. 114.1 Canceling First Revision of Original Sheet No. 114.1

ROCKY MOUNTAIN POWER

ELECTRIC SERVICE SCHEDULE NO. 114

STATE OF UTAH

Load Management Program

APPLICABLE: This tariff is applicable to eligible Customers who have premises located in designated areas. Customers served by the Company in the state of Utah taking service under the Company's electric service schedules listed on Schedule 193 – DSM Cost Adjustment located within the designated areas are eligible to participate in a Load Management Program (Program).

PURPOSE: To manage electrical loads through a Company-dispatched Direct Load Control System (System).

PROGRAM DESCRIPTION: Detailed descriptions of Program(s) can be found on the Company website at www.wattsmart.com.

The Company shall have the right to dispatch System(s) according to the following criteria:

Load Control Program	Dispatch Period	Available Dispatch Hours	Maximum Dispatch Hours	Dispatch Days	Dispatch Duration
Cool Keeper	May 1 through September 30	2:00pm to 9:00pm Mountain Time	100 hours per Program Year	Monday through Friday, excluding holidays	Events will be limited to four hours per day
Wattsmart Batteries	January 1 through December 31	12:00sm to 11:59pm Mountain Time	N/A	Monday through Sunday	Events may be held multiple times per day up to two full battery duty cycles
Wattsmart Business	January 1 through December 31	12:00am to 11:59pm Mountain Time	65 hours per Program Year	Monday through Sunday	Events will be limited to four hours per day
Wattsmart Electric Vehicle	January 1 through December 31	12:00am to 11:59pm Mountain Time	<u>N/A</u>	Monday through Sunday	Events will be limited to 15 minutes per dispatch

In the event of a system emergency, Rocky Mountain Power may, at its discretion, expand the dispatch criteria beyond the parameters listed. Emergency events may be used to satisfy requirements of the North American Electric Reliability Corporation (NERC) standard BAL-002-WECC-2 for Contingency Reserve Obligation (CRO) and may be deployed when the utility is experiencing a qualifying event as defined by the Northwest Power Pool.

Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. <u>23-035-T1122-035-T09</u>

FILED: November 14, 2023 June 6, 2022 **EFFECTIVE:** January 1, 2024 July 6, 2022



Second Revision of Sheet No. 114.1 Canceling First Revision of Sheet No. 114.1

ROCKY MOUNTAIN POWER

ELECTRIC SERVICE SCHEDULE NO. 114

STATE OF UTAH

(continued)

Load Management Program

APPLICABLE: This tariff is applicable to eligible Customers who have premises located in designated areas. Customers served by the Company in the state of Utah taking service under the Company's electric service schedules listed on Schedule 193 – DSM Cost Adjustment located within the designated areas are eligible to participate in a Load Management Program (Program).

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FILED: November 14, 2023 EFFECTIVE: January 1, 2024



<u>First Revision of Sheet No. 114.3</u> <u>Canceling</u> Original Sheet No. 114.3

qualifying event as defined by the Northwest Power Pool.

ELECTRIC SERVICE SCHEDULE NO. 120 – Continued

Table 4 – Wattsmart Electric Vehicle Demand Response Incentives

Load Management	Participating Equipment	<u>Maximum In</u>	centive "up to"
<u>Program</u>		Year 1 of Enrollment	Year 2+ of Enrollment
Wattsmart Electric Vehicle Demand Response	Eligible electric vehicles	\$120/vehicle	\$60/vehicle

ELECTRIC SERVICE REGULATIONS: Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Electric Service Regulations of the Company on file with and approved by the Public Service Commission of the State of Utah, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. <u>23-035-T1122-035-T09</u>

FILED: November 14, 2023June 6, 2022 **EFFECTIVE**: January 1, 2024June 6, 2022



First Revision of Sheet No. 114.3 Canceling Original Sheet No. 114.3

ELECTRIC SERVICE SCHEDULE NO. 120 – Continued

Table 4 – Wattsmart Electric Vehicle Demand Response Incentives

Load Management	oad Management Posticipating Equipment Maximum Incentive "up to"		centive "up to"
<u>Program</u>	ram Participating Equipment	Year 1 of Enrollment	Year 2+ of Enrollment
Wattsmart Electric Vehicle Demand Response	Eligible electric vehicles	\$120/vehicle	\$60/vehicle

ELECTRIC SERVICE REGULATIONS: Service under this Schedule will be in accordance with the terms of the Electric Service Agreement between the Customer and the Company. The Electric Service Regulations of the Company on file with and approved by the Public Service Commission of the State of Utah, including future applicable amendments, will be considered as forming a part of and incorporated in said Agreement.

FILED: November 14, 2023 EFFECTIVE: January 1, 2024

Confidential

Exhibit B

THIS ATTACHMENT IS CONFIDENTIAL IN ITS ENTIRETY AND IS PROVIDED UNDER SEPARATE COVER

Confidential

Exhibit C

THIS ATTACHMENT IS CONFIDENTIAL IN ITS ENTIRETY AND IS PROVIDED UNDER SEPARATE COVER

Confidential

Exhibit D

THIS ATTACHMENT IS CONFIDENTIAL IN ITS ENTIRETY AND IS PROVIDED UNDER SEPARATE COVER