

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Approval of Its Electric Vehicle Infrastructure Program)))))	Docket No. 20-035-34 Exhibit No. DPU 3.0 DIR
---	-----------------------	---

Direct Testimony of
Abdinasir M. Abdulle, Ph.D.

For the Division of Public Utilities
Department of Commerce
State of Utah

October 19, 2021

1 **INTRODUCTION**

2 **Q. Please state your name and occupation?**

3 A. My name is Dr. Abdinasir M. Abdulle. I am employed by the Utah Department of
4 Commerce, Division of Public Utilities (Division) as a Utility Technical Consultant.

5 **Q. What is your business address?**

6 A. Heber M. Wells Office Building, 160 East 300 South, Salt Lake City, Utah 84114.

7 **Q. On whose behalf are you testifying?**

8 A. The Division.

9 **Q. Would you summarize your education background and professional experience for**
10 **the record?**

11 A. I have a Ph.D. in Economics from Utah State University. I have attended various
12 industry-related regulatory seminars and conferences. I have been employed by the
13 Division for about 20 years, first as a Utility Analyst, and then as a Utility Technical
14 Consultant.

15 **Q. Have you previously testified before the Public Service Commission of Utah**
16 **(commission)?**

17 A. Yes. I have testified numerous times before this Commission.

18 **Q. What is the purpose of your Direct Testimony?**

19 A. The purpose of my Direct Testimony is to respond to the Direct Testimony of Rocky
20 Mountain Power's (RMP or the Company) witness, Mr. Robert M. Meredith.
21 Specifically, my testimony will present the Division's recommendations regarding the
22 RMP's proposed Electric Service Schedules, Schedule No. 60 – Company Operated

23 Electric Vehicle Charging Station Service and Schedule 198 – Electric Vehicle
24 Infrastructure Program (EVIP) Cost Adjustment. I will also comment on RMP’s proposed
25 extensions to Schedule 2E – Residential Service - Electric Vehicle Time-of-Use Pilot
26 Option and Schedule 120 – Plug-in Electric Vehicle Incentive Program.

27 **PROPOSED ELECTRIC SERVICE SCHEDULES**

28 **Q. What is the purpose of the proposed Schedules 60 and 198?**

29 A. The purpose of these schedules is to comply with Utah Code §54-4-41. The code
30 authorizes RMP to own and operate electric vehicle charging stations and to charge for
31 the service. The Company proposes Schedule 60 to comply with this aspect of the code.
32 The code also authorizes RMP to recover its investment on the electric vehicle charging
33 infrastructure from customers. To achieve this, RMP is proposing Schedule 198.

34 **Q. Please provide a brief description of Schedule 60 – Company Operated Electric**
35 **Vehicle Charging Station Service.**

36 A. Schedule 60 is intended to provide services to RMP and non-RMP customers who want
37 to use the RMP operated charging stations. To assure that the price for the use of this
38 service reflects market price, RMP states that it has based its price on the price of similar
39 charging services in Utah. The Company will provide a credit for off-peak charging and
40 will charge a per session fee. The prices that will be charged will vary based on whether
41 or not the charging station customer or user is a RMP customer.

42 **Q. What is the price of a similar charging service that RMP bases its tariff prices on?**

43 A. The Company claims that it is planning to build electric vehicle charging facilities similar
44 to those of Electrify America in Utah. Therefore, it will base its prices on the prices that
45 Electrify America is currently charging.

46 **Q. What price is Electrify America currently charging in Utah?**

47 A. According to RMP,¹ Electrify America is currently charging \$0.43 per kWh for its
48 services. The Division reviewed Electrify America's website and verified that the price
49 quoted by RMP is correct. The Division does not understand how Electrify America
50 determined its charging price. Division witness Mr. David Williams will discuss RMP's
51 pricing proposal in more detail.

52 **Q. What is the Division's position in relation to RMP basing the price of its electric**
53 **vehicle charging services on the price that Electrify America charges for its**
54 **charging services in Utah?**

55 A. As explained in its application and testimony, RMP is planning on building charging
56 stations that are similar to those of Electrify America in Utah. The ideal would be for
57 RMP to price based on the cost of service of its charging services in Utah. However, the
58 Company does not have cost of service information for its proposed electric vehicle
59 charging station services. Hence, the Division agrees that initially basing the price on the
60 price of charging service in Utah that is similar to the one RMP is proposing is
61 reasonable. The Division recommends that RMP continuously monitor pricing at
62 Electrify America stations and develop cost information for its own stations, and report
63 this information to the Commission on a regular basis over the life of the program for

¹ See Direct Testimony of Rocky Mountain Power witness Mr. Robert M. Meredith, Docket No. 20-035-34, August 23, 2021, line 104.

64 parties to evaluate. The Commission can then consider a process allowing parties to
65 comment on whether pricing changes at RMP's stations is warranted

66 **Q. What pricing elements does RMP propose for the tariff?**

67 A. The pricing elements that RMP is proposing are an energy charge, a session fee, and a
68 credit for off-peak usage.²

69 **Q. Please comment on RMP's proposed energy charges?**

70 A. The Company's proposed energy charges vary based on whether the individual is using
71 direct current (DC) fast chargers or level 2 chargers. For DC charging, the proposed
72 energy prices vary between retail customers of RMP in Utah and non-RMP customers.
73 The Company's customers will pay for the EVIP through Schedule 198. RMP proposes
74 giving RMP customers a 75% discount on the portion of the cost above the utility's
75 marginal cost. For level 2 charging, the same energy price will be charged to both RMP
76 and non-RMP customers.

77 **Q. How does RMP propose to calculate the energy charge for DC charging non-RMP**
78 **customers?**

79 For DC charging by non-RMP customers, a price that is equivalent to that of Electrify
80 America will be charged. The price per kWh that Electrify America charges is \$0.43 per
81 kWh. Assuming a 100 kWh session, the total cost of the session will be \$43. By
82 subtracting the session fee, \$1 per session, from the session total cost and dividing by the

² See Direct Testimony of Rocky Mountain Power witness Mr. Robert M. Meredith, Docket No. 20-035-34, August 23, 2021, lines 64-65.

83 session kWh and rounding to the nearest ten cents, you obtain the energy charge (\$0.40
84 per kWh) that RMP is proposing for non-RMP customers using DC fast chargers.³

85 **Q. What is the Division's position regarding RMP's calculation of the energy charge**
86 **for DC charging non-RMP customers?**

87 A. The Division believes that the calculation is conceptually reasonable and does not oppose
88 it. However, the Division notices that the rounding of the result to nearest ten cents
89 instead of one cent, would result in the price being lower by two cents per kWh. For a
90 100 kWh session, the impact of rounding the price to the nearest ten cents is \$2.00. This
91 is more than the \$1.00 per session fee, The Division recommends rounding the result of
92 the calculation to the nearest one cent. That would result in an energy charge of \$0.42 per
93 kWh, which, combined with per session charge, more closely approximates the \$0.43
94 energy charge by Electrify America. Rounding to the nearest ten cents as proposed by
95 RMP may compound the anti-competitive effects of RMP's proposal, which Division
96 witness Mr. Williams discusses.

97 **Q. How does RMP propose to calculate the energy charge for DC charging by RMP**
98 **customers?**

99 A. For DC charging by RMP customers, the energy charge is calculated as the marginal cost
100 of service (using the marginal cost of service value for Schedule 6, \$0.064233) plus 25%
101 of the difference between the marginal cost and the energy price charged to the non-RMP
102 customers. This yields an energy price of \$0.15 per kWh.⁴

³ $(.43 * 100 - 1) / 100 = \0.40 per kWh

⁴ $\$0.064233$ per kWh + $(\$0.4$ per kWh - $\$0.064233$ per kWh) * $.25 = \$0.15$ per kWh

103 **Q. What is the Division’s position regarding RMP’s calculation of the energy charge**
104 **for DC charging RMP customers?**

105 A. The Division believes that conceptually, providing a discount to the RMP customers,
106 since they are paying for the EVIP through Schedule 198, is reasonable. However, the
107 Division is concerned that the magnitude of the discount proposed by RMP is not
108 justified and is not in the public interest. A discount of 75% of the portion of the cost
109 above the utility’s marginal cost would result in an energy charge (\$0.15 per kWh) that is
110 much lower than the energy charge paid by the non-RMP customers (\$0.42 as the
111 Division recommends), which is equivalent to the energy charge of the comparable
112 charging stations owned by other providers. RMP customers would have a strong
113 incentive to charge their electric vehicles in RMP owned and operated charging stations,
114 forgoing charging at home at retail rates or at more expensive third party stations. Given
115 RMP serves approximately 80% of Utah residents, the proposed discount would pose an
116 entry barrier for non-RMP owned stations and operators. Electric vehicle charging
117 stations not owned and operated by RMP will not be able to compete and could
118 eventually be forced to go out of business.

119 This is equivalent to predatory dumping except that no foreign company is involved.
120 Predatory dumping is an anticompetitive behavior in which a foreign company prices its
121 products below market price with the intention of driving out domestic competition. In
122 this case RMP is charging below the market price for DC charging driving its competitors
123 out. This will result in RMP getting monopoly in DC charging stations in Utah. While the
124 application reveals no intent to push out competition, the proposed pricing will not

125 promote competition. This is in violation of Utah code §54-4-41(4)(d). For a detailed
126 analysis and discussion about the impact of the discount on competition, refer to the
127 Direct Testimony of Division witness Mr. Williams.

128 **Q. What allows RMP to set the energy charge for its DC charging services lower than**
129 **the market price for RMP retail customers?**

130 A. The energy price that RMP is charging its retail customers who own electric vehicles is
131 subsidized by the other RMP customers who do not own electric vehicles but are paying
132 for the EVIP through Schedule 198. This violates the principle of cost causation.
133 Subsidizing prices is an anti-competitive practice. While in many ratemaking processes, a
134 class's payments of a surcharge might be relevant to the magnitude of the discount, here
135 there is too much benefit transferred from non-EVIP to EVIP customers. Essentially,
136 EVIP and non-EVIP customers are two separate classes. Coupled with the statute's
137 requirement to facilitate competition, the proposed discount transfers too much value
138 from non-EVIP customers to EVIP customers.

139 **Q. What remedy would you propose for this potential problem?**

140 A. The Company is proposing to transition the price over to cost of service pricing over 10
141 years. Given the steep discount proposed by RMP, the Division believes that this too long
142 of a period. As I said above, it is reasonable to give RMP's Utah customers some
143 discount. Hence, the Division proposes, as is explained in the Direct Testimony of Mr.
144 Williams, a rate of approximately \$0.35 per kWh. This translates to using the Division's
145 recommendation of \$0.42 and a discount of approximately 20% of the portion of the cost
146 above the utility's marginal cost. Depending on the Commission's decision on pricing,

147 the Division offers alternative recommendations. If the Commission adopts RMP's
148 proposals, the 75% discount and a non-RMP charge of \$0.40, the Division recommends
149 shortening the program from 10 years to five years, with a transition to full cost of
150 service of two years. If the Commission adopts the Division's proposals, a 20% discount
151 of the portion of the cost above the utility's marginal cost and a non-RMP charge of
152 \$0.42, the Division recommends the program run for 10 years with a transition to full
153 cost of service of 5 years as proposed by RMP. While the Division prefers its customer
154 charge and discount proposals, either alternative may help mitigate the anticompetitive
155 effects of RMP's proposals.

156 **Q. How does RMP propose to calculate the energy charge for Level 2 charging?**

157 A. For level 2 charging, RMP determined an energy charge that approximates the marginal
158 cost of service value for Schedule 6 after incorporating a time varying element and
159 accounting for the \$1 per session fee. The time varying element is calculated as the
160 product of the percent of the total kWh that is off-peak and the off-peak energy cost
161 calculated as three-year average off-peak EIM prices. The energy price calculated the
162 same way as the energy price per kWh for the DC charging by non-RMP customers (but
163 using the marginal cost of service for Schedule 6 instead of the price of Electrify
164 America) less the time varying element and dividing by the percent of total kWh that are
165 on-peak yields the on-peak energy price for level 2 charging. This resulting price is \$0.08
166 per kWh for both RMP and non-RMP customers.

167 **Q. What is the Division's position regarding RMP's calculation of the energy charge**
168 **for DC charging for level 2 charging?**

169 A. The Division believes that RMP's calculation of the energy charge for level 2 charging is
170 conceptually reasonable and does not oppose it.

171 **Q. What energy credit does RMP propose for the off-peak charging?**

172 A. Rocky Mountain Power proposes \$0.05 per kWh energy credit for off-peak charging for
173 both DC charging and Level 2 charging. This credit is calculated as the difference
174 between the off-peak energy price, calculated as a three-year average of EIM prices
175 during off-peak hours, and the energy charge for the level 2 charging.

176 **Q. What is the Division's view concerning RMP's proposed energy credit for off-peak**
177 **charging?**

178 A. The Division does not oppose RMP's proposed energy credit for off-peak charging. The
179 Division believes that this credit may encourage customers to shift load to off-peak hours.
180 As with other aspects of pricing at RMP owned stations, the Division recommends that
181 the Company develop cost of service data and report to the Commission on a regular
182 basis.

183 **Q. Please provide a brief description of Schedule 198 – Electric Vehicle Infrastructure**
184 **Program (EVIP) Cost Adjustment.**

185 A. In compliance with Utah Code §54-4-41, Schedule 198 is designed to recover the
186 investments for the EVIP from RMP's retail customers. The Code authorized RMP to
187 collect \$50 million from the customers to fund EVIP. Schedule 198 would be applicable
188 to all RMP customers. The Company is proposing to collect the \$50 million over 10
189 years, \$5 million per year.

190 **Q. How does RMP propose to spread the cost of the program among the customer**
191 **classes?**

192 A. The Company proposes to spread the cost of the program among the customer classes as
193 an equal percentage of the total base revenue and to design the rates as percent
194 adjustments applied to the power charge, energy charge, facilities charge, back-up power
195 charge, excess power charge, daily power charge, and voltage discount.⁵

196 **Q. What is the rate impact of the proposed Schedule 198?**

197 A. The Company estimated the rate impact of the proposed Schedule 198 to be 0.2 percent
198 increase effective January 1, 2022. However, when the expiration of Schedule 196 –
199 Sustainable Transportation of Energy Plan (STEP) Cost Adjustment is taken into account,
200 the net impact will be a 0.2 percent decrease for customers.⁶ The resulting monthly bill
201 impact for a typical residential customer using 775 kWh will be a \$0.21 per month
202 decrease.

203 **Q. Would you comment on RMP's proposal regarding RMP's rate spread and the**
204 **number of years to recover the \$50 million investment?**

205 A. The Division reviewed RMP's proposed rate spread⁷, billing determinants, and proposed
206 rates⁸ for Schedule 198. The Division believes that the proposed rate spread is reasonable
207 and does not oppose it. However, the Division notices that the number of years to recover
208 the \$50 million investment proposed by Company witness Mr. Meredith is different than
209 the one proposed by Company witness Mr. Campbell. Mr. Meredith proposed \$5 million

⁵ See Direct Testimony of Rocky Mountain Power witness Mr. Robert M. Meredith, Docket No. 20-035-34, August 23, 2021, lines 64-65.

⁶ See Meredith's Page one of Exhibit (RMM-3)

⁷ See Meredith's Pages two of Exhibit RMP_(RMM-3)

⁸ See Meredith's Pages three through 21 of Exhibit RMP_(RMM-3)

210 for ten years, whereas Mr. Campbell proposed \$10 million for 5 years. The Division,
211 believes that recovering the investment in five years is reasonable and the Division
212 supports the five year recovery period.

213 **Q. What would be the impact of changing the number of years to recover the**
214 **investments from ten years to five years?**

215 A. As is shown in DPU Exhibit No. 3.1 DIR, the rate impact of the proposed Schedule 198
216 will be 0.5 percent increase.⁹ The combined impact of Schedule 198 and the expiring
217 Schedule 196 – Sustainable Transportation of Energy Plan (STEP) Cost Adjustment will
218 be 0.006 percent increase for customers. The monthly bill impact for a typical residential
219 customer using 775 kWh will be an increase of \$0.02.

220 **Q. Would you please comment on the Company’s proposed extension of Schedules 2E**
221 **and 120?**

222 A. Yes. RMP proposed a six month extension of Schedule 2E, which is set to terminate on
223 December 31, 2021. The six month extension would allow RMP to file its report on the
224 electric vehicle time of use pilot and allow the interested parties to provide comments.
225 RMP is also proposing a ten year extension of Schedule 120. This schedule is designed to
226 provide incentives to customers who install electric vehicle chargers. Because the EVIP
227 contains incentives, RMP is proposing to continue the incentive through January 1, 2032.
228 The Division does not oppose the proposed extensions of Schedules 2E and 120.

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

230 A. Yes.

⁹ In this analysis, the Division used Mr. Meredith’s exhibit, RMP Exhibit RMM 3 – Schedule 198 Calculation 8-23-2021, and changed the dollar amount to be collected annually from \$5 million to \$10 million.