

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Investigation of	:	Docket No. 14-035-114
the Costs and Benefits of	:	Compliance Filing
PacifiCorp's Net Metering Program	:	Direct Testimony
	:	of Michele Beck for the
	:	Office of Consumer Services

June 8, 2017

1 **Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

2 A. My name is Michele Beck. I am the Director of the Office of Consumer
3 Services (Office). My business address is 160 East 300 South, Salt Lake
4 City, Utah, 84111.

5 **Q. PLEASE PROVIDE AN OVERVIEW OF YOUR BACKGROUND.**

6 A. I have served as Director of the Office since 2007. In that capacity I have
7 overseen all policy development and testimony submission on behalf of the
8 Office. I have also personally testified in numerous cases before the Public
9 Service Commission of Utah (Commission.) Prior to this position, I worked
10 for about twelve years in various capacities in the electric industry in the
11 Midwest including time in a regulatory agency, a generation and
12 transmission cooperative, and an electric utility.

13 **Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THIS DOCKET?**

14 A. Yes. In an earlier phase of this docket I provided direct, rebuttal and
15 surrebuttal testimony on July 30, September 8, and September 29, 2015,
16 respectively.

17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

18 A. I introduce the witnesses for the Office who conducted the analysis on
19 behalf of the Office in this case. I will also present the Office's policy
20 recommendations related to Rocky Mountain Power's (RMP or Company)
21 Compliance Filing and request to complete all analyses required under the
22 net metering statute for the evaluation of the net metering program
23 (Compliance Filing).

24 **Q. PLEASE IDENTIFY THE ADDITIONAL WITNESSES FOR THE OFFICE.**

25 A. The Office has two witnesses in addition to myself. Mr. James W. Daniel of
26 GDS Associates, Inc. provides a description and results of the analysis he
27 conducted regarding the Company's cost of service studies. He also
28 presents certain recommendations based on those results.

29

30 Mr. Danny A. C. Martinez, a utility analyst for the Office, presents the results
31 of his analysis of the Company's proposed customer charge and application
32 fee for residential net metered customers and provides the Office's
33 recommendations regarding those charges.

34 **Q. WHAT IS THE COMPANY ASKING OF THE COMMISSION IN THIS**
35 **FILING?**

36 A. In its Application the Company asks that the Commission:

37 1) find that the CFCOS, the ACOS, and the net metering breakout cost
38 of service study (NEM Breakout COS) are compliant with and fulfill
39 the November 2015 Order;

40 2) find, based on the cost of service analyses, that the cost of the net
41 metering program under the current rate structure exceed its
42 benefits;

43 3) find, based on the cost of service analyses, that the unique usage
44 characteristics of net metering customers justify segregating them
45 into a distinct class;

- 46 4) determine that the current rate structure for net metering customer is
47 unjust and unreasonable because it does not reflect the costs
48 imposed on and benefits contributed to the system, and unfairly shifts
49 costs from net metering customers to other customers;
- 50 5) approve, as just and reasonable, the Company's proposed Schedule
51 136, Net Metering Service, with modifications to net metering service
52 and Schedule 5, Residential Service for Customer Generators, which
53 includes a three-part tariff structure that reflects the costs and
54 benefits that net metering customers impose on and contribute to the
55 system; and
- 56 6) approve a waiver of Utah Admin. R. 746-312-13, pursuant to Utah
57 Admin. R. 746-312-3(2) for changes to the application fee, as
58 explained in more detail below.¹

59 Further, in Joelle Steward's testimony, the Company also requested
60 approval for revisions to the interconnection agreements. (Steward Direct,
61 page 12, lines 229 – 233) Exhibit RMP__(JRS-2) identifies the proposed
62 revisions.

63 **Q. PLEASE SUMMARIZE THE OFFICE'S POSITION.**

64 A. The Office takes the following positions:

- 65 (1) The Office agrees with RMP that the Commission should find the
66 cost of service studies are compliant with the November 2015 Order.

¹ Application page 2.

- 67 (2) The Office agrees with RMP that the Commission should find, based
68 on the cost of service analyses, that the cost of the net metering
69 program under the current rate structure exceed its benefits.
- 70 (3) The Office agrees with RMP that net metering customers have
71 different usage characteristics than other residential customers, but
72 does not believe it is necessary to create a separate customer class.
73 The Office will propose a different rate design solution that does not
74 require the creation of a new customer class.
- 75 (4) The Office disagrees with RMP's conclusions that current rates are
76 unjust and unreasonable and recommends that the Commission
77 deny its request to make such a finding.
- 78 (5) The Office recommends that the Commission deny RMP's request
79 for approval of a new Schedule 136 and Schedule 5. Those proposed
80 tariffs would not result in just and reasonable rates. The tariffs include
81 provisions that are demonstrably contrary to the public interest.
82 Further, RMP has not provided evidence that this dramatic change
83 is necessary, or in the public interest, to justify implementation
84 outside of a general rate case (GRC.)
- 85 (6) The Office does not oppose RMP's request for a waiver of Utah
86 Admin. R. 746-312-13 to change the application fee, but
87 recommends that the Commission take additional follow up actions
88 as further explained in Mr. Martinez' testimony.

89 (7) The Office supports most of RMP's request for changes to the
90 interconnection agreements, as described below. The final changes
91 should reflect other details that may be contained in the
92 Commission's order in this case.

93 (8) The Office recommends that the Commission approve a new, lower
94 cap to the net metering program.

95 (9) The Office recommends that the Commission approve a new, post
96 net metering rate design, that includes a requirement for time-of-use
97 (TOU) rates for consumption and a separate compensation rate for
98 excess energy (determined hourly or more frequently).

99 (10) The Office recommends that the Commission approve a transition
100 plan that includes a rate design solution to grandfather the rate
101 design for net metering customers for a time limited period and a
102 phased-in compensation rate for excess energy for new, post net
103 metering residential DG customers.

104 (11) The Office recommends that the Commission incorporate a
105 communication plan into its order as discussed later in this testimony.
106

107 **Cost of Service Studies and Interpretation of Results**

108 **Q. PLEASE SUMMARIZE THE OFFICE'S POSITION REGARDING RMP'S**
109 **COS STUDIES AND INTERPRETATION OF RESULTS.**

110 A. The Office finds the COS studies to be reasonable and recommends that
111 the Commission find them to be compliant with its November 10th order.

112 However, as further explained in Mr. Daniel's testimony, the Office
113 disagrees with the Company that the results show a cost shifting problem
114 that requires immediate action.

115

116 As I explain throughout this testimony, the Office's position is that the COS
117 results show an emerging problem. Thus, this docket is an opportunity for
118 the Commission to create a roadmap for a transition away from net metering
119 into a more sustainable DG rate design. While we agree with RMP that its
120 studies show that costs of the net metering program exceed benefits, we do
121 not agree on the magnitude and urgency of the problem. Instead, the Office
122 asserts that the Commission is authorized to move forward and consider
123 new charges and rate design but should do so carefully and methodically.

124

125

126 **Office Response to RMP Proposal for New Rates and Tariffs**

127 **Q. DOES THE OFFICE AGREE WITH THE NEW RATES AND TARIFFS**
128 **PROPOSED BY RMP?**

129 A. The Office supports some of RMP's proposed changes and opposes others
130 as being either unsupported, contrary to the public interest, or both.

131 **Q. WHICH PROPOSED NEW RATES AND TARIFFS DO THE OFFICE**
132 **SUPPORT?**

133 A. The Office supports most of the proposed changes to the interconnection
134 agreement proposed in Ms. Steward's testimony. The Office also supports

135 part of the Company's proposal to change the application fee as requested
136 in page 2 of its application.

137 **Q. PLEASE EXPLAIN FURTHER THE CHANGES RMP PROPOSES TO**
138 **THE INTERCONNECTION AGREEMENT.**

139 A. The proposed changes to the interconnection agreements include the
140 following:

- 141 • Currently there is not an application fee for Level 1 interconnection,
142 and the Level 1 Interconnection Agreement contains no reference
143 to such a fee. RMP proposes to add language to the Level 1
144 interconnection agreement to indicate that the customer is
145 responsible for an application fee set by Rule or Commission
146 order.²
- 147 • Level 2 and Level 3 interconnections are currently subject to an
148 application fee as set forth in rule R746-312-13. RMP proposes to
149 add "or as otherwise approved by the Commission."
- 150 • RMP proposes changes to the appendices to reflect its proposed
151 changes to application fee: Appendix A for Level 1 adds a \$60.00
152 Application Fee, Appendix B for Level 2 changes the fees from \$50
153 base and \$1.00 per Kw to \$75 base and \$1.50 per kW, and
154 Appendix C for Level 3 changes the fee from \$100 base and \$2.00
155 per kW TO \$150 Base and \$3.00 per kW.

² 4.1 Customer shall bear the cost of any Application fee set forth by Rule, or as otherwise approved by the Commission.

- 156 • RMP proposes to add the following statement into each agreement:
157 “Whereas, the Net Metering rate schedule may be amended from
158 time to time, and the Public Service Commission may alter the
159 charge, credit, and ratemaking structure applicable to Net Metering
160 customers pursuant to Utah code § 54-15-105.1;”
- 161 • In other areas of the interconnection agreements, RMP proposes
162 adding statements to indicate that certain aspects of the Agreement
163 “may be amended from time to time.”
- 164 • RMP proposed to modify Section 5.1 as follows (new language
165 underlined): “The electric service charge shall be computed in
166 accordance with the monthly billing in the currently applicable
167 service tariff. Customer will be compensated for net excess energy
168 in accordance with Schedule 135A or its successor
169 tariff(s). Customer will be transitioned to any successor tariff
170 immediately upon approval of that tariff by the Public Service
171 Commission and will be subject to any charge, credit, or ratemaking
172 structure implemented therein.”

173 **Q. DOES THE OFFICE SUPPORT THESE CHANGES?**

174 A. The Office supports most of the proposed changes to the interconnection
175 agreements as follows:

- 176 • The Office supports the language modifications within the
177 agreements addressing application fees. As described later and in
178 Mr. Martinez’ testimony, the Office does not support the proposed

179 increase in application fees for Level 2 and 3 interconnections.
180 Nonetheless, RMP's proposed language addressing Levels 2 and 3
181 is reasonable.

182 • The Office supports amending the agreements' appendices to reflect
183 the Commission's order for appropriate application fees for each
184 interconnection level.

185 • The Office supports language clarifying that elements of the
186 interconnection agreements could be amended "from time to time,"
187 Including the new "whereas" clause cited above. It is apparent
188 through public comment in this docket that some customers who
189 have signed an interconnection agreements view the agreements as
190 fixed contracts with terms that remain constant. The addition of this
191 language should assist in increasing the understanding that rates are
192 fluid and although they are signing an agreement regarding
193 interconnection it does not hold all aspects of rates constant. Net
194 metering rates and terms are subject to change as conditions
195 change.

196 • The Office supports the amendment to 5.1 to insert "currently
197 applicable."

198 • As of this date, the request for Schedule 135A is still under
199 suspension and therefore references to Schedule 135A should not
200 be inserted into any of the interconnection agreements.

201 • The Office does not support the last sentence proposed for inclusion
202 in 5.1. The reference to moving customers “immediately” appears to
203 be tied to some of the specifics of this current case. There are cases
204 where customers would be moved at the time new rates are effective,
205 which may or may not be “immediately.” The Office believes that
206 including the words “currently applicable” is sufficient clarification.

207 **Q. WHAT PORTIONS OF RMP’S PROPOSED CHANGES TO THE**
208 **APPLICATION FEE DOES THE OFFICE SUPPORT?**

209 A. As explained in Mr. Martinez’ testimony, the Office supports the revised
210 calculations for Level 1 interconnections. The Office opposes the other
211 changes as not having been justified at this time. Further, as explained by
212 Mr. Martinez, the Office does not oppose the request for a waiver of rule
213 R746-312-13 in this proceeding. This is in contrast to rate changes
214 proposed by RMP, which the Office continues to assert must only be
215 implemented in a GRC to ensure that all rates are just and reasonable.

216 **Q. WHICH PROPOSED NEW RATES AND TARIFFS DO THE OFFICE**
217 **OPPOSE?**

218 A. The Office opposes RMP’s proposed Schedule 5 and Schedule 136 and
219 recommends that the Commission reject them. As further explained it is
220 unnecessary and contrary to the public interest to implement these new
221 tariffs in the current proceeding rather than in the next GRC.

222

223 Even if the Commission were inclined to make this type of rate change in
224 this proceeding, these specific tariff proposals have not been demonstrated
225 to be in the public interest. Mr. Daniel shows that Schedule 5 results in
226 unduly significant rate impacts for new net metering customers and in
227 combination with Schedule 136 creates significant disparities between
228 similar net metering customers. Mr. Martinez' testimony provides more
229 detail demonstrating that the calculation of the monthly customer charges
230 is inconsistent with past Commission orders and unjustified. Thus,
231 implementing the proposed Schedules 5 and 136 would not result in just
232 and reasonable rates and the proposed schedules must be rejected.

233 **Q. DOES THE OFFICE HAVE ADDITIONAL CONCERNS WITH THESE**
234 **TARIFFS?**

235 A. Yes. The Office generally opposes incorporating demand charges into
236 residential rates, including residential net metering customers, at this time
237 or in the near future. Demand charges would represent a fundamental
238 paradigm shift that should be accompanied by a thoughtful education
239 program over a long enough period to reach a substantial number of the
240 affected customers. Residential customers are accustomed to thinking in
241 terms of energy, not demand, and are unlikely to understand what drives
242 their demand and what actions could help manage demand charges. In
243 fact, it is not clear whether the latest developments in smart home
244 management tools are sufficiently developed to manage demand for
245 residential customers. So, even the earliest adopters of this technology

246 may not be in a position to manage demand charges. RMP's proposal does
247 not even contemplate customer education and should be rejected.

248

249 **Net Metering Cap**

250 **Q. YOU HAVE CRITICIZED RMP'S RESPONSE TO THE COS RESULTS,**
251 **WHAT ALTERNATIVE RESPONSE DO YOU RECOMMEND?**

252 A. In my view, the results of the COS studies show that net metering is not
253 sustainable as a long-term rate design. However, rather than impose a
254 punitive, unsupported rate design on new net metering customers, the
255 better approach would be to create a transition plan to evolve DG rate
256 design away from net metering and into a more sustainable, cost-based rate
257 design.

258 **Q. WHY DO YOU BELIEVE THAT NET METERING IS NOT SUSTAINABLE?**

259 A. RMP's studies show that the costs of the net metering program exceed the
260 benefits. While those net costs are not currently large in the aggregate, the
261 differential will become increasingly pronounced. At the time of the next
262 rate case, the current rate design and net metering paradigm will likely shift
263 costs from residential net metering customers to residential non-net
264 metering customers. The penetration rate of net metering customers is
265 increasing which will further exacerbate these cost shifts. I believe it is
266 contrary to good public policy to have one set of customers pay increasing
267 costs as a result of a different set of customers' investment decisions for
268 their personal consumption. This is particularly troubling when many of the

269 more vulnerable segments of the residential customer class will not have
270 the ability to make similar decisions for their own consumption.

271 **Q. DOES THE OFFICE BELIEVE THAT THE COMMISSION CAN ISSUE AN**
272 **ORDER IN THIS DOCKET ADDRESSING THE SPECIFIC DETAILS**
273 **ASSOCIATED WITH A TRANSITION FROM A NET METERING**
274 **PARADIGM TO A NEW, POST NET METERING RATE DESIGN?**

275 A. Yes, the Office believes that the Commission can and should include
276 several specific findings in this docket to create a roadmap to facilitate an
277 orderly transition in rate design away from a net metering paradigm. Laying
278 out the plan now will help to ensure that the interests of all customers are
279 considered and addressed in a way that does not unduly harm the solar
280 industry, RMP, or customers. It will also provide notice and transparency so
281 that potential new DG customers can properly evaluate rate impacts and
282 payback periods in order to make informed investment decisions.

283 **Q. HOW DOES THE OFFICE PROPOSE TO TRANSITION AWAY FROM**
284 **NET METERING?**

285 A. Fundamentally, the Office's proposal relies on the Commission's authority
286 to set a cap for the level of penetration of net metering resources. After the
287 cap is reached, the utility may discontinue its net metering program's
288 availability for new customers. Utah Code Ann. § 54-15-103(2)(a) initially
289 established the cap for when the "cumulative generating capacity of
290 customer generation systems in the program equals at least .1% of the
291 electrical corporation's peak demand during 2007." The net metering statute

292 also allows the Commission to establish a higher level before a net metering
 293 program may be discontinued. As noted by RMP in its application, the
 294 Commission established a cap at 20% of the 2007 peak in Docket 08-035-
 295 78.

296

297 Thus, the Office proposes that the Commission reset the cap to a lower
 298 level, issue an order regarding the principles to be used in a post net
 299 metering rate design, and address principles for implementation including a
 300 transition plan that incorporates the principle of gradualism and some
 301 measure of grandfathering.

302 **Q. AT WHAT LEVEL DOES THE OFFICE RECOMMEND THAT THE**
 303 **COMMISSION RESET THE NET METERING CAP?**

304 A. It is difficult to provide a specific recommendation on resetting the cap. In
 305 my view, it would result in a more efficient and orderly process to tie the cap
 306 to a specific time or to coincide with the rate effective period of a future
 307 general rate case. Deciding the most appropriate timing for a cap to come
 308 into play is highly dependent on what specific transition path is chosen.

309

310 RMP's forecast for net metering penetration is not precise enough to be
 311 able to predict the penetration level at a specific point in time. In response
 312 to our discovery, RMP provided the following forecast of net metering
 313 penetration:

	Base Case	High Case
2017	4.83%	4.83%

2018	7.12%	7.23%
2019	9.30%	9.65%
2020	9.92%	10.71%
2021	10.53%	11.75%
2022	10.82%	12.11%

314

315 This forecast includes RMP's best estimate for 2017 and incorporates the
316 base case and high case from Navigant's forecast prepared for the 2017
317 Integrated Resource Plan. (All percentages are expressed in relation to
318 4,615 MW, the 2007 Utah peak demand.) I am sympathetic to the
319 difficulties associated with this forecast as changes in rate design,
320 economics associated with solar panels, and differences in customer
321 perception could all significantly impact the rate of adoption.

322

323 In my view, the Commission should reset the cap somewhere closer to a
324 10% penetration level. Further, I believe the Commission could use RMP's
325 forecast as a guide and tie the cap to a specific time period. For example,
326 the Commission could indicate its intention to cap the net metering program
327 on or about a certain date and implement this intention by ordering RMP to
328 provide a more precise penetration percentage as that date approaches.
329 Not only would using a date instead of a percentage provide a more orderly
330 transition process, it would also provide more meaningful and transparent
331 information to customers making DG decisions leading up to that date.

332

333 I provide more specific options regarding dates to consider for setting the
334 timeline for capping the net metering program in the transition plan section
335 below.

336

337 **Proposal for a Sustainable Successor Rate Design**

338 **Q. DOES THE OFFICE HAVE A PROPOSAL FOR AN ALTERNATIVE TO**
339 **THE SCHEDULE 5 AND SCHEDULE 136 RATE DESIGN PROPOSED BY**
340 **RMP?**

341 A. Yes, the Office is proposing that the Commission approve a specific rate
342 design in this docket. The Office's proposal differs from Schedule 5 and
343 Schedule 136 as proposed by RMP in that it is not specifically designed to
344 be utilized within the net metering framework. The rate design being
345 proposed by the Office is for an approach to residential customer-owned
346 generation (like rooftop solar) in a post net metering paradigm, i.e. not
347 incorporating the full scope of the netting concepts embedded in net
348 metering. We will also propose additional rate design changes to apply to
349 residential net metering customers as part of our proposal for transitioning
350 rates, which is addressed in the next section of my testimony.

351 **Q. WHAT IS THE PRIMARY PRINCIPLE DRIVING THE OFFICE'S**
352 **PROPOSED "POST NET METERING" RATE DESIGN?**

353 A. The primary feature of our proposal is that it would ensure that customers
354 with self-owned generation both receive proper compensation for the value
355 of their excess energy and pay their fair share of the utility system costs

356 based on their level and pattern of consumption. In my view, it is important
357 to separate the rate design for compensation and consumption in order to
358 design rates that can be relevant for the longer term. Net metering provided
359 a simplification that was useful in assisting a nascent industry as consumers
360 gained understanding and interest in rooftop solar. Now that we are seeing
361 exponential growth, it is time to move to a more complex rate design that
362 more accurately assigns costs and benefits.

363 **Q. WHAT ARE THE KEY ELEMENTS OF THE OFFICE'S PROPOSED**
364 **"POST NET METERING" RATE DESIGN?**

365 A. The Office proposes the following:

- 366 • Develop a new tariffed rate to compensate residential self-owned
367 generation for excess energy delivered to the system.
- 368 • Measure excess energy to receive this new compensation on an
369 hourly or smaller, reasonably metered interval. This necessitates the
370 elimination of netting within the billing period, and appropriately
371 compensates all energy exported to the system. It allows any
372 customer-owned generation that serves customer load to be treated
373 as "behind the meter."
- 374 • Credit customer bills for the dollar value of the excess energy, with
375 bill credits that expire at the end of the annual period similar to how
376 the net metering credits are treated under current rate design.
- 377 • Require participation in a TOU rate as mandatory to receive
378 compensation from this new tariff. This would ensure that customers

379 pay appropriate rates reflecting the time periods of the part of their
380 consumption served by RMP.

381 • Include an adder to the monthly customer charge to recover the costs
382 associated with the additional metering requirements.

383 **Q. WHEN WOULD THIS NEW RATE DESIGN BE IMPLEMENTED?**

384 A. This new rate design should be implemented when rates are effective from
385 RMP's next general rate case. The Commission could order that RMP file a
386 GRC by a date certain if it would like to provide more certainty regarding the
387 timing of implementation. In addition, I propose some degree of gradualism
388 in implementation in the Office's transition proposal that I further address in
389 the next section of my testimony.

390 **Q. HOW WOULD THE RATES BE SPECIFICALLY DESIGNED?**

391 A. In my view, the Commission could provide specific direction regarding the
392 principles and formulas to be considered in the next GRC when the majority
393 of these new rates would be calculated. I also think it would be reasonable
394 to have a separate proceeding that could be initiated immediately to
395 investigate the specific technical inputs and calculations for the new excess
396 generation compensation tariff. (I note that previous avoided cost dockets
397 have taken well over a year.) I also note that if the Commission accepts our
398 recommendations for gradualism and a transition plan it would not be
399 necessary to immediately calculate the compensation rate as our proposal
400 includes a transition from predetermined compensation rates to a formulaic
401 one. However, the calculation would still be useful in providing indicative

402 prices to customers who are evaluating rooftop solar and related
403 investments to estimate their payback timeframe.

404 **Q. HOW DOES THE OFFICE ENVISION CALCULATING THE NEW**
405 **COMPENSATION RATE?**

406 A. The Office recommends developing a compensation rate using similar
407 methodology to what is used in developing Schedule 37. Clearly, additional
408 benefits would have to be included above what is used in that specific
409 calculation, most obviously adjusting for line losses since distributed
410 generation avoids the losses associated with more remote generation.
411 While the Office is not proposing a specific list of other benefits (or costs)
412 that would differ from existing avoided cost calculations, other parties would
413 be free to propose such components and support their proposals with
414 concrete evidence at the time that the formula for such a rate is developed
415 and/or updated.

416
417 Specifically, the Office envisions using power cost modeling to develop the
418 compensation rate, similar to what is done in setting Schedule 37 rates, but
419 adjusted to incorporate additional categories of costs and benefits to the
420 extent these costs and benefits can be sufficiently quantified. Some of the
421 other issues to consider in developing the rate would be the appropriate
422 time period over which to conduct the modeling, whether levelized costs
423 should be used, and how to value potential avoided capacity costs. A

424 process should be established allowing adequate time for a full investigation
425 of the issues.

426

427 The Office further supports updating this tariff at appropriate intervals, such
428 as annually or biennially. Such updates would capture the changing benefit
429 profile of these distributed generation resources as well as the changing
430 market prices such generation offsets. Conversely, it would be
431 administratively infeasible to lock in compensation levels for multiple years
432 for each individual self-generation residential customer. If feasible, the
433 administrative costs would be direct assigned to this tariff.

434 **Q. DOES THE OFFICE PROPOSE UTILIZING THE CURRENT SCHEDULE**
435 **2 FOR THE REQUIRED TIME OF USE RATES FOR CONSUMPTION?**

436 A. No. Schedule 2 has not been thoroughly reviewed and updated in many
437 years. Further, many interested parties, including the Office, have gained
438 increased knowledge and understanding of residential TOU rates through a
439 workgroup held in conjunction with the STEP docket. My recommendation
440 is that Schedule 2 should be carefully addressed in the next GRC
441 incorporating any lessons learned from the electric vehicle TOU pilot. RMP
442 should have only one residential TOU rate that is available as an option for
443 any residential customer, but required as a condition for participation in the
444 new excess generation compensation tariff previously described.

445 **Q. DOES THE OFFICE PROPOSE ANY CHANGES TO THE CUSTOMER**
446 **CHARGE FOR PARTICIPATION IN SCHEDULE 2 AND/OR THE NEW**
447 **COMPENSATION RATE?**

448 A. Yes. The Office proposes that in the next GRC, the customer charge for
449 Schedule 2 should be set at the same rate as the customer charge for
450 Schedule 1 with the addition of incremental costs associated with a different
451 level of metering costs. The Office further proposes that the tariff for
452 compensation for excess energy be designed to include an adder to the
453 monthly customer charge to incorporate any incremental costs associated
454 with the required production meters.

455 **Q. WHAT RATE DESIGN DOES THE OFFICE PROPOSE FOR NON-**
456 **RESIDENTIAL CUSTOMERS?**

457 A. For small commercial customers, i.e. Schedule 23 customer less than 15
458 kW that do not pay a demand charge, the Office believes that this proposal
459 for residential customers would be applicable and appropriate. Thus, in the
460 next GRC, a TOU rate for Schedule 23 customers should also be
461 addressed. In addition, Schedule 23 should be further scrutinized to ensure
462 that the demand charge imposed on consumption above 15 kW results in
463 fair allocation of costs across the customer class, even in the case of
464 participation in a new TOU rate.

465

466 The other issue that would need to be addressed in the next GRC is
467 appropriate crediting for DG generation in the non-residential classes. RMP

468 has proposed that eliminating one compensation option would result in just
469 and reasonable rates. However, in my view it would be important to
470 thoroughly analyze whether additional changes are necessary in a post net
471 metering environment. Also, it would be important to evaluate whether all
472 net metering customers should receive the same compensation rate for
473 exports of excess energy, i.e. the new compensation rate I describe above.

474 **Q. WHY DOES THE OFFICE BELIEVE THIS PROPOSAL WOULD BE IN**
475 **THE PUBLIC INTEREST?**

476 A. Fundamentally, by addressing consumption and compensation separately,
477 the proposal will better assign correct levels of costs and revenues. The
478 Office believes it is appropriate to treat self-generation that serves
479 instantaneous load as “behind the meter.” To do otherwise could lead to
480 distinctions among customers regarding all sorts of “behind the meter”
481 differences. It is also fair to define excess generation on a closer to
482 instantaneous basis. (The Office proposes hourly or a reasonably
483 calculated smaller interval, primarily depending on what metering
484 capabilities are available at what cost.) In my view, it will be extremely
485 difficult or impossible to assign costs correctly while maintaining netting
486 across the billing period or even smaller intervals such as days or weeks.
487 To keep that type of netting would almost necessarily result in intra-class
488 subsidies, either between net metering and non-net metering customers, or
489 among the net metering customers themselves. Finally, charging
490 customers a TOU rate for all consumption served by the system (rather than

491 by self-generation), better captures the cost causation associated with that
492 consumption. Also, a TOU rate would provide more detailed cost signals
493 for customers to design their DG systems to maximize value.

494

495 **Proposal for Transition Plan**

496 **Q. HOW DID THE OFFICE EVALUATE THE INTERESTS OF CUSTOMERS**
497 **IN DEVELOPING A RECOMMENDATION FOR A TRANSITION PLAN?**

498 A. The Office carefully evaluated the different sets of residential DG customers
499 that could be created depending on how a transition is established. The
500 Office identified four distinct sets of residential DG customers as follows:

501 (1) Existing Net Metering Customers: The Office is defining these as
502 customers who have installed DG prior to the release of the
503 Commission order in this case. (I recognize that more recently
504 interconnected customers could be reasonably expected to have
505 been given notice of pending changes. I also recognize that some
506 new DG customers will be rather far along in the process of
507 installation but not complete at the time of the order. Depending on
508 the transition plan selected, this may warrant adjusting the definition
509 or it may be immaterial. For simplicity sake, I will utilize this definition
510 for my discussion.)

511 (2) New Net Metering Customers: The Office is defining this category as
512 customers who install DG after the Order is released prior to the net

513 metering cap being reached. (As discussed later, this category could
514 be avoided depending on where the cap is set.)

515 (3) New DG Customers (Post NM, pre new rate setting): The Office is
516 defining this category as customers who install DG after the net
517 metering cap is reached, but prior to rates being calculated and
518 implemented. (As discussed later, certain transition plans could
519 avoid this category.)

520 (4) DG Customers Subject to Approved Rates for the New Rate Design:
521 The Office is defining this category as customers who install DG after
522 a post net metering rate design is completely in place.

523

524 I assume that the post net metering rate design will be thoroughly vetted
525 and found to be in the public interest via appropriate rate proceedings. (The
526 previous section of my testimony addresses our preliminary views on this
527 rate design.) Thus, this transition section primarily relates to the other three
528 categories of DG customers. The Office relied on standard ratemaking
529 principles such as simplicity and understandability of rates, rate stability, fair
530 allocation of costs, avoiding undue discrimination, and gradualism.

531 **Q. WHAT TYPES OF TRANSITION MECHANISMS DID THE OFFICE**
532 **CONSIDER?**

533 A. The Office considered multiple combinations of ideas in formulating a
534 recommendation for a transition plan including the following:

535 • The length of time net metering customers should be grandfathered;

- 536 • The rate mechanisms used to implement grandfathering;
- 537 • The phase in of the new compensation rate over a particular period
- 538 of time;
- 539 • What types of rates and tariffs are appropriate to change or
- 540 implement outside of a GRC;
- 541 • Similarities and differences in the treatment of existing net metering
- 542 customers and new net metering customers; and
- 543 • When to aim for a net metering cap to come into place to mitigate
- 544 unintended consequences such as increasing levels of cost
- 545 subsidies, uneven “rushes” for new installments prior to rate
- 546 changes, and potential discriminatory treatment among similar
- 547 customers.

548 The Office considered a transition plan that included the establishment of a
549 cap that would come into place closely following the Commission order.
550 However, that option would create the possibility of an abrupt end to new
551 DG if a new rate design would not be in place when the cap is reached.
552 Thus, implementation of this type of a transition plan would have to address
553 new rate design within the current docket. In my view, this would be difficult
554 or impossible to accomplish using existing tariffs. Moreover, in most cases
555 it would not be in the public interest to change these tariffs outside of a GRC.

556

557 The Office then considered a transition plan that included the establishment
558 of a cap that is reached at the rate effective period of the next GRC. The

559 Office recognizes that this option creates additional net metering customers
560 that potentially increase the total level of cost shifting. Additionally, the
561 Office is concerned that a future cap could create a rush of new customers
562 (as we saw when December 8, 2016 appeared to be a possible cutoff point.)
563 However, in my view, this approach provides for a less abrupt transition,
564 especially if net metering customers are grandfathered to a date certain
565 rather than each customer receiving the same number of years of
566 grandfathering.

567 **Q. WHAT IS THE OFFICE'S SPECIFIC RECOMMENDATION FOR A**
568 **TRANSITION PLAN?**

569 A. The Office recommends a transition plan that incorporates the following
570 components:

- 571 • Establish a transition period of approximately twelve years. Use that
572 benchmark of time to grandfather net metering customer and also to
573 phase in the new compensation rate for excess energy.
- 574 • Allow current net metering customers to voluntarily switch to the post
575 net metering rate design as soon as it is implemented.
- 576 • Implement a facilities fee for net metering customers. The fee would
577 be calculated on a per installed kW basis and be designed to collect
578 all appropriate costs associated with serving the net metering
579 customers. To facilitate grandfathering the fee could be set at zero
580 until January 1, 2030 (the end of the transition period) at which time
581 the full amount would begin to be collected. The addition of the

582 facilities fee would either facilitate the voluntary switch to the post net
583 metering rate design or collect the appropriate level of costs from net
584 metering customers. (Legislative solutions could be pursued in the
585 interim that rendered this additional charge unnecessary.)

- 586 • Initiate a process for the development of the new compensation for
587 excess energy. Clearly indicate that excess energy will be defined
588 as the energy exported on an hourly or more frequent basis, but allow
589 specific elements of the compensation calculation to be addressed
590 in the new process.
- 591 • Phase in the compensation rate moving from a set dollar
592 compensation to a formulaic rate. The phase in could start at 9
593 cents/kWh, which is similar to the current retail rate compensation
594 but set at the current first tier energy rate (rounded up.) The phase
595 in could then drop the compensation one cent at a time every two or
596 three years with the first version of the calculated, formulaic rate
597 being implemented as of January 1, 2030. It would be appropriate
598 for these rates to be set and changed outside of a GRC as the
599 differences would flow through the EBA true-up filings.
- 600 • Set other new rates in the next general rate case. The rates that
601 need to be addressed would include: an updated residential TOU
602 rate, including an appropriate monthly customer charge to recover
603 the incremental costs associated with different metering
604 requirements; the calculation of the facilities charge to be

605 implemented at the conclusion of the grandfathering period; the
606 development of a TOU rate for Schedule 23 customers; the
607 evaluation of the interaction of the demand charge for larger
608 Schedule 23 customers; the evaluation of changes to excess energy
609 compensation for all customer classes; and any other necessary
610 changes for the non-residential classes in a post net metering
611 environment.

612 • To ensure that the new rates are put in place in a timely manner, the
613 Commission may require that a new GRC is filed by a date certain,
614 such as April 1, 2019. (This date would result in a rate effective
615 period starting January 1, 2020 and is consistent with some signals
616 that RMP has given publicly regarding its intended timeline for the
617 next GRC.)

618 • Establish the new net metering cap at the level of DG anticipated to
619 be in place at the time that the rate effective period begins for the
620 next GRC, or January 1, 2020. Doing so eliminates the third category
621 of customers I identified earlier. Further, the inclusion of a date
622 certain for grandfathering net metering customers alleviates any
623 concerns that might be associated with allowing the net metering
624 customers to increase during the time period between the order in
625 this case and the implementation of new rates.

626 **Q. WHY DOES THE OFFICE ASSERT THAT THIS TRANSITION**
627 **PROPOSAL WOULD BE IN THE PUBLIC INTEREST?**

628 A. First, the Office believes it is important to set a grandfathering period
629 sufficiently far in the future such that existing net metering customers are
630 not hit with a significant rate shock. Most of these customers made
631 investment decisions without access to information that could inform them
632 of the magnitude of potential rate design changes that are now under
633 consideration. Second, the Office believes that in considering
634 grandfathering scenarios, it is most fair to have a date certain that net
635 metering either ends or incorporates a new charge as we have proposed.
636 This gives earlier adopters a longer period, which is reasonable given that
637 those early adopters almost certainly faced higher costs of investment.
638 Third, setting a new net metering cap that will be reached in the near future
639 will allow enough time for the transition plan to be understood while still
640 managing the numbers of customers that may “rush” to get in before the
641 cap is hit. Fourth, the Office concluded that to create a smooth transition it
642 is necessary to both phase out net metering and phase in the new
643 compensation method. The Office acknowledges that some parties will
644 criticize the plan for having uncertain rates of compensation after twelve
645 years, but the Office asserts that its proposal finds a good balance between
646 gradualism and transparency of rates. This transition plan provides a path
647 to implementation of new rates that is measured and deliberate and utilizes
648 standard processes to avoid the pitfalls associated with transitioning too
649 quickly. Finally, this approach avoids the significant problems associated
650 with evaluating new rates and customer classes outside of the full context

651 of a general rate case. The Office's transition plan is designed to ensure
652 that new revenues can be immediately assigned to appropriate customers
653 and that rates are developed to reach just and reasonable results.

654

655 **Proposal for Communications Plan**

656 **Q. DOES THE OFFICE HAVE ANY ADDITIONAL RECOMMENDATIONS TO**
657 **ACCOMPANY ITS RECOMMENDED TRANSITION PLAN?**

658 A. Yes. The Office recommends that the Commission carefully consider a
659 communications plan to accompany its order.

660 **Q. IS IT STANDARD PRACTICE FOR THIS COMMISSION TO ORDER**
661 **COMMUNICATIONS PLANS?**

662 A. No. In fact, the Commission has explicitly declined to do so in the past.
663 However, in this case the public interest requires that the Commission
664 provide a source of unbiased information for customers, industry, and
665 policymakers to have access to factually correct information about the future
666 of net metering and DG rate design.

667 **Q. HOW DO YOU RECOMMEND THAT THE COMMISSION APPROACH A**
668 **COMMUNICATIONS PLAN?**

669 A. In my view, the Commission should take two sets of actions.

670

671 First, if the Commission adopts the transition plan proposed by the Office or
672 any other rate design transition that occurs across time, it should ensure
673 that the changes are transparent and knowable in advance of

674 implementation. For example, if the Commission were to approve the
675 Office's proposal for a new excess energy compensation that phases in
676 over twelve years, it should not wait until the end of the phase in period to
677 establish the formulaic rates. Rather, it should move forward on the process
678 of developing the rates so that potential new customers would have access
679 to more detailed information about the ultimate compensation they could
680 expect to receive. Of course, these rates (as with all rates) could change
681 over time, but having a rate paradigm in place sooner than later would
682 provide indicative pricing that well-informed customers could use in making
683 their investment decisions.

684

685 Second, the Office recommends that the Commission establish a webpage
686 to present reliable and unbiased information explaining any rate design
687 transition that it orders. The transition plan should be presented as a
688 simplified or pictorial representation of the timeline for changes. The
689 Commission could request the assistance of an advisory group to develop
690 such materials and the Office would gladly participate. Absent such a
691 central source of information, the Office is concerned that ratepayers and
692 other members of the public will not have access to key pieces of
693 information to be able to make informed decisions.

694

695

696

697 **Summary**698 **Q. PLEASE SUMMARIZE THE OFFICE'S POSITION.**

699 A. The Office's position is comprised of the following:

700 (1) The Office recommends that the Commission should find the cost of
701 service studies are compliant with the November 2015 Order.702 (2) The Office recommends that the Commission should find, based on
703 the cost of service analyses, that the cost of the net metering
704 program under the current rate structure exceed its benefits.705 (3) The Office does not believe it is necessary to create a separate
706 customer class for residential net metering customers.707 (4) The Office recommends that the Commission deny RMP's request
708 to make a finding that current rates are unjust and unreasonable.709 (5) The Office recommends that the Commission deny RMP's request
710 for approval of a new Schedule 136 and Schedule 5.711 (6) The Office does not oppose RMP's request for a waiver of Utah
712 Admin. R. 746-312-13 to change the application fee, but
713 recommends that the Commission take additional follow up actions
714 as further explained in Mr. Martinez' testimony.715 (7) The Office recommends that the Commission approve portions of
716 RMP's request to change the interconnection agreements as follows:717 • Approve the language modifications within the agreements
718 addressing application fees.

- 719 • Approve language clarifying that elements of the
720 interconnection agreements could be amended.
- 721 • Approve the addition of “currently applicable” to 5.1.
- 722 • Require the appendices to be updated to reflect the
723 Commission final order regarding application fees.
- 724 • Deny request to reference Schedule 135A.
- 725 • Deny the final sentence proposed to be added to 5.1.
- 726 (8) The Office recommends that the Commission approve a new, lower
727 cap to the net metering program at around 10% but specifically
728 designed to go into place at the beginning of the rate effective period
729 associated with its next GRC. The Office further recommends that
730 the Commission require RMP to file a GRC no later than April 1,
731 2019.
- 732 (9) The Office recommends that the Commission approve a new, post
733 net metering rate design, that includes:
- 734 • a requirement for time-of-use (TOU) rates for residential and
735 small commercial net metering customers (calculated and
736 implemented in the next GRC),
- 737 • the development of a separate compensation rate for excess
738 energy (determined hourly or more frequently) via a process
739 initiated at the conclusion of the order in this phase of the
740 current docket, and

741 • an evaluation of additional, necessary rate design changes in
742 the next GRC.

743 (10) The Office recommends that the Commission approve a transition
744 plan that includes:

- 745 • a twelve year transition timeline,
- 746 • a new facilities charge to be calculated in the next rate case
747 and implemented beginning January 1, 2030 at the end of the
748 transition period, and
- 749 • a phased-in compensation rate for excess energy for new,
750 post net metering residential DG customers that starts at 9
751 cents/kWh and decreases by about one cent every year or
752 two transitioning into the specifically calculated rate by
753 January 1, 2030 at the end of the transition period.

754 (11) The Office recommends that the Commission incorporate a
755 communication plan into its order.

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

757 A. Yes.