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November 4, 2021

***VIA ELECTRONIC FILING***

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

Attention: Gary Widerburg  
Commission Administrator

**Re: Docket No. 20-035-34**  
**In the Matter of Rocky Mountain Power's Application of Rocky Mountain Power**  
**for Approval of Electrical Vehicle Infrastructure Program**  
*Rocky Mountain Power Rebuttal Testimony*

In accordance with the Scheduling Order and Notice of Hearing issued by the Public Service Commission of Utah on September 14, 2021, Rocky Mountain Power hereby submits for filing its rebuttal testimony in the above referenced matter.

Rocky Mountain Power respectfully requests that all formal correspondence and requests for additional information regarding this filing be addressed to the following:

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Informal inquiries may be directed to Jana Saba at (801) 220-2823.

Sincerely,

Joelle Steward  
Vice President, Regulation

cc: Service List Docket Nos. 20-035-34

**CERTIFICATE OF SERVICE**

Docket No. 20-035-34

I hereby certify that on November 4, 2021, a true and correct copy of the foregoing was served by electronic mail to the following:

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Rocky Mountain Power  
Docket No. 20-035-34  
Witness: James A. Campbell

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Rebuttal Testimony of James A. Campbell

November 2021

1 **Q. Are you the same James Campbell that filed direct testimony on behalf of**  
2 **PacifiCorp d/b/a Rocky Mountain Power (“Rocky Mountain Power” or**  
3 **the “Company”) in this proceeding?**

4 A. Yes.

5 **I. PURPOSE OF TESTIMONY**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. The purpose of my rebuttal testimony is to respond to concerns and recommendations  
8 regarding the Company’s proposed Electric Vehicle Infrastructure Program (“EVIP”  
9 or “Program”) raised by witnesses for the various parties in this matter.

10 **II. SUMMARY OF TESTIMONY**

11 **Q. Please summarize your rebuttal testimony.**

12 A. My rebuttal testimony supports the Company’s proposed EVIP and demonstrates why  
13 it satisfies the public interest under Utah Code section 54-4-41. The proposed EVIP  
14 will increase the availability of charging services throughout Utah, which will increase  
15 the adoption rates of electric vehicles (“EVs”). The EVIP as proposed will enable  
16 competition and innovation and promote customer choice. The Company’s proposed  
17 EVIP presents a comprehensive plan to fund infrastructure, including Company-owned  
18 charging stations, make-ready investments and incentives. The Company commits to  
19 provide ongoing reporting to the Commission and stakeholders and to re-evaluate the  
20 program after five years.

21 **Q. What is your general observation of the parties' testimony on Company's**  
22 **proposed EVIP?**

23 A. Most parties were supportive of an EVIP and recommend approval of the Program,  
24 although some parties did condition their support on proposed modification to the  
25 EVIP's pricing, questions about the program's competitiveness, and recommendations  
26 on specific program elements.

27 **III. PUBLIC INTEREST**

28 **Q. What are the public interest requirements for the EVIP?**

29 A. The public interest requirements under Utah Code section 54-4-41(4) are met if the  
30 proposed EVIP: (a) increases the availability of electric vehicle battery charging  
31 service in the state; (b) enables the deployment of infrastructure that supports electric  
32 vehicle battery charging service and company-owned charging stations in a manner  
33 expected to increase electric vehicle adoption; (c) includes an evaluation of  
34 investments in the areas of the jurisdictional land, defined in Utah Code section 11-  
35 58-102 (the Inland Port) and the point of the mountain land, defined in Utah Code  
36 section 11-59-102 (Point of Mountain); (d) enables competition, innovation, and  
37 customer choice in charging service, while promoting low-cost services for electric  
38 vehicle battery charging customers; and (e) provides for ongoing coordination with  
39 UDOT.

40 **Q. Division of Public Utilities (“DPU”) witness Mr. Robert A. Davis asserts that the**  
41 **Company’s EVIP proposal may not satisfy section 54-4-41(4)(a) of the Utah**  
42 **Code.<sup>1</sup> How do you respond to this claim?**

43 A. The public interest standard in Utah Code section 54-4-41(4)(a) requires that the  
44 Program “increases the availability of electric vehicle battery charging service in the  
45 state.” The proposed EVIP will clearly increase availability of the charging service by  
46 a minimum by 20-25 locations with 80-100 chargers in utility-owned charging service  
47 across the state. The Program will increase EV adoption that will further increase  
48 demand for charging services resulting in third parties investing in additional EV  
49 infrastructure. The Program will also increase EV adoption and availability of charging  
50 service through make-ready investments and incentives. The Program design clearly  
51 meets the public interest standard in Utah Code section 54-4-41(4)(a).

52 **Q. What are the parties’ positions as to whether the proposed EVIP meets the**  
53 **public interest requirement in section 54-4-41(4)(b) of the Utah Code?**

54 A. Utah Code section 54-4-41(4)(b) states that the Public Service Commission  
55 (“Commission”) shall find the program to be in the public interest if it enables the  
56 significant deployment of infrastructure that supports EV battery charging service in a  
57 manner reasonably expected to increase EV adoption. Mr. Davis raises some concerns  
58 with regards to the Utah State University (“USU”) study on EV adoption, which was  
59 provided in my direct testimony as Exhibit RMP\_\_\_(JAC-5). Professor Regan Zane,  
60 the Director of the ASPIRE Center at USU, the only federally funded Engineering  
61 Research Center on electric transportation infrastructure in the country, provides

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<sup>1</sup> Confidential Direct Testimony of Robert A. Davis, October 19, 2021, p. 4, lines 66-67.

62 rebuttal testimony in response to the concerns raised by Mr. Davis and demonstrates  
63 how the EVIP satisfies the requirement in Utah Code section 54-4-414(b).

64 **Q. Does the proposed EVIP meet the public interest requirement of Utah Code**  
65 **section 54-4-41(4)(b)?**

66 Yes. One of the barriers to widespread EV adoption is the consumer perception that  
67 there is not sufficient charging infrastructure. A simple qualitative review of relevant  
68 literature on the topic finds that increasing the amount of charging infrastructure is  
69 critical for increased EV adoption.<sup>2,3,4,5</sup> The Company designed the EVIP to deploy  
70 significant utility-owned infrastructure and utility-owned charging service. This design  
71 includes 20-25 locations (with roughly four chargers per location) strategically located  
72 throughout the state with sufficient charging speeds to address both charging gaps in  
73 the state and to provide needed capacity, particularly in populated areas. This  
74 investment is coupled with non-utility make-ready investments and incentives to  
75 complement the utility-owned infrastructure.

76 **Q. Did any other party support this assertion?**

77 A. Yes. Utah Clean Energy (“UCE”) witness Thomas Kessinger lists the likelihood of  
78 increased EV adoption as one of his positive observations of the EVIP. Zeco Systems,  
79 Inc., d/b/a Greenlots (“Greenlots”) witness Mr. Thomas Ashley states that “Utility  
80 investments in transportation electrification are thus vitally needed to instead catalyze

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<sup>2</sup> Neaimeh, M, et al, Analysing the Usage and Evidencing the Importance of Fast Chargers for the Adoption of Battery Electric Vehicles, Energy Policy 108 (2017) 474-486

<sup>3</sup> Coffman, M., Bernstein, P., Wee, S. Electric Vehicles Revisited: A Review of Factors That Affect Adoption. Transport Reviews, Vol. 37, No. 1, 2017, pp. 79–93.

<sup>4</sup> Funke, S., et al, How Much Charging Infrastructure Do Electric Vehicles Need? A Review of the Evidence and International Comparison. Transportation Research Part D, 77 (2019) 224-242

<sup>5</sup> Hennlock, Magnus, Strong Link between Charging Infrastructure and Electric Vehicle Adoption. Shift Policy Brief, Sustainable Horizons in Future Transport (2020)



81 a virtuous cycle of investment whereby the increased visibility of EV charging stations  
82 leads to more EV adoption.”<sup>6</sup> Professor Zane also supports this perspective in his  
83 rebuttal testimony. In addition to the qualitative review, the Company requested that  
84 Professor Zane and the USU’s ASPIRE Center conduct a quantitative review of the  
85 proposed EVIP to ascertain if it would increase EV adoption. The USU’s analysis had  
86 the following findings:

87 **Table 1. Comparison of EV Adoption with and without EVIP**

<b>Year</b>	<b>W/out RMP Programs (# vehicles)</b>	<b>W/RMP Programs (# vehicles)</b>	<b>Increase Due to RMP Programs (# vehicles)</b>
<b>2026</b>	36,000	63,000	27,000
<b>2031</b>	107,000	230,000	123,000

88 As described in his rebuttal testimony, and quantified above, Professor Zane concludes  
89 that the proposed EVIP enables the significant deployment of infrastructure in a manner  
90 that will reasonably expect to increase EV adoption.

91 **Q. Please summarize the issue raised by Mr. Davis with respect to the emissions**  
92 **calculations presented by the Company in your direct testimony.**

93 A. Mr. Davis questions the Company’s claims that increased EV mileage leads to a net  
94 reduction in Carbon Dioxide (“CO<sub>2</sub>”) based on updates from the most recently filed  
95 integrated resource plan (“IRP”).

96 **Q. How do you respond to these concerns?**

97 A. First, in the workpapers that I submitted with my direct testimony, the emissions

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<sup>6</sup> Direct Testimony of Thomas Ashley, October 19, 2021, p. 10, lines 8-10.

98 calculations show the calculations for Table 5 Annual Transportation Sector  
99 Greenhouse Gas (“GHG”) Emissions Reductions in my direct testimony. The  
100 workpapers were updated to include new information for system emission factors that  
101 were derived from the Company’s most recent IRP, as provided in my revised  
102 workpapers. The new information from the IRP does not change the conclusion that  
103 the EVIP results in transportation sector emission reductions. In fact, the emission  
104 reductions from increased EV adoption are even greater due to the fact that the 2021  
105 IRP results in lower system emissions.

106 Second, Mr. Davis draws an erroneous conclusion about emission reductions  
107 with increased EV usage based on a failure to account for increased emissions from an  
108 internal combustion engine vehicle as a comparison. The calculation included in my  
109 workpapers takes a proxy vehicle, defined by the U.S. Environmental Protection  
110 Agency as a passenger vehicle with 11,500 miles driven annually that emits 4.6 Metric  
111 Tons of CO<sub>2</sub> per year,<sup>7</sup> and switches the vehicle to an EV and calculates its estimated  
112 emissions from the system required to propel the vehicle 11,500 miles in a year. The  
113 emission reductions are then calculated by subtracting the emissions from the proxy  
114 internal combustion engine vehicle with the emissions associated with the EV (system  
115 emissions). In Mr. Davis’s analysis, he increases the miles driven from the EV (up to  
116 25,000 miles driven) and the associated system emissions to propel the EV 25,000  
117 miles which results in greater CO<sub>2</sub> emissions for the EV. However, the problem with  
118 Mr. Davis’s calculation is that he fails to increase the emissions for the proxy internal  
119 combustion engine vehicle, which would result in greater emissions since the vehicle

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<sup>7</sup> U.S. EPA Office of Transportation and Air Quality, *Greenhouse Gas Emission from Typical Passenger Vehicle*, EPA-420-F-18-008, March 2018

120 is now traveling 25,000 miles, rather than the 11,500 miles, which produces only 4.6  
121 Metric Tons of CO2 emissions.

122 **Q. Mr. Davis raises concerns with the Estimated Expenditures in Confidential**  
123 **Exhibit RMP \_\_ (JAC-2). How do you respond to these concerns?**

124 A. Mr. Davis's concern is that the Company conducted a high-level estimate for projected  
125 costs that lacks granularity. However, Mr. Davis fails to recognize that the two biggest  
126 cost variables for locations with high powered EV fast charging are 1) equipment and  
127 network services, and 2) site engineering costs. Firm costs cannot be determined in a  
128 pre-program planning exercise. In order to provide the costs at a more granular level,  
129 the Company needs to conduct a rigorous and competitive Request for Proposal  
130 ("RFP") process to hire vendors and contractors. Further, detailed engineering site  
131 analysis needs to be performed for each site location, along with permitting and load  
132 impact analysis to get a valid estimate of the true costs. It would be premature for the  
133 Company to conduct those activities prior to the Commission approving the Program.

134 **Q. Mr. Davis also claims that the Company did not provide enough detail on the**  
135 **balancing account. Can you address his concerns?**

136 A. The Company has provided an illustration for the mechanics of the balancing account  
137 through discovery that included the estimated revenues, expenses along with the  
138 carrying charge that includes the Company's pre-tax average weighted cost of capital  
139 of 8.99 percent in accordance with section 54-4-41(6)(a). If necessary, the details of  
140 the balancing account could be addressed in the reporting requirement process I  
141 introduce later in this testimony.

142 **Q. Mr. Davis claims that the EVIP is not in the public interest because sections 54-4-**  
143 **41(4)(c) and (e) of the Utah Code are not satisfied. What is your response to this**  
144 **assertion?**

145 A. Mr. Davis asserts that the Company failed to meet this public interest standard because  
146 it lacked formality in the coordination with third party entities and did not take meeting  
147 minutes in its pre-program interactions with the Point of the Mountain State Land  
148 Authority (“POM”), the Utah Inland Port Authority (“UIPA”), and UDOT. The  
149 recording of meeting minutes is not a statutory requirement under Utah Code sections  
150 54-4-41(4)(c) and (e). However, the Company did engage with both the POM and  
151 UIPA and has signed Cooperation Agreements with both of those organizations, which  
152 are provided as Exhibit RMP\_\_\_(JAC-1R). In those Cooperation Agreements, signed  
153 by the chief executives of the organizations, a framework was identified to evaluate the  
154 potential investments in EV charging infrastructure within both the POM and UIPA  
155 areas.

156 In terms of UDOT, the Company has regularly met with the state agency since  
157 April of 2020 and assisted in the development of a State-wide Electric Vehicle  
158 Charging Network Plan. Further, the Company and UDOT have agreed to meet and  
159 coordinate on an on-going basis. This agreement is confirmed in a letter from Mr. Lyle  
160 McMillan, UDOT Director of Strategic Investments who is the senior manager  
161 responsible for UDOT’s EV charging activities, which is attached to my testimony as  
162 Exhibit RMP\_\_\_(JAC-2R).

163 **Q. DPU witnesses Mr. Davis and Mr. Williams claim that the EVIP is not in the**  
164 **public interest because it fails to meet section 54-4-41(4)(d) of the Utah Code?**  
165 **What is your response to this assertion?**

166 A. The DPU concludes RMP’s EVIP proposal does not meet the competition-related  
167 public interest requirements because the Program focuses too heavily on utility  
168 charging stations, and it includes discounts for the Company’s customers that the DPU  
169 believes are excessive. However, this assertion is contrary to the governing statute. The  
170 plain language in sections 54-4-41(2)(a)(i) and (ii) of Utah Code demonstrates the Utah  
171 Legislature’s intent to have utility-owned infrastructure and utility-owned charging  
172 service provided by the Company (both are needed for utility charging stations). Utility  
173 ownership of infrastructure and charging service within the Program is not just a  
174 component of the statute, it is the primary purpose of the statute. The intent of these  
175 provisions is to create conditions that support low-cost charging for customers to  
176 encourage the adoption of EVs. Company witness Mr. Robert M. Meredith provides  
177 additional support for the Company’s proposed rate structure and discount for Rocky  
178 Mountain Power customers.

179 In arguing that the proposed EVIP is not in the public interest because it does  
180 not sufficiently enable competition, the parties erroneously focus on only one part of  
181 section 54-4-414(d) of Utah Code. That section states that the Commission shall find  
182 the Program to be in the public interest if the EVIP, “enables competition, innovation,  
183 and customer choice in [EV] charging services, while promoting low-cost services for  
184 EV battery charging customers.” Parties argue that the proposed discount makes the  
185 EVIP non-compliant with this provision. However, the discount actually makes the

186 proposed EVIP compliant as the Program will promote “low-cost services”. Further,  
187 as Mr. Meredith explains, the cost to serve is currently unknown for the Company and  
188 for third parties, so to artificially force the EVIP to conform with other third-party  
189 business models may be in direct violation of the section because the third-party  
190 business models may not be promoting low-cost services. The Legislature clearly  
191 intended for the Company to own and operate EV charging services, with a transitional  
192 rate, with a discount for Company customers, and that promotes low-cost services for  
193 charging customers. The EVIP has been designed to balance and comply with all  
194 public interest requirements of the statute. The proposed EVIP is in the public interest,  
195 as required by Utah Code section 54-4-41(4)(d) because it supports the creation of a  
196 sufficient charging network throughout the State with attractive charging prices that are  
197 expected to encourage EV adoption.

#### 198 IV. EVIP FUNDING STRUCTURE

199 **Q. Please briefly summarize the Company’s proposal on how the funding would be**  
200 **allocated to the various components of the EVIP.**

201 A. The Company’s proposed budget includes funding for 20 to 25 Company-owned  
202 charging stations and a make-ready infrastructure component. The Company’s  
203 proposed split in funding between the two components is roughly two thirds for  
204 Company owned stations and one third for make-ready infrastructure.

205 **Q. Did the parties have any recommendations for changes to this funding**  
206 **allocation?**

207 A. Yes. Mr. Williams and Mr. Justin D. Wilson, witness for ChargePoint, Inc.  
208 (“ChargePoint”), recommend the Company shift investments from utility-owned

209 infrastructure to make-ready investments. Mr. Williams recommends that the Company  
210 should be limited to capital spending on Company projects equaling one-third of the  
211 total capital spending based on current chargers located in the state.

212 **Q. How do you respond to the recommendations of Mr. Williams and Mr. Wilson?**

213 A. Basing decisions on the existing levels of infrastructure in the state is problematic.  
214 First, the current levels of infrastructure in the state are insufficient to meet the goals  
215 of the program and the policy of the State of Utah. This insufficiency is one of the  
216 reasons why the Legislature created section 54-4-41 of Utah Code. Further, relying on  
217 older and in some cases outdated chargers as the basis for future decisions is akin to  
218 “driving by looking in the rear-view mirror.” Mr. Williams, Mr. Wilson and other  
219 parties suggest moving significant funds from utility-owned infrastructure and  
220 charging service to support non-utility infrastructure and service. They make these  
221 suggestions without adequately addressing the impacts on the Program’s goals and  
222 other public interest requirements, specifically section 54-4-41(4)(b) of Utah Code.  
223 Finally, the parties do not adequately address the impact of “shifting funds” on the  
224 prudence requirement for investments in section 54-4-41(7)(b) of Utah Code. This  
225 section of code defines investments as prudent if they “provide the...utility’s customers  
226 significant benefits that may include revenue from utility vehicle charging service that  
227 offsets the large-scale electric utility’s costs and expenses.” If the number of utility-  
228 owned chargers is significantly altered as suggested by parties then it could prevent the  
229 Company from meeting the prudence requirement envisioned by the Legislature.  
230 Ultimately, section 54-4-41 of Utah Code is about utility-owned infrastructure and  
231 charging service not non-utility owned infrastructure and charging service.

232 **Q. One of the recommendations for the EVIP raised by Mr. Davis and Dr. Abdulle**  
233 **is to shift the time frame of the EVIP from 10 years to five years and shorten the**  
234 **time frame by which the \$50 million program funding collected through**  
235 **Schedule 198 to five years instead of the Company’s proposed 10 years. What is**  
236 **your response to this recommendation?**

237 A. The Company strongly opposes this recommendation. First, Dr. Abdulle incorrectly  
238 claims that I recommended collecting \$10 million a year for five years. As described  
239 by Mr. Meredith, the Company’s proposal is that the rates under Schedule 198 be set  
240 to collect \$5 million a year for ten years. My direct testimony proposes that the  
241 expenditures for the program take place over the first five years after which the Program  
242 could be re-evaluated, and appropriate adjustments could be made for the remaining  
243 five years. I do not propose collecting the funds from customers over five years, which  
244 would result in higher rates as described by Dr. Abdulle. The EVIP design was based  
245 on 10-year program, in which the stations would be installed over a five-year period  
246 intended to “prime the pump” and increase EV adoption, then during the next five years  
247 the Program is designed to build sufficient utilization so that these stations can operate  
248 on their own. Under the DPU proposal, the stations would have to stand on their own  
249 within the first five years, not giving sufficient time for the Program to create enough  
250 utilization. This could have a detrimental effect on the objectives of the EVIP.



251 **V. UTILITY-OWNED CHARGING SERVICE**

252 **Q. Mr. Wilson, as well as Ms. Sara Rafalson, witness for EVgo Services, LLC**  
253 **(“EVgo”), suggest that competition in the market of EV charging service will be**  
254 **better served if the EVIP is modified to prevent the Company from establishing a**  
255 **network of utility-owned charging locations for a period of two or two and one-**  
256 **half years. How do you respond to this suggestion?**

257 A. The Company strongly disagrees with this proposal. Mr. Wilson and Ms. Rafalson do  
258 not address the potential impact of delaying implementation of utility-owned  
259 infrastructure and utility-owned charging service on the program goals and statutory  
260 requirements outlined in sections 54-4-41(4) and (7) of Utah Code. The Company is  
261 concerned that delaying the program will suppress EV adoption and reduce the ability  
262 for the Company to generate significant benefits for customers like revenue from utility  
263 charging service. Mr. Wilson’s and Ms. Rafalson’s claims of competition being  
264 impacted by the EVIP are overstated. I agree with Mr. Ashley’s assessment that the  
265 proposed Program will stimulate competition, in which “multiple and appropriately  
266 diverse opportunities to compete for business, which is critical for growing this nascent  
267 market and driving customer, market and EV driver value” and “[u]tility ownership  
268 and procurement should be understood to foster competition rather than hinder it.”<sup>8</sup>

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<sup>8</sup> Direct Testimony of Thomas Ashley, October 19, 2021, p. 6 lines 20-27.

269 **Q. Mr. Wilson provides suggestions for the “Company-owned chargers program”**  
270 **related to site host arrangements, parity rebates, and the Company’s RFP**  
271 **process.<sup>9</sup> How do you respond to these suggestions?**

272 A. The Company disagrees with Mr. Wilson’s suggestions for Company-owned chargers,  
273 parity rebates and RFP process requirements. Mr. Wilson is recommending rules and  
274 limits on Company-owned chargers as it relates to site locations and site arrangements.  
275 In essence, Mr. Wilson is attempting to dictate the role the Company will have with its  
276 own chargers and its relationship with Company partner site hosts. The net effect of  
277 his suggestions would be to eliminate the utility-owned charging service which would  
278 be in direct contradiction with Utah Code section 54-4-41(2)(a)(ii) and the legislative  
279 intent of the governing statute. Furthermore, Mr. Wilson is proposing a parity rebate,  
280 which is just an enhanced incentive for non-utility charging service providers.  
281 Prioritizing the Program toward non-utility charging service is also counter to the  
282 legislative intent. In addition, Mr. Wilson attempts to shape the Company’s RFP  
283 process. The Company possesses vast experience with sophisticated procedures for  
284 administering complex competitive vendor selection processes that are in our  
285 customers’ interest. It is highly inappropriate for a company like ChargePoint to try  
286 and influence that process through this proceeding since it could be a potential bidder  
287 or in direct competition with potential bidders.

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<sup>9</sup> Direct Testimony of Justin D. Wilson, October 19, 2021, p. 54-63

288 **Q. Some witnesses question the location selected for Company-owned charging**  
289 **stations. Specifically, Mr. Kessinger suggests that the Commission require the**  
290 **Company to undertake a supplementary analysis of charging locations to include**  
291 **equity in the plan, and that Company-owned charging locations should only be in**  
292 **locations that would not be served by the private market. Ms. Deborah Kapiloff,**  
293 **witness for Western Resource Advocates (“WRA”), recommends the Company**  
294 **prioritize three primary criteria in locating charging stations. How do you**  
295 **respond to the suggestions regarding Company-owned charging locations?**

296 **A.** The Company disagrees with the suggestions from both Mr. Kessinger and Ms.  
297 Kapiloff for Company-owned charger locations. Neither party explains how their  
298 suggestions would enhance the Program’s ability to meet statutory requirements for  
299 public interest and prudence for investments outlined in sections 54-4-41(4) and (7) of  
300 Utah Code, respectively. In particular, the parties do not show how their suggestions  
301 would increase EV adoption or increase revenue compared to the locations already  
302 identified by the Company.

303 **VI. REPORTING, PROGRAM EVALUATION AND EDUCATION**

304 **Q. What are the reporting requirements in section 54-4-41 of the Utah Code?**

305 **A.** Utah Code section 54-4-41(8) requires the Company to submit an annual report, on or  
306 before June 1, to the Public Utilities, Energy, and Technology Interim Committee of  
307 the Legislature (“PUETIC”) about the EVIP’s status, operation, funding, and benefits,  
308 the disposition of the EVIP’s funds, and the EVIP’s impact on rates.

309 **Q. Most of the witnesses recommend that the Commission not approve the EVIP**  
310 **absent additional reporting requirements and possible additional stakeholder**  
311 **processes. What is the Company's position on this issue?**

312 A. The Company agrees to annual reporting requirements of its EVIP separate from and  
313 in addition to its statutory obligation to the PUETIC. Most of the parties in this docket  
314 offered a wide range of suggestions as to the timing, contents and structure of what  
315 should be contained in a reporting requirement. The Company recommends the  
316 Commission include in its order in this docket a directive for the Company to file a  
317 proposed reporting template within 90 days of the order in this matter. Filing the  
318 reporting template after the Commission's order will allow the Company to incorporate  
319 the Commission's decisions in the template. The Company also intends that its  
320 proposed reporting template will be informed by the recommendations offered in the  
321 testimony by the parties. The Company also recommends that the Commission  
322 establish a comment period to allow interested parties an opportunity to comment on  
323 the proposed reporting requirements before the requirements are finalized in a  
324 commission order. This process is similar to how the reporting requirements were  
325 established in other matters, such as the annual Sustainable Transportation Energy Plan  
326 ("STEP") and New Wind and Transmission reports<sup>10</sup> and allows additional time for the  
327 reporting template to be thoughtfully assessed and be reflective of the Commission's  
328 order on the EVIP. The Company also suggests the proposals for additional stakeholder  
329 process be addressed through this post-order process.

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<sup>10</sup> See Docket No. 16-035-36, Rocky Mountain Power's September 1, 2017 filing, and Docket No. 17-035-40, Rocky Mountain Power's August 31, 2018 filing.

330 **Q. Mr. Kessinger claims there have not been any opportunities for meaningful**  
331 **stakeholder engagement prior to filing the Program. Can you please elaborate on**  
332 **the Company's effort at stakeholder involvement prior to filing the EVIP?**

333 A. The Company disagrees with Mr. Kessinger's assertion that no meaningful opportunity  
334 for feedback was provided to stakeholders. The Company filed a notice in this docket  
335 on August 27, 2020, to notify the Commission and interested parties that it was in the  
336 early stages of developing a proposed charging infrastructure program and would be  
337 hosting a stakeholder input meeting. On September 24, 2020, the Company held this  
338 meeting with stakeholders and received input. Over the next several months, the  
339 Company developed the Program further. Before the Company finalized its proposed  
340 EVIP, it contacted stakeholders and set up a second stakeholder input meeting for  
341 June 29, 2021—55 days before the EVIP was filed with the Commission. The meeting  
342 materials were circulated prior to the meeting and the Company solicited stakeholder  
343 feedback and established an informal process for parties to submit comments two  
344 weeks after the meeting. Over the next month, the Company reviewed the feedback  
345 and updated its proposed EVIP to incorporate several recommendations from the  
346 stakeholders. In addition to the stakeholder meetings, the Company accommodated  
347 several requests for one-on-one meetings with individual organizations to provide  
348 additional information, including a meeting with UCE in early August 2021. Contrary  
349 to Mr. Kessinger's claims, the stakeholders were provided ample opportunity to be  
350 involved at multiple stages in the process.

351 **Q. Mr. Alex Ware, witness for the Office of Consumer Services (“OCS”), and Ms.**  
352 **Kapiloff<sup>11</sup> suggest that the Company modify the EVIP to include an education**  
353 **component of the program. How do you respond to this suggestion?**

354 A. The Company agrees to expand the program to include education and outreach. In  
355 particular, the Company agrees to include an explanation of how different charging  
356 behaviors, such as on and off-peak charging, impact the grid. Further, the Company  
357 agrees to include recommendations for best charging times and will explain how  
358 certain patterns of charging behavior could drive the need for additional electric  
359 system investments, raising rates and harming all customers, including non-  
360 participating customers.

361 **VII. INCENTIVES UNDER ELECTRIC SERVICE SCHEDULE NO. 120**

362 **Q. Please briefly describe the incentives being proposed under Electric Service**  
363 **Schedule No. 120 (“Schedule 120”)?**

364 A. Schedule 120 is for incentives for eligible customers that cover a portion of the cost of  
365 charging equipment. The incentives were originally developed as part of STEP and are  
366 scheduled to end on December 31, 2021. Although incentives are not utility-owned  
367 infrastructure or utility-owned charging service, the Company felt they could be in  
368 included in the EVIP at a modest level to help with the transition from STEP to the  
369 EVIP and to enable customer choice in Utah Code section 54-4-41(4)(d). However,  
370 incentives are not intended to be a key component of the EVIP authorized in section  
371 54-4-41 of Utah Code.

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<sup>11</sup> Direct Testimony of Alex Ware, October 19, 2021, p. 12, lines 238-51.

372 **Q. Several parties offered suggestions for revisions to Schedule 120. How do you**  
373 **respond to those suggestions?**

374 A. There were several suggestions for revisions to Schedule 120 including increased  
375 funding and requirements to use smart devices from ChargePoint and EVgo. WRA  
376 suggested specific allocations for different charging levels and different customers like  
377 multi-family dwellings and to use funding from Company-owned chargers to fund  
378 additional incentives. UCE suggested increases in funding and tying the incentives to  
379 time of use rates. OCS suggested limiting Schedule 120 for two to three years and  
380 removing the residential incentive until after the education component is implemented  
381 and the residential incentives are demonstrated to be in the public interest. The  
382 Company disagrees with all the suggestions except OCS. Since the incentive is not  
383 utility-owned infrastructure or utility-owned service and the incentives are not directly  
384 referenced in section 54-4-41 of Utah Code, the incentives outlined in Schedule 120  
385 should be limited in scope and not expanded as suggested by many parties. It is a zero-  
386 sum gain if incentives are expanded then utility-owned infrastructure and utility-owned  
387 service are reduced, which is counter to the clear intent of section 54-4-41 of Utah  
388 Code. The Company accepts OCS's suggestion to limit Schedule 120 to three years  
389 and to remove the residential incentive.

390 **Q. Mr. Ashley from Greenlots suggests the Company utilize open standards and**  
391 **interoperability for charging infrastructure. How do you respond to this**  
392 **suggestion?**

393 A. The Company supports this suggestion. The Division issued data request DPU 1.1 in  
394 which it raised the issue of generation capacity costs to support the EVIP. The

395 Company responded that it didn't know the generation capacity costs because it hasn't  
396 performed a cost-of-service study yet. Intuitively speaking it is expected that capacity  
397 costs will be minimal in the early years of the EVIP as EV adoption is still relatively  
398 small. However, if adoption levels are significant then there is the potential that  
399 capacity impacts could be measurable. In the event capacity impacts are significant,  
400 the Company would likely begin to implement demand side management programs to  
401 address capacity and load issues. The best way to reduce the cost impact of the demand  
402 side management programs is to future-proof the investments in charging infrastructure  
403 that are currently being proposed and to prepare for a future where load control and  
404 demand response are easily implemented. Although the EVIP doesn't have load control  
405 or demand response programs in its current plan, it is reasonable and responsible to  
406 require all the charging infrastructure investments be based on open standards and  
407 ensure interoperability. Further, incorporating open standards and interoperability is  
408 aligned with the Company's grid modernization efforts. As such, the Company will  
409 require open standards and interoperability on all investments including Company-  
410 owned chargers, make-ready investments and incentives.

411 **Q. Mr. Kessinger suggests that surplus revenue from Company-owned charging**  
412 **stations should either be refunded to customers or used for Schedule 120**  
413 **incentives. What is your response to this suggestion?**

414 A. The Company proposes that all revenue from Company-owned charging stations will  
415 be entered into the EVIP's balancing account and credited to customers to offset costs  
416 and expenses of the Program as envisioned in section 54-4-41(7)(b) of Utah Code.



417 Allocating revenue to specific components or refunding it to customers is unwarranted  
418 and inconsistent with the statute.

419 **Q. Mr. Kessinger also recommends that the Commission order the Company to allow**  
420 **interested parties to be involved in its distribution system planning process by**  
421 **integrating that planning with the Company's IRP. How does the Company**  
422 **respond?**

423 A. The Company does not believe requiring the Company to implement a stakeholder  
424 involvement process in its distribution planning in the context of EVIP is  
425 appropriate. Funds collected through Schedule 198 are spent on distribution  
426 improvements determined in distribution studies specific to a particular application and  
427 project and would not relate to system planning activities. Given the nature of these  
428 specific distribution studies and sensitivities to the privacy of individual applications,  
429 the Company opposes making distribution studies available to interested stakeholders.  
430 In addition, the Company recommends the Commission deny UCE's request in this  
431 docket to impose integrated distribution planning so that it may be further discussed in  
432 the appropriate forum.

433 **VIII. INNOVATIVE PROJECTS AND PARTNERSHIPS**

434 **Q. Ms. Kapiloff requests that the Company provide more detail regarding its**  
435 **planned innovative projects and partnerships. Mr. Kessinger, UCE, claims that**  
436 **there is an inconsistency regarding the funding for the F-LED project, and Mr.**  
437 **Wilson suggests funding of innovative projects be limited within Company-owned**  
438 **chargers. How do you respond to these comments and suggestions?**

439 A. There appears to be confusion on what the innovative projects and partnerships entail.  
440 This Program element describes how the Company will integrate innovation and  
441 technology by leveraging insight and partnerships from other programs like the  
442 WestSmart EV@Scale Department of Energy grant and the Intermodal Hub project.  
443 There are no specifically funded projects or activities from the EVIP for this element.  
444 All projects that receive funding from the EVIP will fall into one of three investment  
445 categories: Company-owned chargers, make-ready investments, or incentives. The F-  
446 LED is an intriguing project that can help inform the broader EVIP activities because  
447 of its use of emerging technology. Further, the F-LED is attractive because it is located  
448 within the Utah Inland Port and the Legislature has specifically referenced investments  
449 in the Inland Port area. Since the F-LED project is still being developed and scoped  
450 the project details are not available. But if the F-LED project requests funding either  
451 through make-ready investments or incentives it will still have to go through the same  
452 application process and demonstrate that it meets the program goals and complies with  
453 sections 54-4-41(4) and (7) of Utah Code. Could Company-owned chargers be  
454 deployed within the Inland Port and participate with the F-LED project? Possibly. Salt  
455 Lake City is a community that is identified for Company-owned chargers, but there

456            have been no requests or plans at this time to deploy Company-owned chargers in the  
457            Inland Port area as part of the F-LED project since the project is still being scoped.

458    **Q.    Does this conclude your rebuttal testimony?**

459    A.    Yes.

Rocky Mountain Power  
Exhibit RMP\_\_ (JAC-1R)  
Docket No. 20-035-34  
Witness: James A. Campbell

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Exhibit Accompanying Rebuttal Testimony of James A. Campbell

Joint Clean Energy Cooperation Statement

November 2021



## **POINT OF THE MOUNTAIN STATE LAND AUTHORITY AND ROCKY MOUNTAIN POWER JOINT CLEAN ENERGY COOPERATION STATEMENT**

The Point of the Mountain State Land Authority ("Land Authority") and PacifiCorp dba Rocky Mountain Power("Company") (collectively the "Parties") jointly state their intention to cooperate in accordance with the below stated objectives.

### **I. OVERVIEW**

The Land Authority is a political subdivision of the state of Utah, established by Utah Code 11-59-201 (the "Act"), responsible to plan, manage, and implement development of the approximately 600 acres of state-owned land currently occupied by the Utah state correctional facility in the area commonly referred to as the Point of the Mountain (the "Point of the Mountain State Land").

The Company is a public electric utility regulated by the Public Service Commission of the State of Utah ("PSC") with a responsibility for providing safe and reliable electrical service to its customers at rates that are fair, just and reasonable as determined by the PSC.

The Parties have determined that it is in their collective interest and in the best interest of residents, visitors, businesses and Utah as a whole, to ensure that the Point of the Mountain State Land is developed in an environmentally responsible and sustainable manner. The Parties agree that focused efforts on developing the Point of the Mountain State Land in this manner will deliver benefits through enhanced air quality, improved public health and additional economic opportunities.

The Parties desire to work cooperatively to support mutual goals as identified herein through programs and innovative technologies that will be further developed through ongoing feasibility and implementation work.

### **II. GOALS**

The Land Authority desires to support environmentally sustainable energy practices including, but not limited to, energy efficiency programs, low and zero-carbon energy development, electrified transportation infrastructure that is widely available, proactive infrastructure planning and exploration of additional innovative technologies. The Land Authority seeks to partner with the Company to create a model of sustainable development that significantly reduces air emissions and energy use, taking advantage of low and zero-carbon energy solutions, while advancing economic development.

The Land Authority further seeks to keep any additional costs to the Land Authority or energy users within the Point of the Mountain State Land associated with achieving its stated clean-energy goals reasonable. The Land Authority envisions measures to mitigate certain incremental costs associated with pursuing a clean-energy future to all energy users within the Point of the Mountain State Land.

The Company is committed to exploring opportunities to enhance power delivery methods and practices to help optimize electrification for tenants in the Point of the Mountain State Land and the ability to provide its users with cost-efficient clean energy power supply utilizing methods such as:

- Blue Sky
- Subscriber Solar
- Schedule 137
- Schedule 32/34
- Other programs or structures that are consistent with applicable regulations

### **III. 10-YEAR POWER-USE FORECAST**

The Company and Land Authority desire to work collaboratively to develop a 10-year load forecast for the Point of the Mountain State Land, anticipating that the forecast may need to be updated periodically. The parties are committed to work together to create the most reliable forecast by sharing non-confidential information, internal forecasts, land-use planning information, research, real estate data, personal experiences and other data.

### **IV. RENEWABLE ENERGY GENERATION AND STORAGE FORECASTING**

Once a 10-year power forecast has been created, the Company will work with the Land Authority to prepare a broad energy generation and storage forecast to serve as a non-binding roadmap for future action. The clean energy generation and storage forecast will include a forecast for resource type (i.e. wind, solar, battery, renewable energy credits, etc.), resource size and action necessary to meet the needs of future energy users with low to zero-carbon energy resources. The Parties anticipate that the non-binding forecast will need to be updated periodically to accommodate site development, energy markets and other factors.

### **V. ELECTRIFIED TRANSPORTATION INFRASTRUCTURE**

The electrification of transportation represents a promising opportunity for the State of Utah to address air quality while encouraging economic growth. Transportation electrification is a sound solution to reduce both criteria pollutants and carbon emissions from transportation while lowering operating costs as electricity is less expensive than traditional transportation fuels. The Land Authority and the Company agree to coordinate and collaborate on the following areas for transportation electrification:

- a) **Electric Vehicles** – Advancements in battery and power train technologies have enabled a significant increase in the number and types of electric vehicles that are available in the marketplace. In the next few years, it is expected that electric vehicles will be available as

passenger vehicles, delivery trucks, work trucks, shuttle vans and buses. In addition, advancements are expected for flying taxis/drones and autonomous vehicles. The Parties agree to work together to evaluate vehicle technology and associated power needs to enable appropriate deployment of such vehicles.

- b) **Charging Stations** – A requirement for the successful deployment and adoption of electric vehicles is having sufficient charging capacity. The Company agrees to work with the Land Authority to evaluate charging needs and technology requirements. Further, the Parties agree to evaluate the potential investment of Company-owned chargers within the Point of the Mountain State Land development, including funding availability under House Bill 396, Electric Vehicle Charging Infrastructure Amendments.
- c) **Research and Grants** – Transportation electrification will be accelerated by emerging technologies. The Point of the Mountain State Land development is an ideal location to evaluate and test innovative technologies. The Parties agree to work together to encourage innovative technologies and pursue grant opportunities while prioritizing technologies developed by state institutions and entities within the development.

## **VI. TRANSMISSION AND DISTRIBUTION NETWORK PLANNING**

A significant amount of new electric infrastructure is expected to be required to expand development at the Point of the Mountain State Land. The Company will work directly with the Land Authority to provide system impact studies to better understand the impacts of new energy usage in the area and required infrastructure to meet the needs of future development. Utilizing load, generation and storage forecasts, the Company will work with the Land Authority to identify future transmission and distribution infrastructure needs. The Parties will work in good faith to determine what action is appropriate to preserve energy infrastructure corridor necessary for delivery of energy to future customers, while considering impacts to development opportunities and land values. The Parties will also consider the Company's rights and obligations to maintain and access its facilities, as well as the Land Authority's needs for access to and from the Point of the Mountain State Land, while working in good faith to develop transmission and distribution network plans.

## **VII. COMMITMENT OF COOPERATION**

The parties intend to work together in good faith to develop an implementation plan outlining respective roles, processes, responsibilities, timelines, program/project development pathways and costs to achieve the goals and deliverables outlined in this Cooperation Statement. The Parties will meet regularly to develop a framework of deliverables to support the implementation plan. The Parties acknowledge that additional approvals for specific aspects of the plan, agreements, etc. will require board approval of each Party and may require PSC approval.

The Parties agree to mutually implement the objectives stated in this cooperation statement, and not to take action contrary to the interests of the other party without first consulting with the other party.

This Cooperation Statement shall become effective upon signing by the Parties and will inform cooperation between the same, commencing immediately after signing. Progress toward objectives stated herein will

be reviewed and the Cooperation Statement may be extended in the future, with or without amendments, through a commitment by the Parties or may be terminated at any time by unilateral action of either Party.

IN WITNESS WHEREOF, the parties to this JOINT COOPERATIVE STATEMENT have affixed their signatures:

  
\_\_\_\_\_  
Point of the Mountain State Land Authority      Date: 9/21/2021

  
\_\_\_\_\_  
Rocky Mountain Power      Date: 9/21/2021



**UTAH INLAND PORT AUTHORITY  
AND ROCKY MOUNTAIN POWER  
JOINT CLEAN ENERGY COOPERATION STATEMENT**

The Utah Inland Port Authority (“**Authority**”) and PacifiCorp dba Rocky Mountain Power, an Oregon corporation (“**Company**”) (the Authority and the Company collectively referred to herein as the “**Parties**”), hereby execute this Joint Clean Energy Cooperation Statement (“**Cooperation Statement**”) and jointly state their intention to cooperate in accordance with the below stated objectives.

**I. OVERVIEW**

The Authority is a political subdivision of the state of Utah, established by Utah Code 11-58-101 *et seq.* (the “**Act**”), which is responsible to implement strategies that use the best available technology to mitigate environmental impacts from logistics and goods movement facilities, development and uses within the Authority Jurisdictional Land (as defined in the Act) and in Project Areas (also defined in the Act) around the State, while promoting and optimizing logistics and goods movement to support the economy of the State and the United States.

Company is an electric utility regulated by the Public Service Commission of the State of Utah (“**PSC**”) with a responsibility for providing safe and reliable electrical service to its customers by means and at rates that are fair, just and reasonable as determined by the PSC.

The Parties have determined that it is in their collective interest and in the best interest of residents, visitors, businesses and Utah as a whole, to ensure that the Authority Jurisdictional Land is developed in an environmentally responsible and sustainable manner. The Parties agree that focused efforts on developing Authority Jurisdictional Land in this manner will deliver benefits through improved public health, additional economic opportunities, long-term energy price stability and a stronger sense of community pride and security.

The Parties will work together to advance solutions which will make meaningful contributions to reducing pollution and greenhouse gas emissions of future and current activities within Authority Jurisdictional Land. This will include working to develop solutions to meet future electrical energy needs with net 100% renewable energy, planning for electrification of freight, cargo, and logistics equipment, and focused efforts on energy efficiency programs.

The Parties desire to work cooperatively to support mutual goals as identified herein through the use of programs and innovative technologies that will be further developed through ongoing feasibility and implementation work.

Pursuant to this Cooperation Statement, the Parties anticipate that additional and related cooperation agreements, memoranda of understanding, letters of intent or similar documents will be entered into between the Company, the Authority and the owners and/or developers of real property within the Authority Jurisdictional Land to further the goals of this Cooperation Statement.

## **II. GOALS**

The Authority desires to support environmentally sustainable and other clean energy practices within the Authority Jurisdictional Land including, but not limited to, energy efficiency programs, cost-efficient renewable energy development and use, clean energy programs, energy storage, microgrids, proactive infrastructure planning, and exploration of innovative technologies. Specific areas for immediate study and exploration by the Authority and Company include: (i) the feasibility and cost-effectiveness of 100% of electric energy from renewable resources, such as solar panels, or other sources of clean electricity generation as may be developed in the future (including the question of whether such will be cost-effective for new development only or for all electric energy needs within the Authority Jurisdictional Land and/or Project Areas), and (ii) the feasibility and cost-effectiveness of electrifying logistics and goods movement facilities within the Authority Jurisdictional Land and/or Project Areas to include charging stations for electric vehicles (including short haul, regional and long haul trucks, off road cargo handling equipment, refrigerated cargo containers and other electric vehicles). Additional areas may be studied without further amendment to this Cooperation Statement.

The Company desires to support the UIPA's goal of environmentally sustainable development of Authority Jurisdictional Land. In support of the UIPA's goal, the Company intends to identify suitable renewable energy generation projects to support sustainable development of Authority Jurisdictional Land, while preventing adverse economic impacts to other customers. In addition, the Company desires to work closely with the UIPA to study and develop comprehensive plans to electrify vehicles and facilities that operate within the Authority Jurisdictional Land. In furtherance of those plans, the Company desires to study and deploy energy efficiency programs, energy management technologies, and other approaches to minimize environmental impacts to the Authority Jurisdictional Land.

## **III. 10 YEAR POWER USE FORECAST**

The Company and the Authority will work together to develop a 10-year load forecast for Authority Jurisdictional Land. It is anticipated that the forecast may need to be updated periodically. The parties are committed to working together to create the most reliable forecast that may include sharing non-confidential information, internal forecasts, land-use planning information, research, real estate data, personal experience and other data.

## **IV. RENEWABLE ENERGY GENERATION AND STORAGE FORECASTING**

After a 10-year load forecast has been created, the Company and the Authority will work together to prepare a broad electric energy generation and electric energy storage forecast to serve as a non-binding roadmap for future action. The renewable electric energy generation and storage forecast will include forecast for resource type (i.e. wind, solar, battery, renewable energy credits, etc.), resource size (in MW), delivery timeline, capital, and action necessary to meet the needs of future energy users with renewable energy resources. It is expected that the non-binding forecast will need to be updated periodically to accommodate real estate and port facility development, energy markets, and other factors.

## **V. TRANSMISSION AND DISTRIBUTION NETWORK PLANNING**

Utilizing load, generation, and storage forecasts, the Company and the Authority will work together to identify future transmission and distribution infrastructure needs. The Parties will work in good faith to determine what action is appropriate to secure and preserve electric energy infrastructure corridor necessary for the delivery of energy to future customers.

## **VI. IMPLEMENTATION STEPS AND TIMING**

The Parties intend to work together in good faith to develop an implementation plan outlining respective roles, processes, responsibilities, timelines, program and project development pathways and costs to achieve the goals and deliverables outlined in this Cooperation Statement. The Parties will meet regularly to develop a framework of deliverables to support the implementation plan. The Parties acknowledge that additional approvals for specific aspects of the plan (i.e. agreements, etc.) will require approvals from each Party and may also require PSC approval. The target deadline for completion and acceptance of the initial framework of deliverables by the Company and the Authority is May 31, 2020.

## **VII. COMMITMENT OF COOPERATION**

As stated above, the Parties desire to work together to successfully achieve the stated goals and objectives in this Cooperation Statement.

This Cooperation Statement shall become effective upon signing by the Parties and will commence immediately after signing. Progress towards objectives stated herein will be reviewed and the Cooperation Statement may be: (i) extended in the future by amendment, or (ii) terminated at any time as to any Party by unilateral action of such Party. This Cooperation Statement does not reference all of the terms, conditions, representations, warranties, covenants, and other provisions that would be contained in the definitive documentation for the transactions contemplated by this Cooperation Statement. For the avoidance of doubt, this Cooperation Statement does not constitute and will not give rise to any legally binding obligation on the part of any Party or any of such Party's affiliates. This Cooperation Statement is not intended to constitute a binding and enforceable contract. Rather it is a memorandum of understanding which, if accepted by the Parties, shall cause the Parties to cooperatively and mutually move towards planning and gathering information upon which decisions for future direction and implementation can be made and, if then determined appropriate and desirable, drafting and negotiating a definitive and binding Agreement.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties to this JOINT COOPERATION STATEMENT have affixed their signatures:


**Utah Inland Port Authority**

Jack C. Hedge \_\_\_\_\_ Date: April 24, 2020 \_\_\_\_\_

Printed Name

Executive Director \_\_\_\_\_

Title

  
\_\_\_\_\_  
Signature

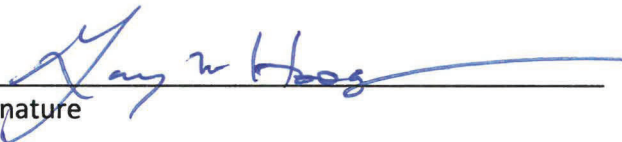
**Rocky Mountain Power**

Gary Hoogeveen \_\_\_\_\_ Date: 4/29/2020 \_\_\_\_\_

Printed Name

President & CEO \_\_\_\_\_

Title

  
\_\_\_\_\_  
Signature

Rocky Mountain Power  
Exhibit RMP\_\_ (JAC-2R)  
Docket No. 20-035-34  
Witness: James A. Campbell

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Exhibit Accompanying Rebuttal Testimony of James A. Campbell

UDOT Correspondence

November 2021



State of Utah

SPENCER J. COX  
Governor

DEIDRE M. HENDERSON  
Lieutenant Governor

## DEPARTMENT OF TRANSPORTATION

CARLOS M. BRACERAS, P.E.  
*Executive Director*

TERIANNE S. NEWELL, P.E.  
*Deputy Director of Planning and Investment*

LISA J. WILSON, P.E.  
*Deputy Director of Engineering and Operations*

October 22, 2021

James Campbell  
Director of Innovation and Sustainability Policy  
Rocky Mountain Power

Dear James,

This letter confirms that since the conclusion of the 2020 Utah legislative session, Pacificorp dba Rocky Mountain Power has met continuously with UDOT to coordinate on the development and alignment of our respective state-wide EV charging network plans. During these regular informal meetings, UDOT provided input and feedback into the development of the EVIP. The meetings included discussions on state traffic patterns, rights-of-way, federal rules regarding rest stops on interstates, federal designations of Alternative Fuel Corridors, EV technology, utility service territory boundaries, and potential site locations. UDOT and Rocky Mountain Power have agreed to continue to meet and coordinate on the planning and deployment of Utah's EV charging network at regular intervals.

I very much appreciate your time, efforts, and willingness to work together towards meeting this critical next step in the evolution of transportation. Rocky Mountain Power's coordination with UDOT has helped make the State-wide Electric Vehicle Charging Network Plan a valuable resource to the citizens of Utah and our surrounding neighbors.

Best regards,

A handwritten signature in black ink, appearing to read "Lyle McMillan".

Lyle McMillan  
Director, Strategic Investments  
Utah Department of Transportation

Cc: Ben Huot, Director of Programming, UDOT

Rocky Mountain Power  
Docket No. 20-035-34  
Witness: Regan Zane

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Rebuttal Testimony of Regan Zane

November 2021

1                                   **I.       INTRODUCTION AND QUALIFICATIONS**

2   **Q.     Please state your name and business address.**

3   A.     Regan Zane, 4120 Old Main Hill, Utah State University, Logan UT 84322.

4   **Q.     By whom are you employed and in what capacity?**

5   A.     I am employed by Utah State University (“USU”), where I am the David and Diann  
6           Sant Endowed Professor in the Electrical and Computer Engineering Department and  
7           the Director of the Advancing Sustainability through Powered Infrastructure for  
8           Roadway Electrification Engineering Research Center (“ASPIRE Center”).

9   **Q.     Please describe your education and professional experience.**

10  A.     I received a Ph.D. degree in Electrical Engineering from the University of Colorado at  
11           Boulder in 1999. I’ve worked as a Research Scientist at General Electric’s Corporate  
12           Research and Development Center in New York, as an Assistant and Associate  
13           professor at the University of Colorado and as the Sant Endowed Professor at USU. I  
14           have worked extensively in the field of power electronics with a strong emphasis for  
15           more than a decade on electric vehicles (“EVs”) and charging systems and  
16           infrastructure to support widespread adoption of EVs. I have published more than 200  
17           peer-reviewed articles and have more than 30 issued patents. As Director for the  
18           ASPIRE Center, I lead a team of over 60 faculty and 150 students across  
19           nine universities with more than 50 industry and innovation partners, including a  
20           dedicated team of faculty and students focused on EV adoption.

21  **Q.     On whose behalf are you testifying in this docket?**

22  A.     I am testifying on behalf of PacifiCorp d/b/a Rocky Mountain Power (“Rocky  
23           Mountain Power” or the “Company”).



24 **Q. Have you previously testified before the Public Service Commission?**

25 A. No.

26 **II. PURPOSE OF TESTIMONY**

27 **Q. What is the purpose of your direct testimony in this case?**

28 A. The purpose of my testimony is to provide information regarding the impact of the  
29 proposed Electric Vehicle Infrastructure Program (“EVIP” or the “Program”), and the  
30 impact of utility-owned chargers on market competition.

31 **III. IMPACT OF PROGRAM ON EV ADOPTION**

32 **Q. In your experience, what are the factors that affect EV adoption?**

33 A. The key factors to accelerate the adoption curve for EVs include the availability and  
34 cost of public fast charging, and similarly, the perception of trustworthy, dependable,  
35 growing charging infrastructure for EVs. These factors are important for expanding  
36 adoption into a broader group of early adopters that have been considering EVs but are  
37 nervous to take action and purchase an EV. The availability of vehicles and different  
38 choices on make and model and vehicle classes are also important and are expected to  
39 expand significantly over the next two years with passenger cars from most  
40 manufacturers and many competing entries to the electric SUV and truck markets.  
41 These vehicles will continue to be in high demand with limited production in the next  
42 few years, and it is likely that regions with faster growth in charging infrastructure will  
43 capture more of the early market of EVs.

44 **Q. What are the impacts of utility-owned charging stations on EV adoption?**

45 A. Utility-owned charging stations support reaching a broader group of early adopters by  
46 instilling trust and confidence through a company where consumers already have a

47 relationship and that they consider trustworthy. Consumers will consider the  
48 Company's investment and the availability of low-cost services for public EV charging  
49 as signals that indicate now is the time to make the transition to electric and that the  
50 EV wave has now reached them in their local town. The utility-owned stations will also  
51 provide flexibility to make strategic decisions on locations to best serve broader EV  
52 adoption across the region. The ability of utility-owned charging stations to expand the  
53 availability of public fast charging is expected to significantly accelerate adoption and  
54 regional market growth for EVs and charging demand.

55 **Q. Did you assist Rocky Mountain Power in conducting an analysis to assess how the**  
56 **Company's proposed EVIP would impact the adoption of EVs in Utah?**

57 A. Yes. I provided a report on adoption forecasts for EVs in Utah resulting from the  
58 proposed EVIP and provided estimates for the demand, utilization, and revenue from  
59 public direct current fast charging ("DCFC"), which was submitted to the Company on  
60 December 29, 2020. I updated the model spreadsheet associated with the report to  
61 include minor modifications and additional scenarios in the analysis as part of a data  
62 request.<sup>1</sup> The additional scenarios do not alter the conclusions in the study.

63 **Q. Mr. Robert A. Davis, testifying on behalf of the Division of Public Utilities**  
64 **("DPU"), questioned your selection of the Bass model. Please explain the Bass**  
65 **model and why you selected that model.**

66 A. The Bass model has become a well-accepted model for predicting adoption of  
67 innovations in the marketplace, and EV adoption is a good candidate to follow this type  
68 of market curve. The Bass model represents different patterns of diffusion of innovation

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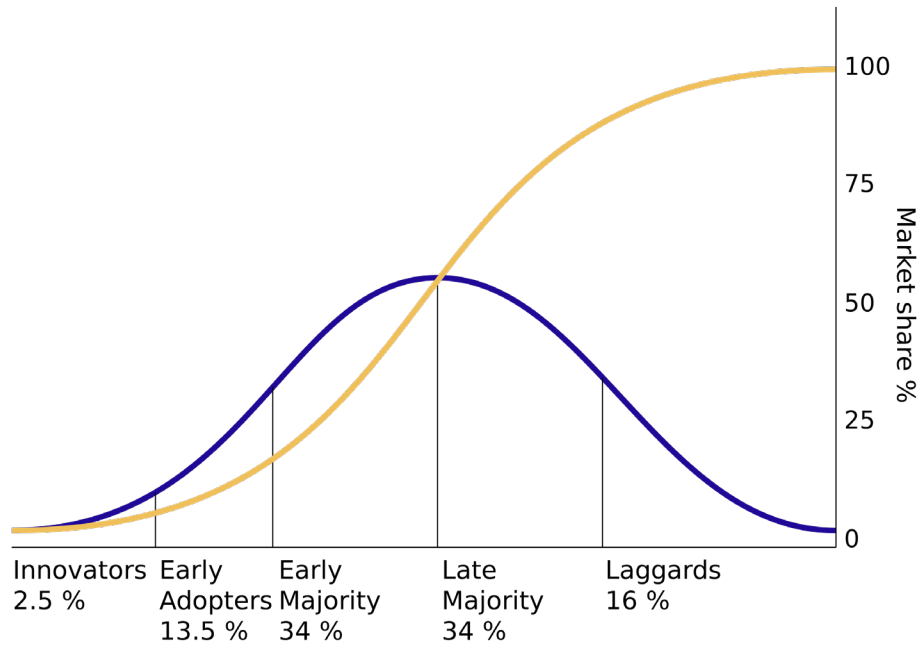
<sup>1</sup> DPU Data Request 4.2 1<sup>st</sup> Supplemental.

69 using the  $p$  and  $q$  variables, and it allows adaptation to include the localized effects of  
70 EV chargers on adoption. This was added in our model by combining the Bass model  
71 with a Panel Data Regression Model developed by Dr. Ziqi Song at USU.

72 The regression model considers certain variables involving gasoline price  
73 fluctuations, financial incentives, infrastructure availability, and drivers' socio-  
74 economic factors and creates weighting factors for these variables. These factors are  
75 then incorporated into the EV adoption. The regression model methodology provides  
76 various benefits and overcomes some of the limitations of time-series and cross-section  
77 studies. Panel data can deal with heterogeneity resulting from the variation of  
78 unmeasured explanatory variables that affect the behavior of people in different states.

79 The Bass model follows an S-curve for the cumulative probability of adoption  
80 at a point in time, and can also predict the probability density function for the likelihood  
81 of adoption at a point in time as shown below.

**Figure 1. S-Curve of Innovation**



83 **Q. What were your findings?**

84 A. Our models predict the total combined light and heavy duty EVs in Utah will reach  
 85 approximately 230,000 vehicles by 2031, which represents an estimated increase of  
 86 approximately 123,000 vehicles over a scenario without the EVIP.

**Table 1. Comparison of EV Adoption with and without EVIP**

Year	W/out RMP Programs (# vehicles)	W/RMP Programs (# vehicles)	Increase Due to RMP Programs (# vehicles)
2026	36,000	63,000	27,000
2031	107,000	230,000	123,000

92 **Q. In your opinion, does the proposed EVIP enable significant deployment of**  
93 **infrastructure that supports EV battery charging service and utility-owned**  
94 **vehicle charging infrastructure in a manner that is reasonably expected to**  
95 **increase EV adoption?**

96 A. Yes. Our models predict that the proposed EVIP will have significant impacts on both  
97 steepening the adoption curve and shifting the major growth portions of the curve  
98 earlier in time. The Company's proposed Program will act like a seed, providing  
99 awareness and instilling confidence in consumers that there will be sufficient charging  
100 infrastructure to warrant the purchase of an EV.

101 **IV. EFFECTS OF UTILITY-OWNED CHARGERS ON MARKET DYNAMICS**

102 **Q. What are the impacts of utility-owned charging stations on the EV market?**

103 A. The primary impact will be growth of the overall market for EV charging by  
104 accelerating adoption of EVs in the region. In particular, the additional charging  
105 stations and proposed RMP discount will spur growth in EV adoption by instilling  
106 confidence in consumers that EVs can meet their needs now without fear of high costs  
107 for public fast charging. This is especially important in these early years leading to  
108 widespread adoption, when EVs and third-party charging stations will both have a  
109 higher cost due to low volumes and utilization. As the Company's Program helps stir  
110 new market growth in EVs and charging demand, opportunities will grow quickly for  
111 third-party investment into charging infrastructure and EV costs will continue to come  
112 down as volumes increase and factory and supply chain capabilities are expanded.

113 Q. **Mr. David Williams, witness for DPU, along with other witnesses questions**  
114 **whether the number of charging stations owned by the Company could discourage**  
115 **third-party investment in charging stations. Do you agree with this assertion?**

116 A. I disagree for the reasons I highlighted above. Based on our model projections, the  
117 primary impact of the charging stations planned to be owned by the Company will be  
118 to accelerate growth in the market demand for EV charging well beyond the chargers  
119 made available through the Company. Our models show that during the EVIP, initial  
120 chargers will have lower levels of utilization, for example below 20 percent before  
121 2025 and below 30 percent before 2028. These early investments by the Company are  
122 needed to accelerate market growth and create demand sooner than third-party  
123 investments are likely to support during these early years in the adoption curve.  
124 Following the Company investments, the number of large (700 kilowatt) fast charging  
125 stations needed to support the market in Utah are expected to grow rapidly from around  
126 60 before 2030 to over 400 by 2040, even while maintaining high utilization levels well  
127 above 30 percent. These high levels of utilization of charging equipment and market  
128 growth will motivate significant third-party investment due to the impacts of the  
129 Company Program.

130 Q. **In your opinion, does the proposed EVIP enable competition, innovation, and**  
131 **customer choice in EV battery charging services, while promoting low-cost**  
132 **services for EV battery charging to customers?**

133 A. Yes. As I have stated above, our models predict that the proposed EVIP will  
134 significantly increase EV adoption and create more demand for EV charging. These  
135 impacts will support growth in competition and innovation in the marketplace as the

136 demand rises along the accelerated adoption curve. The EVIP is expected to be a key  
137 catalyst to early market growth in EVs in Utah. Without the EVIP, it is expected that  
138 growth of EVs in Utah will be delayed, with other states receiving the benefits of early  
139 market growth.

140 **Q. Does this conclude your testimony?**

141 A. Yes.

Rocky Mountain Power  
Docket No. 20-035-34  
Witness: Robert M. Meredith

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Rebuttal Testimony of Robert M. Meredith

November 2021



1 **Q. Are you the same Robert M. Meredith who submitted direct testimony in this**  
2 **proceeding on behalf of PacifiCorp d/b/a Rocky Mountain Power (“the Company”**  
3 **or “RMP”)?**

4 A. Yes.

5 **I. PURPOSE AND SUMMARY OF REBUTTAL TESTIMONY**

6 **Q. What is the purpose of your rebuttal testimony?**

7 A. The purpose of my rebuttal testimony in this proceeding is to support the Company’s  
8 proposed Electric Vehicle Infrastructure Plan (“EVIP”), specifically its proposed  
9 pricing for service from Company-owned charging stations. I address how the proposed  
10 prices comply with the legislative requirements for EVIP and I respond to the testimony  
11 of other parties. My rebuttal testimony responds to the direct testimonies of David  
12 Williams and Abdinasir M. Abdulle for the Division of Public Utilities (“DPU”), Justin  
13 D. Wilson for ChargePoint, Inc (“ChargePoint”), Sara Rafalson for EVgo Services,  
14 LLC (“EVgo”), Alex Ware for the Office of Consumer Services (“OCS”), Deborah  
15 Kapiloff for Western Resource Advocates (“WRA”), and Thomas Kessinger for Utah  
16 Clean Energy (“UCE”).

17 **II. PRICES FOR COMPANY-OWNED CHARGING STATIONS**

18 **Q. What is your general observation of several of the parties’ testimony that is critical**  
19 **of the Company’s proposed Schedule 60 prices?**

20 A. While some parties generally support the Company’s proposed pricing, a handful of  
21 parties’ testimony criticizes the proposed prices. Those parties suggest that the rates,  
22 particularly the discount for RMP customers, are at odds with the enabling legislation  
23 found in Utah Code section 54-4-41 which states that “(t)he commission shall find a

24 charging infrastructure program to be in the public interest if the commission finds that  
25 the charging infrastructure program....enables competition.” The thrust of their  
26 argument is that they believe that the price for RMP customers is set at too low of a  
27 level, which would stifle competition.

28 **Q. Please explain why the Company’s proposed discount for RMP customers is**  
29 **reasonable in order for the Public Service Commission of Utah (“Commission”)**  
30 **to find EVIP to be in the public interest.**

31 A. Subsection (4) of Utah Code section 54-4-41 specifies that the Commission shall find  
32 a charging infrastructure program to be in the public interest if, among other  
33 requirements, the Commission finds that the charging infrastructure program:

- 34 (a) increases the availability of electric vehicle battery charging service in the
- 35 state;
- 36 (b) enables the significant deployment of infrastructure that supports electric
- 37 vehicle battery charging service and utility-owned vehicle charging
- 38 infrastructure in a manner reasonably expected to increase electric vehicle
- 39 adoption; . . .
- 40 (d) enables competition, innovation, and customer choice in electric vehicle
- 41 battery charging services, while promoting low-cost services for electric vehicle
- 42 battery charging customers.

43 Along with ensuring that the program enables competition, two other key  
44 aspects necessary for the Company’s EVIP to be in the public interest are that it  
45 “reasonably is expected to increase electric vehicle adoption” and that it promotes  
46 “low-cost services for electric vehicle battery charging customers.” If the Company’s  
47 discount for RMP customers were to be rejected or watered down significantly as some  
48 other parties suggest, those two components of public interest would not be met.

49 **Q. Are the Company’s proposed plans for Schedule 60 pricing over the next 10 years**  
50 **anti-competitive?**

51 A. No. The Company has laid out a clear plan for how it will bring pricing for its stations  
52 in line with the cost of providing this service. Initially, however, it will not know  
53 exactly what the cost of providing this service will be until it has some time to gain  
54 experience and grow its user base. Electric vehicle (“EV”) charging is a relatively  
55 limited and nascent industry and charging lower introductory rates is not necessarily at  
56 odds with competition. It is fairly common, for example, for a new social media  
57 platform or technology service to build up its user base early on and forsake fees or  
58 advertisements. This concept is similar to what the Company is proposing for its EVIP  
59 pricing. Making its charging stations more affordable earlier with a clearly defined  
60 path to self-sufficiency for the program is key its success and the adoption of EVs.  
61 Increasing adoption of EVs will support all market players in the long run.

62 **Q. Will the Company’s prices stifle competition as some parties suggest?**

63 A. I don’t believe they would. While the Company’s proposed prices for RMP customers  
64 are less than those currently offered by Electrify America, there are a variety of other  
65 pricing structures available for direct current (“DC”) fast charging in Utah. A quick  
66 look at PlugShare, a free app that is used to search for charging stations, shows the  
67 following:

- 68 • The charging station at West Jordan Public Works has fast charging for 20 cents  
69 per kilowatt-hour (“kWh”) plus a \$1.50 session fee with free level 2 charging.
- 70 • The Maverik Station in Wellsville, Utah charges 25 cents per kWh plus a \$2.00  
71 session fee.

- 72 • The EVgo station at the REI in Salt Lake City, Utah charges \$1.99 per session  
73 plus 35 cents per minute for non-members and 28 cents per minute for EVgo  
74 Plus members who pay a \$6.99 per month subscription fee.
- 75 • The Kanab Center – West charges \$21 per hour for fast charging and 10 cents  
76 per kWh for level 2 charging.
- 77 • The Frontier Museum in Monticello, Utah, Museum of San Rafael in Castle  
78 Dale, Utah, Price City Offices in Price, Utah, Ephraim’s Restaurant in Garden  
79 City, Utah, and the Summit County Library in Park City, Utah all have free DC  
80 fast charging.
- 81 • While Electrify America’s standard fee is 43 cents per kWh, this price is  
82 reduced to 31 cents per kWh with a \$4.00 monthly membership fee.

83 In summary, there are a variety of pricing models used by charging stations in Utah.  
84 Some of them are cheaper for members who pay a monthly fee and some of them are  
85 even free. This variety of different pricing models makes it challenging for any  
86 comparison to be made to what exactly the “market” prices are for DC fast charging in  
87 Utah. While the Company’s proposed prices for RMP customers may be cheaper than  
88 some stations, they would certainly be more expensive than free. It is indeed striking  
89 to note that free DC fast charging stations exist and yet their presence does not appear  
90 to be stifling the market. With RMP’s plan for a limited deployment of stations, the  
91 Company likewise does not believe that its low-cost pricing would hinder the build-out  
92 of privately owned charging stations. In fact, the Company believes that its make-ready  
93 and incentive programs will continue to drive privately-owned charger deployment  
94 alongside a limited number of Company-owned stations.

95 **Q. Why should the Commission find the Company’s proposed prices to be in the**  
96 **public interest?**

97 A. Range anxiety is a key barrier to electric vehicle adoption. Recognizing the need for  
98 more charging stations across Utah, the Utah Legislature passed, and the Governor  
99 signed into law House Bill 396 which allows RMP a path to support the deployment of  
100 and help fill gaps for this much-needed infrastructure. The Company’s proposed  
101 pricing fairly balances the purposes of the legislation to support adoption of EVs and  
102 the infrastructure while also recognizing that customers are funding the program  
103 through their rates. A customer rate for charging that is four times higher than the price  
104 they pay for electricity while customers are also paying a surcharge for the program is  
105 not justified. Moreover, the program will only fund a limited number of Company-  
106 owned stations while other market players have unlimited opportunities to deploy their  
107 services.

108 **III. RESPONSE TO DPU WITNESS MR. WILLIAMS**

109 **Q. Please summarize DPU witness Mr. Williams’ testimony related to the Company’s**  
110 **proposed Schedule 60 pricing.**

111 A. Mr. Williams argues that the discount on DC fast charging service for RMP customers  
112 is not justified and would make it difficult for third-party charging stations to compete.  
113 He reasons that the Company, as a monopoly utility, will not have the same incentive  
114 to keep costs down, pick profitable locations, and adequately follow industry trends  
115 like other providers. If the utility offers prices substantially lower than the “market  
116 cost,” he claims that other providers will be unable to compete. He opines that rate  
117 shock and other adverse consequences will ensue if the discounted rate is transitioned

118 to cost of service. Finally, he recommends that a 5 cent per kWh discount for RMP  
119 customer be used based upon a comparison of what a customer might pay for in the  
120 surcharge. I address each of these arguments below.

121 **Q. Mr. Williams compares how 100 kWh of charging at an Electrify America station**  
122 **would cost \$43 versus \$16 for an RMP customer at a Company-owned charger**  
123 **under proposed pricing. He then concludes that “Electrify America and other**  
124 **third-party charging companies will find it difficult to compete with this**  
125 **discounted price.”<sup>1</sup> Do you agree with him?**

126 A. No. Mr. Williams has no evidence that 43 cents per kWh is in fact Electrify America’s  
127 cost of doing business. Without more insight into Electrify America’s costs and its  
128 sales volume, profitability at this price point is unknowable. It is possible that 43 cents  
129 is much higher than its cost, or that 43 cents is much lower than what it needs to  
130 breakeven at this stage with EV adoption still in its infancy. Interestingly, Electrify  
131 America charges the same price at its stations in Utah as it does in California, even  
132 though electricity prices are much higher there. Also of note, Electrify America offers  
133 a discounted 31 cents per kWh rate for users who pay a \$4 monthly subscription fee.  
134 As I noted earlier in my testimony, there are a variety of pricing models for charging  
135 service in Utah, including several free fast chargers. What is an actual “market rate” is  
136 therefore elusive.

137 Perhaps the most significant factor in determining a charging station’s  
138 profitability is its utilization or how often its chargers are getting used. At this stage of

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<sup>1</sup> Direct Testimony of DPU witness Mr. William at lines 100-113.

139 EV adoption, I think that it is highly likely that very few stations are making a net profit  
140 on charging revenues alone whether they charge 15 cents or 50 cents per kWh.

141 **Q. Do you agree with Mr. Williams that the Company will not have the same incentive**  
142 **as other providers to keep costs down and will, for the most part, face fewer**  
143 **consequences for any poor market decisions? <sup>2</sup>**

144 A. No. I believe that over the years, the Company has shown itself to be a prudent operator  
145 of its resources and diligent in its pursuit of cost efficiencies. The Company will select  
146 an experienced third-party vendor to maintain and operate its stations. Additionally,  
147 the program is intended to become self-sufficient over time, which will require the  
148 Company to prudently manage the operations of the stations. Given the pre-defined  
149 transition to cost of service, the prominence of the legislation calling on the Company  
150 to deploy \$50 million, and the importance to the Company of EV adoption in the state  
151 of Utah, the stakes are very high for the Company and it has as much of an incentive  
152 for its charging service to be as efficient, reliable, and successful as any other provider.

153 **Q. Mr. Williams expresses concern that offering too low of a rate may result in rate**  
154 **shock for customers who rely upon those prices to make decisions when the rate**  
155 **transitions to cost of service.<sup>3</sup> Does the Company share those concerns?**

156 A. Yes. The Company is likewise concerned that large price changes can be disrupting,  
157 especially for customers who have relied upon those prices to make decisions. It is for  
158 this reason that the Company is proposing a five-year period when rates would have  
159 more limited changes so the Company would have some time to build the infrastructure  
160 and grow its user base, and an additional five years for prices to gradually transition to

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<sup>2</sup> Direct Testimony of DPU witness Mr. William at lines 68-72.

<sup>3</sup> Direct Testimony of DPU witness Mr. William at lines 153-157.

161 cost of service. This plan will minimize rate shock and provide a smooth transition to  
162 cost of service. The Company plans to communicate to customers and make them  
163 aware of the planned transition throughout the program.

164 **Q. Mr. Williams shares Questar Gas Company’s pricing experience for compressed**  
165 **natural gas (“CNG”) for natural gas vehicles (“NGV”) as a cautionary tale of rate**  
166 **shock.<sup>4</sup> Is the Company setting itself up for a similar scenario to play out here?**

167 A. No. First off, the NGV rate for Questar Gas Company was established in 1989 and  
168 only had small rate adjustments for 18 years until it was moved 50 percent towards cost  
169 of service over six months. This price jump was the gasoline equivalent of moving the  
170 price for CNG vehicles from \$0.80 per gallon to \$1.43 per gallon or 79 percent within  
171 a short time.<sup>5</sup> In contrast, the Company’s plan calls for a five-year gradual transition  
172 that would avoid such a sharp change in price. Second, the market for NGV over ten  
173 years ago should not be compared to the state of the EV market right now. A very key  
174 part of establishing a successful business model for charging stations and attaining  
175 parity with cost of service is achieving higher levels of station utilization. EV adoption  
176 will drive station utilization. EVs right now seem to be at an inflection point where  
177 adoption is going to begin to really take hold with recent announcements of major auto  
178 manufacturers committing to invest billions of dollars for new models and production  
179 facilities.<sup>6</sup> This is a very different scenario than where NGV’s were at during the years  
180 of 1989 and 2007.

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<sup>4</sup> Direct Testimony of DPU witness Mr. William at lines 157-163.

<sup>5</sup> *In the Matter of the Application of Questar Gas Company to Increase Distribution Non-Gas Rates and Charges and Make Tariff Modifications*, Docket No. 07-057-13, Order at 35, 40-42 (Dec. 22, 2008).

<sup>6</sup> See <https://plants.gm.com/media/us/en/gm/ev.detail.html/content/Pages/news/us/en/2021/jun/0616-gm.html>, <https://media.ford.com/content/fordmedia/fna/us/en/news/2021/09/27/ford-to-lead-americas-shift-to-electric-vehicles.html>, and <https://www.cnbc.com/2021/07/08/stellantis-to-invest-35point5-billion-in-evs-and-new-technologies-by-2025.html> for example.



181 **Q. Mr. Williams expresses concerns with relying upon one provider, Electrify**  
182 **America, to set rates and questions whether its pricing truly reflects the “actual**  
183 **market rate.”<sup>7</sup> Please comment.**

184 A. I think Mr. William’s is right that Electrify America may not necessarily represent the  
185 “market rate.” As I noted earlier, there are many different pricing models and levels in  
186 the EV charging marketplace. Given this wide assortment of prices and structures and  
187 the Company’s lack of data on its cost of providing this service at this time, it is not  
188 particularly useful to entirely rely on a “market rate” absent accounting for other  
189 factors. However, the Company needed a starting place from which to base its pricing  
190 and it used Electrify America’s, since it is a large provider with a straight-forward cents  
191 per kWh rate and chargers that were the most like those the Company plans to install.

192 **Q. Mr. Williams notes that the Company’s 75 percent RMP customer discount is not**  
193 **based upon a particular analysis.<sup>8</sup> Is this true?**

194 A. Yes. A 75 percent discount level was used by Company, because in its judgment, this  
195 produced reasonable and appropriate prices that considered the statutory requirement  
196 for the Company to promote “low-cost services,”<sup>9</sup> and accounted for the fact that RMP  
197 customers would be paying for this infrastructure through their Schedule 198  
198 surcharge.

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<sup>7</sup> Direct Testimony of DPU witness Mr. William at lines 164-172.

<sup>8</sup> Direct Testimony of DPU witness Mr. William at lines 114-123.

<sup>9</sup> Utah Code Ann. § 54-4-41(4)(d).

199 **Q. What analysis does Mr. Williams present to try to justify a much lower discount**  
200 **level?**

201 A. Mr. Williams makes some assumptions about a typical EV customer and deduces that  
202 such a customer would pay \$3.51 more per year in the surcharge to fund EVIP but  
203 would save \$172.50 per year in away-from-home charging due to the RMP discount.<sup>10</sup>  
204 He recommends that the Commission require the Company to perform analysis  
205 comparing the discount paid to the surcharge received for a typical EV customer as a  
206 starting point for determining a discount. He then proposes a much smaller 5 cents per  
207 kWh RMP customer discount based upon an “outlier case” with different assumptions  
208 where the surcharge paid of \$8.45 would be close to a charging discount of \$8.63.<sup>11</sup>

209 **Q. Is Mr. Williams’ analysis an appropriate way to determine a discount?**

210 A. No. There is no reason why the discount from a rather high 43 cent per kWh charge  
211 should be based upon what a typical customer would pay in surcharges to fund the  
212 program. Customers will pay for the cost of the infrastructure through the surcharge  
213 and the cost of this infrastructure is largely fixed. It is not reasonable, after paying for  
214 this fixed cost, for customers to then be required to pay more than three times their cost  
215 of charging at home.<sup>12</sup> The fixed cost of these stations will be the same whether one  
216 customer uses them or 10,000 customers use them. A more appropriate comparison  
217 could be framed that since customers pay 100 percent of the fixed cost of the program,  
218 they should get a 100 percent discount over marginal cost. The Company took a more  
219 measured approach than this and proposed a 75 percent discount.

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<sup>10</sup> Direct Testimony of DPU witness Mr. William at lines 124-152.

<sup>11</sup> Direct Testimony of DPU witness Mr. William at lines 177-185.

<sup>12</sup> Per Attachment A of the Final Order in the 2020 Rate Case, the average residential price is about 10.8 cents per kWh (\$730,195 thousands divided by 6,782,999 MWh). 35 cents divided by 10.8 cents is about 3.24.

220 While it may be true that only some customers may be able to take advantage  
221 of the program and utilize Company-owned chargers to charge their EVs, every  
222 customer at least has the opportunity to take advantage of the program. A similar  
223 paradigm exists with the Company’s energy efficiency programs. All customers pay  
224 for energy efficiency and all are eligible to receive incentives. The incentive level that  
225 a customer receives is not proportional to the demand-side management (“DSM”)  
226 surcharge paid. It makes even less sense for EVIP benefits to be tied to the specific  
227 surcharge paid than for DSM, since EVIP’s costs are largely fixed. Mr. Williams  
228 presents the wrong comparison here for justifying the paltry discount level he  
229 recommends, and his proposal would compromise the Company’s statutory obligation  
230 to promote low-cost charging services.

#### 231 IV. RESPONSE TO DPU WITNESS DR. ABDULLE

232 **Q. Dr. Abdulle recommends that the Company “continuously monitor pricing at**  
233 **Electrify America stations and develop cost information for its own stations and**  
234 **report this information to the Commission on a regular basis over the life of the**  
235 **program for parties to evaluate.”<sup>13</sup> Do you agree with this recommendation?**

236 A. The Company will certainly develop cost information for its own charging stations,  
237 which it will report through its annual cost of service filings. The Company does not  
238 agree to continuously monitor and report on the prices charged by Electrify America or  
239 other providers because such reporting would be administratively burdensome and not  
240 actionable until the Company makes its first transition towards cost of service in  
241 five years. At that time, the Company would present any pricing from other providers

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<sup>13</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 61-64.

242 if it uses it to inform its transitional price changes. Otherwise, the pricing for publicly  
243 available charging stations is readily available online and any party desiring to do such  
244 research can do so.

245 **Q. Dr. Abdulle calls out that the Company rounded its fast-charging price for non-**  
246 **RMP customers down by two pennies from 42 cents to 40 cents per kWh.<sup>14</sup> Why**  
247 **did the Company do this?**

248 A. The Company rounded this charge down to 40 cents to make its pricing easier to  
249 understand and remember for customers. This is a similar practice to when the  
250 Company rounds its customer service charge to the nearest dollar. The Company would  
251 prefer to keep its proposed prices but concedes that using either 40 or 42 cents is not a  
252 meaningful difference either way and recognizes the DPU's concern.

253 **Q. Dr. Abdulle reasons that the Company's discount would provide a strong incentive**  
254 **for RMP customers to charge at Company-owned stations which could pose a**  
255 **barrier to entry for other providers and possibly even drive existing operators out**  
256 **of business. He compares the Company's proposed pricing to predatory dumping.**  
257 **He claims that "(t)his will result in RMP getting monopoly in DC charging stations**  
258 **in Utah." He concludes that the proposed pricing will not promote competition.<sup>15</sup>**  
259 **How do you respond?**

260 A. I disagree that the Company's proposed pricing plan is anti-competitive or akin to  
261 predatory dumping. As I discussed earlier, Electrify America is just one provider and  
262 there are many others who price fast charging at different levels including some that  
263 are free. Additionally, the Company has a plan to purposefully transition to cost of

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<sup>14</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 88-96.

<sup>15</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 103-127.

264 service over time and will only deploy a limited number of stations. With the  
265 Company's limited deployment and its transition to cost of service, there will be ample  
266 space for other providers to compete. It would be necessary for the Company to be the  
267 dominant player in the market or for it to flood the market with its services for it be  
268 engaging in predatory dumping. As described earlier, the Company's strategy behind  
269 its pricing is to offer somewhat lower introductory prices now to support EV adoption  
270 and utilization of the charging stations.

271 **Q. Dr. Abdulle claims that the Company is only able to provide lower prices than**  
272 **other providers because deployment of the stations would be subsidized by retail**  
273 **customers paying the Schedule 198 surcharge.<sup>16</sup> Do you consider this a subsidy?**

274 A. The HB 396 legislation states that the Company's:

275 investment in utility-owned vehicle charging infrastructure is prudently made  
276 if the large-scale electric utility demonstrates in a formal adjudicative  
277 proceeding before the commission that the investment can reasonably be  
278 anticipated to... provide the large-scale electric utility's customers significant  
279 benefits that may include revenue from utility vehicle charging service that  
280 offsets the large-scale electric utility's costs and expenses.

281 In other words, the expectation is that in the long run, the stations will pay for  
282 themselves and indeed bring net benefits for customers as a result of the charging  
283 revenue. It is therefore more appropriate to think of RMP's customers as investing in  
284 the infrastructure rather than subsidizing it.

285 **Q. Are other providers of EV charging services free from subsidies or outside sources**  
286 **of funding?**

287 A. No. Many of the stations in Utah that presently exist took advantage of the Company's  
288 Schedule 120 incentives that can provide up to 75 percent of the cost of total charger

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<sup>16</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 128-133.

289 and installation costs for DC fast charging. Businesses can also take advantage of the  
290 Alternative Fuel Vehicle Refueling Property Credit when they file their federal income  
291 taxes which is the smaller of 30 percent of the cost or \$30,000.<sup>17</sup> It is also not at all  
292 uncommon for outside funding to be provided for building out charging infrastructure.  
293 For example, some auto manufacturers have partnered with charging service providers  
294 to deploy stations.<sup>18</sup> Additionally, in the case of Electrify America, investment in EV  
295 chargers was required per the terms of the settlement in the Volkswagen diesel  
296 emissions matter.<sup>19</sup> The fact that RMP customers will fund the infrastructure does not  
297 on its face differentiate its competitive position relative to other providers.

298 **Q. Dr. Abdulle states that “there is too much benefit transferred from non-EVIP to**  
299 **EVIP customers. Essentially, EVIP and non-EVIP customers are two separate**  
300 **classes.”<sup>20</sup> Do you agree with his characterization?**

301 A. No. Dr. Abdulle is trying to imply that there are customers who take advantage of EVIP  
302 (i.e., users of the charging stations) and customers who do not and that there is an  
303 interclass subsidy. I think it’s unhelpful to think of EVIP in those terms. I think it’s  
304 better to think of EVIP as a program available to any customer on a non-discriminatory  
305 basis like the Company’s DSM programs. Any customer who gets an EV and charges  
306 at one of the Company’s stations would get the discount. Further, the Company has  
307 plans to measure how revenue for the stations (from RMP and non-RMP customers)

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<sup>17</sup> See <https://www.irs.gov/pub/irs-pdf/i8911.pdf>.

<sup>18</sup> See <https://cheddar.com/media/general-motors-partners-with-evgo-to-bolster-electric-vehicle-presence> and <https://media.ford.com/content/fordmedia/fna/us/en/news/2019/10/17/ford-introduces-north-americas-largest-electric-vehicle-charting-network.html>

<sup>19</sup> See <https://www.caranddriver.com/news/a36956207/volkswagen-seeking-investor-electrify-america/>

<sup>20</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 133-138.

308 stacks up to cost of service and has a plan for those stations to stand on their own in the  
309 long run.

310 **Q. As an alternative to the DPU recommended 35 cents per kWh fast charging price**  
311 **for RMP customers, Dr. Abdulle recommends that the Commission could accept**  
312 **the Company's pricing but only if the program were to only last five years and**  
313 **have a two-year transition to cost of service.”<sup>21</sup> Is this a reasonable trade-off?**

314 A. No. Time is needed for the stations to be built and for the Company to gain experience  
315 before it can begin transitioning to cost of service. Rate shock would also be a big  
316 concern if this alternative were approved. A two-year transition would set the Company  
317 up to have a similar scenario as what occurred with Questar Gas Company's NGV rate  
318 which could result in very negative experiences for customers.

319 **Q. Dr. Abdulle notes some confusion about the proposed timing of the recovery of**  
320 **EVIP through Schedule 198.<sup>22</sup> Please respond.**

321 A. The Company's proposed recovery of EVIP is \$5 million per year over ten years. At  
322 the five-year midpoint, when other aspects of the program are up for evaluation, the  
323 Company will evaluate how recovery and net spending have tracked as well as any  
324 remaining future investments/expenses and will recommend any changes as needed at  
325 this time. The Company believes that this longer recovery period is preferable because  
326 it will minimize the rate impact on customers.

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<sup>21</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 139-155.

<sup>22</sup> Direct Testimony of DPU witness Dr. Abdulle at lines 203-212.

327           **V.       RESPONSE TO CHARGEPOINT WITNESS MR. WILSON**

328   **Q.     How do you respond to Mr. Wilson’s contention that the Company’s prices will**  
329       **undercut prices the competitive market is able to offer?**<sup>23</sup>

330   A.     Mr. Wilson provides no evidence for what the competitive market is *able* to offer. We  
331       know how some providers are pricing their service by examining public information,  
332       such as that which can be found on PlugShare. As I stated earlier, this includes a wide  
333       array of different pricing levels. Also, public charging has been the recipient of  
334       different subsidies and some of the different providers have received outside sources  
335       of funding. What the competitive market is able to offer and what its actual pricing is  
336       could be two different things. The Company has laid out a very transparent plan for  
337       measuring how its pricing will compare to the cost of providing service, but such  
338       information is not presently available for other providers.

339   **Q.     Do you agree with Mr. Wilson that the Company’s rates are so low that it will**  
340       **incentivize customers to charge away from home?**<sup>24</sup>

341   A.     No. At 10 cents per kWh for off-peak charging plus a \$1 session fee, a 50 kWh session  
342       would cost about 12 cents per kWh and a 100 kWh session would cost about 11 cents  
343       per kWh. This is basically right at the level of the Company’s second tier energy  
344       charges which are 11.9733 cents and 10.5959 cents for summer and winter energy,  
345       respectively. A customer could pay even less for energy if charging during off-peak on  
346       a time-of- use rate, which could include Schedule 2 or Schedule 2E, if the Commission  
347       approves continuing the rate after its initial pilot period. While the rates are similar, it  
348       is important to note that there is a significant convenience factor that weighs towards

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<sup>23</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 649-653 and 924-935.

<sup>24</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 936-976.



349 at-home charging for customers. If a customer can charge from home, that is likely  
350 more convenient than waiting at a charging station and waiting for the charge to  
351 complete. Excessive DC fast charging can also cause a vehicle's battery to degrade  
352 quicker over time, which also encourages a customer, if able, to charge at home.

353 **Q. Mr. Wilson notes that the Company's proposed prices for Level 2 charging are**  
354 **"significantly less than the rates residential customers pay at their homes."<sup>25</sup> Do**  
355 **you think this is problematic or will lead customers to choose to charge away from**  
356 **their home?**

357 A. No. I agree that the Company's prices for Level 2 charging are less than residential  
358 rates. However, the convenience factor will prevent most customers from using  
359 Level 2 charging to save money, since Level 2 charging takes significantly longer than  
360 DC fast charging. It is also important to note that there are many locations where  
361 Level 2 charging is free, and the Company does not plan on a significant build-out of  
362 Level 2 chargers with DC fast charging being the main attraction at its charging  
363 stations.

364 **Q. Mr. Wilson contends that a charging station would be most likely to take service**  
365 **from the Company on Schedule 6A and that it would not be able to purchase**  
366 **electricity from the Company for less than the Company's rates for Company-**  
367 **owned charging until those stations got to a 30 percent load factor.<sup>26</sup> Do you agree**  
368 **that charging stations will most likely utilize Schedule 6A?**

369 A. No. Schedule 6A provides a good opportunity for very low utilization customers to  
370 pay less for demand on this time-of-use option. This can be a great fit for separately

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<sup>25</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 936-976.

<sup>26</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 900-923.

371 metered charging stations that might be located in more remote locations. However, it  
372 is more typical, especially in denser metro areas, for DC fast chargers to be anchored  
373 to a large retail location like a grocery or big box store with the chargers behind the  
374 store's meter. If charging doesn't coincide with the store's peak kW usage, the cost of  
375 electricity for the chargers can be much less than on Schedule 6A.

376 **Q. Do you agree with Mr. Wilson that the Company's benchmarking comparison**  
377 **upon which it bases its pricing should consider more than just Electrify America?**<sup>27</sup>

378 A. No. As I stated in my response to Mr. Williams and Dr. Abdulle, Electrify America has  
379 stations that are the most comparable to the ones the Company plans to install and  
380 charges in a straightforward way. Other providers use different pricing structures for  
381 which a direct comparison is challenging.

382 **Q. Is Mr. Wilson correct in stating that the Company provided no justification for**  
383 **proposed 75 percent discount for RMP customers?**

384 A. No. The justification for the 75 percent discount for RMP customers is that it produces  
385 prices that compare favorably to gasoline and also reflects the fact that customers are  
386 paying for the cost of the stations through a surcharge on their bill.

387 **Q. Is it true as Mr. Wilson claims that that the Company's five cents per kWh off-**  
388 **peak credit lacks support?**<sup>28</sup>

389 A. No. As I stated in my direct testimony, five cents represents the difference between the  
390 average Energy Imbalance Market ("EIM") three cent per kWh price during off-peak

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<sup>27</sup> See Direct Testimony of ChargePoint witness Mr. Wilson at lines 879-885.

<sup>28</sup> See Direct Testimony of ChargePoint witness Mr. Wilson at lines 891-895.

391 hours and an eight cent per kWh on-peak price that would be required in conjunction  
392 with the three cents per kWh value to yield the marginal cost of service for Schedule 6.<sup>29</sup>

393 **Q. Mr. Wilson claims that “(u)nless a site host offers DC fast charging as a ‘loss**  
394 **leader,’ these prices will be impossible for site hosts to compete with.”<sup>30</sup> Does Mr.**  
395 **Wilson provide any support for this claim?**

396 A. No. Mr. Wilson provides no support for this claim. At this nascent stage of the industry,  
397 it is likely that most charging stations are and will be unprofitable until EV adoption  
398 accelerates further, despite all of the subsidies that are available. Fortunately, I think  
399 that this will all change in the intermediate term as EVs become more mainstream and  
400 the business model for public charging services becomes more viable.

401 **Q. Do you agree with Mr. Wilson that “the long-term effects of RMP undercutting**  
402 **the market will be detrimental to EV drivers and RMP’s customers”?<sup>31</sup>**

403 A. No. With the volume of EVs that are likely coming, there will be more than sufficient  
404 need for both the Company’s limited deployment of charging stations and stations from  
405 other providers. Also, the price for Company-owned charging service for RMP  
406 customers would not stay at that level under the Company’s proposed plan, but will  
407 transition to cost of service over time. It could actually be argued that the Company’s  
408 pre-defined transition to cost of service puts it in more of a competitively risky position  
409 than other providers.

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<sup>29</sup> Direct Testimony of Company witness Mr. Meredith at lines 117-131.

<sup>30</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 898-899.

<sup>31</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 928-931.

410 **Q. Mr. Wilson recommends that the Commission require the Company to survey**  
411 **pricing for public charging in its service territory annually to benchmark its price**  
412 **against an average.<sup>32</sup> Would such a survey be a workable way to benchmark the**  
413 **Company's prices?**

414 A. No. As I mentioned in response to Dr. Abdulle, benchmarking all stations would be  
415 administratively burdensome and not actionable. A comparison of different pricing  
416 structures and levels could be useful around the time of the first transition in five years.

417 **Q. Mr. Wilson makes the point that DC fast charging can be inelastic with drivers**  
418 **simply needing to get back on the road, which can result in time of use pricing**  
419 **being ineffective.<sup>33</sup> Please comment.**

420 A. I agree with Mr. Wilson that drivers who are on a trip will likely not modify when they  
421 charge in response to time-of-use pricing. Public charging, however, can make it  
422 possible for people who live in multi-family dwellings, renters who cannot change the  
423 wiring in their home, or others who may not have a dedicated place for parking to be  
424 able to get access to charging. For these customers, off-peak charging may be an  
425 important way to lower the cost of their everyday driving.

426 **Q. Please respond to Mr. Wilson's recommendation that time of use pricing be**  
427 **accomplished with a 5 cent per kWh on-peak adder instead of a 5 cent per kWh**  
428 **off-peak credit to mitigate "anticompetitive effects."<sup>34</sup>**

429 A. I disagree with Mr. Wilson that the Company's proposed pricing is anticompetitive. I  
430 do recognize that the Commission may ultimately order the Company to use prices at

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<sup>32</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 977-985.

<sup>33</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 986-993.

<sup>34</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 994-1002.

431 higher levels than what it has proposed. Mr. Wilson's specific recommendation to  
432 swing the credit to a charge would effectively increase the Company's pricing by  
433 five cents per kWh. Regardless of the pricing level selected by the Commission, I  
434 recommend that time-of-use pricing be accomplished by labeling in the tariff the on-  
435 peak price as the base and having an incremental off-peak discount credit. Expressing  
436 the prices in this way is a simple approach and enhances the customer's experience.

437 **Q. What is your reaction to Mr. Wilson's recommendation that the discount for RMP**  
438 **customers be set at no more than 10 percent with a glide path where the discount**  
439 **is reduced by one percent per year over ten years?**<sup>35</sup>

440 A. I disagree with his proposal for all the same reasons I have stated earlier. The  
441 Company's proposed discount will promote low-cost charging services and help EV  
442 adoption, consistent with the statute. It is also appropriate for customers to receive a  
443 significant discount since they are funding the program through the surcharge. Mr.  
444 Wilson's proposed discount would not at all be meaningful to customers and would  
445 not reflect the significant contribution they have made through Schedule 198 rates.

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<sup>35</sup> Direct Testimony of ChargePoint witness Mr. Wilson at lines 1003-1012.

446 VI. RESPONSE TO EVGO WITNESS MS. RAFALSON

447 Q. Ms. Rafalson argues that private sector providers “must charge a price that  
448 reflects all their development and maintenance costs,” but utilities can “charge a  
449 lower price because they can recover a large portion of their costs through  
450 ratepayers, even those not charging at their EV stations.” She argues that the  
451 Company’s proposed prices therefore create an uneven playing field.<sup>36</sup> Please  
452 respond.

453 A. Ms. Rafalson provides no evidence that other providers must pay a price reflecting all  
454 their development and maintenance costs nor that the Company has a unique advantage  
455 because of its funding by ratepayers given the various subsidies and funding that are  
456 available to non-utility owners.

457 Q. Do you agree with Ms. Rafalson’s recommendation for Schedule 60 rates to  
458 “consider the pricing of all privately-owned chargers in its service territory, not  
459 only one provider, and should take into account all costs, including operations and  
460 maintenance costs”?<sup>37</sup>

461 A. As I stated earlier in my response to Mr. Williams, Dr. Abdulle and Mr. Wilson, it is  
462 challenging to put all of pricing for different charging stations on the same basis given  
463 their different structures with discounts for members, charging by the hour, and even  
464 free charging at some stations. Basing the Company’s prices on Electrify America is  
465 reasonable since it is a major provider whose stations are the most like the ones the  
466 Company intends to develop and who expresses its prices in a simple cents per kWh  
467 format. The Company’s pricing will take into account all costs including operations

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<sup>36</sup> Direct Testimony of EVgo witness Ms. Rafalson at page 12.

<sup>37</sup> Direct Testimony of EVgo witness Ms. Rafalson at page 20.

468 and maintenance as part of including service from Company-owned stations as a  
469 separate class in the cost of service study.

470 **VII. RESPONSE TO OCS WITNESS MR. WARE**

471 **Q. Mr. Ware expresses concern about “the lost opportunity if there is not a**  
472 **continuation of Schedule 2E or a replacement time-of-use (TOU) rate”.<sup>38</sup> Do you**  
473 **share his concern?**

474 A. Yes. Time-of-use pricing can be a very important way to mitigate the impact that  
475 incremental charging load can have on the grid. While the Company’s evaluation of  
476 Schedule 2E, which is due at the end of the year, is not completed yet I am hopeful that  
477 continuation of Schedule 2E will be approved in some form.

478 **Q. Do you agree with Mr. Ware’s claims that the Company did not follow through on**  
479 **its commitment to build a website that includes education on appropriate charging**  
480 **behavior?**<sup>39</sup>

481 A. No. The Company did have information about its Schedule 2E Electric Vehicle Time  
482 of Use program, but it took this information down after Schedule 2E was closed to new  
483 service at the end of 2020. Please refer to Exhibit RMP\_\_\_(RMM-1R) for the Schedule  
484 2E content that the Company had on its website. The Company has also recently  
485 revamped its website content on time of use across all its states and has a promotional  
486 video that discusses the benefits of time-of-use for customers. See  
487 <https://www.rockymountainpower.net/savings-energy-choices/time-of-day.html>.

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<sup>38</sup> Direct Testimony of OCS witness Mr. Ware at lines 162-181.

<sup>39</sup> Direct Testimony of OCS witness Mr. Ware at lines 209-216.

488 **Q. Mr. Ware recommends that if Schedule 120 residential incentives are continued,**  
489 **there should be an educational component to inform customers of the best times**  
490 **to charge their vehicles to avoid impacts to the grid.<sup>40</sup> Please comment.**

491 A. I agree. If Schedule 2E is approved in some form and/or there is a successor time-of-  
492 use program, participation should be required for at least a year for that customer to  
493 receive a residential Schedule 120 incentive if residential Schedule 120 incentives are  
494 continued.

495 **Q. Mr. Ware calls out that Special Condition 1 of proposed Schedule 60 should have**  
496 **specific terms and prices for an idling penalty and that the Company does not have**  
497 **authority to institute a penalty absent Commission approval.<sup>41</sup> Why was the**  
498 **Company’s Special Condition 1 intentionally vague about the specific pricing and**  
499 **terms of the penalty?**

500 A. In the Company’s proposed Schedule 60 tariff, Special Condition 1 did not contain any  
501 details on any penalties for idling, because the Company has not yet conducted a  
502 request for proposals (“RFP”) and selected a vendor. The Company therefore does not  
503 know yet what types of penalties the vendor it ultimately selects will be capable of  
504 billing. I agree with Mr. Ware’s concern though and recommend that Special Condition  
505 1 be re-worded, as he suggests, to read, “Customers are expected to make a charging  
506 station available immediately following session completion. If cause arises, the  
507 Company may seek approval from the Commission to institute a penalty policy.” After  
508 the Company selects a vendor, it will request approval of any specific idling penalty  
509 once it knows the vendor’s capabilities.

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<sup>40</sup> Direct Testimony of OCS witness Mr. Ware at lines 290-310.

<sup>41</sup> Direct Testimony of OCS witness Mr. Ware at lines 334-358.



510 **Q. Mr. Ware also recommends that for the first five years of the program that**  
511 **Schedule 60 prices would change in tandem with all price changes, not just base**  
512 **price changes.<sup>42</sup> Do you agree?**

513 A. Yes. I think that Mr. Ware's recommendation makes sense. He also recommends  
514 softening the language describing how prices would change each year since Special  
515 Condition 6 notes that the Company may request to modify rates as circumstances arise.  
516 The Company agrees to modify Special Condition 5, as Mr. Ware suggests, to read,  
517 "For the first five years of the Electric Vehicle Incentive Program, the Company intends  
518 to request to change prices listed on this tariff by the same percentage as retail price  
519 changes rounded to the nearest cent."

520 **Q. Finally, Mr. Ware recommends some clarifying changes to Special Condition 6 of**  
521 **Schedule 60.<sup>43</sup> Do you agree with those changes?**

522 A. Yes. The Company agrees to modify Special Condition 6 as Mr. Ware suggests.

523 **VIII. RESPONSE TO WRA WITNESS MS. KAPILOFF**

524 **Q. Ms. Kapiloff recommends that residential incentives be tied to participation in**  
525 **time-of-use pricing.<sup>44</sup> Please comment.**

526 A. I agree with Ms. Kapiloff. As I responded to Mr. Ware, if Schedule 2E is approved in  
527 some form and/or there is a successor time of use program, participation should be  
528 required for at least a year for residential customers who receive Schedule 120  
529 incentives, if residential Schedule 120 incentives are continued.

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<sup>42</sup> Direct Testimony of OCS witness Mr. Ware at lines 360-392.

<sup>43</sup> Direct Testimony of OCS witness Mr. Ware at lines 360-392.

<sup>44</sup> Direct Testimony of WRA witness Ms. Kapiloff at lines 365-374.

530 **Q. What is your opinion of Ms. Kapiloff's recommendation that Schedule 2E be**  
531 **modified so that an extension be made until the Commission makes a final decision**  
532 **as to the continuation of an EV-charging time-of-use rate instead of six months as**  
533 **the Company proposes?**<sup>45</sup>

534 A. The Company takes no position on this recommendation. I believe that six months will  
535 be sufficient time for stakeholders to review the Schedule 2E final report and for the  
536 Commission to make a decision.

537 **Q. Do you agree with Ms. Kapiloff's suggestion for the Schedule 60 glidepath to cost**  
538 **of service to begin after two years and take place over an eight-year period?**<sup>46</sup>

539 A. No. While I appreciate Ms. Kapiloff's desire to have the transition occur quicker to  
540 promote the goal of enabling competition and avoid users gaining a sense of  
541 entitlement, I am concerned that two years will not be enough time. If Ms. Kapiloff's  
542 suggested glidepath were approved, the first transition price change would be based  
543 upon the data in the cost of service study for the first year of the program. The  
544 Company will likely just be getting started in its first year and may have very few  
545 stations installed and a low level of usage. I do not think it would be wise to change  
546 Schedule 60's prices based upon this first cost of service study.

547 **Q. Ms. Kapiloff recommends that any transitional price increase be applied to on-**  
548 **peak charges.**<sup>47</sup> **Please comment.**

549 A. I do not think the specific application of transitional price increases to different  
550 components should be determined at this time, since cost of service data and billing

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<sup>45</sup> Direct Testimony of WRA witness Ms. Kapiloff at lines 384-406.

<sup>46</sup> Direct Testimony of WRA witness Ms. Kapiloff at lines 589-603.

<sup>47</sup> Direct Testimony of WRA witness Ms. Kapiloff at lines 618-644.

551 determinants for Schedule 60 are unavailable. It may be reasonable to apply a greater  
552 increase to on-peak charges to encourage better utilization of the system but applying  
553 the entire increase to on-peak may be challenging if there are substantially less units  
554 over which to spread this cost. It is more appropriate to make such determinations  
555 closer to the time of the first transition price change.

556 **IX. RESPONSE TO UCE WITNESS MR. KESSINGER**

557 **Q. Mr. Kessinger emphasizes the importance of stakeholder engagement on Schedule**  
558 **60 prices for Company-owned charging service.<sup>48</sup> Please comment.**

559 **A.** I generally agree with Mr. Kessinger that stakeholder engagement is important and  
560 often leads to better outcomes for customers as different perspectives are considered.

561 **Q. Mr. Kessinger calls out that in my direct testimony I describe the first five years**  
562 **of the plan as having “greater pricing stability... subject to limited adjustments or**  
563 **modifications if warranted” and then makes the comment that “(a) determination**  
564 **of whether adjustments or modifications are warranted necessitates stakeholder**  
565 **engagement.”<sup>49</sup> Do you agree?**

566 **A.** In the initial years prior to transitioning to cost of service, the Company intends for  
567 changes to Schedule 60 pricing to be applied rather mechanically with price changes  
568 following the average change in price for its retail customers. Because of rounding, it  
569 is possible that by following this logic there may be years when no price change is  
570 warranted. I agree though with Mr. Kessinger that stakeholder engagement should  
571 occur if the Company requests some deviation from this plan during the initial period.

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<sup>48</sup> Direct Testimony of UCE witness Mr. Kessinger at lines 263-281.

<sup>49</sup> Direct Testimony of UCE witness Mr. Kessinger at lines 271-281.

572 Stakeholders should also be engaged prior to making the first price change that  
573 transitions to cost of service.

574 **Q. Mr. Kessinger specifically questions the \$1.00 session fee as requiring greater**  
575 **stakeholder engagement because he is concerned that the fee may disincentivize**  
576 **usage and he also desires clarity on “when, why, or where session fees should be**  
577 **included.”<sup>50</sup> How do you respond?**

578 A. I believe that my direct testimony as well as the Company outreach prior to filing  
579 already have provided this information. For most customers, one dollar is a fairly small  
580 amount to pay which the Company believes will not disincentive usage. At the same  
581 time, the Company believes that having a fixed element of the pricing is important to  
582 send appropriate price signals for any card-based transaction fees that a vendor may  
583 impose and to also reflect some of the fixed costs of providing this service. The  
584 Company believes that session fees should apply to all sessions from Company-owned  
585 charging stations including DC fast and Level 2 charging for RMP customer and non-  
586 RMP customer users.

587 **Q. Mr. Kessinger recommends tying residential Schedule 120 incentives to a time of**  
588 **use rate as soon as one is available.<sup>51</sup> Do you agree?**

589 A. Yes. As I responded to Mr. Ware and Ms. Kapiloff, if Schedule 2E is approved in some  
590 form and/or there is a successor time of use program, participation should be required  
591 for at least a year for residential customers who receive Schedule 120 incentives, if  
592 residential Schedule 120 incentives are continued.

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<sup>50</sup> Direct Testimony of UCE witness Mr. Kessinger at lines 263-270.

<sup>51</sup> Direct Testimony of UCE witness Mr. Kessinger at lines 326-335.

593 **Q. Mr. Kessinger recommends that an idling-fee be determined by the Commission.**<sup>52</sup>

594 **Do you agree?**

595 A. Yes. The Company agrees to file with the Commission for approval of proposed  
596 modifications to the language in Schedule 60 as Mr. Ware suggested and request a more  
597 specific idling-fee with the Commission after it understands the billing capabilities of  
598 the vendor it selects.

599 **X. CONCLUSION**

600 **Q. Do you have an exhibit containing changes that you agreed to for proposed**  
601 **Schedule 60?**

602 A. Yes. Please refer to Exhibit RMP\_\_\_\_(RMM-2R) for an updated version of proposed  
603 Schedule 60.

604 **Q. Please summarize your rebuttal testimony.**

605 A. The Company's proposed prices and planned transition to cost of service are just,  
606 reasonable and in the public interest. They will ensure a positive experience for RMP  
607 customers and will help advance electric vehicle adoption in the state of Utah.

608 **Q. Does this conclude your rebuttal testimony?**

609 A. Yes.

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<sup>52</sup> Direct Testimony of UCE witness Mr. Kessinger at lines 350-366.

Rocky Mountain Power  
Exhibit RMP\_\_ (RMM-1R)  
Docket No. 20-035-34  
Witness: Robert M. Meredith

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Exhibit Accompanying Rebuttal Testimony of Robert M. Meredith

Schedule 2E Website Content

November 2021



- Savings & Energy Choices**
- Home energy choices
  - Business energy choices
  - Renewable energy
  - Electric vehicles
  - Customer generation
  - Pricing options

## Utah energy rate options

[← Back to electric vehicles](#)

If you drive a plug-in electric vehicle, you can enroll in one of two new time-of-use rate options. Under these options, the price you pay for electricity depends on when you use it.

If you charge your car and use other equipment during off-peak hours, you *may* save money on your bill. Plus, qualifying customers who participate for a year earn a \$200 incentive.



[ENROLL NOW](#)

### Qualifications

- Utah residential customers who own plug-in electric vehicles
- Provide a copy of your DMV registration
- *Not* participating in net metering or Subscriber Solar programs
- Your account meets payment/credit criteria
- One-year participation commitment
- All of your energy use for your home will be subject to time varying rates – not just your plug-in electric vehicle

### Peak hours

You can save money by significantly reducing your energy use on *weekdays* between:

- All months of the year: 3 p.m. to 8 p.m.
- October through April: 8 a.m. to 10 a.m.

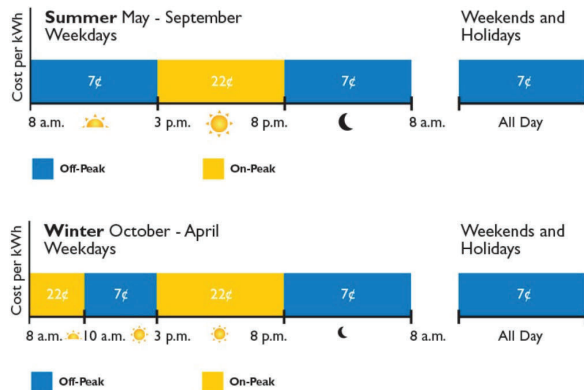
You'll pay lower prices on all other off-peak hours. Some holidays that fall on weekdays are also considered off-peak hours all day.

### Choose between two rate plans

#### RATE OPTION 1

Pricing: 22.2755¢ per kilowatt-hour on-peak and 6.7881¢ per kWh off-peak

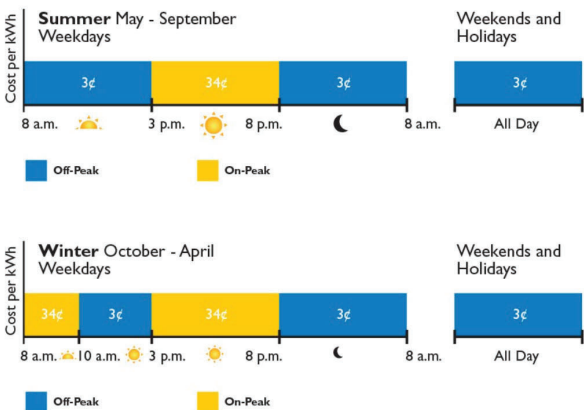
Summer and winter charts (rates are rounded slightly below)



#### RATE OPTION 2

Pricing: 34.3753¢ per kWh on-peak and 3.4003¢ per kWh off-peak

Summer and winter charts (rates are rounded slightly below)



## Guarantee

Your energy costs could be higher under the time-of-use rate options. We will, however, guarantee that your energy charges won't be more than 10 percent higher than they would have been on standard residential rates for your first year of enrollment. These options are best suited for customers who can use most of their electricity during lower cost, off-peak periods.

## FAQ

Does my whole home need to be on time-of-use or can I have car charging only on time-of-use?	▼
How do I get an electronic copy of my DMV registration?	▼
What are the benefits? Why should I enroll?	▼
I want to install a Level 2 charger at home. Are there incentives available?	▼

**Sign up or learn more**



Questions? Email us at [ev@rockymountainpower.net](mailto:ev@rockymountainpower.net).



Does my whole home need to be on time-of-use or can I have car charging only on time-of-use? <

Your whole home needs to be on time-of-use for this program.

How do I get an electronic copy of my DMV registration? <

To make an electronic copy of your DMV registration, you can scan the document to PDF or take a picture of it on your phone.

What are the benefits? Why should I enroll? <

With this program, you have the potential to save money on your bill. In addition, we will give you \$200 to enroll for a year.

Time-of-use options help customers become more aware of when they're using energy to avoid peak times when the cost for electricity is more expensive to generate and purchase. These options have the potential to keep costs down for all customers.

This is a limited term pilot for only about 1,000 customers. We are hoping to learn from our customers who charge electric vehicles so we can develop rate options that support off-peak charging and create a framework for the potential growth of electric vehicles in the future.

I want to install a Level 2 charger at home. Are there incentives available? <

Yes, please see charging equipment incentives.

Rocky Mountain Power  
Exhibit RMP\_\_ (RMM-2R)  
Docket No. 20-035-34  
Witness: Robert M. Meredith

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

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Exhibit Accompanying Rebuttal Testimony of Robert M. Meredith

Revised Schedule 60 Tariff

November 2021



P.S.C.U. No. 51

Original Sheet No. 60.1

**ROCKY MOUNTAIN POWER**  
**ELECTRIC SERVICE SCHEDULE NO. 60**

**STATE OF UTAH**

**Company Operated Electric Vehicle Charging Station Service**

**AVAILABILITY:** In all territory served by the Company in the State of Utah

**APPLICATION:** To electric vehicle charging service provided from Company operated electric vehicle charging stations.

**BILLING:** Any individual using Company operated electric vehicle charging stations for the purpose of recharging the battery of an electric vehicle shall pay both an Energy Charge and a Session Fee and Energy Charge as described below.

	<b>Energy Charge</b>	
	Non-RMP Customer	RMP Customer
DC Fast Charging:	\$0.40 per kWh	\$0.15 per kWh
Level 2 Charging:	\$0.08 per kWh	\$0.08 per kWh
Off-Peak Credit:	-\$0.05 per kWh	-\$0.05 per kWh
	<b>Session Fee</b>	
	\$1.00	

**TIME PERIODS:**

On-Peak: October through May inclusive  
8:00 a.m. to 10:00 a.m., and 3:00 p.m. to 8:00 p.m., Monday through Friday,  
except holidays.  
June through September inclusive  
3:00 p.m. to 8:00 p.m., Monday through Friday, except holidays.

Off-Peak: All other times.

Holidays include only New Year's Day, President's Day, Memorial Day, Independence Day, Pioneer Day, Labor Day, Thanksgiving Day, and Christmas Day. When a holiday falls on a Saturday or Sunday, the Friday before the holiday (if the holiday falls on a Saturday) or the



**P.S.C.U. No. 51**

**Original Sheet No. 60.2**

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Monday following the holiday (if the holiday falls on a Sunday) will be considered a holiday and consequently Off-Peak.

**SPECIAL CONDITIONS:**

1. Customers are expected to make a charging station available immediately following session completion. If cause arises, the Company may seek approval from the Commission to institute a penalty policy.
2. Operation, repair and maintenance of electric vehicle charging stations on this rate schedule will be the responsibility of the Company.
3. Inoperable electric vehicle charging stations will be repaired as soon as reasonably possible, during regular business hours or as allowed by Company's operating schedule and requirements, provided the Company receives notification from a Consumer or a member of the public by notifying Rocky Mountain Power's customer service (1-888-221-7070).
4. The Company may at its discretion install, relocate, modify, or remove electric vehicle charging stations. Potential modifications to Company operated electric vehicle charging stations may include adding, removing, or changing electric vehicle supply equipment available for charging service.
5. For the first five years of the Electric Vehicle Incentive Program, the Company intends to request to change prices listed on this tariff by the same percentage as retail price changes rounded to the nearest cent.
6. The Company may at its discretion file a request with the Commission to change rates on this schedule as the need arises.
7. From the sixth to the tenth years of the Electric Vehicle Incentive Program, price listed on this tariff shall transition to cost of service.

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Issued by authority of Report and Order of the Public Service Commission of Utah in Docket No. 20-035-04

**FILED:** November 4, 2021

**EFFECTIVE:** January 1, 2022