

Witness OCS – 5R

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

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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**  
) **Phase II Rebuttal Testimony of**  
) **Ron Nelson**  
) **On behalf of the**  
) **Office of Consumer Services**  
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October 16, 2020

1        **I. INTRODUCTION**

2        **Q.    PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**  
3        **OCCUPATION.**

4        A.    My name is Ron Nelson. I am a Director with Strategen Consulting. My  
5        business address is Suite 400, 2150 Allston Way, Berkeley, California  
6        94704.

7

8        **Q.    ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

9        A.    I am testifying on behalf of the Utah Office of Consumer Services (“OCS”).

10

11       **Q.    ARE YOU THE SAME RON NELSON WHO FILED DIRECT TESTIMONY**  
12       **IN THIS DOCKET?**

13       A.    Yes. I filed Phase II direct testimony.

14

15       **Q.    WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

16       A.    I respond to several intervenors’ testimony on Rocky Mountain Power’s  
17       (“RMP’s”) cost of service, revenue apportionment, and rate design.

18

19       **Q.    DOES NOT RESPONDING TO AN INTERVENOR’S ARGUMENT**  
20       **INDICATE AGREEMENT?**

21       A.    No. I respond to a narrow scope of issues in my rebuttal and my not  
22       commenting on an issue should not be interpreted as agreement.

23

24 **Q. HOW IS YOUR REBUTTAL TESTIMONY ORGANIZED?**

25 A. My rebuttal testimony is organized into the following sections:

26 I. Introduction

27 II. ECOSS: production & transmission subfunctionalization and  
28 unbundling

29 III. ECOSS: production & transmission classification

30 IV. ECOSS: distribution system classification

31 V. Marginal Cost of Service Study ("MCOSS")

32 VI. Revenue apportionment

33 VII. Rate design

34

35 **Q. WHAT ARE THE HIGH-LEVEL TAKEAWAYS FROM YOUR REBUTTAL**  
36 **TESTIMONY?**

37 A. Intervenor's approval of RMP's subfunctionalization and unbundling  
38 approaches appear to be based on false assumptions related to RMP's  
39 methods. The intervenors falsely assumed that RMP followed common or  
40 accepted practices when subfunctionalizing cost and unbundling rates.  
41 However, RMP did not follow common or accepted practices, which  
42 resulted in intervenor's, normally safe, assumptions leading to inaccurate  
43 conclusions.

44 Adopting RMP's subfunctionalization and unbundling proposals  
45 would be a precedent setting decision that would move Utah away from

46 using a cost study to inform rate designs and toward a ratemaking  
47 approach employed by only one utility in the United States: RMP.<sup>1</sup>  
48 Specifically, RMP's unbundled rate design proposals rely on  
49 subfunctionalized cost components that are derived from a subjective  
50 division of costs into fixed and variable, which are not directly tied to any  
51 concept within the embedded or marginal cost study. Intervenor failed to  
52 provide any analysis on the mechanics of RMP subfunctionalization and  
53 how it influenced unbundled rates. Instead, intervenors assumed that  
54 these approaches were similar to other utilities – but they are not. The  
55 impact of these changes are significant and there is insufficient  
56 stakeholder analysis for the PSC to approve RMP's subfunctionalization  
57 and unbundling proposals.

58 Finally, intervenors' combined recommendations on the ECOSS  
59 and rate design could result in significant negative impacts to the  
60 residential class. Specifically, DPU Witness Bruce Chapman's  
61 recommendation to explore ECOSS approaches that classify larger  
62 portions of the distribution system as customer related could lead to  
63 unreasonably high customer charges and shift revenue apportionment into  
64 the residential class.

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<sup>1</sup> OCS 8.7

66 **II. ECOSS: P&T SUBFUNCTIONALIZATION AND UNBUNDLING**

67 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
68 **RESPOND TO IN THIS SECTION.**

69 A. DPU Witness Chapman supports RMP's proposal to subfunctionalize  
70 production and transmission costs while Walmart Witness Steve Chriss  
71 supports RMP's proposal to unbundle rates. I am concerned with each of  
72 these positions, particularly the way that the witnesses do not  
73 acknowledge the flawed mechanics of RMP's proposals. It appears that  
74 these subject matter experts assumed that RMP's P&T  
75 subfunctionalization and unbundling would have predictable and accepted  
76 impacts on RMP's cost study and rate design. This was a rational  
77 assumption; however, the impacts of RMP's opaque proposals do not  
78 match the witnesses' assumptions. Instead, the impacts of RMP's  
79 proposals are unreasonable and unsupported. Because of their  
80 assumptions about RMP's methodology, Witnesses Chapman and Chriss  
81 do not provide a wholistic analysis on the reasonableness of either  
82 proposal. I address both witnesses in this section because RMP's  
83 unprecedented P&T subfunctionalization and rate unbundling proposals  
84 are directly related.

85

86 **Q. WHY DOES WITNESS CHAPMAN SUPPORT RMP'S P&T**  
87 **SUBFUNCTIONALIZATION?**

88 A. Witness Chapman finds that RMP’s proposal to subfunctionalize P&T  
89 costs into “fixed” and “variable” categories “helps clarify how costs are  
90 likely best classified.” However, the Witness’s next sentence laments that  
91 “the issue of how to classify many fixed costs remains unresolved.”<sup>2</sup>

92

93 **Q. HOW DO YOU RESPOND TO WITNESS CHAPMAN?**

94 A. Witness Chapman says that the subfunctionalization clarifies  
95 classification, but RMP’s P&T subfunctionalization step does not actually  
96 change its classification or allocation outcomes – or its ECOSS – at all. It  
97 is very reasonable for Witness Chapman to make this assumption, as any  
98 subfunctionalization step *should* improve the granularity for which costs  
99 are classified and/or allocated. Unlike any other subfunctionalization step  
100 within the model, however, RMP’s P&T subfunctionalization does not  
101 change the classification or allocation of costs. Witness Chapman’s false  
102 assumption on RMP’s P&T subfunctionalization underscores the  
103 misleading nature of RMP’s proposal.

104

105 **Q. ARE RMP’S SUBFUNCTIONALIZED CATEGORIES CLARIFYING?**

106 A. No. Even if RMP’s subfunctionalization proposal impacted its classification  
107 or allocation – which it does not - the subjective categories “fixed” and  
108 “variable” are outdated and inappropriate. They lack analytical definition

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<sup>2</sup> Chapman Direct at 11.

109 and therefore I agree with Witness Chapman’s determination that their  
110 classification application remains unresolved. My direct testimony covers  
111 RMP’s subjective exercise of dividing fixed and variable costs at length.

112

113 **Q. WHY DOES WITNESS CHRISS SUPPORT RMP’S UNBUNDLING**  
114 **PROPOSAL?**

115 A. Walmart’s Witness Chriss supports RMP’s unbundling proposal because  
116 “unbundling tariff rates by function allows customers to determine the  
117 costs of each...function” for comparison across utilities and jurisdictions.<sup>3</sup>  
118 Walmart’s Witness Chriss believes that unbundling can ensure  
119 appropriate and transparent rates for cost collection.

120

121 **Q. HOW DO YOU RESPOND TO WITNESS CHRISS?**

122 A. I agree with Witness Chriss that transparent, cost-based rates benefit  
123 consumers, but unfortunately, RMP’s unbundling proposal does not allow  
124 for useful comparison of functional costs nor does it enhance rate  
125 transparency. At a superficial level, I can understand why Witness Chriss  
126 would support unbundling rates in general. Unbundling costs and  
127 translating them to rates can be beneficial for customers—if the analytical  
128 approach is logical and transparent. However, RMP informs its rate  
129 components using an opaque and subjective differentiation between fixed

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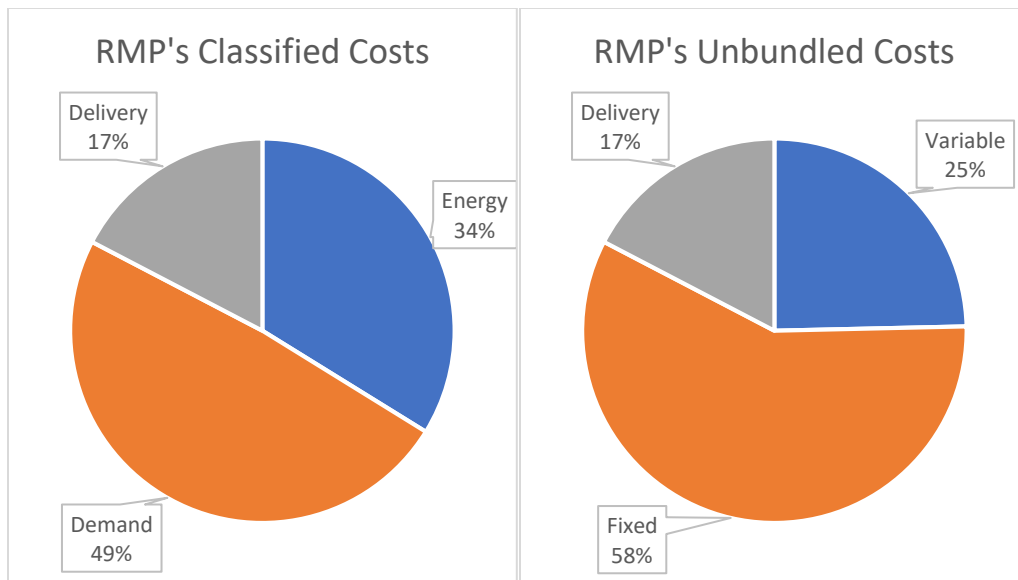
<sup>3</sup> Chriss Direct at 7-8.

130 and variable costs. RMP does not analytically define “fixed” or “variable”  
131 and the categories do not align with the demand and energy categories  
132 that have traditionally classified costs into groups to inform different rate  
133 components. By using a set of cost categories that deviates from the  
134 ECOSS results in order to design rates, RMP moves away from cost-of-  
135 service based rates – the opposite of what Walmart appears to be  
136 supporting. Figure 1 below shows the difference between the results of  
137 RMP’s ECOSS classification method and its unbundling proposal.

138

139 **Figure 1: Classified vs Unbundled Schedule 6 P&T Costs<sup>4</sup>**

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<sup>4</sup> Workpaper OCS 5.2D.



143 Figure 1 demonstrates that the cost components in RMP's ECOSSE are not  
144 directly related to the variable and fixed cost components used for rate  
145 design. The fact that Walmart does not acknowledge these underlying  
146 mechanics of RMP's unbundling proposal nor its origins in the new,  
147 subjective P&T subfunctionalization, suggests the misleading nature of  
148 RMP's proposal.

149

150 **Q. WHAT ARE YOUR CONCLUSIONS ABOUT RMP'S P&T**  
151 **SUBFUNCTIONALIZATION AND UNBUNDLING?**

152 A. Witnesses Chapman and Chriss fail to analyze the way that RMP's  
153 subfunctionalized fixed and variable costs flow through to its proposed  
154 unbundled rate design proposals. Because the Witnesses omitted such an  
155 analysis, it is unclear whether either Witness fully appreciates the  
156 implications of RMP's proposals. The fact that the Witnesses did not  
157 identify this connection clearly demonstrates that the subfunctionalization  
158 and unbundling proposals are anything but transparent or logical.

159 RMP's unprecedented proposal removes a link between its cost  
160 study and its rate designs and is not well understood by stakeholders. The  
161 significance of the change cannot be overstated and the analysis in the  
162 record is insufficient for the PSC to approve it.

163

164 **III. ECOSS P&T CLASSIFICATION**

165 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
166 **RESPOND TO REGARDING P&T CLASSIFICATION.**

167 A. The DPU's Witness Chapman recommends that the Commission address  
168 the classification of production and transmission within the 2023 Protocol.  
169 Witness Chapman also suggests that RMP's P&T "classification methods  
170 should eventually be supported by a defensible methodology"<sup>5</sup> and  
171 provides an overview of a few classification approaches, including one  
172 that uses a marginal cost-based allocator.

173

174 **Q. HOW DO YOU RESPOND TO WITNESS CHAPMAN?**

175 A. My rebuttal is concerned with P&T classification methods, as OCS  
176 Director Michele Beck is concurrently testifying on the issue of when and  
177 why P&T classification should be addressed (i.e., in this case or in the  
178 2023 Protocol).

179 I agree with Witness Chapman that RMP's production and  
180 transmission classification should be modified. However, unless the PSC  
181 is moving toward a marginal cost regulatory framework, it is not clear to  
182 me why RMP would utilize a marginal cost method for classifying P&T  
183 within an ECOSS, as Witness Chapman has proposed. Witness Chapman  
184 does not explain why integrating a marginal cost approach into an

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<sup>5</sup> Chapman Direct at 9.

185 embedded cost study would be appropriate. When asked to name other  
186 jurisdictions that had used the same type of marginal cost allocator, the  
187 DPU named jurisdictions that also use marginal cost studies for  
188 ratemaking purposes, unlike RMP.<sup>6</sup> These examples do not help indicate  
189 why that method should be integrated in an embedded cost study or  
190 whether it is even feasible.

191

192 **IV. ECOS: DISTRIBUTION CLASSIFICATION**

193 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
194 **RESPOND TO REGARDING DISTRIBUTION CLASSIFICATION.**

195 A. The DPU's Witness Chapman took issue with RMP's distribution cost  
196 classification, specifically: RMP's categorization of certain distribution  
197 system infrastructure (poles, underground conduits, conductors, and  
198 transformers) as entirely demand-related. Witness Chapman asserts that  
199 RMP's methodology "is different from common industry practices" and that  
200 the "standard approach" would instead classify portions of this distribution  
201 infrastructure as both customer-related and demand-related.<sup>7</sup>

202 Witness Chapman suggests that RMP defend its current approach  
203 or consider alternatives, specifically the minimum size method or the  
204 minimum-intercept method.

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<sup>6</sup> OCS 2.1 to DPU.

<sup>7</sup> Chapman Direct at 12.

205

206 **Q. HOW DO YOU RESPOND TO WITNESS CHAPMAN?**

207 A. RMP did in fact choose an industry-accepted distribution classification  
208 methodology. It is called the basic customer method. I recommend that  
209 RMP continue to use the basic customer method. It is more appropriate  
210 than the alternatives named by Witness Chapman and it also aligns with  
211 the DPU's guiding principles related to rate design.

212

213 **Q. CAN YOU DESCRIBE THE BASIC CUSTOMER METHOD?**

214 A. According to the basic customer method, only costs that can be traced to  
215 a specific customer should be assigned as customer costs, because those  
216 are the only costs that vary based on the number of customers in a class.  
217 Under this theory, the costs of the shared distribution system – FERC  
218 accounts 364-368 – cannot be attributed directly to a customer, because  
219 adding one customer to the system would not increase the cost of the  
220 system. Instead, the basic customer method recognizes that the shared  
221 distribution system is built to serve peak demands, and so its costs should  
222 be classified as demand.

223

224 **Q. WHY IS IT APPROPRIATE TO CLASSIFY SHARED DISTRIBUTION  
225 SYSTEM COSTS AS 100 PERCENT DEMAND?**

226 A. As one cost of service analyst has put it: "The theoretical basis for [the  
227 basic customer] approach is that the distribution system is sized to a

228 certain capacity, that capacity is available to the total population of  
229 customers served by a system, and any capacity used by one customer is  
230 generally not available to another.”<sup>8</sup> That is, from an engineering  
231 perspective, the distribution system is designed to meet the localized peak  
232 demand of a group of customers, and from an economic perspective,  
233 demand reflects how the system is utilized by customers. Therefore,  
234 shared distribution costs are more properly classified as 100 percent  
235 demand related and not customer related.

236

237 **Q. DO REGULATORY COMMISSIONS IN THE UNITED STATES USE THE**  
238 **BASIC CUSTOMER APPROACH?**

239 A. Yes. In 2000, the Regulatory Assistance Project (“RAP”) estimated that  
240 approximately 30 electric utilities use methods that do not classify any  
241 portion of the shared distribution system as a customer cost – just like  
242 RMP in this case.<sup>9</sup> I have also testified in a proceeding where a natural  
243 gas utility claimed that 19 states utilize the basic customer or peak-and-  
244 average approach (an energy-related approach).<sup>10</sup> This demonstrates that

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<sup>8</sup> Jim Lazar, *Cost Elements and Study Organization For Embedded Cost of Service Analysis: Applicable to the Tucson Electric Power Company* 19 (1992).

<sup>9</sup> See Fredrick Weston, The Regulatory Assistance Project, *Charging for Distribution Utility Services: Issues in Rate Design* at 29 (2000).

<sup>10</sup> *In the Matter of the Application of CenterPoint Energy Corp. d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota*, Docket No. G-008/GR-15-424, Rebuttal Testimony of Russell A. Feingold, at Schedule 3 (Dec. 18, 2015). Due to the time intensive nature associated with a review of these estimates, I have not verified either of these estimates by assessing each Commission’s order on the subject. I believe that it is reasonable to rely on CenterPoint Energy’s survey as demonstrative that a minimum of 19

245 many Commissions use these methods to classify and allocate both  
246 electric and natural gas distribution systems throughout the country.

247

248 **Q. IS THE BASIC CUSTOMER APPROACH COMMONLY USED AND**  
249 **SUPPORTED BY RELIABLE REFERENCES?**

250 A. Yes. The same source that Witness Chapman used to suggest the  
251 minimum size and minimum intercept methods, the NARUC Electric  
252 manual, mentions the basic customer approach.<sup>11</sup> While the NARUC  
253 Manual's discussion of the basic customer approach resides within the  
254 marginal cost section of the manual, a similar approach is applied to  
255 embedded ECOSs throughout the country, as I demonstrate below. In  
256 addition, Dr. James Bonbright discusses the basic customer approach in  
257 *Principles of Public Utility Rates*, as does the Regulatory Assistance  
258 Project in its 2020 *Electric cost allocation for a new era: A manual*.

259

260 **Q. HAVE STATE COMMISSIONS EXPLICITLY DISCUSSED THE BASIC**  
261 **CUSTOMER APPROACH?**

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regulatory commissions use the basic customer or peak-and-average approaches, given that it was provided by a utility in opposition to those methods.

<sup>11</sup> See National Association of Regulatory Utility Commissioners, *Electric Utility Cost Allocation Manual* (1992); see also National Association of Regulatory Utility Commissioners, *Gas Distribution Rate Design Manual* (1989). The NARUC Electric Manual methods discusses a method similar to the basic customer in the marginal cost section on pages 136–146. The NARUC Gas Manual discusses the basic customer approach on page 23.

262 A. Yes. Many states have previously discussed the merits of the basic  
263 customer method in orders.

264

265 **Q. PLEASE SUMMARIZE PREVIOUS ORDERS THAT YOU ARE AWARE**  
266 **OF THAT DISCUSS THE MERITS OF THE BASIC CUSTOMER**  
267 **APPROACH.**

268 A. The Illinois Commission has rejected the minimum distribution system and  
269 zero-intercept approaches and adopted a method similar to the basic  
270 customer approach:

271 As it has in the past, see, e.g. Dockets 05-0597, 99-0121 and  
272 00-0802, the Commission rejects the minimum distribution or  
273 zero-intercept approach for purposes of allocating distribution  
274 costs between the customer and demand functions in this  
275 case. In our view, the coincident peak method is consistent  
276 with the fact that distribution systems are designed primarily  
277 to serve electric demand.

278  
279 The Commission believes that attempts to separate the costs  
280 of connecting customers to the electric distribution system  
281 from the costs of serving their demand remain problematic.  
282 We reject the use of the MDS in this proceeding, and find that  
283 ComEd's ECOSS was correct in not reflecting the MDS  
284 concept. Accordingly, the Commission rejects the use of  
285 IIEC's COSS because it relies on the use of MDS.<sup>12</sup>  
286

287 The Washington Utilities and Transportation Commission has also  
288 addressed the use of the basic customer approach in detail multiple times,  
289 as indicated by the following:

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<sup>12</sup> Final Order, *Commonwealth Edison Company Proposed General Increase in Electric Rates (Tariffs filed October 17, 2007)*, at 208 (Sep. 10, 2008), Docket No. 07-0566 (Illinois Commerce Commission).

290 The company proposed to classify distribution costs using the  
291 Basic Customer method, which treats substations, poles,  
292 towers, fixtures, conduit, and transformers as demand-  
293 related. Service drops and meters are classified as customer  
294 related. The company put forward this method in lieu of the  
295 Minimum System approach it prefers, primarily in the interest  
296 of promoting consensus, and because it is compatible with the  
297 use of a decoupling mechanism.

298  
299 Commission Staff and Public Counsel strongly supported the  
300 use of the Basic Customer method as an appropriate  
301 allocation. Public Counsel recommended that the  
302 Commission also consider approving a method similar to that  
303 applied in Cause No. U-86-100, whereby distribution costs  
304 were considered to have energy-, demand- and customer-  
305 related aspects.

306 ...  
307 The Commission finds that the Basic Customer method  
308 represents a reasonable approach. This method should be  
309 used to analyze distribution costs, regardless of the presence  
310 or absence of a decoupling mechanism.

311  
312 We agree with Commission Staff that proponents of the  
313 Minimum System approach have once again failed to answer  
314 criticisms that have led us to reject this approach in the past.  
315 We direct the parties not to propose the Minimum System  
316 approach in the future unless technological changes in the  
317 utility industry emerge, justifying revised proposals.<sup>13</sup>  
318

319 Iowa uses an approach similar to the basic customer approach.

320 Iowa law states that “[c]ustomer cost component estimates or allocations  
321 shall include only costs of the distribution system from and including  
322 transformers, meters and associated customer service expenses.”<sup>14</sup>

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<sup>13</sup> Ninth Supplemental Order on Rate Design Issues, *Petition of Puget Sound Power & Light Company for an Order Regarding the Accounting Treatment of Residential Exchange Benefits*, (Aug. 16, 1993) Docket No. UE-920433 (Washington Utilities and Transportation Commission) (1993 WL 13812140), at 5–6.

<sup>14</sup> Iowa Admin. Code 199-20.10(2)(e).



323 Connecticut enacted a similar law related to the fixed charge.  
324 Specifically, the law states that a public utility’s fixed charge shall “recover  
325 only the fixed costs and operation and maintenance expenses directly  
326 related to metering, billing, service connections and the provision of  
327 customer service.”<sup>15</sup> This law speaks directly to the how the fixed charge  
328 is set, as opposed to how the ECOSS classifies distribution system costs,  
329 but demonstrates that the basic customer approach has direct implications  
330 for rate design.

331 The California PUC also uses a form of the basic customer  
332 approach and has stated:

333 We prefer the approach of identifying specific equipment as  
334 access related and assigning the investment costs directly to  
335 the appropriate customer class. While there is not a clear line  
336 of distinction between demand and customer related  
337 equipment, we believe the [Transformers, Services, and  
338 Meters] method provides us with the best approximation.  
339 Accordingly, we will treat the remaining common distribution  
340 costs as demand-related.<sup>16</sup>  
341

342 The Idaho Commission moved from the minimum system  
343 approach to the basic customer approach in 1998 because it found that  
344 the basic customer approach was a superior methodology.<sup>17</sup>

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<sup>15</sup> See <https://law.justia.com/codes/connecticut/2015/title-16/chapter-283/section-16-243bb/>

<sup>16</sup> Interim Opinion, *Re San Diego Gas and Electric Company*, (Dec. 19, 1988), Decision 88-12-085 (California Public Utilities Commission), (1988 WL 1663871), at 15.

<sup>17</sup> Order No. 28097, *In the Matter of the Application of the Washington Water Power Company (Now Avista Corporation dba Avista Utilities—Washington Water Power Division) For an Order Approving Increased Rates and Charges for Electric Service in the State of Idaho*, at 24–27 (July 29, 1999), Case No. WWP-E-98-11 (Idaho Public Utilities Commission).

345 Rhode Island does not require the minimum system approach and  
346 has not since at least 1984, according to the following:

347 Both the Navy and TEC-RI requested that the Commission  
348 require a Minimum System Study prior to the next case to  
349 allocate costs to demand and customer components. The  
350 Division recommended that the Commission reject this  
351 request. The Commission is satisfied by Dr. Swan's reasoning  
352 that it deny the request for a minimum system study and as  
353 such, rejects the request. This is consistent with the  
354 Commission's previous ruling in *In Re: Narragansett Electric*  
355 *Co.*, Docket No. 1606/1692, Order No. 11227 (issued April 30,  
356 1984) at p.7.<sup>18</sup>

357  
358 Maryland PUC assessed the minimum system approach and  
359 instead uses a method similar to the basic customer approach for both  
360 electric and natural gas utilities as indicated by the following:

361 As noted above, MEG proposed that a portion of distribution  
362 lines, for both gas and electric, should be partially allocated to  
363 customer-related costs.... MEG advocated partial allocation  
364 to customer-related costs under a minimum cost of service  
365 methodology, whereby any such service requires at least a  
366 hypothetical minimum size line or pipe to provide service,  
367 which hypothetical minimum size service should be classified  
368 as a customer-related cost.

369  
370 ...We find no grounds to re-allocate lines as customer-related  
371 under a minimum cost of service methodology as advocated  
372 by MEG. This proposal has not been accepted in the past by  
373 the Commission, and we are not inclined to do so now.<sup>19</sup>  
374

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<sup>18</sup> Decision and Order, *In Re: The Application of the Narragansett Electric Company d/b/a National Grid for Approval of a Change in Electric[sic] Base Distribution Rates*, at 142 (April 29, 2010), Docket No. 4065 (State of Rhode Island and Providence Plantations Public Utilities Commission).

<sup>19</sup> Order No. 83907, *In the Matter of the Application of Baltimore Gas and Electric Company for Revisions in its Electric and Gas Base Rates*, at 81–82 (March 9, 2011) Case No. 9230 (Public Service Commission of Maryland) (internal citations omitted).

375                   The Arkansas Public Service Commission has also ruled against  
376                   the minimum system approach and for the basic customer approach on  
377                   numerous occasions as indicated by the following:

378                   The Commission agrees with EAI, Staff and AG that accounts  
379                   364-368 should be allocated to the customer classes using a  
380                   100% demand methodology and find that AEEC and HHEG  
381                   do not provide sufficient evidence to warrant a determination  
382                   that these accounts reflect a customer component necessary  
383                   for allocation purposes.<sup>20</sup>  
384

385                   The Texas Public Utilities Commission has stated that  
386                   “[s]pecifically, the customer charge shall be comprised of costs that vary  
387                   by customer such as metering, billing and customer service.”<sup>21</sup> It has also  
388                   found that “[i]t is appropriate to use a 100% demand allocator for  
389                   distribution accounts 364 through 368,” which is again consistent with  
390                   RMP’s own basic customer approach.<sup>22</sup>

391                   Additionally, both the Minnesota and Wisconsin Commissions have  
392                   used the basic customer approach to inform their decisions. Recently,  
393                   Xcel Energy’s subsidiary, Northern States Power Wisconsin (“NSP-W”),  
394                   was ordered to file an ECOSS that utilized the basic customer approach,

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<sup>20</sup> Order, *In the Matter of the Application of Entergy Arkansas, Inc., for Approval of Changes in Rates for Retail Electric Service*, at 124–26 (Dec. 30, 2013) Docket No. 13-028-U (Arkansas Public Service Commission).

<sup>21</sup> Order No. 40, *Generic Issues Associated with Applications for Approval of Unbundled Cost of Service Rate Pursuant to PURA § 39.201 and Public Utility Commission Substantive Rule § 25.344*, at 6 (Nov. 22, 2000) Docket No. 22344 (Public Utility Commission of Texas).

<sup>22</sup> Order, *Application of AEP Texas Central Company for Authority to Change Rates*, at 17 (Dec. 13, 2007) Docket No. 33309 (Public Utility Commission of Texas).

395 which the Wisconsin Public Commission (“WPS”) used to set rates.<sup>23</sup>  
396 Specifically, NSP-W was required by WPS staff to produce a new ECOSS  
397 using a 100 percent demand classification for the distribution system.  
398 WPS then continued its long-standing practice of setting rates using a  
399 range of COSS models that included the 100% demand classification.

400 As for Minnesota, the Commission has considered COSSs that  
401 classify the distribution as 100 percent demand-related as well as ones  
402 that classify a portion as energy-related for natural gas and electric  
403 utilities. In one case, the Minnesota Commission found that:

404 The OAG showed that there are several methods, including  
405 the minimum system, basic customer, and peak-and-average  
406 methods, for classifying and allocating distribution system  
407 costs. The Commission finds merit in each theory.

408 . . .  
409 The Commission is persuaded, on valid theoretical grounds,  
410 that the minimum system studies over-allocate distribution  
411 costs to the customer component. Other class-cost-of-service  
412 studies suggest that the over-allocation to the customer  
413 component may be significant.<sup>24</sup>

414  
415 In another case, the Minnesota Commission stated:

416 the Commission also concurs with the OAG on the merits of  
417 considering more than one cost study (including the basic  
418 customer COSS).

419  
420 The Electric Manual indicates that no single cost study  
421 method can be judged superior to all others in all contexts,

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<sup>23</sup> Application of Northern States Power Company-Wisconsin for Authority to Adjust Electric and Natural Gas Rates, Docket No. 4220-UR-121, FINAL DECISION at 39 (Wis. Pub. Svc. Comm’n Dec. 23, 2015).

<sup>24</sup> *In the Matter of the Application of CenterPoint Energy Corp. d/b/a CenterPoint Energy Minnesota Gas for Authority to Increase Natural Gas Rates in Minnesota*, Docket No. G-008/GR-15-424, Findings of Fact, Conclusions of Law, and Order 53 (June 3, 2016).

422 and the choice among methods is fraught with disputes over  
423 assumptions, applications, and data.<sup>25</sup>  
424

425 **Q. WHY IS THIS INFORMATION IMPORTANT FOR THE COMMISSION TO**  
426 **CONSIDER?**

427 A. I have provided information from twelve commissions related to both  
428 vertically integrated and restructured electric utilities that support my  
429 recommendation that RMP continue to utilize the basic customer ECOSSE.  
430 I have not, however, conducted an exhaustive survey of all states nor do I  
431 constantly monitor each state for updates.

432 I believe that these twelve jurisdictions are sufficient to demonstrate  
433 the point that I wish to make: other regulatory commissions have  
434 recognized the reasonableness of the basic customer approach, meaning  
435 that it is certainly a standard distribution classification approach, unlike  
436 Witness Chapman's claim.

437

438 **Q. DOES WITNESS CHAPMAN EXPLAIN THE IMPLICATIONS TO RATE**  
439 **DESIGN OF ALTERNATE DISTRIBUTION CLASSIFICATION?**

440 A. No, Witness Chapman does not explain the implications to rate design of  
441 using the minimum size or minimum intercept classification approaches.

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<sup>25</sup> See Findings of Fact, Conclusions, and Order, *In the Matter of the Application of Otter Tail Power Company for Authority to Increase Rate for Electric Service in Minnesota*, 62. Docket No. 15-1033 (May 1, 2017).

442                    These approaches will lead to a higher, over-estimated  
443                    classification of customer-related costs, which will disproportionately harm  
444                    the residential class because it has a higher number of customers.

445

446    **Q.    HOW WILL THE MINIMUM SYSTEM OR MINIMUM SIZE METHODS**  
447                    **OVER-ESTIMATE CUSTOMER-RELATED COSTS?**

448    A.    The minimum size and minimum intercept methods both serve to estimate  
449                    a utility’s theoretical “minimum distribution system,” which is a hypothetical  
450                    distribution system that has little or no capacity. Because this minimum  
451                    system has no capacity, it would presumably include only the costs  
452                    needed to connect each customer. The customer cost varies generally  
453                    with the number of customers under the minimum system approach.

454                    To create this imaginary minimum distribution system, analysts  
455                    must make numerous subjective assumptions that oversimplify system  
456                    engineering and assign costs based on questionable cost causative  
457                    principles. This is different than the basic customer approach, which relies  
458                    more heavily on actual system data.

459    **Q.    WHAT SOURCE DOES DPU CITE FOR THE MINIMUM SYSTEM**  
460                    **APPROACHES?**

461    A.    Witness Chapman cites the NARUC Manual for these approaches. While  
462                    the NARUC Manual remains a relevant reference on cost allocation, it  
463                    does not set out “contemporary industry practice,” as both Witnesses

464 Robert Davis and Chapman state.<sup>26</sup> The near-30-year-old manual must be  
465 tempered with other references and recognition of the changing power  
466 system.<sup>27</sup> For example, the NARUC Manual cannot anticipate “the  
467 changes in RMP’s generation mix (exiting from coal and the increasing  
468 use of renewables)” that Witness Chapman references when justifying the  
469 need for a new P&T classification approach.<sup>28</sup>

470

471 **Q. IS WITNESS CHAPMAN’S RECOMMENDATION CONSISTENT WITH**  
472 **THE DPU’S GUIDING PRINCIPLES?**

473 A. No. The DPU’s Witness Davis presents a set of principles that guide the  
474 Division’s cost of service and rate design objectives. One of the seven  
475 principles, titled Customer Charges, closely aligns with RMP’s treatment of  
476 distribution system costs:

477 Costs that generally increase with the number of customers,  
478 but not caused individually by each customer, should be  
479 excluded from the customer charge and included within the  
480 commodity portion of rates.<sup>29</sup>  
481

482 As the Commissions and experts that I quoted above have  
483 indicated, it is widely agreed that meter and service costs are caused by  
484 each individual customer; the shared distribution system is not. RMP’s

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<sup>26</sup> Witness Chapman at 3-4; Witness Davis at 6.

<sup>27</sup> For a discussion of how the power system is changing cost allocation, See Lazar, J., Chernick, P., Marcus, W., and LeBel, M. (Ed.). (2020, January). *Electric cost allocation for a new era: A manual*, at 18. Montpelier, VT: Regulatory Assistance Project. (hereinafter “RAP Manual”)

<sup>28</sup> Witness Chapman at 7.

<sup>29</sup> Davis Direct at 5.

485 cost analysts have recognized this with their distribution classification  
486 methodology. The DPU, however, has proposed methods that classify all  
487 shared distribution infrastructure as partly customer-related which would  
488 then, in turn, likely be collected through a fixed charge – directly  
489 contradicting the Department’s guiding principle on the matter.

490

491 **Q. PLEASE SUMMARIZE YOUR CONCLUSIONS ABOUT DISTRIBUTION**  
492 **CLASSIFICATION.**

493 A. I disagree with the DPU’s Witness Chapman and find that RMP’s  
494 distribution classification methodology is methodologically sound and  
495 accepted by the industry. The minimum system approaches suggested by  
496 Witness Chapman are inappropriate and shift costs onto the residential  
497 class. I recommend that RMP maintain its current basic customer  
498 approach, by continuing to classify distribution accounts 364-368 as 100  
499 percent demand related.

500

501 **V. MARGINAL COST OF SERVICE STUDY (“MCOSS”)**

502 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
503 **RESPOND TO IN THIS SECTION.**



504 A. The DPU's Witness Robert Camfield found RMP's marginal cost study to  
505 be "constructed with substantial care and diligence."<sup>30</sup> Witness Camfield  
506 recommended that larger portions of the distribution system be considered  
507 customer related through an alternative method, such as the minimum  
508 distribution study.

509

510 **Q. HOW DO YOU RESPOND TO WITNESS CAMFIELD?**

511 A. RMP's MCOSS already classifies substantial and inappropriate portions of  
512 its distribution system as customer related. For example, RMP classifies  
513 poles as customer related.<sup>31</sup> This is neither reasonable nor common  
514 practice. While I did not comprehensively analyze the MCOSS, this  
515 approach is inconsistent with Witness Camfield's claim that RMP's  
516 proposed MCOSS is in line with longstanding principles and methods.<sup>32</sup>

517

518 **VI. REVENUE APPORTIONMENT**

519 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
520 **RESPOND TO IN THIS SECTION.**

521 A. Intervenors such as Walmart and Kroger argue that some customer  
522 classes often subsidize other classes. Specifically, Walmart voices

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<sup>30</sup> Camfield Direct at 4.

<sup>31</sup> Meredith Direct at 70.

<sup>32</sup> Camfield Direct at 17. While Witness Camfield's comments are framed as general, classifying the distribution system out of step with industry practices is a significant deviation.

523 concern over subsidies paid by Schedules 6, 8, 23, and 15.<sup>33</sup> Kroger  
524 Witness Richard Baudino recommends that the Commission “decisively  
525 move to address the long-standing problem of subsidies being paid by  
526 Schedule 6 customers”<sup>34</sup> and claims there is “persistent and growing”  
527 dollar value of subsidies that have “burdened” Schedule 6 customers.  
528 Witness Baudino compares the rate of return index, or the rate of return  
529 for each customer class, divided by Utah Jurisdiction's normalized rate of  
530 return, to show that Schedules 6, 8, and 23 provide subsidies to other  
531 classes.

532 Neither Witness Baudino nor Chriss proposes to change RMP's  
533 proposed revenue allocation unless the Commission authorizes reductions  
534 in the Company's overall revenue increase. In such case, Kroger  
535 proposes that Schedule 6 receive a percentage increase that is only half  
536 the magnitude of the approved overall allowed increase<sup>35</sup>, while Walmart  
537 proposes that 50% of any reduction in revenue requirement be allocated  
538 to Schedules 6, 8, 23, and 15, and the remainder be allocated equally  
539 among all classes.<sup>36</sup>

540

541 **Q. HOW DO YOU RESPOND TO WITNESSES CHRISS AND BAUDINO?**

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<sup>33</sup> Chriss Direct at 2.

<sup>34</sup> Baudino Direct at 5.

<sup>35</sup> Baudino Direct at 11-12.

<sup>36</sup> Chriss Direct at 2.

542 A. First, I would note that any quantified under- or over-performance by a  
543 particular customer class is based on the results of RMP's Embedded  
544 Cost of Service Study, the subjectivity of which I detailed in my direct  
545 testimony. An investor-owned utility like RMP may often introduce bias in  
546 its ECOSS decision-making. Thus, the filed rate of return index, or relative  
547 ROR, only reflects one approach to cost of service, when there are  
548 numerous approaches. I filed and quantified the result of alternate  
549 approaches in my direct testimony.

550 Second, an historic perspective is informative when comparing  
551 relative rate of return among customer classes. For example, comparing  
552 the rate of return index over recent years in Table 1 below shows the  
553 residential deficiency to be very small.

554

555

556

**Table 1: Historic Class Rate of Return Index<sup>37</sup>**

		2013	2014	2015	2016	2017	2018	2019	Projected 2021	Average 2013-2019
1	<b>Residential</b>	0.90	1.01	0.90	0.95	0.98	1.01	0.88	0.83	0.95
6	<b>GS - Large</b>	1.24	1.12	1.20	1.15	1.11	1.08	1.21	1.21	1.16
8	<b>GS - Over 1 MW</b>	1.04	1.03	1.11	1.02	1.02	1.00	1.10	1.15	1.05
7, 11, 12	<b>Street &amp; Area Lighting</b>	2.06	2.17	1.78	1.77	1.78	1.67	2.52	2.18	1.96
9	<b>GS - High Voltage</b>	0.78	0.74	0.83	0.79	0.79	0.70	0.76	0.92	0.77
10	<b>Irrigation</b>	0.87	0.97	0.89	0.98	0.90	0.77	0.94	0.99	0.90
15	<b>Traffic Signals</b>	1.29	1.38	1.40	1.37	1.39	1.38	1.35	1.29	1.37
15	<b>Outdoor Lighting</b>	2.86	3.31	2.23	1.78	2.32	3.32	2.95	2.76	2.68
23	<b>GS - Small</b>	1.15	1.12	1.17	1.13	1.13	1.37	1.33	1.27	1.20
SPC	<b>Customer 1</b>	0.60	0.45	0.48	0.63	0.66	0.45	0.51	0.71	0.54
SPC	<b>Customer 2</b>	0.74	0.73	0.94	1.08	0.92	0.88	0.90	1.13	0.88

557

The residential class has seen an unexplained decrease in RoR

558

since 2018, while Schedule 9's RoR index is projected to increase by

559

approximately 20% within one year. Witness Baudino's near-singular

560

focus on Schedule 6 ignores the fact that Schedule 23, among others, is

561

outperforming Schedule 6 in the test year and has been doing so on

562

average for the last 6 years. This historical data helps contextualize the

563

test year forecast and indicates that class disparities have varied from

564

year to year.

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<sup>37</sup> *In the Matter of In the Matter of the Miscellaneous Correspondence and Reports Regarding Electric Utility Services*; 2014, Docket No. 14-999-01, Exh. A & B (July 28, 2014); *In the Matter of PacifiCorp's Financial Reports – Results of Operations*, Docket No. 15-035-51, Exh. A (June 15, 2015); *In the Matter of PacifiCorp's Financial Reports 2016*, Docket No. 16-035-15, Exh. A & B (June 15, 2016); *Rocky Mountain Power's Annual Cost of Service Study – 2016*, Docket No. 17-035-43, Exh. A & B (June 15, 2017); *Rocky Mountain Power's Annual Cost of Service Study – 2017*, Docket No. 18-035-25, Exh 1 & 2 (June 15, 2018); *Rocky Mountain Power's Annual Cost of Service Study – 2018*, Docket 19-035-27, Exh. 1 & 2 (June 14, 2019); *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, Exh. 1 & 2 to Robert Meredith's testimony (January 17, 2020).

565 Third, I believe that any approved revenue requirement reduction  
566 should be accounted for using a more holistic approach than supporting  
567 one class without specifically considering the others.  
568

569 **V.II RATE DESIGN**

570 **Q. PLEASE SUMMARIZE THE INTERVENOR TESTIMONY YOU WILL**  
571 **RESPOND TO IN THIS SECTION.**

572 A. Several intervenors commented on RMP's rate design. I will respond to  
573 testimony from Western Resource Advocates ("WRAs") Witness Douglas  
574 Howe and the DPU's Witness Camfield on residential rate design and the  
575 Schedule 35 interruptible pilot.  
576

577 **Q. HOW DOES WITNESS HOWE RESPOND TO RMP'S RATES?**

578 A. WRA supports RMP's proposal to phase out the third residential Inclining  
579 Block Rate ("IBR") tier. However, Witness Howe recommends that the  
580 Commission also direct RMP to fully phase out IBR and propose a default  
581 TOU rate for the next rate case, if RMP has the metering and billing  
582 infrastructure by then.<sup>38</sup>  
583

584 **Q. HOW DO YOU RESPOND TO WITNESS HOWE?**

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<sup>38</sup> Howe Direct at 3.

585 A. I appreciate Witness Howe's focus on TOU rates and implementing  
586 technologies with system and customer benefits. I support TOU rates  
587 generally. Therefore, the question is not if, but when to implement TOU  
588 rates. Based on RMP's proposed AMI Project, it is not the appropriate  
589 time to implement TOU rates or roll out AMI. In fact, RMP has indicated  
590 that it needs a significant amount of time to put together a coherent  
591 strategy for AMI and TOU rates. Without such a strategy, implementation  
592 would be premature and would likely lead to increased cost and  
593 underutilized utility assets. Thus, I reiterate my direct testimony position  
594 that RMP's AMI Project should be rejected by the Commission and that  
595 future TOU rate implementation be part of a comprehensive advanced  
596 rate design roadmap, alongside several other improvements that must  
597 accompany new metering.

598

599 **Q. HOW DOES WITNESS CAMFIELD RESPOND TO RMP'S RATE**  
600 **PROPOSALS?**

601 A. The DPU suggests that RMP's residential IBR and customer charge  
602 changes will cause major windfalls and losses on customers;<sup>39</sup> however,  
603 Witness Camfield does not provide details about what type of customers  
604 will be harmed, nor does Witness Camfield make recommendations to  
605 address the claimed impact.

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<sup>39</sup> Camfield Direct at 32.

606                   Witness Camfield also responds to RMP's Schedule 35 interruptible  
607                   load pilot, suggesting a "menu of service" approach in which pilot  
608                   participants would have a variety of curtailment options to diversify the  
609                   participation options and the gird impacts.

610

611   **Q.    HOW DO YOU RESPOND TO WITNESS CAMFIELD?**

612   A.    I agree with the DPU's observation and provided analysis on the extent to  
613           which there will be winners and losers from RMP's proposed residential  
614           IBR tier compression. However, I was surprised that Witness Camfield did  
615           not recommend any solution to the identified problem. Additionally, I am  
616           concerned that some of the DPU's other cost of service recommendations  
617           will exacerbate the problems identified by Witness Camfield. For example,  
618           using a minimum system or zero intercept study to classify more of the  
619           distribution system as customer related could presumably be used to  
620           justify increased customer charges—further increasing the rate impacts for  
621           low consuming residential customers.

622                   Regarding the Schedule 35 pilot, I agree in theory that a suite-of-  
623           services approach could be beneficial. However, as I discussed at length  
624           in my direct testimony, the current proposal lacks a suitable pilot  
625           framework. If RMP is going to include more options, they need to  
626           concurrently improve the pilot structure.

627

628

**VIII. CONCLUSION**

629

**Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

630

**A. Yes.**