

1 **Q. Are you the same Gregory N. Duvall who submitted direct testimony on**
2 **behalf of the Company in this phase of the proceeding?**

3 A. Yes.

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

5 A. My rebuttal testimony responds to the direct testimony submitted by other parties
6 in this phase of the proceeding, including direct testimony submitted by
7 Mr. Abdinasir M. Abdulle, Ph.D. on behalf of the Division of Public Utilities
8 (“Division” or “DPU”); Mr. Randall J. Falkenberg on behalf of the Office of
9 Consumer Services (“OCS”); Ms. Sarah Wright on behalf of Utah Clean Energy
10 (“UCE”); Mr. Luigi Resta on behalf of Scatec Solar of North America (“Scatec
11 Solar”); Mr. Rocco Vrba on behalf of Energy of Utah, LLC (“Energy of Utah”);
12 and Mr. Maurice Brubaker on behalf of Kennecott Utah Copper, LLC and Tesoro
13 Corporation. Specifically, I respond to issues surrounding the methodology for
14 calculating avoided cost pricing for renewable qualifying facilities (“QFs”) larger
15 than three megawatts. Company witness Mr. Paul H. Clements will respond to
16 issues related to renewable energy certificate (“REC”) ownership for renewable
17 qualifying facilities larger than three megawatts.

18 **Q. How is your rebuttal testimony organized?**

19 A. My rebuttal testimony is divided into four sections. The first section responds to
20 other parties’ comments concerning whether the Market Proxy method continues
21 to produce reasonable results. The second section responds to other parties’
22 comments concerning the capacity contribution assumptions used in Proxy/Partial
23 Displacement Differential Revenue Requirement (“Proxy/PDDRR”) method for

24 renewable QF resources. The third section responds to the integration cost
25 assumptions used in the Proxy/PDDRR method for renewable resources. The
26 fourth section responds to all other issues presented by parties.

27 **Q. Please summarize your rebuttal testimony.**

28 A. First, I show that no party has refuted the evidence showing the Market Proxy
29 method is no longer appropriate to calculate avoided costs for wind resources, and
30 the Proxy/PDDRR method should be used to calculate avoided costs for all
31 renewable resources. Second, I demonstrate why OCS's proposed "equalizing"
32 adjustment that increases the capacity contribution of wind resources from 4.1
33 percent to 13.8 percent is not necessary, and why UCE's proposal to use either the
34 Effective Load Carrying Capability ("ELCC") method or the Equivalent
35 Conventional Power ("ECP") method to determine capacity contribution is
36 inappropriate. Third, I demonstrate why the inclusion of solar integration costs is
37 reasonable. Fourth, I demonstrate that the additional adjustments and proposals
38 made by parties are either not necessary or outside of the scope of this
39 proceeding.

40 **The Market Proxy Method**

41 **Q. Has any evidence been presented to justify the continued use of the Market**
42 **Proxy method?**

43 A. No. None of the parties that filed testimony in support of the Market Proxy
44 method have provided any evidence to address the problems clearly identified in
45 Company's Request for Approval of Changes to Renewable Avoided Cost
46 Methodology for Qualifying Facilities Projects Larger than Three Megawatts

47 (“Request for Agency Action”) filed October 9, 2012. The Proxy/PDDRR method
48 is already being used to calculate avoided costs for non-wind renewable
49 qualifying facilities in accordance with the Commission Order dated October 31,
50 2005 in Docket No. 03-035-14 (“2005 Order”), and should be used for wind
51 qualifying facilities as well.

52 **Q. Which parties continue to support the Market Proxy method?**

53 A. UCE and Scatac Solar are the only parties who recommend that the Market Proxy
54 method be retained. However, UCE conditions its proposal by indicating that the
55 Market Proxy method should be used in the event that the Company’s integrated
56 resource plan (“IRP”) selects renewable resources. In the alternative, UCE
57 recommends the use of a modified Proxy/PDDRR method when renewable
58 resources are not selected in the Company’s preferred portfolio.

59 **Q. Did the preferred portfolio in the Company’s 2013 IRP select economic
60 renewable resources?**

61 A. No. The only renewable resources in the 2013 IRP preferred portfolio were
62 selected to meet renewable portfolio standard (“RPS”) requirements in Oregon,
63 Washington and California. No cost-effective renewable resources were selected.
64 Based on this outcome, it appears UCE would support a modified Proxy/PDDRR
65 method under current circumstances.

66 **Q. What modifications to the Proxy/PDDRR method does UCE recommend?**

67 A. UCE recommends the following modifications to the Proxy/PDDRR method for
68 renewable QFs:

- 69
- Use either the ELCC or ECP method to determine the capacity contribution;

- 70 • Displace the cost of a combined cycle combustion turbine (“CCCT”) in both
71 the sufficiency and deficiency periods, rather than displacing front office
72 transactions (“FOTs”) in the sufficiency period and displacing a CCCT in the
73 deficiency period as is currently done in the Proxy/PDDRR method;
- 74 • Exclude integration costs for solar QFs; and
- 75 • Add a risk premium for natural gas risk and hedging costs.

76 Taken together, these modifications make the Proxy/PDDRR method functionally
77 equivalent to the Market Proxy method. I will rebut each of these proposals later
78 in my testimony.

79 **Q. How does UCE address the fact that the Company does not need wind**
80 **resources on an economic basis and only adds uneconomic wind resources to**
81 **meet RPS requirements in the 2013 IRP preferred portfolio beginning in**
82 **2024?**

83 A. UCE continues to argue that the timing of wind resources is not important and
84 that as long as there are wind resources selected by the IRP, wind QFs should get
85 paid the full cost of a new wind resource beginning in the first year of the QF
86 contract.

87 **Q. Is this reasonable?**

88 A. No. This is one of the major flaws of the Market Proxy method that was identified
89 in my direct testimony and was also recognized by the Division and OCS. It is not
90 reasonable for a renewable QF to receive a capacity payment associated with
91 deferring a wind resource beginning in the first year of their contract when the
92 Company is not avoiding a wind resource until 2024.

93 **Q. Does UCE suggest modifications to the Market Proxy method to make it**
94 **work in the future?**

95 A. Yes. UCE suggests that an alternative approach might be to use the cost
96 assumptions the Company uses in its IRP for the market proxy cost, Company
97 wind purchased power agreements where available, or publicly available costs for
98 wind purchase power agreements from other utilities.

99 **Q. Do any of these suggested modifications address the issue that the Company**
100 **does not need wind resources in the immediate future?**

101 A. No. None of these suggested modifications provide any relief to customers of
102 paying too much for wind QFs when the QF does not result in avoiding the cost
103 that is being referenced.

104 **Q. Did Scatec Solar respond to any of the specific problems that the Company**
105 **identified with the Market Proxy method?**

106 A. No. Without addressing any of the problems with the Market Proxy method
107 identified in the Company's Request for Agency Action, Scatec Solar proposed to
108 expand the Market Proxy method to apply to solar resources as well as wind.
109 Scatec Solar made this proposal without providing any evidence that the Market
110 Proxy method continues to be reasonable.

111 **Q. Scatec Solar also proposed to include a solar target in the IRP which would**
112 **then form the basis of a solar Market Proxy method. Is this the appropriate**
113 **forum for this issue?**

114 A. No.

115 **Q. Please summarize your response regarding the continued use of the Market**
116 **Proxy method.**

117 A. UCE and Scatec Solar are the only parties that have proposed keeping the Market
118 Proxy method without presenting any reasoning to justify its continued use.
119 Accordingly, the Market Proxy method should be discontinued permanently for
120 the reasons cited in my Direct Testimony and the Direct Testimony of OCS and
121 DPU and the fact that no party has presented any evidence showing why it is
122 reasonable.

123 **Peak Capacity Contribution**

124 **Q. How do you respond to the claim made by UCE witness Ms. Wright that the**
125 **Company’s historical measurements of peak capacity contribution are**
126 **energy-focused, rather than an evaluation of capacity value?**

127 A. Ms. Wright introduces the term “capacity value” in place of “capacity
128 contribution.” Capacity value as used by Ms. Wright is an energy measure
129 because it uses all of the hours in the year rather than peak load hours and is
130 therefore not appropriate for determining capacity contribution for QF pricing.
131 Moreover, Ms. Wright ignores the fact that the Company’s capacity
132 measurements are based on the likelihood that a resource will be available to
133 satisfy system coincident peak loads which is the essence of “capacity
134 contribution.” The Company measured wind output in 100 summer hours with the
135 highest loads based on a 90 percent confidence level that output would be
136 available to meet peak loads. Ms. Wright concludes that the Company’s
137 calculation is energy-focused because the Company uses a capacity factor. The

138 Company would agree that a capacity factor calculation is energy-focused if it is
139 calculated for an entire year, but not when it is applied to the 100 summer hours
140 with the highest loads. The Company's capacity contribution methodology is
141 clearly a capacity measurement focused on system coincident peak loads, not an
142 energy measurement, and accurately measures a QFs contribution to meeting the
143 system coincident peak load.

144 **Q. What is the source of capacity value as used by Ms. Wright?**

145 A. Ms. Wright appears to source the term from a report titled "Comparison of
146 Capacity Value for Photovoltaics in the Western United States" prepared by the
147 National Renewable Energy Laboratory ("NREL") that she introduced as UCE
148 Exhibit 4.1(D). The report details the calculations of Ms. Wright's proposed
149 ELCC and ECP methods for determining capacity value. The purpose of the
150 report was to identify whether various simplified methods of calculating capacity
151 value produced results that were similar to the results produced by the ELCC and
152 ECP methods. NREL was clear in the report that the results were not appropriate
153 for measuring the ELCC or ECP at the individual utility level. The NREL report
154 was prepared for the U.S. Department of Energy, Office of Scientific and
155 Technical Information.

156 **Q. Did the report include a disclaimer?**

157 A. Yes. On the first page of the report, the United State Government makes the
158 following disclaimer: "Neither the United States government nor any agency
159 thereof, nor any of their employees, makes any warranty, express or implied, or

160 assumes any legal liability or responsibility for the accuracy, completeness, or
161 usefulness of any information.”

162 **Q. Why do you characterize the capacity values contained in the NREL report**
163 **as energy measures?**

164 A. Section 4 of the NREL report indicates that the calculations in the report used
165 hourly load data for the years 1998-2005 in the calculation of the various methods
166 including the ELCC and ECP methods that are recommended by Ms. Wright in
167 this proceeding. The term “capacity value” as used in the report applies to all
168 hours of the year and is not limited to just the hours that are representative of the
169 system coincident peak and therefore does not accurately capture “capacity
170 contribution” associated with system coincident peak load.

171 **Q. Are there other assumptions used in the NREL report that render it**
172 **unsuitable for use in determining the capacity contribution for solar QFs**
173 **located in Utah?**

174 A. Yes. On page 13 of the report, NREL acknowledges that use of utility-specific
175 data would be more typical of how a utility would consider the capacity value of a
176 generation resource and on page 14 reiterates that the primary purpose of the
177 analysis is to compare methods as opposed to determining a value of solar
178 capacity for a particular utility. On page 15, NREL stresses that any correlation
179 between local loads and local solar resources are not captured in their analysis
180 because they use a Western Energy Coordinating Council (“WECC”) wide
181 footprint which assumes utilities have the ability to share capacity resources
182 across the entire Western Interconnect. While this assumption is appropriate for

183 the purpose of the NREL study, it is not a reasonable assumption for accurately
184 determining the capacity contribution of Utah QFs to meeting PacifiCorp's
185 system coincident peak load.

186 **Q. Are any of the numbers from the NREL report appropriate for use in**
187 **determining the capacity contribution for Utah QFs?**

188 A. No. It is clear that the numbers produced by NREL are not appropriate to apply on
189 a utility specific basis. The Company's capacity contribution study, on the other
190 hand, uses actual data¹ to measure the variability of output from intermittent
191 resources across peak load hours. It is a reasonable method that produces accurate
192 results. It makes little sense to use a theoretical method that focuses on energy
193 when actual data on peak contribution is available. In addition, capacity from an
194 intermittent resource should be measured based on the resource's ability to
195 reliably satisfy the Company's system coincident peak obligations. It should not
196 be based on a resource's ability to satisfy energy obligations in all hours of the
197 year, which is what the ELCC and ECP proposed by Ms. Wright estimates.

198 **Q. What is Ms. Wright's recommended modification to the Proxy/PDDRR**
199 **method with regard to the timing and level of capacity contribution?**

200 A. As noted previously, Ms. Wright recommends the capacity payment based on the
201 CCCT begin immediately, regardless of the timing of the next deferrable CCCT.
202 While Ms. Wright recognizes her recommendation is a departure from current
203 practice, she nevertheless makes it under the claim that renewable QFs bring
204 capacity value to the system and they should be compensated for that value in the

¹ For wind resources, the Company uses historical generation data from its own wind plants. For solar resource, the Company uses historical meteorological data provided by the National Renewable Energy Laboratory.

205 avoided cost rate. She goes on to note that preliminary results from the 2013 IRP
206 indicate that the Company will rely very heavily on FOTs, and concludes that
207 while PacifiCorp may not be planning to add a resource in the near term, there is
208 nevertheless a need for both energy and capacity.

209 **Q. What is wrong with Ms. Wright's proposal?**

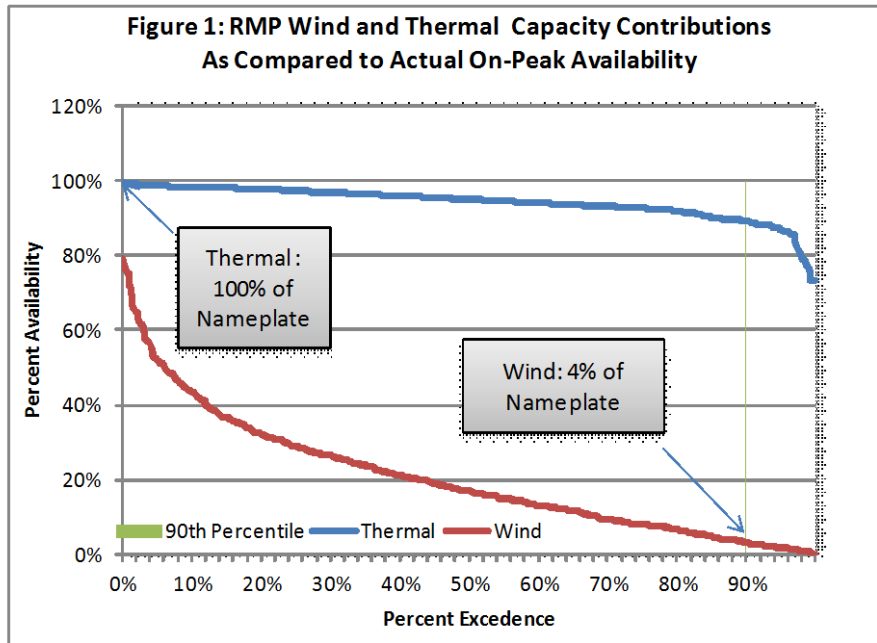
210 A. The next deferrable CCCT in the 2013 IRP is in 2024. The Company cannot defer
211 the capacity costs of a new CCCT immediately. Ms. Wright's proposal does not
212 reflect costs that the Company can avoid. The Proxy/PDDRR method already
213 includes capacity deferral of FOTs when they are the avoidable capacity resource
214 during the sufficiency period. Specifically, the Proxy/PDDRR method provides
215 QFs a capacity value for the deferral of FOTs each year prior to the year of the
216 next deferrable CCCT. Beginning in the year of the next deferrable CCCT, the
217 Proxy/PDDRR method provides QFs a capacity value for the deferral of the
218 deferrable CCCT. The Proxy/PDDRR method should not be modified to reflect
219 Ms. Wright's proposal because the current approach reflects the Company's
220 avoided cost of capacity consistent with the IRP.

221 **Q. Does Mr. Falkenberg propose any adjustments to the Company's capacity**
222 **contribution study?**

223 A. Yes. Mr. Falkenberg prepared an analysis from which he concluded that the
224 Company's peak capacity contribution analysis overstates the capacity
225 contribution of a CCCT. Based on this conclusion, Mr. Falkenberg recommended
226 an adjustment be made to the capacity contribution of wind resources so that the
227 wind plant provided the same reliability as a CCCT. He based his conclusion on

Figure 1 in his direct testimony, which the Company has reproduced below.

**Figure 1
Reproduction of OCS 1D Falkenberg Figure 1**



229 **Q. Why did Mr. Falkenberg conclude that the peak capacity contribution of a**
 230 **CCCT was overstated in the Company’s analysis?**

231 **A.** Mr. Falkenberg concludes that because the entire thermal fleet (coal, gas,
 232 geothermal) is not 100 percent available at a 90 percent confidence level it is
 233 necessary to make an adjustment to equalize the reliability impacts of wind and
 234 the thermal fleet. Mr. Falkenberg does not dispute that the Company’s wind
 235 portfolio contributes approximately 4.1 percent to peak loads at a 90 percent
 236 confidence level.

237 **Q. Do you agree that it would be more appropriate for Mr. Falkenberg to**
238 **compare the peak capacity contribution of wind to the next deferrable**
239 **CCCT, not the entire thermal fleet?**

240 A. Yes. The comparison should be between wind and the next deferrable CCCT, not
241 the entire thermal fleet. The capacity costs paid to QFs are based on the value of
242 the next deferrable CCCT, so peak capacity contribution should also be based on
243 the next deferrable CCCT. As explained in the 2005 Order:

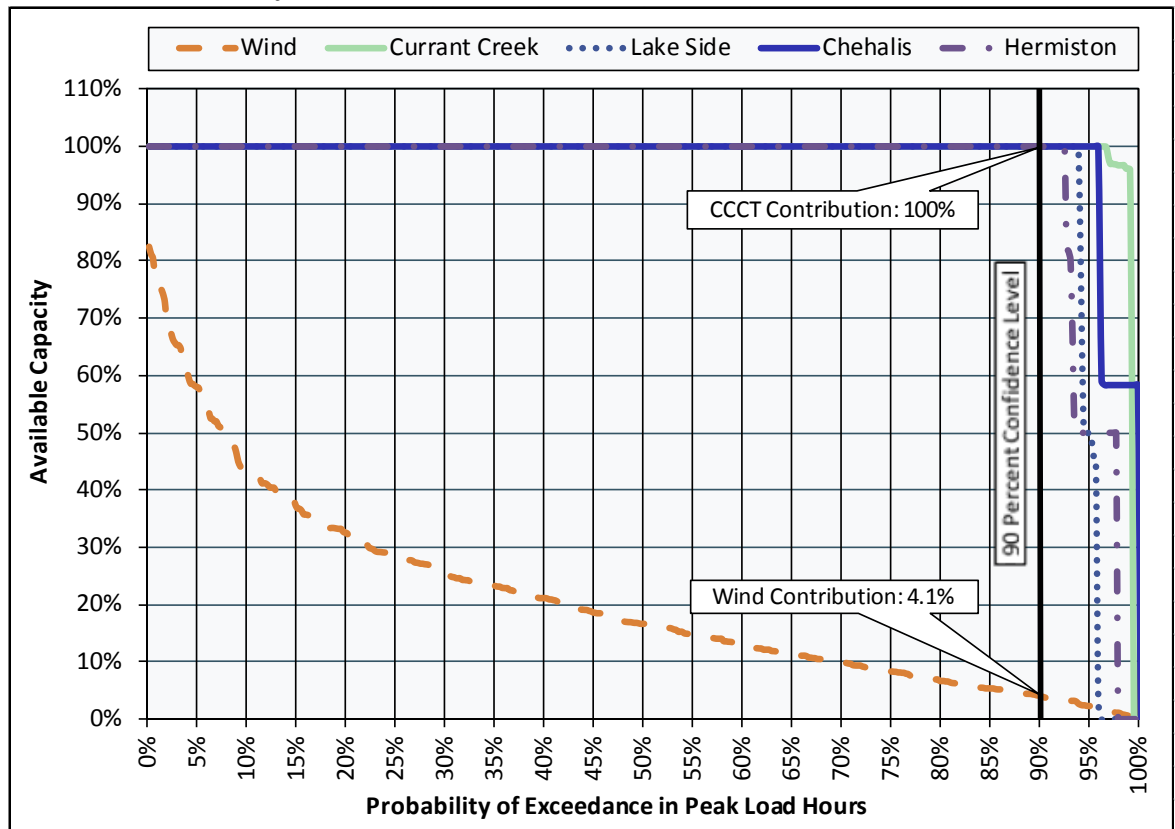
244 The Company, Division and Committee support avoided cost
245 determination based on the QF's proposed operating conditions.
246 PDDRR results will reflect QF dispatchability, reliability and
247 availability. *For the QF to be paid for avoiding capacity, it must*
248 *meet the availability of the avoidable resource.* (emphasis added)²

249 **Q. Have you recreated Mr. Falkenberg's chart to compare the peak capacity**
250 **contribution of wind to the Company's CCCT resources?**

251 A. Yes. Figure 2 compares the peak capacity contribution of wind to the Company's
252 existing CCCT resources. The Company believes that the historical peak
253 contribution of these resources is representative of the next deferrable CCCT.

² 2005 Order, p17.

Figure 2
Wind and Thermal CCCT
Probability of Exceedance in Peak Load Hours 2007 - 2011



254 **Q. What does Figure 2 show?**

255 A. Figure 2 shows that using a 4.1 percent contribution to capacity for a wind plant is
 256 equivalent on a reliability basis to using a 100 percent contribution to capacity for
 257 a CCCT with a 90 percent confidence level. Based on this chart, no “equalization”
 258 adjustment is warranted.

259 **Q. Please summarize your recommendation with regard to capacity**
 260 **contribution.**

261 A. There is no need to use theoretical methods to estimate peak capacity contribution
 262 when actual data is available. In addition, the ELCC, which measures unserved
 263 energy in all hours of the year, measures energy contribution not peak capacity

264 contribution. The method developed by Mr. Falkenberg is also inappropriate
265 because it does not compare wind and the next deferrable resource in the IRP
266 which is a CCCT. No compelling evidence has been presented to justify deviation
267 from the use of actual data presented in the Company's historical analysis.

268 **Integration Costs**

269 **Q. Have any parties opposed the Company's recommendation to account for**
270 **wind integration costs in the Proxy/PDDRR calculations using the same**
271 **method that is used in the IRP and general rate cases?**

272 A. No.

273 **Q. Have any parties opposed the Company's recommendation to use the cost of**
274 **wind integration as a proxy for solar integration?**

275 A. Yes. UCE witness Ms. Wright recommended excluding integration costs from
276 solar avoided cost calculations. Division witness Mr. Abdulle recommended
277 reducing solar integration costs to 50 to 65 percent of wind integration costs,
278 depending on panel configuration. Other parties have not made alternative
279 proposals to using wind integration as a proxy for solar integration.

280 **Q. Is it reasonable to exclude integration costs entirely from solar avoided cost**
281 **calculations as proposed by Ms. Wright?**

282 A. No. It would be unreasonable to assume that the Company would not incur any
283 cost to integrate solar resources. Solar resources are intermittent, and just like
284 wind would cause the Company to incur integration costs.

285 **Q. Ms. Wright claims that utility scale solar in PacifiCorp's system is so small**
286 **that the integration costs are negligible.³ Is this a valid reason to exclude**
287 **solar integration costs from avoided cost calculations?**

288 A. No. The solar integration costs included in the avoided cost calculations are
289 proportional to the output of the solar facilities. In other words, if a solar resource
290 is a small facility it will pay less integration cost on a total dollars basis than if it
291 was a large facility.

292 **Q. The Division represented that solar energy is less variable and more**
293 **predictable than wind energy and, as a result, proposed to use solar**
294 **integration rates that are lower than the Company's wind integration rate.**
295 **Do you believe this is accurate?**

296 A. No. The cost of reserves necessary to integrate solar could be equal to or greater
297 than wind integration for the following reasons:

298 (1) Solar resources have the potential to exhibit sharp swings in output as
299 a result of rapidly changing cloud cover, where wind output changes more
300 gradually;

301 (2) Sharp changes in solar output may occur nearly instantaneously,
302 resulting in strains on the system that require additional quantity of
303 reserves relative to wind;

304 (3) Because all of the variability of solar occurs during the day, a greater
305 portion of the reserves necessary to integrate solar must be held during on-
306 peak hours, when the opportunity cost of holding reserves is highest; and

³ Direct Testimony of Ms. Wright, lines 534-535.

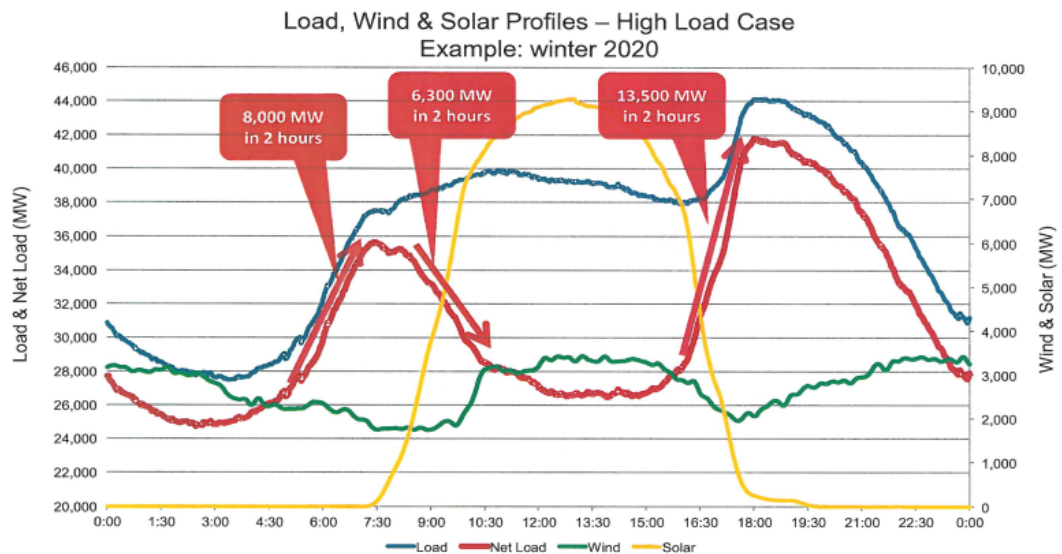
307 (4) Correlation between load and solar generation has the potential to
308 increase the ramping reserve requirements because of the timing of solar
309 output relative to system load.

310 These four factors cause the Company to believe that, despite the differences in
311 wind and solar generation, the wind integration costs serve as a fair proxy for the
312 cost to integrate solar resources on PacifiCorp's system.

313 **Q. Do you have an example of the potential impact solar may have on the**
314 **ramping requirements?**

315 **A.** Yes. As demonstrated in the following figure prepared by the California ISO, high
316 penetration levels of solar resources have the potential to impose new load
317 following requirements.

Figure 3
California ISO Example of Solar Resource Load Following Implications⁴



Slide 6

318 As illustrated in Figure 3, after resources have ramped up in the morning to meet

⁴ Source: <http://www.caiso.com/Documents/FlexibleResourceAdequacyCriteria-MustOfferObligation-ISOPresentation.pdf>.

319 increased load, they must ramp down to follow the increase in solar generation. In
320 the afternoon, resources ramp up to follow the decline of solar generation and
321 then must ramp up further to meet the peak load when solar output is back near
322 zero.

323 **Q. Do you agree with the OCS recommendation that the Commission should**
324 **direct the Company to perform a solar integration study?**

325 A. No. The addition of solar resources on the Company's system is still in the early
326 growth stages. While the Company has data from small projects participating in
327 the Utah solar incentive program, the Company does not yet have adequate data
328 from utility-scale solar projects connected to its transmission system to perform a
329 full solar integration study.

330 **Q. Please summarize your recommendation regarding integration costs.**

331 A. No party has opposed the use of the IRP and general rate case integration
332 methodology for wind resources in the Proxy/PDDRR calculations. The Company
333 believes that this method is also appropriate for solar resources.

334 **All Other Issues**

335 **Q. UCE, Energy of Utah, and Scatec Solar recommended an adjustment to the**
336 **Proxy/PDDRR method for renewable resources to reflect the fuel cost risks**
337 **associated of fossil fuel plants that are avoided by the addition of renewable**
338 **QFs. How do you respond to their proposals?**

339 A. First, fuel cost risk is neither an energy nor capacity cost incurred by the
340 Company, and is therefore not a known and measurable cost that can be avoided
341 by the Company. If a risk premium were included in pricing for renewable QFs, it

342 would have to be fabricated and would pass costs on to retail customers that are
343 above and beyond the avoided cost of energy and capacity, in violation of the
344 Public Utility Regulatory Policies Act (“PURPA”).⁵ In addition, it does not seem
345 reasonable to include fabricated costs in a commercial transaction. Second, fuel
346 source does not alter how a QF impacts the Company’s risk profile. A renewable
347 QF and a non-renewable QF are both fixed-price power purchase agreements
348 (PPAs) from the Company’s perspective. To the extent that two PPAs have the
349 same delivery pattern, they would have the same impact on the Company’s risk
350 profile. No adjustment is currently made to QF pricing under the Proxy/PDDRR
351 method to reflect the risk characteristics of non-renewable QFs, so it is not
352 appropriate to adjust QF prices for the risk characteristics of renewable QF
353 resources. Third, avoided cost prices represent expected or median outcome that
354 reflect escalating fuel costs and are just as likely to result in higher cost to
355 customers as they are to result in lower cost. Because the risk is symmetrical,
356 customers receive no incremental benefit by entering into a fixed price QF
357 contract.

358 **Q. Did any party propose a specific methodology to estimate the cost of risk**
359 **avoided by purchasing power from renewable QFs?**

360 A. No. For example, UCE recommends that a possible method would be to use the
361 Company’s averaging hedging costs over a 20 year period, but then fails to
362 identify how the average hedging costs would be calculated. The Company has
363 stated in its IRP that there are no hedging costs. There are gains and losses over

⁵ See, e.g., *Connecticut Light and Power Company*, 70 FERC ¶ 61,012, at 61,023, 61,028, *reconsideration denied*, 71 FERC ¶ 61,035, at 61,151 (1995), *appeal dismissed*, 117 F.3d 1485 (D.C. Cir. 1997) (invalidating state QF rates that exceed avoided costs).

364 time as a result of hedging, but the expected outcome is that the gains and losses
365 will net to zero. Hedging is conducted to mitigate risk, not to increase or decrease
366 costs.

367 **Q. These parties have also characterized a renewable QF resource as a zero cost**
368 **resource to the Company. Is that accurate?**

369 A. No. It is unlikely that a renewable QF owner would be willing to give power to
370 the Company for free. The Company must pay for every megawatt-hour
371 purchased from a renewable QF resource, so it is not a zero cost resource to the
372 Company. Avoided cost prices paid to renewable resources under the
373 Proxy/PDDRR method reflect escalating natural gas and wholesale market prices
374 over time. Adding a fuel risk premium on top of avoided cost prices that reflect
375 escalating natural gas prices would result in avoided cost prices for renewable
376 resources that reflect a high natural gas price scenario. This is not a reasonable
377 assumption.

378 **Q. Please summarize your recommendation with regard to risk mitigation costs.**

379 A. From the Company's perspective, the risk characteristics of a renewable QF are
380 no different than the risk characteristics of a non-renewable QF. The Company
381 must purchase power from both QFs at its avoided cost which already include
382 escalating natural gas prices based on a medium natural gas price forecast. Any
383 additional price risk premium would not be known and measurable, and would
384 therefore violate PURPA. Accordingly, it is not necessary, appropriate or legal to
385 adjust the Proxy/PDDRR method for renewable resources to reflect avoided fuel
386 price risk.

387 **Q. UCE and Energy of Utah suggest that avoided cost prices for renewable**
388 **resources should reflect avoidable climate change costs. Do you agree?**

389 A. No. Avoidable climate change costs are not known and measurable and are not an
390 energy or capacity cost incurred by the Company. Avoidable climate change costs
391 should not be included in avoided cost calculations for the same reasons that
392 avoided fuel price risk costs should not be included in avoided cost calculations.

393 **Q. Mr. Brubaker proposed to expand Schedule No. 38 to include an additional**
394 **list of ten items that the Company must provide each time it submits**
395 **indicative pricing to a QF developer regardless of whether they are**
396 **renewable or not. Are these changes to Schedule No. 38 appropriate for this**
397 **phase of the proceeding?**

398 A. No. The Company has not proposed to make any changes to Schedule No. 38 in
399 this proceeding, and the scope of this phase was limited to addressing the
400 methodology for calculating renewable avoided cost rates. A change to Schedule
401 No. 38 in the fashion prescribed by Mr. Brubaker would impact all QF's, not just
402 renewable resources. The Company does not believe that all parties interested in
403 general Schedule 38 changes are parties to this docket. Accordingly, the Company
404 requests that the Commission not examine these potential changes to
405 Schedule No. 38 at this time.

406 **Q. Much of Mr. Brubaker’s recommendation regarding changes to Schedule**
407 **No. 38 has to do with providing Generation and Regulation Initiative**
408 **Decision Tools (“GRID”) access to recipients of indicative avoided cost**
409 **pricing. Does the Company already provide GRID access to potential QFs**
410 **who request indicative pricing?**

411 A. Yes. The Company already provides GRID access to all potential QFs who
412 request it, including Kennecott Utah Copper, LLC and Tesoro Corporation, who
413 routinely receive GRID access following the receipt of indicative pricing.

414 **Q. What additional administrative burden would be imposed on the Company if**
415 **it were to adopt Mr. Brubaker’s changes to Schedule No 38?**

416 A. The Company is supportive of providing GRID access to QF developers who are
417 interested in performing a review of the GRID modeling used to calculate avoided
418 cost pricing. However, the Company is not supportive of providing GRID access
419 for all pricing requests regardless of whether the QF developer intends to review
420 the GRID modeling in the early phases of their development efforts. The
421 Company receives multiple requests for avoided cost prices each month, and
422 many of the projects never progress beyond the very preliminary development
423 stages. Much of the information included in the GRID model is proprietary and
424 can only be provided once appropriate protective agreements are in place. It
425 would be unreasonable to require the Company to dedicate resources to provide
426 access to a developer who never accesses the model.

427 **Q. What resources are necessary to set up GRID access for a new user?**

428 A. From a technology perspective, the process for providing GRID access is time

429 consuming and complicated. Each GRID user is provided with a separate
430 computer on the Company's network to perform GRID studies. The user has to be
431 set up in the Company's network as a vendor and granted access to the network
432 through the internet. Internet access is established using a unique secure account,
433 which must be approved for each user. The administrative burden to the Company
434 to set up GRID access for each pricing request is significant, and likely could not
435 be performed in the timeframe established under Schedule No. 38.

436 **Q. Division witness Mr. Abdinasir proposes to open a docket to determine the**
437 **proper treatment of Oregon solar resources in the Company's GRID**
438 **modeling. Is this necessary?**

439 A. No. A general rate case is the proper venue to discuss the GRID modeling of situs
440 assigned resources, such as the Company's Black Cap solar project. The Black
441 Cap project produces less than one average megawatt, so the Company does not
442 believe it warrants extraneous measures of a separate docket.

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

444 A. Yes.