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BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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

Docket No. 20-035-04

**PREFILED DIRECT TESTIMONY AND EXHIBITS OF
CHRISTOPHER F. BENSON**

The University of Utah (“University” or “U of U”) hereby submits this Prefiled Direct Testimony of Christopher F. Benson in this docket.

DATED this 15th day of September, 2020.

JAMES DODGE RUSSELL & STEPHENS

By:



Phillip J. Russell
Counsel for the University of Utah

CERTIFICATE OF SERVICE
Docket No. 20-035-04

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Prefiled Direct Testimony of Christopher F. Benson

On Behalf of the University of Utah

U of U Exhibit RD 1.0

September 15, 2020

1 **I. INTRODUCTION AND SUMMARY**

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

3 A. My name is Christopher F. Benson. My business address is V Randall Turpin Bldg.,
4 1795 E South Campus Drive, Salt Lake City, UT 84112.

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

6 A. I am employed by the Department of Facilities Management at the University of Utah.
7 My title is Associate Director, Sustainability and Energy.

8 **Q. On whose behalf do you offer this testimony?**

9 A. My testimony is on behalf of the University of Utah.

10 **Q. Please provide your qualifications.**

11 A. I have a Master of Business Administration (MBA) from the David Eccles School of
12 Business and a bachelor's degree in electrical engineering from the University of Utah. I
13 am a licensed engineer (PE), certified energy manager (CEM), and LEED accredited
14 professional (LEED AP).

15 I have been in the energy consulting industry since 2006, having worked on 58
16 million square feet of buildings and saving millions of dollars in energy cost savings each
17 year. My HVAC control designs and techniques have been implemented in several of the
18 world's largest buildings and thousands of mechanical systems.

19 I have managed the University of Utah's Facilities Sustainability and Energy
20 Program since the beginning of 2017.

21 **Q. What duties and responsibilities do you have as Associate Director, Sustainability**
22 **and Energy?**

23 A. My division is responsible for benchmarking performance across 282 buildings,
24 managing utility procurement, and leading a strategy to fund and execute operational
25 initiatives that will help the University achieve its commitment to carbon neutrality and
26 improved local air quality.

27 **Q. Have you previously testified before the Public Service Commission of Utah?**

28 A. No.

29 **Q. Have you testified previously before any other state utility regulatory commissions?**

30 A. No.

31 **Q. What is the purpose of your direct testimony?**

32 A. My testimony addresses Rocky Mountain Power's ("RMP") proposed changes to
33 Schedule 32, "Service from Renewable Energy Facilities."

34 **Q. Please summarize your recommendation to the Commission regarding RMP's**
35 **request with respect to Schedule 32?**

36 A. I recommend that the Commission decline to adopt the Company's proposal to modify
37 Schedule 32. Instead, as I describe more fully below, I recommend that the Commission
38 set the Schedule 32 Delivery Facilities Charge the same as the Facilities charge in
39 Schedules 6/8/9 and then determine the daily Power Charge based on the Power Charge
40 set for Schedules 6/8/9. My analysis focuses primarily on transmission voltage
41 customers under Schedule 32. While I believe that the principles discussed herein should

42 apply equally to Schedule 6 and 8 customers, my analysis has been limited to the effects
43 of RMP's proposed changes on transmission voltage customers.

44 **II. THE UNIVERSITY OF UTAH'S INTEREST IN SCHEDULE 32**

45 **Q. Please describe the University of Utah's electrical load.**

46 A. The University of Utah currently occupies close to 300 buildings, comprising
47 approximately 17.2 million square feet. These buildings house for education, healthcare,
48 research, and housing. The University makes up approximately 1% of the electrical load
49 in Utah, which amounts to around \$16 million in total annual electrical costs.

50 **Q. Does the University of Utah have sustainability targets or goals?**

51 A. Yes. In 2008, the University of Utah joined the American College & University
52 Presidents' Climate Commitment, which dedicated our campus to reaching carbon
53 neutrality by 2050. In 2010, the Sustainability Office created the 2010 Climate Action
54 Plan as a roadmap toward a carbon-neutral campus. In 2019, University President Ruth
55 Watkins signed the Presidents' Climate Leadership Commitments, which renewed the
56 University's commitment to carbon neutrality and added additional commitments to
57 climate and resilience.

58 **Q. Does the University of Utah have a Schedule 32 contract with RMP?**

59 A. Yes. The University is currently the only RMP customer with a Schedule 32 contract.
60 When RMP's President and CEO Gary Hoogeveen states in lines 330-331 of his Direct
61 Testimony that "[t]he Company currently has one contract approved under Schedule 32,"
62 he is referring to the contract with the University. While I understand that other Utah
63 customers are considering Schedule 32, the University of Utah is the only current

64 Schedule 32 customer and the only customer that would experience immediate effects
65 from RMP's proposal to change the Schedule 32 Tariff.

66 In addition to its current Schedule 32 contract, the University is in the final stages
67 of a lengthy contract negotiation process to sign a second Schedule 32 contract for a solar
68 facility to be located in Utah, which will increase the University's share of energy from
69 renewable sources.

70 **Q. Please explain the University's decision to use Schedule 32 to meet its sustainability**
71 **goals.**

72 A. To achieve its carbon neutrality goal by 2050, the University has implemented
73 numerous energy efficiency programs that have reduced campus electricity usage despite
74 a significant increase in building square footage, a shift away from natural gas for heating
75 systems in buildings and higher adoption of electricity usage. These energy efficiency
76 measures are significant, but insufficient to achieve the University's goals without also
77 supplying its remaining energy needs from renewable sources.

78 The University has also installed approximately 1 MW of behind-the-meter solar
79 facilities on campus. While this increases the University's access to renewable resources
80 and reduces the University's reliance on energy from the grid, it falls far short of the
81 amount necessary for carbon neutrality.

82 Due to physical space limitations on campus, and to economies of scale, the
83 University's only realistic path to sufficient renewables to achieve carbon neutrality by
84 2050 is through access to off-site, large-scale renewable energy facilities, such as is

85 described in the Energy Resource Procurement Act (Utah Code §§ 54-17-801 to -807),
86 which has been implemented in Schedule 32 and Schedule 34.

87 Schedule 32 is a particularly complicated rate tariff that allows direct negotiation
88 with suppliers for renewable energy and utilizes RMP for transportation, backup and
89 shaping, and supplementary power. Under Schedule 32, demand fees vary based on peak
90 loads and real-time balancing of energy production with customer loads. To best manage
91 costs, the University developed a strategy to match production resources and load with a
92 combination of geothermal (for baseload power) and solar (for peaking).

93 **Q. Please discuss the process through which the University elected to enter into its**
94 **existing Schedule 32 contract.**

95 A. In 2017, the University issued its first RFP to procure new, large-scale renewable energy
96 with the intent of entering into a Schedule 32 contract.

97 To secure supplier project lending support and obtain pricing competitive with
98 grid-based energy, the University structured the RFP for a 25 year contract.

99 Once bids were received and pricing was in hand, we began an extensive
100 modeling exercise to identify the financial implications under the published rate structure
101 for Schedule 9 and Schedule 32. In our evaluation, we sought to consider the many
102 unknowns that could occur over the 25-year period of the proposed PPA, including
103 weather performance, availability of tax incentives, technology improvements, electrical
104 market rate escalation, and changes to our electrical loads from construction and
105 envisioned efficiency projects.

106 We and our consultants performed sensitivity analysis to show the range of likely
107 outcomes. Our analysis showed that our choice to acquire renewable power through
108 Schedule 32 could increase or decrease costs by small percentages, when compared to
109 traditional grid-based electrical purchases, centering very close to neutral in terms of
110 projected cost. This analysis and the significant progress toward the University's
111 sustainability goals gave us the confidence to move forward with Schedule 32 PPAs.

112 **Q. Did this process ultimately result in the University signing PPAs?**

113 A. Yes. After extensive modeling, analysis, alignment with partners, and lengthy discussion
114 with University leadership, the University entered into a renewable energy supply
115 contract with Amor IX, LLC (a subsidiary of Cyrq Energy)¹ and a corresponding
116 Renewable Energy Contract with RMP in February of 2018. In March of 2018, the
117 Renewable Energy Contract between the University and RMP and an associated power
118 purchase agreement between RMP and Amor IX, LLC were brought before this
119 Commission for review and eventual approval.²

120 **Q. Does the University receive power and energy through either of the Schedule 32**
121 **contracts it signed in 2018?**

122 A. Yes. The University selected two projects in its RFP—a 20 MW geothermal project
123 operated by Cyrq and a 10 MW solar project to be built and operated by Berkshire
124 Hathaway Energy Renewables. After selecting these projects in the RFP, the University
125 began negotiating contracts with these entities.

¹ For simplicity, I refer to Amor IX, LLC herein as "Cyrq."

² See *In the Matter of the Application of Rocky Mountain Power for Approval of the Renewable Energy Contract Between PacifiCorp and the University of Utah and the Related Agreement with Amor IX, LLC*, Docket No. 18-035-18.

126 In 2018, the University entered into a 25-year PPA with Cyrq for 20 MW of
127 capacity and energy from Cyrq's geothermal plant in the Soda Lake Geothermal Field
128 near Fallon, NV. This geothermal project was completed in the fall of 2019 and since
129 that time the University has received this power at three substation delivery points on its
130 main campus.

131 While the University also had intended to enter a separate 25-year PPA with
132 Berkshire Hathaway Energy Renewables for a 10-MW solar facility, that supplier was
133 not able to meet the RFP commitments. The University ultimately rescinded the intent to
134 award the solar component and returned to the market in 2019 to request new proposals.

135 **Q. Has the University selected a new solar project to couple with its current geothermal**
136 **project?**

137 A. Yes, the University went back to the market in 2019 with a new RFP and ultimately
138 selected a 20 MW solar project through that process. The University, RMP, and the
139 developer of that solar project are in the final stages of a lengthy contract negotiation
140 process, and construction on the project is expected to be completed in 2022.

141 **Q. Please discuss the scope of the University's Schedule 32 commitments once this**
142 **second project is completed.**

143 A. Once the 20 MW solar project is completed and operational, the University will receive
144 71% of its electricity from renewable resources, most of which will be facilitated through
145 Schedule 32 power purchase agreements. These projects substantially reduce the
146 University's carbon footprint and, with its portion of load in Utah, will make a
147 measurable reduction to local emissions.

148 **III. CURRENT SCHEDULE 32**

149 **Q. Please describe the basic structure of Schedule 32.**

150 A. Schedule 32 identifies the following components of a customer's monthly bill: a
151 customer charge, an administrative fee, renewable power and energy charges consistent
152 with the Renewable Energy Contract, a delivery facilities charge, a daily power charge,
153 and supplemental energy rates that are consistent with those set by the customer's general
154 service schedule (Schedule 6, 8, or 9).

155 This basic structure has existed since Schedule 32 was adopted by the
156 Commission in its Report and Order in Docket No. 14-035-T02 ("Schedule 32 Order").³
157 Below, I discuss these components in more detail.

158 **Q. Please discuss the current Schedule 32 customer charge in more detail.**

159 A. The Schedule 32 customer charge is set so as to be equal to the customer charge from the
160 applicable full service schedule that would otherwise apply to the customer (Schedules 6,
161 8, and 9).

162 **Q. Please discuss the current Schedule 32 administrative fee in more detail.**

163 A. As the Commission notes in its Schedule 32 Order, the administrative fee is intended to
164 cover PacifiCorp's cost to complete the manual monthly billing process for Schedule 32
165 customers. There is a charge based on the number of generators at issue in the
166 Renewable Energy Contract and the number of delivery points in the Schedule 32
167 contract with the customer.

³ See *In the Matter of Rocky Mountain Power's Proposed Electric Service Schedule No. 32, Service from Renewable Energy Facilities*, Docket No. 14-035-T02, Report and Order dated March 20, 2015.

168 **Q. Please discuss the current Schedule 32 renewable power and energy charges in more**
169 **detail.**

170 A. The renewable power and energy charges are set according to the Renewable Energy
171 Contract between RMP and the developer of the Renewable Energy Facility. These are
172 the power and energy charges that RMP purchases from the Renewable Energy Facility
173 at the point of interconnection between the Renewable Energy Facility and the PacifiCorp
174 system, and then sells to the Schedule 32 customer. While these charges are terms of the
175 agreement between RMP and the developer, they are actually negotiated and agreed on
176 by the Schedule 32 customer and the developer and are incorporated into RMP's
177 Schedule 32 contract with the customer.

178 **Q. Please describe the current Schedule 32 supplemental power and energy charges in**
179 **more detail.**

180 A. Supplemental power and energy is set at the price identified in the Schedule 32
181 customer's otherwise applicable general service tariff. Supplemental power and energy is
182 the power and energy to be delivered to the Schedule 32 customer that exceeds the power
183 and energy of the Renewable Energy Contract. That is, if a Schedule 9 customer with a
184 20 MW load enters into a Schedule 32 contract in which 15 MW of power will be
185 delivered by the Renewable Energy Facility, then the 15 MW of power is priced
186 according to the Renewable Energy Contract and the remaining 5 MW of power is the
187 supplemental power and is set according to Schedule 9.

188 **Q. Please discuss the current Schedule 32 delivery facilities charge in more detail.**

189 A. The current delivery facilities charge is \$3.85 per kW for transmission voltage customers
190 such as the University of Utah. This charge applies to a Schedule 32 customer's electric
191 service up to the kW of renewable contract power. This Commission has described the
192 charge as "a per kW per month charge for PacifiCorp to deliver the electricity" both from
193 the Renewable Energy Facility to the Schedule 32 customer when the Renewable Energy
194 Facility is producing power, and from PacifiCorp's generation resources across the
195 PacifiCorp transmission (and, as applicable, distribution) facilities when the Renewable
196 Energy Facility is not generating or is producing less than its contracted capacity.⁴

197 The method of determining the delivery facilities charge was disputed in Docket
198 14-035-T02. In that docket, RMP had proposed that the delivery facilities charge be
199 designed such that if a Schedule 32 customer uses Backup Power every day during a
200 month, it would pay essentially the same in facilities charges as a Customer on the
201 otherwise applicable general service tariff.⁵ UAE asserted that RMP's approach would
202 result in Schedule 32 customers paying different effective rates for delivery service than
203 their counterparts in Schedules 6, 8, and 9 because the delivery charges set in the rate
204 design process for those rate schedules do not match the cost of service results. As a
205 result, UAE proposed that the Schedule 32 delivery facilities charge be developed using
206 the final demand-related rates and billing units identified in the most recent general rate

⁴ Schedule 32 Order at 11.

⁵ *See id.* at 11-12.

207 case, adjusted by the ratio of the sum of the transmission and distribution unit costs to the
208 total demand-related unit costs identified in the applicable cost of service study.⁶

209 In the Schedule 32 Order, the Commission chose the method proposed by the
210 Utah Association of Energy Users (“UAE”) over that proposed by RMP.⁷ In doing so,
211 the Commission agreed with UAE “that under PacifiCorp’s proposal Schedule 32
212 customers would be paying a different effective rate than their full service counterparts.”

213 **Q. Please discuss the current Schedule 32 power charge in more detail.**

214 A. The current Schedule 32 power demand charge is \$0.66 per kW Day (summer peak
215 hours) and \$0.41 per kW Day (winter peak hours) for transmission voltage customers
216 such as the University of Utah. This charge is based on a monthly summation of the
217 fifteen (15) minute period of the Schedule 32 customer’s greatest use of power during on-
218 peak hours each day, for power up to the renewable contract power amount. The charge
219 is intended to cover PacifiCorp’s costs to provide generation capacity for the Schedule 32
220 customer when the Renewable Energy Facility is either not generating or is producing
221 less than its full capacity.⁸

222 **IV. DISCUSSION REGARDING RMP’S PROPOSED CHANGES TO**
223 **SCHEDULE 32**

224 **Q. Please discuss how RMP proposes to modify Schedule 32.**

225 A. RMP’s proposal to modify Schedule 32 keeps the basic structure intact by utilizing the
226 same components of a customer’s monthly bill discussed above: a customer charge, an

⁶ See *id.* at 12.

⁷ See *id.* at 27-28.

⁸ See Schedule 32 Order at 8.

227 administrative fee, renewable power and energy charges consistent with the Renewable
228 Energy Contract, a delivery facilities charge, a daily power charge, and supplemental
229 energy rates that are consistent with those set by the customer's general service schedule
230 (Schedule 6, 8, or 9).

231 While RMP keeps the basic structure of Schedule 32 intact, it proposes to modify
232 the manner in which certain of these components is determined. Certain of these
233 proposals—in particular RMP's proposal to set a Delivery Facilities Charge for Schedule
234 32 customers that is more than 200% higher than the Facilities charge for Schedule 9
235 customers—impose unfair burdens on Schedule 32 customers.

236 I discuss each of RMP's proposed modifications to the Schedule 32 billing
237 components below.

238 **Q. Do you have a recommendation regarding RMP's proposed changes to the Schedule**
239 **32 customer charge or administrative fee?**

240 **A.** I do not object to RMP's proposed changes to the customer charge or administrative fee.
241 As noted above, current Schedule 32 customer charges are set to equal the customer
242 charge from the applicable full service schedule that would otherwise apply to the
243 customer (Schedules 6, 8, and 9). RMP's proposed modifications to Schedule 32
244 customer charges are based on its proposed modifications to customer charges in
245 Schedules 6, 8, and 9 and are, therefore, appropriate. RMP's proposal to modestly
246 increase the Schedule 32 administrative fee also appears appropriate.

247 **Q. Please discuss RMP’s proposed modification to the Delivery Facilities Charge.**

248 A. RMP proposes to modify the manner in which the Delivery Facilities Charge is
249 determined. This change is reflected in what RMP witness Robert Meredith refers to as a
250 “cost of service analysis for Schedule 32,” which he includes on page 181 of Exhibit
251 RMP___(RMM-3).⁹ The table from that page of Exhibit RMP___(RMM-3) is included
252 below:

Rocky Mountain Power Schedule 32 Cost of Service Analysis State of Utah 12 Months Ended Dec 2019					
Delivery Facilities Charges	Delivery Voltage				
	Secondary < 1 MW	Primary < 1 MW	Secondary > 1 MW	Primary > 1 MW	Transmission
Transmission-Demand COS	\$71,248,584	\$71,248,584	\$20,947,339	\$20,947,339	\$46,748,425
Distribution - P&C, Transformer & Substation	\$80,147,940	\$80,147,940	\$18,279,061	\$18,279,061	
Total	\$151,396,524	\$151,396,524	\$39,226,400	\$39,226,400	\$46,748,425
Billing Units	15,576,842	15,576,842	4,249,794	4,249,794	8,792,631
Per kW	\$9.72	\$9.72	\$9.23	\$9.23	\$5.32
Voltage Discount		(\$0.96)		(\$1.13)	
Delivery Charge per kW	\$9.72	\$8.76	\$9.23	\$8.10	\$5.32
Daily Power Charges					
Jun - Sept					
Schedule 6/8/9 Facilities Charge per kW	\$4.11	\$4.11	\$4.95	\$4.95	\$2.33
Schedule 6/8/9 On-Peak Power Charge per kW	\$13.69	\$13.69	\$16.17	\$16.17	\$14.65
Voltage Discount		(\$0.96)		(\$1.13)	
Less: Delivery Facilities Charge	(\$9.72)	(\$8.76)	(\$9.23)	(\$8.10)	(\$5.32)
Remaining Retail Rate for Backup Power Charge	\$8.08	\$8.08	\$11.89	\$11.89	\$11.66
On-Peak Days per Month	21.25	21.25	21.25	21.25	21.25
Per Day	\$0.38	\$0.38	\$0.56	\$0.56	\$0.55
Ratio - Daily Average to Monthly Peak kW	80%	80%	80%	80%	85%
Backup Power Charge per kW/Day	\$0.48	\$0.48	\$0.70	\$0.70	\$0.65
Primary/Secondary Loss Adjustment		98.7%		98.7%	
Power Charge per kW/Day	\$0.48	\$0.47	\$0.70	\$0.69	\$0.65
Oct - May					
Schedule 6/8/9 Facilities Charge per kW	\$4.11	\$4.11	\$4.95	\$4.95	\$2.33
Schedule 6/8/9 On-Peak Power Charge per kW	\$12.12	\$12.12	\$14.31	\$14.31	\$12.96
Voltage Discount		(\$0.96)		(\$1.13)	
Less: Delivery Facilities Charge	(\$9.72)	(\$8.76)	(\$9.23)	(\$8.10)	(\$5.32)
Remaining Retail Rate for Backup Power Charge	\$6.51	\$6.51	\$10.03	\$10.03	\$9.97
On-Peak Days per Month	21.25	21.25	21.25	21.25	21.25
Per Day	\$0.31	\$0.31	\$0.47	\$0.47	\$0.47
Ratio - Daily Average to Monthly Peak kW	80%	80%	80%	80%	85%
Backup Power Charge per kW/Day	\$0.38	\$0.38	\$0.59	\$0.59	\$0.55
Primary/Secondary Loss Adjustment		97.5%		97.5%	
Power Charge per kW/Day	\$0.38	\$0.37	\$0.59	\$0.58	\$0.55

253

254 While RMP refers to this table as the “Schedule 32 Cost of Service Analysis,” it

255 does not represent an analysis of the cost to provide service to Schedule 32 customers.

256 Indeed, Mr. Meredith acknowledges that RMP did not perform a cost of service study for

⁹ See Direct Testimony of Robert M. Meredith at lines 949-951.

257 Schedule 32.¹⁰ Rather, the purported “cost of service analysis” included in Exhibit
258 RMP___(RMM-3) simply shows how RMP reached its proposed rate design for
259 Schedule 32, using billing determinants for Schedule 6/8/9 customers..

260 For a transmission voltage customer such as the University, RMP’s proposed
261 modification would increase the Schedule 32 Delivery Facilities Charge by 38%—from
262 the current \$3.85 per kW to the proposed \$5.32 per kW.¹¹

263 **Q. Please explain how RMP’s proposed Delivery Facilities Charge in this docket**
264 **compares to its proposal to design Delivery Facilities Charges in Docket No. 14-035-**
265 **T02.**

266 A. In Docket No. 14-035-T02, RMP “developed its delivery charges using a three step
267 process based on the transmission and distribution costs identified in the functionalized
268 COS Study results used in PacifiCorp’s 2014 GRC.”¹² RMP explained in that docket that
269 it “designed its delivery charge . . . such that a [Contract] Customer that uses Backup
270 Power every day during a month would pay essentially the same in facilities charges . . .
271 as a Customer on the otherwise applicable general service tariff.”¹³

272 In this docket, RMP has again “calculated proposed Delivery Facilities Charges
273 for Schedule 32 based upon the cost of fixed demand-related transmission, distribution
274 substations, distributions poles and conductor, and distribution transformers allocated to
275 full requirement customers.”¹⁴ That is, RMP again proposes to determine the Delivery

¹⁰ *Id.* at lines 192-197.

¹¹ RMP’s proposal to set the Delivery Facilities Charge at \$5.32 per kW is based on RMP’s proposed revenue requirement numbers, which may change and/or may not ultimately be accepted by this Commission.

¹² Schedule 32 Order at 11.

¹³ *Id.* at 11-12

¹⁴ Direct Testimony of Robert M. Meredith at lines 951-954.

276 Charge based on Schedules 6/8/9 billing units and the associated revenue requirement
277 assigned to the transmission and distribution categories from its cost of service study.
278 This is the same approach that RMP proposed in Docket No. 14-035-T02, which this
279 Commission ultimately rejected in favor of an approach proposed by UAE that sought to
280 calculate the delivery costs actually charged to full requirements customers rather than
281 those derived from the cost of service study.

282 The Commission found that RMP's proposal would result in Schedule 32
283 customers "paying a different effective rate than their full service counterparts" for
284 delivery service.¹⁵ As such, the Schedule 32 delivery charge should be tied to the
285 Facilities charge in Schedule 6/8/9, rather than the cost of service study results for those
286 rate schedules.

287 **Q. Do you have a recommendation regarding RMP's proposed change to the Schedule**
288 **32 Delivery Facilities Charge?**

289 A. Yes. I recommend that the Commission decline to adopt RMP's proposed change to the
290 Delivery Facilities Charge. As discussed above, RMP's proposal in this docket is similar
291 (or identical) to its proposal in Docket No. 14-035-T02, which this Commission rejected
292 because it resulted in Schedule 32 customers paying different effective rates for delivery
293 service than their full service counterparts. The Commission should reject RMP's
294 approach in this docket for the same reason.

295 Instead, the Delivery Facilities Charge should be set consistent with the method
296 approved by the Commission in Docket No. 14-035-T02. In that docket, the Commission

¹⁵ Schedule 32 Order at 28.

297 approved UAE's proposal that the Delivery Facilities Charge be "developed using the
298 final demand-related rates and billing units identified in the Commission approved 2014
299 GRC Settlement Stipulation adjusted by the ratio of the sum of the transmission and
300 distribution unit costs to the total demand-related unit costs identified in the 2014 COS
301 Study."¹⁶ This method ensures that Schedule 32 customers will pay the same effective
302 rates for delivery service as their full service counterparts.

303 My proposal is reflected in Table 1, included later in my testimony.

304 **Q. Are there any other points you'd like to address regarding the Delivery Facilities**
305 **Charge?**

306 A. Yes. The method of determining the Schedule 32 Delivery Facilities Charge adopted by
307 the Commission in Docket No. 14-035-T02 sought to identify the "delivery" charges
308 associated with the bundled rates for Schedules 6/8/9 customers determined in the 2014
309 GRC. That process was necessary because RMP did not have unbundled rates. In this
310 docket, however, RMP "proposes to design rates that are unbundled by functional
311 category," including a facilities charge.¹⁷

312 RMP proposes unbundled rates in this docket in an effort to "provide[] for greater
313 transparency between cost of service and rate design."¹⁸ Consistent with its proposal to
314 unbundle rates in this docket, RMP has identified a "facilities" cost for Schedules 6/8/9
315 customers, which is set forth in Exhibit RMP___(RMM-5). The "facilities" cost for
316 those rate schedules utilizes the same forecasted billing units that RMP uses to derive the

¹⁶ *Id.* at 12. *See also id.* at 28 ("[W]e find UAE's testimony persuasive that under PacifiCorp's proposal Schedule 32 customers would be paying a different effective rate than their full service counterparts.").

¹⁷ Direct Testimony of Robert M. Meredith at line 343.

¹⁸ *Id.* at lines 347-348.

317 Delivery Facilities Charge for Schedule 32 customers. As such, the Commission need
318 not rely on the type of calculation proposed by UAE in Docket No. 14-035-T02 to
319 determine whether the “delivery” portion of rates charged to Schedule 9 customers is
320 different than what would be imposed on transmission voltage Schedule 32 customers.
321 Instead, the Commission need only compare the “facilities” charge in RMP’s proposed
322 Schedule 6/8/9 tariffs with the Delivery Facilities Charge in RMP’s proposed Schedule
323 32 tariff to conclude that RMP is, again, proposing to charge Schedule 32 customers a
324 different rate for delivery than their full service counterparts.

325 For example, RMP proposes to charge Schedule 9 customers \$2.33 per kW for
326 delivery service while proposing to charge Schedule 32 transmission voltage customers
327 \$5.32 per kW for that same service. There is no reason to charge transmission voltage
328 customers taking service pursuant to Schedule 32 more for delivery service than
329 transmission voltage customers taking service pursuant to Schedule 9. RMP certainly has
330 not sought to justify charging Schedule 32 customers 228% more for that same delivery
331 service than it would charge to Schedule 9 customers.

332 Finally, the Delivery Facilities Charge applies only to the electric service up to the
333 kW of renewable contract power. The Schedule 6/8/9 “facilities” charge applies to
334 delivery service for each kW above the renewable contract power. There is no reason to
335 charge a Schedule 32 customer one delivery charge for some portion of its load and a
336 different delivery charge for the remainder of its load.

337 **Q. Please discuss RMP’s proposed modification to the daily Power Charge.**

338 A. RMP also proposes to modify the manner in which the Daily Power Charge is
339 determined.

340 Mr. Meredith explains that RMP “set Daily Power Charges at a level that, in
341 combination with the Delivery Facilities Charges, would recover the same level of cost as
342 Facilities and Power Charges that are applicable to full requirements customers.”¹⁹ As
343 shown on the purported “Schedule 32 cost of service analysis provided on the final page
344 of Exhibit RMP ___ (RMM-3), RMP seeks to accomplish this by starting with the sum of
345 the applicable Schedule 6/8/9 facilities charge and on-peak power charge, backing out the
346 proposed Delivery Facilities Charge, then dividing by the number of on-peak days per
347 month, and then dividing that number by the ration of the daily average to monthly peak
348 kw.

349 **Q. Please explain how RMP’s proposed daily Power Charge in this docket compares to**
350 **the Daily Power Charge approved in Docket No. 14-035-T02.**

351 A. In Docket No. 14-035-T02, the Commission adopted the daily Power Charge as proposed
352 by RMP. In that docket, RMP asserted that it designed the daily Power Charge “such that
353 if a Contract Customer requires PacifiCorp to provide the full-capacity requirement every
354 day during the month, the Contract Customer would pay essentially the same for the
355 combination of the delivery charge and the daily power charge as that Contract Customer
356 would have paid for the demand component under the applicable Schedules 6, 8, or 9.”²⁰
357 UAE had proposed to use the same construct as RMP’s design for the Power Charge, but

¹⁹ *Id.* at lines 954-957.

²⁰ Schedule 32 Order at 15.

358 to use an hourly Power Charge instead. The Commission adopted the daily Power
359 Charge proposed by RMP, in part because it was similar in concept to the daily power
360 charge in Schedule 31 and the Commission preferred “consistency with the way currently
361 approved rates and schedules address demand charges,” particularly given the lack of
362 “precedent or experience with functionally unbundled rates for service under Schedule 32
363 and no billing units,” as well as the fact that “prospective customers will be using
364 Schedule 32 to make long-term resource decisions.”²¹

365 **Q. Do you have a recommendation regarding RMP’s proposed change to the Schedule**
366 **32 daily Power Charge?**

367 A. Yes. While I support RMP’s stated goal of designing a Power Charge that— when
368 combined with the delivery charge, ensures that Schedule 32 customers pay the same
369 amount for Facilities and Power Charges as are applicable to full service customers—I
370 recommend that the Commission decline to adopt RMP’s proposed design for daily
371 Power Charge because it fails to achieve that goal as currently calculated. RMP’s
372 proposed design for daily Power Charges is flawed because it uses a Delivery Facilities
373 Charge that is different from the Facilities charge that would be applied to full service
374 customers. As a result, RMP’s design starts with the applicable Schedule 6/8/9 on-peak
375 power charge per kW (which is appropriate), then removes the difference between the
376 applicable Schedule 6/8/9 Facilities charge and the Schedule 32 Delivery Facilities
377 Charge. If the Delivery Facilities Charge were simply the same as the applicable
378 Schedule 6/8/9 Facilities charge, this step would be unnecessary and the Power Charge

²¹ *Id.* at 32.

379 design could be a simple matter of converting the monthly Schedule 6/8/9 on-peak power
380 charge number into a daily Power Charge.

381 As such, I recommend a modification to RMP's proposed design for daily Power
382 Charge that removes from the calculation both the addition of the Schedule 6/8/9
383 Facilities charge and the subtraction of the Schedule 32 Delivery Facilities Charge.
384 When combined with my recommendation that the Delivery Facilities Charge match the
385 Schedule 6/8/9 Facilities charge per kW, this would achieve the goal of ensuring that
386 Schedule 32 customers pay the same amount for Facilities and Power Charges as their
387 full service counterparts.

388 This method results in higher daily Power Charges than those proposed by RMP.
389 Using my recommended design, the resulting Schedule 32 daily Power Charge for
390 transmission voltage customers is similar to the corresponding daily Backup Power
391 Charge for transmission voltage customers in RMP's proposed Schedule 31. This is
392 consistent with the Commission's statement in Docket No. 14-035-T02, when it adopted
393 the daily Power Charge because it was consistent with the daily Power Charge in
394 Schedule 31 and stated that "[t]he use of this demand measure in Schedule 32 will avoid
395 the potential for disparate treatment among customers who place a similar level of partial
396 requirements on the utility and may only be distinguishable by the side of the meter from
397 which their renewable resource serves them."²²

²² *Id.* at 33

398 **Q. Can you illustrate how your recommendations would be reflected in a table similar**
399 **to RMP’s “Schedule 32 Cost of Service Analysis”?**

400 A. Yes. Again, RMP did not perform a “cost of service analysis” for Schedule 32. The
401 table it refers to as a “cost of service analysis” in Exhibit RMP___(RMM-3) is really just
402 a calculation to show how it utilized Schedule 6/8/9 billing determinants to reach its
403 proposed rate design.

404 Table 1, below, recreates RMP’s “cost of service analysis” for Schedule 32 but
405 modifies the table to include my recommendations that:

- 406
- The Delivery Facilities Charge match the Schedule 9 Facilities charge; and
 - The Schedule 32 daily Power Charge convert the Schedule 9 Power
- 407
- 408 Charge to a daily charge.

409

Table 1 – University of Utah “Schedule 32 Cost of Service Analysis”

Delivery Facilities Charges	Delivery Voltage	
		Transmission
Schedule 6/8/9 Facilities Charge per kW		\$2.33
Daily Power Charges		
Jun. - Sept.		
Schedule 6/8/9 Power Charge per kW		\$14.65
Voltage Discount		
On-Peak Days per Month		21.25
Per Day		\$0.69
Ratio - Daily Average to Monthly Peak kW		85%
Backup Power Charge per kW/Day		\$0.81
Primary/Secondary Loss Adjustment		
Power Charge per kW/Day		\$0.81
Oct. - May		
Schedule 6/8/9 Power Charge per kW		\$12.96
Voltage Discount		
On-Peak Days per Month		21.25
Per Day		\$0.61
Ratio - Daily Average to Monthly Peak kW		85%
Backup Power Charge per kW/Day		\$0.72
Primary/Secondary Loss Adjustment		
Power Charge per kW/Day		\$0.72

410

411 **Q. Does your proposed design for Schedule 32 simplify the Tariff?**

412 A. Yes. In addition to ensuring that Schedule 32 customers pay the same amount for
 413 delivery service as Schedule 9 customers, my proposed rate design simplifies the
 414 calculation for daily Power Charges by eliminating the need to account for the difference
 415 between the delivery charges for Schedule 9 and Schedule 32.

416 **Q. You indicated previously that your recommendations would, if adopted, produce**
417 **daily Power Charges for Schedule 32 transmission voltage customers that are**
418 **similar to the Backup Power Charges that RMP proposes for Schedule 31**
419 **transmission voltage customers in this docket. Please explain.**

420 A. My recommended design for Schedule 32 transmission voltage customers results in daily
421 Power Charges of \$0.82 per kW/Day in the summer months (June-September) and \$0.72
422 per kW/Day in the winter months (October to May). These are higher than those that
423 RMP proposes for Schedule 32 transmission voltage customers in this docket, but are
424 very similar to the Backup Power Charges that RMP proposes for Schedule 31
425 transmission voltage customers.

426 For Schedule 31 transmission voltage customers, RMP's proposed design in this
427 docket produces Backup Power Charges of \$0.80 per kW/Day in the summer months and
428 \$0.71 per kW/Day in the winter months.

429 These Schedule 32 daily Power Charges and daily Backup Power Charges are
430 derived using RMP's proposed revenue requirement in this docket. Those charges will
431 change to the extent that the Commission adopts a revenue requirement number different
432 than those proposed by RMP.

433 **IV. SUMMARY AND CONCLUSION**

434 **Q. Please describe how RMP's proposed changes would affect the University of Utah**
435 **with respect to its current Schedule 32 contract?**

436 A. As noted above, RMP's proposal seeks to impose on the University and on other
437 potential future Schedule 32 customers a higher cost for delivery services than it would

438 impose on Schedule 9 customers for that same service. In Docket No. 14-035-T02, this
439 Commission rejected RMP's attempt to impose different delivery charges for Schedule
440 32 customers and Schedule 6/8/9 customers and it should do so again here. Such
441 disparate treatment will create an unfair burden to customers purchasing renewable
442 energy and will disincentivize further adoption of the tariff.

443 **Q. Please summarize your recommendations.**

444 A. My recommendations are as follows:

- 445 • Schedule 32 should retain the same basic structure with the same billing
446 components;
- 447 • The Delivery Facilities Charge should be set to match the Facilities charge
448 applicable to Schedule 6/8/9 customers;
- 449 • The Power Charge should be set to ensure that, when combined with the Delivery
450 Facilities Charge, Schedule 32 customers pay the same for Facilities and Power
451 Charges as their full service counterparts. The calculation should convert the
452 applicable Schedule 6/8/9 on-peak power charge to a daily charge, removing any
453 calculation for the Facilities or Delivery Facilities charge, as discussed above.

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

455 A. Yes, it does.