

Rocky Mountain Power
Docket No. 17-035-39
Witness: Jeffrey K. Larsen

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF UTAH

ROCKY MOUNTAIN POWER

Rebuttal Testimony of Jeffrey K. Larsen

October 2017

1 **Q. Are you the same Jeffrey K. Larsen who previously provided direct testimony in**
2 **this case on behalf of Rocky Mountain Power (“Company”), a division of**
3 **PacifiCorp?**

4 A. Yes.

5 **PURPOSE AND SUMMARY OF REBUTTAL TESTIMONY**

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

7 A. In support of the Company’s request that the Public Service Commission of Utah
8 (“Commission”) approve its energy resource decision for wind repowering, I respond
9 to regulatory policy issues raised in the direct testimonies of Division of Public Utilities
10 (“DPU”) witnesses Dr. Joni S. Zenger, Charles Peterson and David Thomson, Office
11 of Consumer Services witness Donna Ramas, and the Utah Association of Energy Users
12 witness Kevin C. Higgins. I also provide an update to several of my original direct
13 testimony exhibits as a result of the updated economic analysis prepared by Company
14 witness Mr. Rick T. Link.

15 **Q. What are the key issues you address in your rebuttal testimony?**

16 A. I address the following key issues:

- 17 • The appropriateness of the Commission’s review of the wind repowering
18 resource decision under Utah Code Ann. § 54-17-402;
- 19 • Why the full recovery of the Company’s costs of repowering, including
20 undepreciated investment in replaced equipment and a return on investment, is
21 reasonable given the benefits of the repowering project;
- 22 • The advantages of the Company’s proposed Resource Tracking Mechanism
23 (“RTM”) for customers, and the reasonableness of its design; and

24 • The consistency of the Company’s treatment of the costs and benefits of wind
25 repowering with principles of intergenerational equity.

26 **Q. Please summarize your testimony.**

27 A. The Company’s request for approval of its resource decision to repower its wind
28 facilities is timely and proper. The Company has carefully developed and refined the
29 wind repowering project. The Company has forecasted the costs and benefits of the
30 project, and addressed the manner in which project risks have been eliminated or
31 mitigated. At the same time, the Company’s investment and commitment to the wind
32 repowering project remains limited. This is the right window for meaningful review of
33 the repowering project under Utah Code Ann. § 54-17-402.

34 The Company proposes to provide all benefits of the wind repowering project
35 to customers. The only “benefit” to the Company is the opportunity to recover its
36 reasonable and prudent costs, like any other resource investment. Unlike most resource
37 investments, however, repowering will result in rate reductions to customers net of the
38 Company’s costs, which include undepreciated investment in replaced equipment and
39 a return on the investment. The Company’s updated economic analysis for years 2019
40 through 2022 estimates a Utah customer net benefit in each year, with net benefits of
41 up to \$12.4 million by 2022.¹

42 The RTM is carefully designed to deliver repowering benefits to customers in
43 a prompt and straightforward manner. The individual components of the RTM are
44 reasonable, and it is a better tool for tracking the costs and benefits of repowering than
45 traditional ratemaking or an accounting order. The Company’s overall approach to

¹ See Exhibit RMP__(JKL-2R), line 25 for Utah’s allocated share of 2022 Net Customer Benefits of \$12.4 million.

46 tracking the costs and benefits of repowering does not violate the principles of
47 intergenerational equity.

48 **THE COMPANY'S REQUEST IS TIMELY AND PROPER**

49 **Q. DPU witness Dr. Zenger questions the appropriateness of the Company's request**
50 **for preapproval under Utah Code Ann. § 54-17-402 given that, in her estimation,**
51 **the resource decision has "already been committed to." (Zenger Direct, lines**
52 **101 - 105.) Does the Company's request comply with the requirements for**
53 **preapproval, even considering the repowering project expenditures that occurred**
54 **in December 2016?**

55 A. Yes. As described in more detail in Mr. Timothy J. Hemstreet's rebuttal testimony, the
56 Company has not unequivocally committed to the wind repowering project. Instead,
57 the Company has prudently negotiated the ability to either not execute contracts or to
58 terminate its future obligations with suppliers and contractors if the resource decision
59 is not approved or economic conditions change such that the project, or a portion of the
60 project, is no longer beneficial to customers.

61 **Q. Dr. Zenger also claims that the Company appears to have made the decision to**
62 **repower its wind facilities without sufficient public and stakeholder input. (Zenger**
63 **Direct, 101-125) How do you respond?**

64 A. Contrary to Dr. Zenger's claims, PacifiCorp has not made its decision to repower its
65 wind facilities without sufficient public and stakeholder input. This very proceeding
66 provides a venue for the public and stakeholders to review and provide input on the
67 proposed repowering project. PacifiCorp purchased safe-harbor equipment in
68 December 2016 to secure the *option* to repower its fleet of owned resources and deliver

69 substantial benefits for retail customers. PacifiCorp's request is seeking approval of the
70 proposed wind repowering project, which will require additional incremental
71 investments beyond the safe-harbor equipment purchases made at the end of last year.
72 PacifiCorp's request is not seeking approval of these safe-harbor equipment purchases
73 as standalone investments. Therefore, and contrary to Dr. Zenger's claims, PacifiCorp
74 is not seeking absolution for risk it has already incurred.

75 **Q. Has the Company made similar filings in the past for resource decisions the**
76 **Company had made, subject to regulatory approval?**

77 A. Yes. The Company has made several resource approval filings under the Energy
78 Resource Procurement Act in Title 54, Chapter 17, including the Deer Creek mine
79 closure, acquisition of Lake Side 2 and Chehalis plants, and approval to install selective
80 catalytic reduction systems at Jim Bridger Units 3 and 4. Each was reviewed and
81 approved by management prior to filing but subject to the regulatory approval process.
82 The suggestion that the Company's contingent review and approval of the repowering
83 project, including purchasing turbines to preserve the opportunity and the benefits of
84 the project, disqualifies the Company from filing for resource approval is contrary to
85 normal business practices and previous resource approval filings.

86 **Q. Dr. Zenger suggests that the repowering project is not a candidate for preapproval**
87 **because, in essence, it is "fully baked," and parties do not have any real**
88 **opportunity to collaboratively plan the project. (Zenger Direct, lines 116 - 125.)**
89 **Does this assertion comport with your understanding of the project's status?**

90 A. No. First, I disagree with Dr. Zenger's contention that parties should be involved in the
91 planning of the project. Parties, and the public generally, are involved in the

92 development of the Company’s integrated resource plan, but that is very different from
93 planning the implementation of a project like repowering.

94 Second, the Company has not unequivocally committed to the repowering
95 project, and will continue to monitor the economics of the project, as reflected in the
96 updated analysis provided by Mr. Link.

97 Third, the fact the Company is bringing forward a well-developed project
98 should not be viewed as a flaw. As described by Mr. Hemstreet, many of the risks
99 identified by the parties have been mitigated, to a large extent, by the process of
100 negotiating contracts to implement repowering and completing most siting and
101 permitting reviews. If the Company had brought this project to the Commission for
102 preapproval before performing its due diligence and risk mitigation, it would have been
103 more difficult to clearly demonstrate the benefits of the project.

104 **THE CUSTOMER BENEFITS OF REPOWERING JUSTIFY FULL COST**
105 **RECOVERY**

106 **Q. Mr. Peterson recommends that the Company recover the costs of equipment that**
107 **is replaced as part of the repowering project. But Mr. Peterson also suggests that**
108 **the Commission “may wish to condition all or part of the recovery for the legacy**
109 **plant on ratepayer benefits.” (Peterson Direct, lines 158 - 165) Is this a reasonable**
110 **recommendation?**

111 **A.** No. Mr. Peterson suggests that the Commission limit a portion of the recovery on the
112 legacy plant as a hedge against customer risk. If the Commission determines that the
113 wind repowering project provides customer benefits, there is no basis to limit recovery
114 of costs associated with the project.

115 The Company included cost recovery of the legacy plant in its economic

116 analysis that demonstrated repowering is lower cost than other alternatives. To reduce
117 the return on the legacy assets would penalize the Company for making the prudent
118 resource selection. It would be analogous to arbitrarily taking a portion of rate base and
119 applying a different rate of return if another resource were selected.

120 In any forecast of the future, it is unlikely that all assumptions will be
121 completely accurate, especially when looking 30 years into the future. Some
122 assumptions will be low and some will be high. Because of these variances, the
123 Company's modeling includes a range of assumptions that can be used to assess the
124 impact if a particular variable differs from the baseline. This preapproval process is
125 intended to verify the reasonableness of the Company's assumptions and determine that
126 customers will benefit as a result of repowering. If approved, the Company should
127 recover its full cost of service related to the project because it delivers substantial
128 benefits to customers.

129 **Q. Has the Commission previously addressed the replacement of assets with lower**
130 **cost alternatives?**

131 A. Yes. The Commission has allowed cost recovery of replaced or upgraded assets related
132 to the Powerdale facility, the Deer Creek Mine, and the Carbon coal-fired power plant.
133 In all three cases, the Commission determined that early retirement of these facilities
134 was in the best interest of customers, *i.e.*, retirement provided net savings to customers
135 as compared to continued operation.

136 **Q. Did the Commission penalize the Company in any of these transactions by**
137 **allowing a lower rate of return on the retired assets?**

138 A. No. In each case, the Commission decided the transaction was a net benefit to

139 customers and allowed the Company its full return on the retired plant. Although there
140 were customer risks associated with the resource decision made in each case, the
141 Commission allowed full recovery.

142 **Q. What do you conclude from these cases?**

143 A. Consistent with this precedent, if the Commission determines that repowering provides
144 customer benefits, based on what is known today, then it should allow full recovery of
145 the costs associated with the upgraded equipment.

146 **Q. Messrs. Peaco and Higgins argue that the repowering project is inequitable**
147 **because the Company's shareholders will receive substantially more benefits than**
148 **customers. (Peaco Direct, lines 202 - 215; Higgins Direct, lines 293 - 308.) Do you**
149 **agree with this characterization?**

150 A. No. The purported shareholder benefit they claim is the capital cost incurred to fund
151 the repowering project. A basic premise of ratemaking, however, is that "a capital-
152 attracting rate of profit is here considered a part of the necessary cost of service."² The
153 cost of capital is no different than any other prudent cost recoverable in rates if incurred
154 to provide utility service. It is inaccurate to say that shareholders are receiving a greater
155 benefit than customers based on the fact that shareholders recover the costs incurred to
156 provide utility service.

157 The Company has demonstrated it can deliver additional generation to
158 customers at a lower cost than the alternatives, resulting in a net benefit to customers.

159 The customer benefits assume that shareholders recover the full cost of the repowering
160 investment, including capital costs.

² James C. Bonbright, Albert L. Danielsen, & David R. Kamerschen, *Principles of Public Utility Rates*, 112 (2d ed. Public Utilities Reports 1988).

161 Moreover, in the near term, the Company’s proposed RTM only recovers total
162 project costs to the extent that there are net benefits. After the next rate case, the costs
163 and benefits of repowering will be included in the Company’s full revenue requirement.
164 However, there is no guarantee that the Company will recover its full cost of service
165 related to the repowering investment. The Company must prudently manage its costs
166 to achieve the full return allowed by the Commission.

167 **Q. Mr. Higgins recommends that the return on the upgraded equipment should be**
168 **reduced by 200 basis point to increase customer benefits and decrease Company**
169 **“benefits.” (Higgins Direct, lines 386 – 389.) Is this a reasonable recommendation?**

170 A. No. As discussed above, this proposal incorrectly assumes that cost recovery is a
171 “benefit” to the Company that should be compared to the benefits received by
172 customers. As discussed above, there is no precedent for limiting the Company’s
173 recovery of costs when equipment is upgraded or replaced if the upgrade is in
174 customers’ interests.

175 **Q. Would the Company “benefit” be any different if another generation resource**
176 **were selected?**

177 A. Conceptually, no. If the Company invested in any other resource, it would also recover
178 its capital costs, which would be calculated the same way.

179 **RESOURCE TRACKING MECHANISM**

180 **Q. Ms. Ramas asserts that the proposed RTM is unnecessary because the Company**
181 **added rate base in 2015 and 2016 and still earned at or above its authorized rate**
182 **of return. (Ramas Direct, lines 86 - 108.) Do you agree?**

183 A. No. The RTM is designed to more appropriately match costs and benefits of the wind

184 repowering project than under traditional ratemaking, while ensuring that the project
185 does not impose any additional costs on customers in the near term.

186 **Q. Please explain the impact that the RTM has on earnings.**

187 A. The RTM is a tool to capture the costs and benefits of the wind repowering project and
188 fairly treat shareholders and customers, with the protection of a proposed cap. To the
189 extent costs exceed benefits in any given year until the project is fully reflected in rates,
190 the Company bears the risk. In other words, the RTM is asymmetrical in customers'
191 favor and would credit customers with the net benefits of the project annually until the
192 next general rate case. This would have downward pressure on the Company's
193 earnings, to the extent costs exceed the benefits in any given year.

194 **Q. If the RTM is the point of contention in the proceeding, would the Company be**
195 **willing to move forward with the wind repowering project without an RTM?**

196 A. Yes, if there is a proper matching of the costs of the project with the benefits so that
197 shareholders are not penalized for making a prudent decision that delivers customer
198 benefits over the long term. If there is no RTM (and therefore no accounting for the
199 incremental costs and production tax credits ("PTCs")), an additional adjustment would
200 be required to remove the zero-cost energy from the Energy Balancing Account
201 ("EBA") and replace the energy at market cost. Under this scenario, the result of
202 repowering would be captured in semi-annual results of operation reports provided to
203 the Commission, and the impact to earnings would be a matter of routine review by the
204 regulatory agencies for reasonableness.

205 **Deferral vs. Accounting Order**

206 **Q. What is your position on Mr. Thomson's proposal that the Commission issue an**
207 **accounting order to defer the costs and benefits of repowering until the next rate**
208 **case, rather than approve the RTM? (Thomson Direct, lines 169 - 173.)**

209 A. The Company opposes this proposal because it would unreasonably delay recovery of
210 the repowering costs. Under Mr. Thomson's proposal, the Commission would calculate
211 the deferral in the same way as the RTM, other than the carrying charge discussed later
212 in my testimony. Thus, the deferral of the incremental costs and benefits of repowering
213 would be similar and the accounting treatment would essentially be the same as the
214 RTM. However, the delay in the collections from deferring the costs of repowering,
215 rather than implementing an annual true-up mechanism, creates several problems.

216 **Q. Please describe the problems associated with using a deferral instead of the RTM**
217 **to track repowering costs and benefits.**

218 A. First, the RTM ensures that costs and benefits are properly matched in the interim until
219 the next rate case. The RTM will end when repowering costs are reflected in base rates
220 (except for the tracking of the variability of PTCs). A deferral, on the other hand, would
221 result in an amortization built into base rates that would not be removed until a future
222 rate case.

223 Second, the RTM matches the costs and benefits so that the customers receiving
224 the benefits are also paying the costs that generate the benefits. If the investment costs
225 and PTCs are deferred, but the power cost benefits flow through the EBA, a mismatch
226 occurs and customers receive a windfall in the near term. This violates the matching
227 principle for costs and benefits. Because Mr. Thompson's deferral results in matching

228 and intergenerational issues, I recommend using the RTM, which produces essentially
229 the same result and avoids these issues. If Mr. Thomson’s deferral approach is used, the
230 net power cost benefits of the zero-cost energy must be pulled out of the EBA and
231 deferred as well.

232 Third, generally accepted accounting principles do not allow for the deferral of
233 a return on investment that would be collected at some undetermined time in the future.
234 With the RTM, the collection of the return component happens annually as part of the
235 RTM’s regular true-up process. The deferral approach would have the same total
236 overall impact on customers; however, it would lead to complicated separate
237 accounting, increased difficulty in auditing, and delayed inclusion of cost/benefit
238 impacts for both customers and the Company.

239 For these reasons, the RTM as proposed provides greater benefits to customers
240 than the method described by Mr. Thomson.

241 **Carrying Charge**

242 **Q. Mr. Thomson claims that the “Company has not provided support for using a 6%**
243 **carrying charge rather than the Commission approved carrying charge method.”**
244 **(Thomson Direct, lines 156 - 157.) Why is the Company proposing a six percent**
245 **carrying charge on the RTM during the deferral and collection period?**

246 **A.** The repowered assets will provide customer benefits in two ways—by generating
247 revenue through the PTCs and by reducing net power costs (“NPC”) through zero-cost
248 energy. The benefits of the reduced NPC will flow through the EBA, which includes a
249 six percent carrying charge. To match the carrying charge used for the NPC benefits,
250 the Company proposes that the same six percent carrying charge apply to the RTM.

251 **Q. Mr. Thomson recommends that the Commission use an accounting order “without**
252 **the interest carrying charges or sur-credits.” (Thomson Direct, lines 171 - 172.) Is**
253 **this a reasonable recommendation?**

254 A. No. Mr. Thomson’s recommendation is contrary to the carrying charge applied in the
255 EBA and it is contrary to the carrying charge method he implies should be used for
256 deferrals. Mr. Thomson does not explain the rationale for his proposal or justify its
257 departure from established Commission precedent.

258 The use of no carrying charge, as proposed by Mr. Thomson, is unjustified given
259 the customer benefits resulting from repowering. It is appropriate to apply a carrying
260 charge to the balance of the RTM similar to the treatment afforded the EBA. As long
261 as the Commission approves a reasonable carrying charge, however, the Commission
262 could deviate from the carrying charge used for the EBA.

263 **Operation and Maintenance (“O&M”)**

264 **Q. Why is it necessary to include O&M expenses in the RTM?**

265 A. The Company believes that, as part of the RTM, there needs to be a true-up of wind
266 O&M associated with repowering. The Company has included O&M costs in its
267 economic analysis supporting the decision to repower. O&M costs associated with the
268 repowered wind turbines include increased wind lease payments and costs associated
269 with Full Service Agreements from turbine vendors following repowering.

270 **Q. What is the Company’s position on using total wind O&M versus using non-labor**
271 **O&M?**

272 A. Ms. Ramas expressed concerns with tracking labor O&M expenses associated with the
273 repowered assets. (Ramas Direct, lines 409 - 445.) The Company’s proposal is a true-

274 up of the total O&M associated with the wind facilities for simplicity and transparency.
275 Because the increased O&M associated with wind repowering will mainly be
276 associated with non-labor costs, however, the Company is not opposed to truing-up
277 only the non-labor portion.

278 **Q. Ms. Ramas is concerned about the Company's proposal to use a four-year**
279 **historical average O&M expense, rather than the amount from the last rate case,**
280 **to calculate the incremental O&M in the RTM. (Ramas Direct, lines 409 - 445.)**
281 **Why did the Company propose a four-year historical average?**

282 A. The intent of the RTM is to isolate the incremental costs of repowering and to match
283 costs and benefits. To determine the incremental O&M costs, the Company used a pre-
284 repowering four-year average expense as the baseline to determine the average O&M
285 expense. To smooth annual fluctuations in O&M expenditures, a four-year average will
286 minimize any anomalies.

287 **Q. Is the Company changing the proposal for O&M as part of rebuttal?**

288 A. No. The Company believes its original approach is the appropriate measurement of
289 O&M for the RTM. However, the Company does not oppose using non-labor O&M in
290 the RTM.

291 **Production Tax Credits**

292 **Q. Why should the Commission approve the use of a mechanism to recover PTCs**
293 **now, rather than in a future rate case as proposed by Ms. Ramas? (Ramas Direct,**
294 **lines 361 - 363.)**

295 A. Allowing recovery of the PTCs through the RTM better matches costs and benefits and
296 ensures customers receive the benefits of repowering. The current PTCs included in

297 base rates have already begun expiring, and the Company is not proposing to modify
298 base rates to remove expiring PTCs. The Company is proposing to pass through
299 100 percent of the new PTC benefits through the RTM.

300 PTC benefits are tied to the output of the wind turbines. As the annual wind
301 output varies, this results in changes to EBA-related NPC and PTCs associated with
302 the wind production. The energy impact of wind production is captured in the EBA;
303 therefore, the Company is proposing to capture the offsetting impact on PTCs in the
304 RTM. This will match the benefits and costs associated with varying wind production.
305 Also, as previously mentioned, customers will receive all of the PTC benefits
306 associated with repowering.

307 **Property Taxes**

308 **Q. Ms. Ramas criticizes the Company's proposal to use an average property tax rate**
309 **from the past rate case in the RTM because it is inconsistent with projections of**
310 **O&M expense from the last rate case. (Ramas Direct, lines 480 - 485.) Why did**
311 **the Company propose using the average property tax rate from the last rate case?**

312 A. The RTM measures the incremental costs and benefits associated with repowering
313 assets. The baseline costs and benefits are set forth in Exhibit RMP____(JKL-1). For
314 most items, the incremental impact can be measured using data outside of the last
315 general rate case, *e.g.*, the incremental O&M expense discussed above. However, for
316 purposes of quantifying the incremental impact on property taxes, the Company
317 determined that using the average rate from the last rate case provided a verifiable and
318 auditable measurement of the total-company property taxes included in rates. The
319 property taxes are calculated assuming an incremental increase in property taxes

320 resulting from an incremental increase in net rate base.

321 **Q. Ms. Ramas is also critical of the Company’s proposal to track only the incremental**
322 **increase in property taxes, without accounting for the reduction associated with**
323 **existing assets. (Ramas Direct, lines 504 - 508.) What is the Company’s response**
324 **to Ms. Ramas’ assertion that the Company’s proposal overstates property tax**
325 **expense?**

326 A. The Company’s operating property is valued on a centralized basis in each of its states.
327 Assessed values are a function of the Company’s investment in operating property and
328 the amount of earnings derived from the operation of such property. Even though a
329 portion of the plant is being replaced, this will not directly reduce the Company’s
330 property tax expense. The method the Company is proposing is a reasonable method
331 for estimating the property tax impact using the average rate from the last general rate
332 case.

333 INTERGENERATIONAL EQUITY

334 **Q. Mr. Peterson argues that the Company’s proposal creates an intergenerational**
335 **equity issue. (Peterson Direct, lines 177 - 178.) Do you agree?**

336 A. No. Mr. Peterson focuses on what he describes as a “tipping point,” after which
337 customers will be burdened with the cost of the legacy equipment without any
338 associated PTC benefits. This argument incorrectly suggests that PTC benefits are the
339 sole benefits associated with repowering. Another significant benefit of repowering is
340 incremental generation and extended asset life. This is covered in the netting of costs
341 and benefits contemplated in the proposed RTM. This incremental generation is now
342 anticipated to be approximately 743 gigawatt-hour (“GWhs”) in each of the first

343 20 years and approximately 3,612 GWhs in each of the final 10 years. Thus, while the
344 benefits of the PTCs will accrue to customers during the first 10 years, the repowered
345 facilities will continue to provide customer benefits for their entire operating life, and
346 will provide substantial value to customers in later years as a result of the increased
347 generation associated with life extension.

348 **Q. Are you suggesting that the NPC benefit of 743 GWhs of incremental generation**
349 **during the 12-year period starting in 2028 will be commensurate with the costs**
350 **projected to be borne by customers during the same period?**

351 A. I am not. I think it is fair to highlight that there is a period during which customers will
352 be subject to greater costs than benefits. The Company has been transparent on that
353 point – although Mr. Link’s exhibit RMP__(RTL-R3) shows the period lasting not 12,
354 but five-to-six years in high natural gas price scenarios, six-to-seven years in medium
355 natural gas price scenarios, and seven-to-nine years in low natural gas price scenarios.
356 But the fact is that customers will receive *some* NPC benefit stemming from the
357 replacement of the legacy equipment in every year of the repowered projects’ lives.
358 While that benefit may not exceed the associated costs in a given year, few regulators
359 would suggest that a project may go forward only if it will produce benefits in excess
360 of costs every single year of its decades-long life.

361 Throughout the lives of the repowered facilities, the replacement of the legacy
362 equipment will create value through PTC benefits, incremental generation, or both.
363 Therefore, it is inaccurate to claim that the Company’s approach to cost recovery
364 produces intergenerational inequity. As noted earlier in my testimony, however, DPU’s
365 proposal to defer the impacts of repowering rather than use the RTM does create

366 intergenerational inequities because NPC benefits will immediately flow through the
367 EBA, while the other costs and benefits would be deferred.

368 **Q. Does it matter that the value of incremental generation may not exactly match the**
369 **costs borne by future customers?**

370 A. No. There will always be some fluctuation in the exact alignment of costs and benefits.
371 As Dr. Bonbright notes, it is important to use a principled and standard approach to
372 depreciation that does not shift or revise annual expense according to the exact value
373 derived from a facility in a given year:

374 [S]ince cost apportionments must be made ex ante, subject only to a
375 minimum of midstream revisions, any correlation between the resulting
376 annual charges imposed on consumers for capital costs (depreciation
377 plus fair return plus taxes) and the relative benefits derived by
378 consumers from the use of older assets as compared to newer assets,
379 must be extremely rough. Hence, the choice of any given method of
380 depreciation accounting must not be premised on any assumption of a
381 close adherence to a relative-benefit standard.³

382 **Q. What is the Company's position on the remedies identified by Mr. Peterson?**

383 A. Mr. Peterson proposes two potential remedies: (1) accelerating the depreciation of the
384 legacy equipment to match the 10-year PTC period; or (2) amortizing the PTC benefits
385 over the full life of the legacy equipment. I agree with Mr. Peterson's estimation that
386 either of these remedies *could* have the effect of reducing the project's overall benefits
387 to customers. If parties, and ultimately the Commission, see merit in either approach,
388 the Company does not necessarily object. The Company's support for such a change
389 would be contingent upon the lifting of the RTM cap, however, as the number of years
390 in which the RTM would produce a net cost to customers would certainly rise.

³ James C. Bonbright, *Principles of Public Utility Rates*, 204 (Columbia University Press, 1961).

391 **Q. What is your conclusion on the intergenerational equity argument?**

392 A. While perfect matching of costs and benefits is ideal, it is only one of many
393 considerations in the regulatory world. The Commission must also balance it with rate
394 impacts on customers, simplicity in the regulatory accounting, and the unknown future
395 of what might impact the cost of operating a specific asset. Based on this, I recommend
396 the Commission amortize the PTCs over the period they are generated.

397 **UPDATED RESULTS AND EXHIBITS**

398 **Q. As a result of the updates completed by Mr. Link and presented in his testimony,**
399 **have you updated your exhibits from your direct testimony?**

400 A. Yes.

401 **Q. Please provide a summary of the updated results in the revised exhibits.**

402 A. The revised exhibits incorporate modeling changes found in Mr. Link's updated
403 analysis and rebuttal testimony. The revisions include Utah's allocated share of the
404 updated wind construction cost, return, depreciation, PTCs, taxes, and operating costs
405 and benefits. The updated net power cost changes associated with an updated load
406 forecast, system dispatch and revised wind generation projections have been included
407 in the EBA pass-through calculation. Figure 1 is a summary of the estimated
408 repowering revenue requirement benefits found in the revised exhibits and shows a
409 projected net customer benefit in each of the first four years, with net benefits of up to
410 \$12.4 million by 2022.

Figure 1

Repowering Estimated Revenue Requirement Cost (Benefit)				
\$thousands				
	2019	2020	2021	2022
1 Total Company	(2,671)	(1,701)	(17,407)	(29,195)
2 Utah Allocated	(1,138)	(737)	(7,433)	(12,458)
3 Utah EBA	393	(4,661)	(5,306)	(5,530)
4 Utah Deferral	(1,531)	3,924	(2,127)	(6,928)
5 Net Customer Benefit	(1,138)	(737)	(7,433)	(12,458)

412 My original exhibits have been updated and are presented as RMP__(JKL-1R),⁴
 413 RMP__(JKL-2R), Exhibit RMP__(JKL-3R) and Exhibit RMP__(JKL-4R). These
 414 exhibits are revised with Mr. Link's updated economic analysis. They are in the same
 415 format to calculate the monthly and annual revenue requirements and RTM results as
 416 the exhibits presented in my direct testimony.

417 **Q. What do the updated exhibits indicate regarding customer benefits and the RTM?**

418 A. Exhibit RMP__(JKL-2R) shows that the wind repowering project provides estimated
 419 benefits each year. It also shows that the RTM passes these benefits on to customers
 420 each year, while allowing the Company to recover repowering project costs. Although
 421 the Company is proposing to cap⁵ the RTM through the next general rate case, these
 422 updated results show a sufficient level of estimated repowering benefit that use of the
 423 RTM cap may not be necessary.

⁴ Exhibit RMP__(JKL-1R), which provides a revenue requirement overview of the RTM, is changed to reference Mr. Hemstreet's revised exhibit, Confidential Exhibit RMP__(TJH-1R) in the NPC Savings Base calculation.

⁵ The Company is proposing to cap the RTM until the next general rate case so that, after taking into account the wind repowering benefits that will flow through the Company's EBA, it will not operate to surcharge customers.

424 Exhibit RMP__(JKL-3R) shows the monthly calculations that roll-up to the
425 annual results in Exhibit RMP__(JKL-2R). Exhibit RMP__(JKL-4R)⁶ values have not
426 changed from my direct testimony, but is included here to facilitate the referencing to
427 key financial and allocation data used in the other exhibits.

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

429 **A. Yes.**

⁶ The reference to Confidential Exhibit RMP__TJH-3, page 2 of 2 has been updated to reflect that it has been replaced by Mr. Hemstreet's Confidential Exhibit RMP__TJH-1R.