Q.	Have you	previously	filed	testimony	in	this	docket?

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2 A. Yes. I filed direct testimony in which I presented the Company's application to modify
3 the maximum allowable contract term for qualifying facility ("QF") contracts that the
4 Company must enter into under the Public Utility Regulatory Policies Act of 1978
5 ("PURPA").

#### PURPOSE AND SUMMARY OF TESTIMONY

# 7 Q. What is the Company asking the Commission to approve in this proceeding?

A. The Company is requesting an order from the Public Service Commission of Utah

("Commission") directing implementation of a reduction of the maximum contract

term for PURPA contracts from 20 years to three years, to be consistent with the

Company's hedging and trading policies and practices for non-PURPA energy

contracts and more aligned with the Integrated Resource Plan ("IRP") cycle. The

Company is seeking a modification to the maximum contract term of QF contracts

executed under both Schedules 37 and 38.

### Q. To which witnesses are you responding in your rebuttal testimony?

I respond specifically to the direct testimony of Utah Clean Energy ("UCE") witness

Sarah Wright; Sierra Club witness R. Thomas Beach; Rocky Mountain Coalition for

Renewable Energy ("Coalition") witnesses Kevin Higgins, Bryan L. Harris, and Hans

Isern; Renewable Energy Coalition witness John Lowe; Utah Office of Consumer

Services ("OCS") witness Bela Vastag; and Utah Division of Public Utilities ("DPU")

witness Charles E. Peterson.

Q.	After reading intervenors' direct testimony in this docket, what are your gener	ral
	observations?	

A.

In seeking to maintain the "ratepayer indifference" standard required by PURPA, the Company's direct testimony explains and illustrates how the required 20-year contract term is: (1) inconsistent with the Company's hedging practices implemented after careful review by stakeholders in a recent collaborative, (2) inconsistent with resource acquisition policies and practices for non-PURPA energy purchases, and (3) not aligned with the Company's IRP planning cycle and action plan. Additionally, the Company's direct testimony describes how, without the requested modification to contract term, PacifiCorp will be forced to continue to acquire long-term, fixed-price PURPA contracts even though PacifiCorp's 2015 IRP, which was filed in March 2015, shows no new resource is required until 2028.

The direct testimony of three intervenors, namely UCE, the Coalition, and Sierra Club, carry common themes in response to the Company's application. These parties suggest PacifiCorp is trying to eliminate the PURPA must-purchase obligation, even though my direct testimony is clear that the must-purchase obligation remains. These parties are more concerned with ensuring continued QF development under any scenario, despite the lack of an identified need for new generation, than they are with balancing customer rate and risk impacts with QF rights under PURPA. These parties suggest a QF contract is not similar to commodity hedges, which are currently limited to three years or less under the Company's trading policies, even though the current QF contract is clearly a fixed-price purchase of unit-contingent non-dispatchable energy for a 20-year term. These parties suggest a QF contract is similar to a Company

resource, even though procurement of a Company resource is driven by need; and a Company resource can be dispatched and backed down when more economic alternatives are available, passing through to customers the savings from lower fuel and other operating costs because the total cost of the energy is not locked-in for 20 years like it is in a QF contract. Lastly, these parties suggest QFs are able to meet future environmental compliance obligations, even though those obligations are not currently known and measurable. Importantly, these parties ignore the critical fact that the QF retains the renewable energy credits ("RECs") for their own economic benefit, and those RECs represent the environmental attributes that these parties are touting as beneficial to the Company.

The OCS submitted a short piece of testimony in which it raises two critical issues with which I agree: 1) there is a risk to customers associated with carrying long-term fixed-price contracts for power, and 2) there is a disconnect between new QF contracts and PacifiCorp's IRP. Notwithstanding these important concerns, the OCS recommends the Commission not approve the Company's application.

The DPU agrees with the Company on many key issues and shares the Company's concerns related to the large number of existing and potential QFs. The DPU agrees that:

- A 20-year contract is inconsistent with the hedging principles agreed upon in the hedging collaborative;
- 2. A 20-year contract term is a clear benefit to QF developers;
- 3. It is not the regulator's place to ensure economic viability of a QF project; and

4. It is time to reconsider the previous positions related to QF contracts in light of recent events.

The DPU introduces an alternative to the Company's proposal. The DPU proposal consists of a five-year contract term but allows the capacity payment to be based on a 20-year avoided cost calculation. Energy prices would be calculated as they are now, but only for the next five years. Under the DPU proposal, the QF will have the option every five years to seek alternate off-takers elsewhere. While this proposal is an improvement in that it only fixes energy prices for up to five years, paying a capacity payment based on 20 years but allowing the QF the option to cease sales to the Company after only five years is similar to the issue that arises with levelized pricing where capacity and energy values are brought forward for the QF's benefit in early years and returned to customers in the later years of the long-term contract. In the DPU proposal, customers over-pay for the capacity value in the early years as capacity values is brought forward but bear the risk of the overpayment if the QF leaves after five years. This exposure does not meet the ratepayer indifference standard. I continue to recommend the implementation of a three-year contract term for all QF contracts.

### Q. How is your rebuttal testimony organized?

A.

I respond specifically to each of the intervening parties' arguments. Since many of the arguments from UCE, the Coalition, and Sierra Club are similar in nature, I provide detailed responses and evidence responding to Sarah Wright, UCE's witness, and then often refer to those same responses when rebutting the Coalition and Sierra Club. I then respond to the limited issues raised by Renewable Energy Coalition witness John Lowe. Finally, I respond directly to the OCS' recommendation and the issues and proposal

presented by the DPU. Like my direct testimony, my rebuttal testimony focuses on the reasons this change is necessary in order to maintain the "ratepayer indifference" standard required by PURPA.

#### RESPONSE TO UTAH CLEAN ENERGY

95 Q. Please summarize your understanding of Utah Clean Energy's testimony.

- 96 A. UCE argues that a three-year contract term will end renewable QF development in
  97 Utah, commodity hedges and QF projects are not comparable, and Company resources
  98 and QF projects are comparable. Ms. Wright then suggests that QFs provide a benefit
  99 to customers because they lock in generation at "current low prices."
  - Q. What is your response to Ms. Wright's suggestion that a three-year contract term will end the development of renewable QFs in Utah?
    - The fact that a PURPA contract only has a term of three years does not mean that the project will have only a three-year life. The must-take relationship between QF projects and the Company will not change with the shortening of the contract term. Rocky Mountain Power will be required to purchase the power produced by the project as long as PURPA requirements exist and the project qualifies as a QF under PURPA. Limiting the term of the contract to three years simply means that the price Rocky Mountain Power and its customers will be required to pay to the QF will be subject to adjustment every three years and will be more closely aligned with the Company's current avoided costs. After each three-year contract term, the Company will still be required by PURPA to contract with the QF for another term. The Company is not seeking to limit its PURPA purchase obligation to a single three-year term—it is simply proposing to align the pricing terms with the time horizons used in other commodity hedges and the

114		IRP action plan.
115	Q.	Do other witnesses agree that a three-year contract term may not end the
116		development of renewable QFs in Utah?
117	A.	Yes. DPU witness Charles E. Peterson points out on page 12 of his direct testimony
118		"the ability to finance will depend in part on who the developer is and what the purpose
119		of the QF is." Mr. Peterson also points out that with the development of financing
120		vehicles such as "yieldcos", new financing opportunities are available and will likely
121		expand.
122	Q.	Ms. Wright suggests the Company's application to change the QF contract term
123		is contrary to the intent of PURPA. Do you agree?
124	A.	No. Nowhere in PURPA does it specifically state that contract terms for a QF must be
125		of sufficient length for a QF to obtain financing. The foundations of PURPA are: 1) the
126		purchase obligation, and 2) the ratepayer indifference standard. The Company's request
127		in this docket does not alter the purchase obligation. The Company will continue to
128		purchase energy from QFs, in compliance with the letter and the intent of PURPA, for
129		the duration of a QF's useful life. The Company's application is more directly
130		concerned with the second foundation of PURPA—the ratepayer indifference standard
131		The Company's request aligns the maximum contract term for QFs with the Company's
132		hedging and trading policies and practices for non-PURPA energy contracts and with
133		the IRP cycle. This alignment is necessary to maintain the ratepayer indifference
134		standard required by PURPA.

# Q. Does PURPA require the Commission to establish QF contracting terms that

#### 136 guarantee a QF will be economically viable? 137 No. PURPA does not address economic viability of QFs or financing obligations. I Α. 138 agree with DPU witness Mr. Peterson on this issue. In his direct testimony, beginning 139 on line 213, Mr. Peterson states: 140 ...the Division is unaware of any statute or regulation that requires that the 141 Commission ensure that QF projects are economically viable, or that a certain number QF projects be successfully developed. In Docket No. 12-035-100, 142 143 certain parties raised the issue of the economic viability (which broadly would 144 also include the ability to obtain financing). The Division responded that "...the Division believes that it is not the regulators' place to ensure that economic 145 146 success is likely. The Division's position is that the avoided cost pricing that a 147 WQF [wind QF] receives should be high enough such that ratepayers are indifferent between obtaining power from the WQF versus other available 148 149 resources, but the price should be no higher than that." The Company agrees that it is not the Commission's responsibility or obligation to 150 151 ensure the economic viability of a QF project nor should the customer bear any cost for 152 the project to be economically viable. 153 Q. Ms. Wright suggests the contract term should not be changed from 20 to three years because the Company supported a 20-year contract in a prior docket. Do 154 155 you agree? 156 A. 157

No. As discussed in my direct testimony,<sup>2</sup> circumstances have changed dramatically since this issue was last addressed in a 2003 docket. The Company has witnessed a dramatic increase in PURPA contract executions and pricing requests in Utah and system-wide in the last several years. This material increase could not have been anticipated by the Company when the Commission reviewed the issue of contract term in previous cases. Just as avoided cost prices are updated with changing conditions, so

<sup>1</sup> Sarah Wright Direct Testimony, page 10, lines 201-209.

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<sup>&</sup>lt;sup>2</sup> Paul H. Clements Direct Testimony, page 11, lines 189-204.

should the other OF contract terms and conditions. Furthermore, the hedging 162 163 collaborative workshops held in 2011 and 2012 resulted in a review and application of 164 Company hedging practices. The QF contract term must be re-evaluated in light of 165 these new practices to ensure consistency across all Company commodity transactions. Ms. Wright asserts that QF projects are not comparable to a commodity hedge. 166 Q. Do you agree? 167 168 A. No. In fact, I find it interesting that Ms. Wright suggests a QF contract is "not comparable to economic hedges" but then spends the next six pages of her testimony 169 describing how prices are so low now that OFs have "hedging value" and how, if more 170 171 QFs are built, the "locked-in low prices will help keep Utah rates low over the long term."5 172 173 Ms. Wright is confusing "hedging" with "trading". Hedging attempts to reduce 174 or to eliminate volatility. Trading, also known as speculative trading, attempts to profit 175 from betting on the direction in which a market will move. Suggesting that power prices 176 are so low now that the Company should lock in as many long term contracts as possible is a speculative trade, not a hedge. If regulators and stakeholders wanted to speculate 177 178 that power prices will only go up from here, the Company could put on that trade 179 without QFs. But doing so is purely speculative trading. 180

Q. Has Ms. Wright previously asserted in other dockets that energy prices were "low" and more likely to go up than down?

A. Yes. In Docket No. 12-035-100, Ms. Wright provided an example of how gas prices

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<sup>&</sup>lt;sup>3</sup> Sarah Wright Direct Testimony, page 12, lines 243-245.

<sup>&</sup>lt;sup>4</sup> Sarah Wright Direct Testimony, page 17, line 338.

<sup>&</sup>lt;sup>5</sup> Sarah Wright Direct Testimony, page 19, line 369.

183 can influence avoided costs. In her testimony in that docket, Ms. Wright stated: 184 "...because natural gas pricing cannot get much lower, the risk that prices will be higher 185 than projected is greater than the possibility that prices will be lower."<sup>6</sup> 186 Q. Was Ms. Wright correct in her prediction that energy prices would go higher? 187 No. Ms. Wright submitted her testimony in that docket in March 2013. The second A. 188 quarter 2013 avoided cost compliance filing made by the Company showed a levelized avoided cost price of \$49.82 per MWh for a 15-year contract term. <sup>7</sup> The second quarter 189 190 2015 avoided cost compliance filing showed a levelized price of \$28.44 per MWh for 191 that same term. In just two years, the avoided cost price has declined by 43 percent. In 192 fact, avoided costs have steadily fallen since Ms. Wright made her prediction in 2013, 193 continuing a declining trend that began in the second quarter of 2011. Figure 1 shows 194 the 15-year levelized price (covering years 2016-2030) produced by each quarterly 195 compliance filing for the four-year period starting second quarter 2011 through second

quarter 2015. Since the second quarter 2011, the 15-year avoided cost price has

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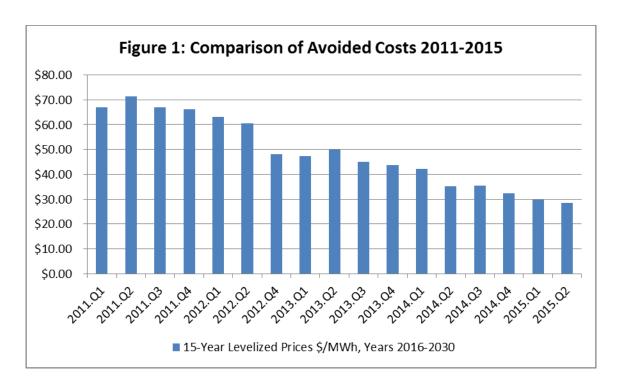
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declined by 60 percent.

<sup>&</sup>lt;sup>6</sup> Docket No. 12-035-100, Direct Testimony of Sarah Wright, page 29 lines 494-496.

<sup>&</sup>lt;sup>7</sup> 15-Year (2016-2030) Levelized Price (Nominal) @ 6.660% Discount Rate.



# Q. Why is this comparison relevant and important in the context of the Company's request to limit QF contract terms to three years?

This data illustrates two key points: 1) predictions regarding the future level of prices are often inaccurate, and 2) the change in the level of prices over just a few years can be significant. One of the primary assertions made by intervenors in this docket, including Ms. Wright, is that QF prices are currently "low" and "have almost nowhere to go but up." This same prediction made just two years ago proved to be wrong. Such predications are not relevant in this proceeding, and the inaccuracy of long term predictions supports the Company's proposal to shorten QF contract terms. Customers should not be exposed to the increased price risk that comes with 20-year QF contracts because they are not exposed to that same risk under the Company's current hedging practices and policies.

Page 10 – Rebuttal Testimony of Paul H. Clements

<sup>&</sup>lt;sup>8</sup> Sarah Wright Direct Testimony, page 16, line 324.

210		As stated in my direct testimony, if recent QF projects are priced higher than
211		the market alternative by just 10 percent, it would create a \$7.33 million impact in 2015
212		for Utah customers.
213	Q.	Is there an example that illustrates the inconsistency between the Company's
214		hedging polices and a QF contract?
215	A.	Yes. In my direct testimony starting on page 12 line 352, I describe how the hedging
216		policy does not allow the Company to purchase (hedge) natural gas for a power plant
217		beyond three years. However, if a QF is projected to "avoid" operation of that plant,
218		the price provided to that QF and subsequently used in the 20-year contract will be
219		based on the forecasted gas price for that plant. Executing a 20-year contract with that
220		QF, based on the 20-year forecasted gas price, essentially locks in or hedges gas at that
221		price for 20 years. That would not occur absent the QF contract, since the Company's
222		hedging policy limits gas hedges to three years.
223	Q.	What do you conclude regarding the Company's hedging policies and a 20-year
224		QF contract term?
225	A.	The hedging collaborative held in 2011 and 2012 resulted in a trading policy that
226		clearly delineates between hedging and speculative trading. The Company does not
227		engage in speculative trading. The Company hedges within certain boundaries
228		established as a result of the collaborative. The hedges are intended to limit price
229		volatility in the three-year time horizon to which the hedging policy applies. The 20-
230		year QF contract term currently in place falls well outside this three-year time horizon.
231		Contrary to Ms. Wright's claims, a 20-year QF contract term impacts customer rates
232		the very same way a 20-year commodity hedge would. A 20-year commodity hedge is

233	a fixed-price purchase of energy for a fixed duration, which is exactly the same as a
234	20-year QF contract. This inconsistency does not maintain the ratepayer indifference
235	standard required by PURPA.

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# Q. Ms. Wright asserts that QF contracts are comparable to the Company's generation resources. Do you agree?

No. As I explained on page 19 of my direct testimony, new Company resources are procured differently than PURPA contracts. PURPA contracts do not go through the same extensive IRP process to determine if they are needed, and they do not go through the same competitive RFP process, which includes oversight by an independent evaluator to ensure selected bids are lowest cost. Of greater importance, PURPA contracts cannot be dispatched in the same manner as a Company resource. This is a critical difference that impacts customer costs. For example, if the marginal cost of a Company gas plant is \$40 per MWh, but another alternative, such as a short-term firm market purchase, costs only \$30 per MWh, the Company would dispatch down the gas plant and buy from the market, saving customers \$10 per MWh. If a QF contract has a \$40 per MWh price, but another alternative costs \$30 per MWh, the Company cannot curtail or dispatch down the QF contract—it must continue to purchase the output at \$40 per MWh even though a less expensive alternative exists. In fact, under PURPA's must-take obligation, the Company would be obligated to back-down the existing \$30 per MWh resource and purchase the \$40 per MWh QF energy.

In a recent order on this same issue of QF contract term, the Idaho Public Utilities Commission highlighted the differences between QFs and Company resources:

256 As is evident upon review of the extensive record (explained by several 257 witnesses), QFs differ from utility resources in several significant and material 258 ways. A utility "cannot be compensated by its customers for energy produced 259 from a generating facility until the utility establishes the need for such new generation" by requesting a Certificate of Public Convenience and Necessity 260 261 (CPCN). Idaho Code § 6 1-526, 6 1-541. Order No. 32697 at 15-16. In contrast, 262 PURPA requires the utility to purchase QF power whether the power is needed 263 or not. Next, a utility-authorized resource is typically subject to competitive 264 bidding, cost scrutiny, and oftentimes has dispatch characteristics different than 265 most QFs. Moreover, the fuel component for utility generating plants is adjusted annually, but is fixed for the duration of fuel-based, long-term QF 266 contracts. QFs are entitled to receive full avoided cost rates. However, the 267 268 calculation of avoided costs is entirely unrelated to what it costs a PURPA 269 project to be developed.<sup>9</sup>

#### RESPONSE TO THE ROCKY MOUNTAIN COALITION FOR

#### RENEWABLE ENERGY

Q. Please summarize your understanding of the Rocky Mountain Coalition for Renewable Energy testimony.

The Coalition has three witnesses, Mr. Kevin Higgins, Mr. Bryan L. Harris, and Mr. Hans Isern. Mr. Harris' and Mr. Isern's testimonies center on the ability of a QF to obtain project financing. They state limiting QF contract terms to three years would adversely affect the ability of renewable energy developers to finance QF projects. <sup>10</sup>

Mr. Higgins asserts the Company has brushed aside the previous body of work developed in this jurisdiction in regards to the "partial displacement differential revenue requirement" ("PDDRR") pricing method, states that now is not a good time to change QF contract terms because new environmental regulations are in a state of flux, and claims that QF contracts are more similar to Company resources than to hedges.

<sup>9</sup> Idaho Public Utilities Commission Order No. 33357, page 24.

Page 13 – Rebuttal Testimony of Paul H. Clements

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<sup>&</sup>lt;sup>10</sup> Bryan L. Harris Direct Testimony, page 2, lines 36-38; Hans Isern Direct Testimony, page 2, lines 41-43.

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285		would adversely affect the ability of renewable QFs to obtain financing. Is their
286		argument supported by PURPA?
287	A.	No. PURPA and FERC regulations do not specify a mandatory length for QF contracts.
288		They do not require that a QF contract term be of sufficient length to ensure financing.
289		The Company is aware of many QFs who choose shorter contracts lengths and are still
290		built and operating. In fact, most of the Company's combined heat and power QFs elect
291		short duration contract terms, typically one year in length.
292	Q.	Do you agree with Mr. Higgins' assertion that the Company is brushing aside the
293		previous body of work developed in this jurisdiction, namely the use of the
294		PDDRR pricing method? <sup>11</sup>
295	A.	No. The Company in not recommending discontinuing the use of the PDDRR pricing
296		method to determine avoided costs. The Company is recommending limiting the
297		contracts that include pricing produced by the PDDRR method to three years.
298	Q.	Mr. Higgins asserts that no changes should be made at this time because new
299		environmental regulations are in a state of flux. <sup>12</sup> Do you agree?
300	A.	No. In fact, Mr. Higgins' statements regarding uncertainty support the Company's
301		recommendation to shorten the QF contract term. As Mr. Higgins' acknowledges, the
302		Clean Power Plan ("CPP") does not require states to submit a compliance plan to the
303		EPA until September 2016, and states may request that date be extended by another
304		two years. The uncertainty around the implementation of the final rules related to the

Mr. Harris and Mr. Isern argue that limiting the QF contract term to three years

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Q.

Kevin Higgins Direct Testimony, page 5, Lines 99-104.
 Kevin Higgins Direct Testimony, page 6, lines 108-116; page 11 lines 218-259.

305 CPP and the final compliance plan support the need for extreme caution at this time in 306 how the Company acquires resources. The Company must evaluate and must makes 307 changes, if prudent, in how and whether it enters into long-term commitments in light 308 of this uncertain future. Uncertainty supports shorter term decisions and obligations— 309 it does not support locking customers into long-term fixed-price obligations. 310 Q. Mr. Higgins, as well as several other witnesses, asserts that QFs could be a means of gaining compliance with environmental regulations.<sup>13</sup> What critical fact are 311 312 they ignoring? 313 A. The critical fact that is being ignored is that the Company does not retain RECs from 314 Utah QF projects. In its Order on Phase II Issues in Docket No. 12-035-100, the Commission ordered that "RECs shall be retained by the QF." <sup>14</sup> The QF may sell RECs 315 316 to a third party, or retire its RECs. In either case, the Company cannot claim the 317 environmental attributes associated with the renewable generation from a QF without 318 retaining the rights to the RECs. Therefore, any argument made by parties in this docket 319 relative to the perceived benefit to customers of acquiring "renewable" QF resources is 320 deceiving and should not be a consideration when evaluating the appropriate contract 321 term for QFs. 322 Mr. Higgins asserts that QF contracts should not be compared to the Company's Q.

hedging practices, but should rather be compared to the Company's generation assets. 15 Do you agree?

No. I addressed in detail how a QF is similar to a hedge and dissimilar to a Company

<sup>15</sup> Kevin Higgins Direct Testimony, pages 7-8, lines 130-164.

<sup>&</sup>lt;sup>13</sup> Kevin Higgins Direct Testimony, page 13, line 257.

<sup>&</sup>lt;sup>14</sup> Order On Phase II Issues, Docket No. 12-035-100, page 43.

resource earlier in my testimony when rebutting Ms. Wright. In response to Mr. Higgins, I add that Company generation assets are acquired much differently (generally through a least-cost, least-risk RFP process under intense stakeholder review and scrutiny) and for different reasons (such as an IRP identified capacity need), than a QF project. I explain these differences in more detail in my direct testimony, and note that Mr. Higgins did not provide any evidence rebutting these differences.

#### RESPONSE TO THE TESTIMONY OF SIERRA CLUB

Please summarize your understanding of the Sierra Club's position in this docket.

- Sierra Club witness Mr. Beach implies that the Company is trying to change the state's competitive energy market and is trying to be relieved of its PURPA must-purchase obligation. He then suggests three reasons why a 20-year contract term should be continued: 1) a QF contract term of this length is necessary to realize PURPA's goal of supporting QF development, 2) the current pricing mechanism will act on its own accord to limit QF development, and 3) there are many benefits of renewable
- Q. On pages 4 through 12 of his testimony, Mr. Beach implies that the Company is trying to end its PURPA must-purchase obligation. Do you agree?
  - No. The Company's requested relief in this docket does not seek the elimination of its must-purchase obligation. Mr. Beach opines heavily on Section 210(m) of PURPA in which utilities can petition FERC for relief from the must-purchase obligation, and further opines on state renewable portfolio standards ("RPS") and state energy policy in general. Those topics are not relevant to this proceeding, so I will not address those issues in detail.

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generation.

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Q. Mr. Beach implies that PURPA requires a contract term that ensures a QF can obtain financing. <sup>16</sup> Do you agree?

A.

A. No. Earlier in my rebuttal of Ms. Wright, I explain how nowhere in PURPA or in FERC regulations is the issue of contract term addressed. There is no requirement to ensure a QF can obtain financing. The obligation is must-purchase, not must ensure economic viability.

Q. In his second of three arguments, Mr. Beach suggests that the pricing mechanism will act on its own to limit QF development. Do you agree?

No. While I agree that avoided costs generally decrease as more QFs are added to the system and lower-cost resources are avoided, the Company's experience has shown that a large and material number of QFs may enter into long-term contracts before any impact of the pricing queue is realized. The Company witnessed this first-hand in the past few years. As described in my direct testimony, the Company signed 24 new QF contracts in Utah totaling 897 MW in the past two years. Mr. Beach points out that recent indicative prices are now lower and implies that this is a result of the queue (i.e., the fact that many QF contracts have already been signed). I have personally been involved in the processing of QF pricing requests and the execution of recent QF contracts and purport that the recent reduction in indicative avoided costs is largely a result of lower forward price curves used as inputs to the model and not a result of the pricing queue.

I previously shared Mr. Beach's opinion that contract term is irrelevant as long as the model produces an accurate avoided cost. However, as I evaluated the impact of

<sup>&</sup>lt;sup>16</sup> R. Thomas Beach Direct Testimony, page 17, lines 343-344

long-term fixed-price risk, analyzed how that impact is magnified when a large number of QF contracts are executed, and recognized that long-term fixed-price risk is not consistent with the Company's hedging practices for non-PURPA contracts, I realized that a 20-year contract term violates the ratepayer indifference standard in that it introduces fixed-price risk to the customer that it otherwise would not incur.

- In his third of three arguments, Mr. Beach suggests that the contract term should remain at 20 years because there are many benefits to renewable generation.<sup>17</sup> Is his characterization and valuation of those alleged benefits accurate?
- No. As a general response, the objective of this docket is not to re-evaluate the avoided cost calculation for renewable generation. Docket No. 12-035-100 evaluated the avoided cost method for wind and solar resources and implemented a model to determine the value. This docket strictly addresses the contract term and not the contract price. Notwithstanding that objection, I find several flaws in Mr. Beach's calculation of his suggested benefits. Since this docket is not focused on the valuation of QFs, I will only briefly address each suggested benefit:
  - REC sales revenues Mr. Beach suggests that RMP can sell RECs and achieve additional revenue. He ignores that fact that RMP does not retain the REC from a QF, making this argument irrelevant.
  - Hedging benefit Mr. Beach suggests long-term renewable QF contracts
    are a better hedge than Company resources because the fuel price is locked
    down (since there is no fuel cost). He fails to acknowledge that a Company
    resource is only acquired if a long-term need is identified through the IRP

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<sup>&</sup>lt;sup>17</sup> R. Thomas Beach Direct Testimony, page 23, lines 457-462

process. No such needs assessment occurs with a QF contract. And he further argues that QF contracts protect against spikes in natural gas prices. He fails to acknowledge how they also can hurt customers when QF prices are locked-in and gas prices decline (which has been the case over the past several years). He also fails to acknowledge that QFs cannot be backed down even when lower cost alternatives are available, while Company resources are dispatched economically.

- Market price mitigation Mr. Beach suggests that the addition of large amounts of renewable generation will decrease demand on the wholesale markets and thus decrease prices in general. His argument is illogical—why would one acquire as much as possible of something now when the effect will be to make it cheaper in the future? Why not acquire nothing now and wait for the cheaper prices? Notwithstanding the irrational nature of this position, as I described earlier in my rebuttal testimony, guessing on the direction of future prices is purely speculative.
- Capacity optionality Mr. Beach asserts that additional QFs will add generation capacity to the Company's system, but then acknowledges that the Company has no need for capacity.
- Local economic benefits Mr. Beach suggests the construction of solar generation provides an economic benefit to Utah. Local economic benefit is not relevant in this proceeding and has not been considered in the past when valuing QFs. And if such a consideration were to be made, one would have to compare the economic benefit of a solar resource to other resource

116		types, which Mr. Beach has not done.
417	Q.	Mr. Beach concludes by saying "today's avoided costs are relatively low" and QF
418		contracts executed now "will be a good deal for ratepayers." Should these types
419		of statements be considered in the Commission's implementation of PURPA?
120	A.	No. These statements represent speculation. I have witnessed Utah solar QF prices fall
121		from the low \$100s per MWh for some Schedule 37 contracts, to the mid-\$60s per
122		MWh for another batch of contracts, to the low-\$50s per MWh for another batch, and
123		then to the low-\$40s for a few more. Each time I was skeptical that the price could go
124		lower and still be economically viable for QFs, largely based on representations by QF
125		developers each time that the bottom had been reached.
126		Notwithstanding this experience, whether one believes the QF avoided cost is
127		low or high at any given time does not change the fact that the Company is being forced
128		to enter into 20-year contracts for energy that it otherwise would not procure under the
129		current IRP action plan and the current hedging policies and practices.
130	RES	PONSE TO THE TESTIMONY OF THE RENEWABLE ENERGY COALITION
431	Q.	What are the specific issues raised by the Renewable Energy Coalition?
132	A.	The Renewable Energy Coalition witness Mr. John Lowe recommends: 1) that the
133		Company's recommended three-year contract term not apply to base load Schedule 37
134		eligible QFs, and 2) that a capacity payment be included for existing QFs that renew
135		their contracts, even if the shorter-term contract period does not include a resource
136		need.
137	Q.	How do you respond to these two recommendations?
138	A.	Mr. Lowe asserts that existing small base load QFs, specifically those eligible for rates

under Schedule 37, are not causing the same harm as new, large QFs. <sup>18</sup> Small 20-year contracts carry the same fixed-price risk as larger contracts, but I agree with Mr. Lowe that the magnitude of the risk is much smaller. The Company's concern with a 20-year QF contract term is largely driven by the limitless nature of QF contracts under Schedule 38, meaning a very large number of megawatts could be put to the Company at a fixed price for 20 years, introducing a considerable amount of fixed-price risk to customers. This concern is lessened considerably for small projects executed under Schedule 37, primarily because Schedule 37 has a cumulative cap of 25 MW built into the tariff. While the Company continues to recommend the three-year contract term apply to all QF contracts, the Company acknowledges the risk from Schedule 37 QFs is less because of the cap in the tariff.

Regarding his second recommendation, I do not agree that capacity payments should apply to existing QFs even if the Company does not have a forecasted capacity need during the three-year term. There is no guarantee a QF will continue to sell to the Company at the expiration of any contract term. Providing or bringing value forward from time periods that are not included in the contractual obligations of both parties is not prudent and does not provide protection to customers that they will receive the future capacity benefits for which they have prepaid. I recommend the Commission reject this proposal.

#### RESPONSE TO THE TESTIMONY OF THE OFFICE OF CONSUMER SERVICES

<sup>&</sup>lt;sup>18</sup> John Lowe Direct Testimony, page 14, lines 255-256.

## 459 Q. Please summarize your understanding of the OCS' testimony.

460 Α. The OCS agrees with the Company on two points: 1) there is a risk to customers associated with carrying long-term fixed-price contracts for power, and 2) there is a 461 462 disconnect between new QF contracts and PacifiCorp's IRP, in that incremental QFs 463 are not evaluated in the Company's annual IRP plan similar to other generation resources. <sup>19</sup> I particularly agree with Mr. Vastag's assessment of the fixed-price risk 464 465 associated with 20-year QF contracts. He states: "Ratepayers, not the Company, not the OF developer, not the OF financier, carry this risk."<sup>20</sup> Notwithstanding these material 466 and relevant concerns, the OCS recommends the Commission not approve the 467 Company's request. The Company agrees with Mr. Vastag that it is customers who 468 469 bear the risk. The Company will get cost recovery for these QF contracts regardless of 470 the Commission's decision in this case.

Q. Do you agree with Mr. Vastag's conclusion that ensuring the avoided cost modeling is accurate adequately addresses the QF contract term issue raised by the Company?

No. The two concerns raised by Mr. Vastag are not completely eliminated by accurate avoided cost modeling. Long-term fixed-price risk exists regardless of the accuracy of the modeling. Mr. Vastag recommends the Commission ensure that avoided cost modeling is *as accurate as possible*,<sup>21</sup> but then discounts the fact that a three-year contract term results in a much more "accurate" avoided cost than a 20-year contract term because of the uncertainty associated with long-term forecasting of prices and

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<sup>&</sup>lt;sup>19</sup> Bela Vastag Direct Testimony, page 2, lines 23-29.

<sup>&</sup>lt;sup>20</sup> Bela Vastag Direct Testimony, page 2, lines 27-28.

<sup>&</sup>lt;sup>21</sup> Bela Vastag Direct Testimony, page 2, lines 39-42, page 4 lines 68-70.

other inputs to the avoided cost model.

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#### RESPONSE TO THE TESTIMONY OF THE DIVISION OF PUBLIC UTILITIES

# Q. Please summarize your understanding of the DPU's testimony.

DPU witness Mr. Charles E. Peterson agrees with the Company on many key issues. He shares the Company's concerns related to the large number of existing and potential QFs. He suggests a large number of additional QFs may negatively impact the Company's operation of its system, and that the existing QF method may not adequately address this risk.<sup>22</sup> Mr. Peterson also agrees with the Company that a 20year contract is inconsistent with the hedging principles agreed upon in the hedging collaborative. <sup>23</sup> Mr. Peterson further agrees with the Company's position that a 20-year contract term is a clear benefit to QF developers that is a concession to a strict ratepayer indifference standard.<sup>24</sup> He also agrees that it is not the regulator's place to ensure economic viability of a QF project. 25 And, most importantly, Mr. Peterson agrees with the Company that it is time to reconsider the previous positions related to QF contracts in light of recent events. <sup>26</sup> He then recaps the Idaho Public Utilities Commission recent determination that 20-year contracts were no longer in the public interest and that the maximum contract term should be reduced to two years. Lastly, he introduces an alternative to the Company's proposal. He recommends the Commission adopt a fiveyear contract term, but allow the capacity payment to be based on a 20-year avoided cost calculation. Energy prices would be calculated as they are now, but only for the

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<sup>&</sup>lt;sup>22</sup> Charles E. Peterson Direct Testimony, page 5, lines 90-104.

<sup>&</sup>lt;sup>23</sup> Charles E. Peterson Direct Testimony, page 8, lines 151-155.

<sup>&</sup>lt;sup>24</sup> Charles E. Peterson Direct Testimony, page 9, lines 179-181.

<sup>&</sup>lt;sup>25</sup> Charles E. Peterson Direct Testimony, page 12, lines 235-237.

<sup>&</sup>lt;sup>26</sup> Charles E. Peterson Direct Testimony, page 10, lines 193-196.

next five years. He states his proposal can be viewed as a 20-year contract with a price reopener every five years, and the QF will have the option every five years to seek higher prices elsewhere.

#### Q. What is your response to the DPU's alternative proposal?

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I agree that the DPU proposal lessens the fixed price risk to customers since the energy portion of avoided costs will only be locked in for five years instead of the current 20 years. However, I see two fatal flaws in his treatment of the capacity value or payment.

First, his proposal continues to lock in the capacity portion of avoided costs for twenty years. While I agree that locking in capacity value but not energy value is more consistent with the Company's hedging practices, it still carries considerable risk to customers and over-payment to the QF should the QF leave at the end of the five-year term. Locking in capacity costs to customers outside the IRP action plan horizon introduces risk to customers that would not otherwise exist. This is due to the fact that long term capacity needs often change from one IRP to the next. For example, the 2013 IRP included a combined cycle combustion turbine ("CCCT") gas plant in 2024. However, due to the timing of the identified need for this resource, the 2013 IRP action plan did not include any action items to procure this long-term resource. In other words, no costs to customers were locked in as a result of this forecasted resource need. The 2013 IRP Update pushed the CCCT out to 2027. Again, due to the timing of this identified need, the Company did not develop an action item to procure this long-term resource. The Company's 2015 IRP was recently completed. The 2015 IRP preferred portfolio pushes the CCCT out even further to 2028. Over the two year planning cycle, the next deferrable resource moved from 2024 to 2028. Customers were not impacted

by this move because the Company did not incur costs to acquire the previously projected 2024 resource because it was outside the IRP action plan.

However, if a 20-year QF contract were entered into between the 2013 IRP and the 2015 IRP, the 20-year capacity value for that QF would have been based on a projected resource need in 2024, even though that need was subsequently pushed to 2028. As a result of that 20-year QF contract, customers are forced to pay capacity value starting with a 2024 resource even though that capacity is now not needed until 2028. Customers would not incur the cost of acquiring that resource earlier than needed absent the QF contract. Bringing forward capacity value for QFs for up to 20 years introduces risk to customers that is not found in the current IRP action plan procedure.

Second, and even more critical, is the fact that Mr. Peterson's proposal allows a QF to receive the benefit of a levelized 20-year capacity payment but then opt out of the contract after only five years. This is simply not equitable to customers. For example, if the resource need (and thus the capacity value or payment) does not begin until the last two years of the proposed 20-year QF contract, Mr. Peterson would propose that the capacity value for the last two years be levelized and then spread across all 20 years. This is reasonable if the QF is contractually obligated to provide the capacity over all 20 years. However, under Mr. Peterson's proposal, the QF can opt out and sell elsewhere after five years. In this scenario, the QF would have received value in years one through five for capacity that it was supposed to provide in years 19 through 20—years in which the QF is no longer available to the Company if it opts out. This proposal also introduces considerable risk in the Company's long range planning. Since the QF can opt out after five years, the Company cannot reasonably assume the

546		QF will continue to be available after five years. So the Company will have to plan for
547		other resources beyond year five. If the Company plans for and then acquires other
548		resources, and then the QF elects to stay and not opt out after five years, the Company
549		is left with more resources than what is needed, and customers are effectively paying
550		twice. Mr. Peterson's proposal is not equitable if the five year opt out is included.
551	Q.	Please summarize your key conclusions after reviewing parties' direct testimony.
552	A.	No party has provided credible evidence to refute the three key facts upon which the
553		Company bases its request. No one has disproven the fact that a 20-year QF contract
554		term is:
555		1. inconsistent with the Company's hedging practices;
556		2. inconsistent with resource acquisition policies and practices for non-
557		PURPA energy purchases; and
558		3. not aligned with the Company's IRP planning cycle and action plan.
559		A 20-year fixed-price QF contract impacts customers in the same manner as a 20-year
560		energy hedge and therefore should be subject to the same term limitations established
561		for non-PURPA energy hedges. Many parties suggest that the environmental benefits
562		associated with renewable QFs justify the continued use of a 20-year contract term, but
563		they fail to acknowledge that the Company does not receive the REC from Utah QFs.
564		Customers receive all of the fixed price risk and none of the environmental benefits.
565		Without the requested modification to the maximum allowable contract term,
566		the Company will continue to be forced to acquire long-term, fixed-price PURPA

contracts even though PacifiCorp's 2015 IRP shows no new resource is required until

2028. I continue to recommend the implementation of a three-year contract term for all

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- QF contracts.
- 570 Q. Does this conclude your rebuttal testimony?
- 571 A. Yes.