

1 **Q. Please state your name, business address and present position with Rocky**
2 **Mountain Power, a division of PacifiCorp (the “Company” or “RMP”).**

3 A. My name is Gregory N. Duvall, my business address is 825 NE Multnomah St.,
4 Suite 600, Portland, Oregon 97232, and my present title is Director, Long Range
5 Planning and Net Power Costs.

6 **Q. Have you previously filed testimony in this case?**

7 A. Yes. I filed direct testimony, supplemental direct testimony and rebuttal testimony
8 in Phase I of this case.

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

10 A. I respond to issues raised by the Division of Public Utilities (“DPU”), presented in
11 the testimony of Mr. Douglas D. Wheelwright; the Office of Consumer Services
12 (“OCS”), presented in the testimonies of Mr. Daniel E. Gimble, Dr. Lori Smith
13 Schell and Mr. Paul Wielgus; and Western Resource Advocates and Utah Clean
14 Energy (“WRA/UCE”), presented in the testimony of Ms. Nancy L. Kelly.

15 **Summary of Testimony**

16 **Q. Will you please summarize the topics you will cover in your rebuttal**
17 **testimony?**

18 A. In my rebuttal testimony, I cover the following issues:

- 19 • Is it necessary to determine whether the Company’s level of reliance on the
20 wholesale power market and its hedging program are “optimal” before
21 determining whether an energy cost adjustment mechanism (“ECAM”) can be
22 adopted or whether it can include front office transactions, natural gas fuel
23 costs or hedging costs?

- 24 • Does the Company’s level of market reliance need to be further analyzed or
25 changed in connection with adoption of an ECAM?
- 26 • Does the Company’s hedging program need to be further analyzed or changed
27 in connection with adoption of an ECAM?

28 **Q. Please provide a summary of your conclusions on the first issue.**

29 A. The Company filed its proposed ECAM a few months prior to its most recent
30 general rate case, Docket No. 09-035-23, to allow an ECAM to commence based
31 on net power costs (“NPC”) found just and reasonable in a general rate case.
32 While testimony on market reliance and hedging in connection with an ECAM is
33 relevant to the question of whether the Company must change its market reliance
34 and hedging with an ECAM in place, thorough analysis of the Company’s
35 reliance on market purchases or its hedging program should not be a precondition
36 for including market purchases or hedging costs in the ECAM. In deciding that
37 this proceeding should move to Phase II, I believe the Commission already
38 rejected the position advocated by some of the witnesses that an ECAM should
39 not be adopted until the Commission has thoroughly reviewed the Company’s
40 reliance on market energy and its hedging program. As stated by the Commission
41 in its February 8, 2010 Report and Order, the issue here is whether “the
42 [C]ompany’s use of natural gas hedging and the level of and reliance on market
43 energy [is] affected by the use of an ECAM.”

44 In addition, as acknowledged by Mr. Wheelwright and Ms. Kelly and to
45 some extent by Mr. Gimble, a determination of appropriate levels of market
46 reliance and hedging is really an ongoing issue best addressed in the integrated

47 resource plan (“IRP”) process. The Commission has already directed that the
48 Company file additional information regarding front office transactions and its
49 hedging program in the IRP process. The Company will comply with that
50 direction and welcomes any input the parties wish to provide regarding these
51 issues. However, adoption of an ECAM should not be delayed to continue to
52 study and analyze the Company’s reliance on market purchases and its hedging
53 program given that these are, by their nature, dynamic issues and will always
54 require continuing study and analysis.

55 **Q. Please summarize your testimony on market reliance.**

56 A. The testimony of other parties ignores the fact that there is also risk to customers
57 in committing to long-term resources. The current forward market for firm
58 supplies in 2012 and 2013 is well below the annualized cost of a new combined
59 cycle power plant dispatched into the market. The Company has received
60 numerous proposals in its current All Source Request for Proposals (“RFP”),
61 including 2014 in-service dates, that are much lower cost than the winning bid for
62 a new gas-fired plant in the previous All Source RFP. Customers are benefitting
63 from the Company’s level of market reliance. For example, the Company’s
64 decision in February 2009 to terminate the Lake Side II resource selected in the
65 last RFP and to rely on front office transactions is reasonably expected to provide
66 approximately [BEGIN HIGHLY CONFIDENTIAL] [REDACTED] [END
67 HIGHLY CONFIDENTIAL] in present value revenue requirement savings to
68 customers.

69 The IRP is the appropriate proceeding to address reliance on wholesale

70 market purchases to satisfy load and reserve requirements and nothing further is
71 required in advance of implementing an ECAM. The Commission acknowledged
72 the 2008 IRP, which included a level of market purchases to satisfy peak capacity
73 requirements. The Company's 2008 IRP Update reduces the open position and
74 requirement for new market purchases as a result of executed transactions and
75 changes in the load forecast except in 2014. The Commission's 2008 IRP
76 acknowledgment order requires the Company to provide additional information
77 regarding market risk of front office transactions in the next IRP and the
78 Company is committed to provide that information. The Company's open east-
79 side capacity position for front office transactions in 2012 and 2013 as reflected in
80 the 2008 IRP Update is 200 MW in 2012 and 338 MW in 2013. The level of
81 market reliance underlying the NPC found just and reasonable in the 2009
82 General Rate Case is consistent with the Company's current level of market
83 reliance. The ECAM will capture only differences between that level of market
84 reliance currently allowed in base rates and actual market reliance.

85 **Q. Please summarize your testimony on the Company's hedging program.**

86 A. The Company has demonstrated in Phase I of this case and through technical
87 conferences in this docket and the natural gas hedging docket, Docket No. 09-
88 035-21, that its natural gas and electricity hedging program effectively reduces
89 customer exposure to price volatility through adherence to its robust risk
90 management policies and best practices and that the hedging program does not

91 eliminate the need for an ECAM.¹ The Company agrees with the OCS that there
92 are many operational uncertainties that impact NPC such as weather and
93 unplanned outages that remain outside the scope of hedging. In regard to
94 Commission guidelines regarding hedging, the Company agrees with the DPU
95 that the Commission should avoid guidelines or requirements that would interfere
96 with the Company's ability to make the best decisions on behalf of customers in
97 day-to-day operations. The Company agrees with the DPU that there should be a
98 biennial review of the Company's hedging program and notes that this is
99 consistent with the Commission's 2008 IRP acknowledgment order directing the
100 Company in the next IRP to add a section on hedging strategy that minimizes
101 costs and risks for customers.

102 The Company is open to the potential use of options in addition to the
103 standard products that it currently uses in its hedging strategy. However, the
104 Company proposes a carefully staged approach to use of options.

105 The Company has maintained and continues to maintain that it does not
106 believe it is necessary to change its hedging strategy with adoption of an ECAM.
107 However, the Company will welcome input and reasonable guidance regarding
108 hedging during biennial reviews in connection with the IRP process.

¹ At a May 18, 2009 technical conference, the Company demonstrated how its hedging program delivers significant risk reduction benefits to customers. Further, although the purpose of the hedging program is not to beat the market, but rather to reduce risk, the Company provided actual history from January 2004 through March 2009 that showed that the Company's hedging activities resulted in cumulative savings to customers of approximately \$100 million (excluding the benefits of the long-term Hermiston natural gas contracts that further increased the benefit to customers).

109 **Q. What is the overall recommendation of RMP in this rebuttal filing?**

110 A. Based on the significant savings associated with the Company's market reliance
111 strategy, and the significant risk mitigation associated with the Company's
112 hedging program, which are already reflected in rates, RMP recommends that the
113 Commission move forward with the next part of Phase II of this proceeding
114 without requiring any changes to its current level of market reliance and hedging
115 strategy in connection with the adoption of an ECAM. The issues that have been
116 raised by the parties in this proceeding on reliance on market transactions and
117 hedging should be evaluated, as ordered by the Commission, in the development
118 of the Company's 2011 IRP. As RMP has indicated, such issues are by their
119 nature dynamic and will require continual study and analysis. The Company
120 recommends implementing an ECAM in Utah on a pilot basis from February 18,
121 2010 through the end of 2013, thereby addressing the OCS's concerns prior to
122 2014; the only year in which market reliance in the 2008 IRP Update has
123 increased in comparison to the 2008 IRP.

124 **Q. How would the "pilot" work?**

125 A. The Company is currently deferring the difference between the NPC found just
126 and reasonable in the 2009 General Rate Case and actual NPC incurred after
127 February 18, 2010, pursuant to the Commission's Report and Order on Deferred
128 Accounting Stipulation issued July 14, 2010 in this docket and Docket No. 10-
129 035-14. When the Commission issues its final order on ECAM design in this
130 docket, the Company will make any adjustments to the deferred account that may
131 be required by that order. The ECAM will then proceed as ordered by the

132 Commission. The Company will file the 2011 IRP, which will include the
133 evaluation of market reliance and hedging ordered by the Commission in the
134 order that acknowledged the 2008 IRP. Interested parties will have the
135 opportunity to review and comment on all aspects of the IRP and the Commission
136 will have the opportunity to provide any guidance it deems appropriate on the
137 IRP, including any guidance the Commission wishes to provide on market
138 reliance and hedging strategy. In addition, the outstanding All Source RFP will be
139 concluded, interested parties will be able to review, and the Commission will have
140 had the opportunity to reach a decision on, any resource acquisitions proposed as
141 a result of the RFP. Based on this information and information about operation of
142 the ECAM during this period, the ECAM will then be reviewed to determine
143 whether any changes should be made in it. It is anticipated that this review will
144 take place during 2013. Thereafter, the ECAM will be continued (no longer as a
145 pilot program) with any adjustments that may be ordered by the Commission in
146 the review proceeding.

147 **Issue in This Portion of Phase II**

148 **Q. Why did the Company file its proposed ECAM when it did?**

149 A. The Company filed its proposed ECAM over three months in advance of the
150 filing of its 2009 General Rate Case consistent with Commitment U 23 approved
151 in the Commission's Report and Order issued June 5, 2006 in Docket No. 05-035-
152 54 that an application for an ECAM would be filed at least three months in
153 advance of a general rate case filing. I understand that the purpose of the
154 commitment was to assure that an ECAM was established on a NPC base

155 examined and found just and reasonable in a general rate case. I understand that
156 this purpose was confirmed in the statute specifically authorizing an ECAM when
157 it provided that the Commission could approve an ECAM that is implemented at
158 the conclusion of a general rate case. Utah Code Ann. § 54-7-13.5(2)(b)(iii). (The
159 Company requested that the ECAM commence concurrent with the Commission's
160 final order in the 2009 General Rate Case and, as mentioned above, is deferring
161 incremental NPC effective as of the date of the final order as ordered by the
162 Commission.)

163 **Q. What do you understand is the issue before the Commission in this portion of**
164 **Phase II of this docket?**

165 A. In its February 8, 2010 Report and Order, the Commission stated:

166 As we come to the end of what we have called
167 Phase I of this docket, we conclude we will proceed with
168 further examination of an ECAM or energy cost adjustment
169 mechanism, that would address the difficulties PacifiCorp
170 raises about its power costs and their impact on the
171 company's operations and ratemaking in the State of Utah.
172 *In the June 18, 2009, Notice of Scheduling Conference and*
173 *Procedural Order (June 18 Procedural Order), we*
174 *indicated that we would continue on to Phase II of this*
175 *docket if we were to conclude that an ECAM were in the*
176 *public interest. Several parties have objected to an ECAM*
177 *under any circumstances. Contrary to their position, we do*
178 *not believe the evidence presented precludes a conclusion*
179 *that one could design an ECAM and use it consistent with*
180 *the public interest.*

181

182 We make no conclusion relative to the specific
183 ECAM and operation PacifiCorp proposed in Phase I. . . .
184 All parties must have the opportunity to make full and
185 complete comment on the proposed ECAM and PacifiCorp
186 to respond thereto. Also, this does not preclude the
187 examination of an alternative ECAM or any other measure
188 or means which would address the difficulties PacifiCorp

189 claims to be associated with its recovery of power costs
190 consistent with a reasonable balance of public policies. *In*
191 *addition, we would like to see the two issues raised by the*
192 *Office of Consumer Services addressed: namely, is the*
193 *company's use of natural gas hedging and the level of and*
194 *reliance on market energy affected by the use of an ECAM?*
195 We will continue this docket into Phase II to make this
196 exploration together with all other relevant areas of inquiry.

197 (Emphasis added.)

198 In the June 7, 2010 Scheduling Order for this phase of the docket, the
199 Commission scheduled the filing of testimony and a hearing on issues related to
200 hedging and reliance on market energy followed by the filing of testimony and a
201 hearing on all remaining ECAM issues, that is, the Company's proposed ECAM,
202 any alternative ECAM proposed by another party or any other measure or means
203 to address the difficulties the Company claims are associated with recovery of its
204 NPC.

205 Based on these orders, the issue for this portion of Phase II is whether the
206 Company's use of natural gas hedging and its level of and reliance on market
207 energy is or should be affected by adoption of an ECAM. In other words, I
208 understand the issue in this portion of Phase II to be whether the Company's
209 hedging and reliance on market energy should be changed in the context of an
210 ECAM. For example, if an ECAM is adopted, should the Company hedge or rely
211 on market purchases more or less than it does currently.

212 **Q. Do you believe the testimony filed by other parties on June 16, 2010 complies**
213 **with this direction?**

214 A. The testimony filed by the DPU complies in part with this direction. It discusses
215 issues related to hedging and reliance on market energy and how the adoption of

216 an ECAM might impact those issues. The DPU states that it may recommend
217 mechanisms in the second part of Phase II to provide incentives for the Company
218 to reduce its reliance on front office transactions. (Testimony of Douglas D.
219 Wheelwright (“Wheelwright”), lines 178-180.) It further states that the
220 Commission should address questions about guidance for the Company’s hedging
221 strategy in the context of an ECAM. (*Id.*, lines 195-204.) This type of testimony
222 is what was expected based on the Commission’s direction.

223 However, the DPU then proceeds to discuss whether the Company’s
224 current hedging program has resulted in lowest fuel costs, implying that the
225 purpose of the hedging program is or should be to achieve lower NPC. The DPU
226 also suggests that to deal with concerns about market purchases, the Commission
227 should exclude market purchases or only allow cost recovery for market
228 purchases that cover a specific percentage of annual or peak load, implying that
229 the current level of market reliance is not “optimal.” The issue of whether the
230 Company’s level of market reliance or hedging program is “optimal” is of
231 questionable relevance to this proceeding given that the Commission has directed
232 the Company to address specific details on market reliance and hedging in its
233 2011 IRP. What is important in this proceeding, at least in the Company’s view, is
234 how its level of market reliance or hedging strategy is affected by moving to an
235 ECAM.

236 **Q. What about the testimony filed by the OCS and WRA/UCE?**

237 A. The testimony filed by the OCS and WRA/UCE also discusses to some extent
238 how an ECAM might be expected to affect the Company’s market reliance and

239 hedging. However, the testimony goes further to recommend that the Commission
240 not include front office transactions, gas fuel purchases and hedging costs in an
241 ECAM because the witnesses believe they are not “optimal” or that the Company
242 has not demonstrated that they are “optimal.” Whether they are “optimal” or not
243 in the view of these parties, front office transactions and hedging are currently
244 included in the base NPC found just and reasonable by the Commission and only
245 the incremental deviations from base NPC will be recovered or refunded through
246 an ECAM. The issue here is only whether there is a need to change the level of
247 market reliance and the Company’s hedging strategy because an ECAM is being
248 adopted.

249 The net effect of Mr. Gimble’s testimony is to reiterate the OCS’s position
250 from Phase I of this docket that the Commission should delay adopting an ECAM
251 until the Commission has thoroughly evaluated and adopted policies or standards
252 for the Company’s reliance on market energy and hedging strategy or that it
253 should not include market purchases or at least limit the inclusion of front office
254 transactions in an ECAM. (Market Reliance Direct Testimony of Daniel E.
255 Gimble (“Gimble”), lines 684-689, 720-754.) When the Commission determined
256 to proceed to Phase II, it effectively rejected that position. In lieu of that position,
257 the Commission stated that it wished to examine whether the Company’s use of
258 natural gas hedging and its level of reliance on market energy *are affected* by the
259 use of an ECAM. Yet the OCS still advocates that the Commission cannot adopt
260 an ECAM, or at least include front office transactions in an ECAM, until it has

261 thoroughly analyzed and evaluated market reliance and hedging and adopted
262 policies regarding them.

263 Likewise, Ms. Kelly states that the IRP process must be addressed and a
264 mechanism put in place to assure that customers benefit from least-cost, least-risk
265 planning before an ECAM is adopted. (Prefiled Direct Testimony of Nancy L.
266 Kelly Phase II, Stage 1 (“Kelly”), lines 32-38.) As a fall-back position, she
267 recommends that the Commission should require the Company to meet energy
268 efficiency and renewable resource targets and limit front office transactions as a
269 condition to approval of an ECAM. (*Id.*, lines 311-313.) However, Ms. Kelly
270 acknowledges “that market reliance and natural gas [hedging] issues are
271 fundamentally integrated resource planning issues.” (*Id.*, lines 298-299.) As I
272 will discuss further in responding to specific issues raised by the June 16
273 testimony, the appropriate place to address the level of the Company’s reliance on
274 market purchases to meet customer load and whether its level of hedging results
275 in least cost resources is in the IRP process.

276 **Q. Do you see any additional problem with the recommendation of the OCS and**
277 **WRA/UCE that analysis of these issues must be concluded before these NPC**
278 **can be include in an ECAM?**

279 A. Yes. Analysis of market reliance and hedging is a continuous project because the
280 market is dynamic. It would be difficult to find that analysis of these issues would
281 ever be completely concluded. Thus, the recommendations of these parties
282 arguably are the equivalent of a recommendation for an indefinite and open-ended
283 delay in adoption of an ECAM.

284 **Q. What do you conclude?**

285 A. Establishing an “optimal” level of market reliance and an “optimal” hedging
286 program is not the purpose of this phase of this case and, therefore, should not be
287 a precondition for approval of an ECAM or for including market purchases or
288 hedging costs in the ECAM. The Commission has directed that these issues be
289 reviewed in the IRP process. That is the appropriate venue for periodic and
290 continuing review of these issues in the context of market changes.

291 **Company’s Current Level of Market Reliance**

292 **Q. Do the DPU, OCS and WRA/UCE contend the Company is over-reliant on**
293 **market purchases?**

294 A. Yes. All of these parties express concern that the Company is over-reliant on
295 market purchases and may be inappropriately putting customers at-risk by
296 delaying acquisition of, or long-term contracts with, new gas-fired resources (e.g.,
297 Wheelwright, lines 79-96; Gimble, lines 253-266; Kelly, lines 236-237).

298 **Q. What is the Company’s response to these concerns?**

299 A. The Company’s decision in February 2009 to terminate the Lake Side II resource
300 selected in the last RFP and to rely on front office transactions is reasonably
301 expected to provide approximately [BEGIN HIGHLY CONFIDENTIAL] ■■■
302 ■■■ [END HIGHLY CONFIDENTIAL] in present value revenue requirement
303 savings to customers. These savings are quantified in Highly Confidential Exhibit
304 ____ (GND-Phase IIA-1R), which reflects the favorable proposals received to-date
305 in the current All Source RFP. (The Company notes that several stages of the All
306 Source RFP remain to be completed including evaluation of the best and final

307 proposals, which were recently submitted, selection of a final shortlist,
308 negotiation and selection of resources.)

309 The Commission's 2008 IRP acknowledgment order was based on a
310 higher amount of front office transactions than the 2008 IRP Update to meet peak
311 capacity requirements in all years except 2014. The order requires the Company
312 to expand discussion on market risk in the next IRP, which the Company is
313 committed to do. The 2008 IRP Update reduced the open capacity position as a
314 result of executed forward transactions and changes to the load forecast.

315 **Q. Mr. Wheelwright acknowledges that the DPU's concern is not changed based**
316 **on adoption of an ECAM (Wheelwright, lines 141-143). Do you agree with**
317 **this testimony?**

318 A. I agree with his conclusion, but not his reasoning. I agree that the issue of the
319 level of the Company's reliance on market purchases is not significantly different
320 whether an ECAM is adopted or not. However, Mr. Wheelwright states that the
321 introduction of an ECAM could reduce the Company's incentive to build (or
322 purchase) longer-term resources to meet demand (Wheelwright, lines 149-153).
323 Mr. Wheelwright seems to be ignoring the resource acquisition and major plant
324 addition processes in this position. Given the passage of the Energy Resource
325 Procurement Act in 2005 and section 54-7-13.4 in 2009, the Company has no
326 disincentive to build or acquire generating plants when it is prudent to do so.
327 Given these provisions, the Company can obtain a decision from the Commission
328 that its decision to construct or acquire a plant is prudent before it actually
329 undertakes the project and it can obtain rate recovery for the cost of the plant

330 when the plant goes into service. With these provisions in place and given that the
331 Company only earns profit on investments and not on operating expenses, the
332 Company has every incentive to invest in rate base assets rather than market
333 purchases to meet its load requirements.

334 **Q. Mr. Wheelwright mentions that the Commission might address concerns**
335 **about over-reliance on market purchases in the context of an ECAM by**
336 **excluding them from the ECAM or by limiting them to a percentage of**
337 **annual or peak load (Wheelwright, lines 163-167). How do you respond?**

338 A. Market purchases are already in rates. All an ECAM does is address the
339 incremental difference, either positive or negative, of actual market purchases
340 versus those included in rates under the current paradigm. Further, although Mr.
341 Wheelwright raises this possibility, he correctly observes that such measures
342 could create perverse incentives and that the Commission should therefore be
343 careful to avoid creating a regulatory structure that does not allow the Company
344 to use its best judgment in managing its day-to-day operations (*Id.*, lines 167-
345 172). I agree with these observations. However, Mr. Wheelwright proceeds to
346 suggest that the DPU may recommend mechanisms within the design of an
347 ECAM that would provide incentives for the Company to reduce its reliance on
348 front office transactions (*Id.*, lines 178-180). The Company will respond to those
349 recommendations when and if they are made. At this time, all that I can say is that
350 any ECAM that does not include all NPC will inevitably create perverse
351 incentives.

352 **Q. Mr. Gimble identifies five significant changes between the 2008 IRP Update**
353 **and the 2008 IRP (Gimble, lines 138-159). Do you agree with his list?**

354 A. No. I would add one item and delete one item. First, the 2008 IRP Update reflects
355 the results of a Nevada Power system impact study commissioned by PacifiCorp
356 that supports the availability of incremental firm transmission from Mead to the
357 Company's load area for a five-year period. This additional transmission provides
358 incremental access to the liquid Mead market and thereby reduces the supply risk
359 associated with relying on market purchases. It allows the Company to transfer
360 additional power from the Mead market to load in 2012-2016.

361 **Q. Which item would you delete from the list?**

362 A. The last item in Mr. Gimble's list, where he assumes incorrectly that the
363 Company has entered into new wholesale sales contracts in 2012 and 2013 (*Id.*,
364 lines 156-159). While the 2008 IRP Update load and resource table shows
365 increases as stated by Mr. Gimble, they are the "return" leg of the "locational
366 spreads" or exchanges shown in Table 3.6 – New Front Office Transactions – on
367 page 28 of the 2008 IRP Update. They are offset by the "receipt" leg of the
368 exchange which is included in the "Purchases" category of the load and resource
369 table. Under these exchange contracts, the Company receives power where it can
370 be used to meet retail loads and in exchange, returns power in another, more
371 liquid market, where it will be offset by a purchase in that market. The Company
372 is not engaging in forward wholesale sales transactions as suggested by Mr.
373 Gimble.

374 **Q. Does Mr. Gimble raise any concerns about the level of reliance on market**
375 **transaction in 2010 or 2011, when the ECAM is first implemented?**

376 A. No. Nor does he raise any concern after 2014. His sole focus is on 2012-2014.

377 **Q. What is the current level of market reliance included in the NPC study**
378 **recently approved by the Commission for setting Utah rates?**

379 A. In the Company's most recent general rate case, Docket No. 09-035-23, the
380 amount of short term firm purchases and system balancing purchases during the
381 summer months is 1,614MW, 1,590MW and 1,284MW for July, August and
382 September, respectively.

383 **Q. What do you conclude from this evidence?**

384 A. I conclude that the level of market reliance during the summer included in rates
385 today exceeds the levels anticipated in the 2008 IRP Update as illustrated in Table
386 1.

387 **Table 1**

Year	Existing and Planned Short-term Firm Market Purchases (Megawatts)
2012	1,004
2013	1,282
2014	1,223

388 The evidence shows that adopting an ECAM does not increase the risk of market
389 reliance to customers since that risk (to the extent it is a risk) is already built into
390 existing rates.

391 **Q. How do you respond to Mr. Gimble’s observation that the Company’s 2008**
392 **IRP Update shows that short-term resources are approximately 9% of the**
393 **Company’s overall resource mix in 2014 (Gimble, lines 193-194)?**

394 A. Given that the Company plans to a 12% planning reserve margin, I would
395 conclude that the Company plans to meet nearly 100% of its forecasted retail load
396 with long-term resources in 2014. This should give the Commission additional
397 comfort that the Company is reasonably positioned to meet the “confluence of
398 rising market prices, prolonged drought conditions and demand recovery above
399 forecast levels” posited by Mr. Gimble (*Id.*, lines 257-262).

400 **Q. How does the Company address the “confluence” situation hypothesized by**
401 **Mr. Gimble?**

402 A. This is done through stochastic analysis in the integrated resource planning
403 process. In addition to market prices, hydro conditions and load being treated as
404 stochastic variables, the Company includes stochastic analysis for forced outages
405 and natural gas prices. While Mr. Gimble’s extreme conditions are captured in the
406 stochastic analysis in the IRPs, it is not reasonable to plan as if these were the
407 only expected assumptions. Customer costs would be much higher if the
408 Company were to plan resource additions to meet these circumstances on an
409 expected basis. In addition, the confluence could go the other way where lower
410 market prices, extended wet years, and loads lower than forecast occur together. If
411 the Company were to plan for the confluence described by Mr. Gimble as its
412 expected future, costs would be very high should the low confluence case
413 materialize.

414 Mr. Gimble also ignores the fact that even without an ECAM rates should
415 be set to cover actual costs. It is true that if rising market prices, prolonged
416 drought conditions and demand recovery above forecasted levels all occur,
417 customer rates will likely increase. This would be the case with or without an
418 ECAM. If it were possible to accurately forecast these factors, the resulting rates
419 would be the same in either case.

420 **Q. In Section IV of his testimony, Mr. Gimble compares the Company's March**
421 **30, 2010 forward price curve for Mid-Columbia and Palo Verde with the**
422 **February 2010 forecast by the Northwest Power Planning Council**
423 **("NWPPC") and concludes that the Company's market price forecast for**
424 **Mid-Columbia appears to be optimistic compared to the NWPPC's price**
425 **outlook (Gimble, lines 341-367). Is his conclusion reasonable?**

426 A. No. In footnote 13 on page 13 of his testimony, Mr. Gimble mistakenly implies
427 that PacifiCorp relies on the Midas model to forecast prices in 2012-2014. This is
428 incorrect. The first six years of the Company's forward price curve are based on
429 actual prices currently available in the market through broker quotes. They are not
430 forecasts produced by the Midas model. A more legitimate conclusion from his
431 comparison of the NWPPC and Company price streams would be that the
432 NWPPC prices appear to be high when compared to what is currently available in
433 the market.

434 **Q. Why is this correction important to understand?**

435 A. Mr. Gimble states "the Company's March 2010 near-term market price forecasts
436 appear to better substantiate the Company's deferral for gas and wind resources in

437 its revised 2008 IRP action plan than its prior market price forecast. However,
 438 there remains the issue of validating the reasonableness of the Company’s March
 439 2010 electric market price forecasts.” (Gimble, lines 332-336). Given that there
 440 are no model forecasts or model input assumptions to validate, the qualifier in the
 441 second sentence quoted above is no longer necessary. This clarification, at least
 442 directionally, would lessen Mr. Gimble’s concerns over the level of market
 443 reliance in the 2012-2014 time periods.

444 **Q. Mr. Gimble indicates that the OCS plans to request PacifiCorp’s June 2010**
 445 **forward price curve (Gimble, lines 376-378). Has that been completed?**

446 A. Yes. The March 2010 and June 2010 forward price curves for Mid-Columbia and
 447 Palo-Verde are shown below in Table 2.

Table 2

	Average Annual PV HLH				Average Annual Mid C Flat			
	Sep-09	Dec-09	Mar-10	Jun-10	Sep-09	Dec-09	Mar-10	Jun-10
2010	54.60	53.00	42.40	41.54 *	46.91	45.82	38.50	39.81 *
2011	59.97	56.88	47.75	46.56	50.81	49.09	40.43	39.88
2012	60.94	58.19	52.00	50.88	51.46	50.50	44.33	43.41
2013	62.48	60.19	54.50	53.38	51.89	52.07	46.53	45.38
2014	63.95	62.44	57.25	56.13	52.79	53.53	48.97	47.22
2015	65.50	64.69	60.25	58.88	53.99	55.00	51.43	49.43
2016	67.87	69.27	65.84	64.54	58.99	61.21	57.02	54.22
2017	69.62	73.92	71.74	73.11	63.53	67.62	63.11	63.18
2018	69.85	76.79	75.00	77.96	63.73	70.36	65.61	69.15
2019	74.08	75.59	74.91	81.77	67.27	69.30	66.15	72.41

* 2010 forward prices are for July through December

448 **Q. What do you conclude from Table 2?**

449 A. Prices for Mid-Columbia and Palo Verde for 2012-2014 are even lower in the
 450 June 2010 forward price curve than in the March 2010 curve. These new prices
 451 would even better substantiate the Company’s resource deferrals described above
 452 and provide the Commission additional evidence that the Company’s level of

453 market reliance does not need to be changed in adopting an ECAM and that its
454 reasonableness will be validated during the initial review period.

455 **Q. Mr. Gimble states that it would be useful for the Commission and the parties**
456 **to understand the various types of standard market products that are**
457 **currently available to the Company and how they might differ by market**
458 **hub (Gimble, lines 427-434). Please provide that information.**

459 A. Products the Company currently uses to hedge its price risk include fixed price
460 physical transactions and fixed-for-floating financial swap transactions²
461 (“swaps”) for both power and natural gas. Additionally, New York Mercantile
462 Exchange (“NYMEX”) Henry Hub swaps and floating-for-floating basis swaps³
463 are available for natural gas hedging. Fixed price physical transactions and swaps
464 are available in the market at the major market hubs such as Mid-Columbia, Palo
465 Verde, and South of Path 15 (“SP15”) for power, and Opal, AECO⁴ and Sumas
466 for natural gas. Fixed price physical power transactions are available at additional
467 points of delivery such as Mead, Mona, Four Corners and California-Oregon
468 Border (“COB”), with somewhat less liquidity. These power and natural gas
469 products are generally transacted in calendar months up through the next season,
470 and in calendar quarters and calendar years for delivery periods beyond the next

² A fixed-for-floating financial swap transaction is a transaction in which one party pays a fixed price in exchange for a floating index price. With respect to natural gas, the floating index price could refer to beginning of the month index prices, or daily index prices. With respect to power, the floating index price normally refers to daily index prices.

³ A floating-for-floating basis swap is a transaction in which one party pays a floating index price at one location and is paid a floating index price at another location.

⁴ AECO is the historical reference for a trading hub in Alberta, Canada.

471 season through the Company's 48-month hedging period. Additionally, seasonal
472 natural gas products are available. Fixed price physical power transactions
473 delivered at additional points of delivery are generally available with limited
474 market depth at additional locations for delivery within a few months or seasons.
475 Power is transacted in standard peak (hours ending 7:00 through 22:00 Pacific
476 prevailing time Monday through Saturday excluding certain holidays), off-peak
477 (all other hours), and flat (all hours). There are additional products available in the
478 market currently not used by the Company, such as options.

479 **Q. Mr. Gimble states that the Commission needs assurance that the Company**
480 **will be able to reliably and economically contract for the levels of front office**
481 **transactions indicated in its IRP Action Plan (Gimble, lines 450-458). How do**
482 **you respond?**

483 A. The volume and price of front office transactions referred to at Mona and Four
484 Corners are reasonable based on the Company's experience with purchases of
485 standard products at those locations.

486 **Q. Mr. Gimble makes reference to the Western Electricity Coordinating**
487 **Council's ("WECC") Power Supply Assessment ("PSA") (Gimble, lines 463-**
488 **465). What does he say the PSA shows?**

489 A. Most notably he indicates that the most recent PSA shows that initial deficits
490 occur in the Basin, Rockies, Northwest and Desert Southwest in 2013, 2018,
491 never, and 2016, respectively (*Id.*, lines 504-506). These dates should give
492 additional comfort to allow the ECAM pilot program to move forward while the
493 Company completes the evaluation it has been directed to perform by the

494 Commission on market reliance in the 2011 IRP.

495 I also wish to note that the PSA is not in and of itself an indication of
496 market availability or depth. For example, the 2004 PSA,⁵ which reflected a
497 power supply assessment that was conducted in October 2004, stated the
498 following in the Executive Summary:

499 Although the aggregated Northwest area remained surplus, a deficit
500 condition developed in the Utah zone (one of the zones in the Northwest
501 area) beginning in 2008, due to insufficient committed generation and
502 transmission constraints. The Utah zone became deficit earlier in scenarios
503 #3 and #4. Note that PacifiCorp approved the release of this zone level
504 result information.

505 Despite this assessment, there was no “deficit condition” in the Utah zone
506 in 2008 and beyond. The Company will use the most recent PSA as one piece of
507 information when it conducts its analyses in the 2011 IRP.

508 **Q. Do you have any other comment about the concerns expressed by Mr.**
509 **Gimble about the Company’s ability to meet its load requirements?**

510 A. Yes. If Mr. Gimble’s point is that the Company has not demonstrated that it can
511 meet its load requirements with no increase in rates under any possible scenario, I
512 would have to agree with him. However, considering the relatively high cost of
513 longer-term resources in the recent past and the best information available to the
514 Company, I do not believe it would have been prudent for the Company to
515 “assure” itself of that result because doing so would have assured a substantial
516 increase in rates as the Company would have been required to commit to major
517 investments in resources at the peak of the market. Instead of doing that, the

⁵ The 2004 PSA is dated November 24, 2004 and can be found using the following link:
<http://www.wecc.biz/Planning/ResourceAdequacy/PSA/Documents/2004%20Power%20Supply%20Assessment%20-%20November.pdf>.

518 Company now appears to be in a position to acquire generation resources at
519 significantly lower costs as demonstrated by the information available at the
520 current stage of the All Source RFP.

521 **Q. Mr. Gimble points to the Commission's order in the 2008 IRP as support for**
522 **the view that the Company's position that an ECAM is needed because of the**
523 **unpredictability and volatility of NPC is inconsistent with its confidence in**
524 **managing market risks in the IRP process (Gimble, lines 566-587). Do you**
525 **agree that these positions are inconsistent?**

526 A. No. The Company's evidence in Phase I of this proceeding demonstrated quite
527 clearly that NPC are substantial and far more volatile than other costs incurred by
528 the Company in providing service to customers. It also demonstrated quite clearly
529 that it is very difficult to forecast NPC in the context of a general rate case. That is
530 why the Company is seeking an ECAM in this docket and it is an essential basis
531 upon which every other non-restructured state in the country has adopted ECAM-
532 like mechanisms for at least some of its electric utilities.

533 The fact that NPC are substantial, volatile and difficult to forecast,
534 however, does not relieve the Company of the obligation to prudently plan to
535 meet its customers' load requirements at the lowest cost reasonably available and
536 to undertake risk management processes to attempt to the greatest extent
537 reasonable to minimize risks associated with that uncertainty. The Company does
538 an excellent job of meeting these obligations through sophisticated, state-of-the-
539 art IRP and risk management processes. The Company has no intention of
540 abandoning those processes if an ECAM is adopted. The Company appreciates

541 and welcomes the input of all interested stakeholders regarding those processes.

542 These same issues will continue to be issues whether or not an ECAM is adopted.

543 **Q. Mr. Gimble contends that adoption of an ECAM will shift the risks of**
544 **procurement decisions from the Company to its customers (Gimble, lines**
545 **629-634). Do you agree?**

546 A. No. As a preliminary matter, I note that this issue was thoroughly explored in
547 Phase I of this docket. The parties expressed strongly held views on the issue
548 there, with the OCS and other parties contending that the issue was so significant
549 that the Commission should conclude that adoption of an ECAM was not in the
550 public interest and that the matter should be concluded in Phase I. The
551 Commission did not agree, concluding: “we do not believe the evidence
552 presented precludes a conclusion that one could design an ECAM and use it
553 consistent with the public interest.”

554 Adoption of an ECAM will not in any way absolve the Company of its
555 responsibility to be prudent in its planning to meet resource needs. This is
556 demonstrated by the fact that the Company’s current planning is done in the
557 context of most of its states already having cost adjustment mechanisms in place.
558 Adoption of an ECAM actually adds an additional venue for parties to raise
559 questions about the Company’s prudence if there is a basis to do so. Not only will
560 parties be able to continue to examine the prudence of the Company’s decisions
561 prospectively in the IRP process, resource acquisition proceedings, certificate of
562 public convenience and necessity proceedings, major plant addition cases and
563 general rate cases, they will now be able to examine actual costs when the

564 Company seeks recovery of deferred power costs in the context of ECAM pass-
565 through proceedings. We trust that the Commission and the parties will not
566 second-guess decisions that have been thoroughly examined on a prospective
567 basis, but they will have the opportunity to raise questions if the Company does
568 not react prudently to changing conditions.

569 **Q. Mr. Gimble presents two alternative recommendations to the Commission.**
570 **The first alternative is to not allow market purchases into an ECAM until**
571 **sufficient analysis justifies their inclusion (Gimble, lines 686-687). How do**
572 **you respond to his first alternative?**

573 A. I disagree with this recommendation for the following reasons. First, two of the
574 reasons for Mr. Gimble's recommendation are erroneous. Namely, the Company
575 is not making wholesale sales of its summer resources as assumed by Mr. Gimble,
576 and the Company's 2012-2014 wholesale market price forecast is not model
577 based; rather, it is based on the market. Second, there is no evidence in the
578 WECC's PSA of region-wide resource shortages in the near term. Holding up the
579 ECAM to study this issue needs to be weighed against the merits of an ECAM as
580 identified in Phase I of this proceeding. Third, recent forward prices better
581 substantiate the resource deferrals between the 2008 IRP and the 2008 IRP
582 Update.

583 **Q. How do you respond to Mr. Gimble's second alternative to establish limits**
584 **for the total amount of market purchases that could be allowed to flow**
585 **through the ECAM (Gimble, lines 688-689)?**

586 A. This recommendation is unreasonable given that a large amount of market

587 purchases are already embedded in rates. In any event, this appears to be a design
588 issue that could be addressed by audit provisions and potentially by sharing
589 bands. Limiting market purchases without limiting market sales or other aspects
590 of net power costs is unbalanced.

591 Mr. Gimble notes himself that economy energy purchases should be
592 allowed (*Id.*, line 694). As already mentioned above, Mr. Wheelwright recognizes
593 that the Commission must be careful not to impose guidelines or conditions that
594 would have the effect of limiting the ability of the Company to react to changing
595 market conditions in ways that would be beneficial to customers (Wheelwright,
596 lines 167-172). Limiting the level of front office transactions included in an
597 ECAM is not in the public interest.

598 Review of the actual level of front office transactions is exactly the type of
599 issue that might be appropriate in a pass-through proceeding under an ECAM.
600 The proper time to question the Company's decisions regarding reliance on
601 market purchases is in IRP processes and ECAM pass-through proceedings. There
602 is no need to prejudge the issue by including limits in the design of an ECAM.

603 **Q. Does OCS consultant Dr. Schell contend the Company is over-reliant on**
604 **market purchases?**

605 A. No. Dr. Schell makes no comments in regard to the Company's reliance on
606 wholesale market purchases. However, Dr. Schell's comments suggesting that the
607 Company should actually *increase* its exposure to wholesale market price
608 movement and reduce its hedging activity by widening the To-Expiry Value-at-
609 Risk ("TEVaR") NPC cost bands unless there is a policy decision to cap the level

610 of risk currently defined in the TEVaR net power cost bands (Direct Testimony of
611 Lori Smith Schell for the Office of Consumer Services (“Schell”), lines 264-272)
612 seems inconsistent with Mr. Gimble’s testimony that the Company is over-reliant
613 on short-term market purchases.

614 **Q. Please explain TEVaR.**

615 A. TEVaR is a statistical method to approximate potential losses a portfolio could
616 incur at a given confidence level over a holding period from the current date
617 through maturity of open forward positions. In contrast to PacifiCorp Energy’s
618 value-at-risk (“VaR”) calculation, which approximates losses PacifiCorp Energy
619 could incur at a given confidence level over one trading day, TEVaR provides
620 information about losses that could be incurred by holding open positions until
621 maturity.

622 On May 25, 2010, the Company held a technical conference on hedging in
623 which it described the TEVaR method with Utah stakeholders. Handouts from
624 that meeting were filed with the Commission on May 27, 2010.

625 **Q. Does OCS consultant Mr. Wielgus contend the Company is over-reliant on**
626 **market purchases?**

627 A. No. Mr. Weilgus makes no comments in regard to the Company’s reliance on
628 wholesale market purchases.

629

630 **Q. Mr. Wielgus recommends that the Company study and consider acquisition**
631 **of non-natural gas capacity resources as an alternative to natural gas price**
632 **risk management. (Direct Testimony of Paul Wielgus for the Office of**
633 **Consumer Services (“Wielgus”), lines 204-207). What is the Company’s**
634 **response?**

635 A. The Company’s position is that the IRP is the appropriate place to review
636 alternative resource strategies that take into account price volatility among many
637 other variables.

638 **Q. Do you have any comments on the testimony of WRA/UCE witness Ms.**
639 **Kelly?**

640 A. Yes. Ms. Kelly focuses in greater depth on the IRP process, concluding that the
641 IRP process has not resulted in an “optimal” mix of resources and that it lacks
642 teeth (Kelly, lines 20, 235-236). In fact, Ms. Kelly’s testimony may be regarded
643 as a proposal for the IRP process to be changed in the future. I have two responses
644 to this testimony.

645 First, the IRP process has been a valuable process to enable the Company
646 to provide analysis of its resource planning to the Commission and interested
647 parties and to get the input of the Commission and those parties as it finalizes its
648 plans. The fact that the Company, and perhaps the Commission, have not agreed
649 with all of Ms. Kelly’s positions over the years, is not an indication that the
650 process has resulted in a “suboptimal” mix of resources.

651 Second, this is not the appropriate docket in which to reform the IRP
652 process. To the extent Ms. Kelly believes the process needs changes, those
653 changes should be suggested in the IRP process. Changes to the IRP process
654 should in no way be a precondition to adoption of an ECAM.

655 **Q. What does Ms. Kelly recommend?**

656 A. Ms. Kelly recommends the Commission require the Company to meet energy
657 efficiency and renewable resource targets and limit the Company's use of the
658 short-term wholesale power market to meet capacity requirements (Kelly, lines
659 311-313).

660 **Q. How do you respond to these recommendations?**

661 A. With regard to renewable resources, by the end of 2010, the development of wind
662 resource is nearly 350MW and five years ahead of the acquisition commitment of
663 adding an additional 1,400MW of renewable resources by 2015. In addition, the
664 Company is fully committed to energy efficiency even though it has no mandated
665 energy efficiency targets. That said, these two recommendations appear to be
666 unrelated to the issues being addressed at this stage of the ECAM proceeding and
667 should not be adopted. As mentioned above, market purchases are already in
668 rates. All an ECAM does is address the incremental difference of actual market
669 purchases versus those included in rates under the current paradigm. Ms. Kelly's
670 final recommendation on "limits" is different and farther reaching than Mr.
671 Gimble's recommendation on "limits." Ms. Kelly is asking the Commission to
672 restrict transactions, as opposed to Mr. Gimble's recommendation to restrict the
673 amount of transactions that flow through an ECAM. I believe this

674 recommendation is contrary to the public interest because it would not allow the
675 Company to have sufficient flexibility to respond to opportunities in the market
676 for the benefit of customers.

677 **Company Hedging Program**

678 **Q. Has the Company previously explained its hedging program in this docket**
679 **and the relationship of the hedging program to its request for an ECAM?**

680 A. Yes. The Company's hedging program was explained at length in the
681 Supplemental Direct Testimony of Frank C. Graves filed in August 2009. Mr.
682 Graves also explained why an ECAM is needed even though the Company has a
683 comprehensive hedging program in both his Supplemental Direct Testimony and
684 his Rebuttal Testimony filed in December 2009. In addition, other Company
685 witnesses in Phase I discussed the issue of how the Company's hedging program
686 is affected by adoption of an ECAM. I will not repeat that testimony here, but
687 simply note that it is already in the record in this case and that it provides a wealth
688 of information on the issue before the Commission. I will focus my rebuttal
689 testimony on hedging issues raised in the testimony filed by Mr. Wheelwright, Dr.
690 Schell and Mr. Wielgus on June 16, 2010.

691 **Q. Does DPU witness Mr. Wheelwright recommend any changes to the**
692 **Company's hedging program?**

693 A. Yes. Although Mr. Wheelwright does not indicate that any additional analysis is
694 required before implementing an ECAM, he does request additional analyses,
695 promotes the use of options, requests a biennial review of the Company's hedging
696 program, and encourages the Commission to consider establishing guidelines in

697 regard to the Company's hedging policy while being careful not to impose
698 requirements that would interfere with the Company's ability to make the best
699 decisions for customers in day-to-day operations (Wheelwright, lines 730-760,
700 767-771, 814-820, 824-826).

701 **Q. Does the Company agree with any of Mr. Wheelwright's recommendations?**

702 A. Yes. The Company agrees a biennial review of the hedging program is in the
703 interest of customers. It seems the first installment of that review will be
704 appropriately addressed through compliance with the Commission's 2008 IRP
705 acknowledgment order for the Company to include a hedging strategy section in
706 its next IRP. The Company does not see the need for additional Commission
707 guidelines or requirements prior to adoption of an ECAM.

708 The Company is open to the use of options, but recommends an approach
709 to work through multi-state regulatory recovery issues of these products.
710 Discussion of options and criteria for using them along with a limited approach
711 can be incorporated in the next IRP's hedging strategy section.

712 The Company is not opposed to Mr. Wheelwright's desire to see more
713 information underlying the new TEVaR net power cost metric, such as the open
714 position of each commodity or the mark-to-market value of each commodity.
715 These metrics are and will continue to be part of the Company's daily risk
716 reporting metrics.

717 Mr. Wheelwright contends the Company has not provided adequate
718 information to demonstrate that the current level of hedging provides the "best" or
719 "optimal" protection for the Company and its customers. Although the Company

720 has not modified its overall risk tolerance position in its current hedging program
721 from what it has maintained for several years, the Company is open to feedback
722 from the Commission and stakeholders because this is ultimately a subjective
723 judgment of customer rate risk tolerance. Such discussion could also be
724 incorporated in the IRP process and biennial review of the hedging program. The
725 new TEVaR metric was incorporated in part to provide better transparency
726 regarding the NPC price risk to which customers are exposed and support a more
727 intelligent discussion.

728 Mr. Wheelwright discusses the consideration of hedging of natural gas and
729 electricity and financial and physical hedges separately. I will discuss the
730 Company's position on separate consideration of natural gas and electric hedges
731 below. The Company agrees with the suggestion that financial and physical
732 hedges should be managed independently to the extent it is effective to do so. The
733 Company hedges its market price risk with a combination of fixed price physical
734 and financial swap transactions for both power and natural gas. The Company
735 balances its physical position with a combination of fixed price physical and
736 index price physical transactions for both power and natural gas.

737 **Q. Does the Company disagree with any of Mr. Wheelwright's**
738 **recommendations?**

739 A. Yes. The Company does not agree with Mr. Wheelwright's recommendation to
740 perform additional analysis that would consider separately managing exposures
741 and associated hedging of natural gas and electricity open positions. The two
742 commodities are correlated and the positions for each commodity are inextricably

743 linked to spark spreads. Natural gas plants frequently produce the marginal
744 electricity in a given hour and therefore are often the primary driver of electricity
745 prices. As the power and natural gas commodity prices are highly-interrelated, it
746 is appropriate and necessary to report and manage the risk exposures from these
747 commodities in a combined fashion. Separate management of these commodities
748 increases the risk of over hedging or increasing the overall risk profile of the
749 Company by hedging in a manner that ignores or reduces natural offsetting
750 positions. The Company believes the adoption of the TEVaR metric which
751 accounts for the relative size of electricity and natural gas positions, forward
752 prices, forward volatilities, and correlations, better reports the risk exposures from
753 these commodities (see Company's response to Schell, lines 235-236, below). A
754 hedging program that ignores this correlation and relationship will naturally be
755 less effective than the current program.

756 Mr. Wheelwright incorrectly states that "[t]he current hedging program
757 assumes that the current relationship between natural gas and electric hedging
758 volumes will continue even though conditions will likely change before the
759 maturity of the contracts" (Wheelwright, lines 536-539). In fact, the Company's
760 current hedging program will capture changes in correlations and changes in
761 future net long/short positions and will reflect the corresponding TEVaR NPC
762 exposure and appropriate hedging signals to mitigate price risk. The Company's
763 current hedging program calculates TEVaR values on a daily basis using
764 assumptions of electricity and natural gas positions, forward price curves, forward
765 volatilities, and near-term rolling historical correlations. These assumptions are

766 each updated on a daily basis. Therefore, changes in electricity and natural gas
767 positions and market dynamics will be captured by the Company's current
768 hedging program.

769 Mr. Wheelwright incorrectly states that the Company's hedging program
770 prevents the ability to participate in short or intermediate-term changes in markets
771 (*Id.*, lines 211-212). The Company's hedging program is designed to respond to
772 market price changes in several ways. First, the hedging program contains hedge
773 targets within which the Company can vary the degree of hedging based on its
774 response to market price changes and to its view of anticipated market price
775 changes. Second, the hedging program is based on a calculation of the Company's
776 open position, which is existing wholesale purchases and expected generation less
777 existing wholesale sales and expected retail sales based on a load forecast. The
778 expected generation is, in turn, based on the market price relative to the
779 generation fuel cost: the higher the market price, the higher the level of expected
780 generation. In this way, the market price influences the amount of hedging
781 required. The expected generation based on market price is updated every
782 business day thereby creating a dynamic process. Third, the hedging program
783 relies on the correlation between power and natural gas market prices. Changes in
784 the observed correlation between power and natural gas prices influence the
785 amount of hedging required. For example, if the Company has a long power
786 position and a short natural gas position and the correlation decreases, then more
787 hedging will be required to stay below the maximum target.

788 The Company has noted its willingness to consider options, but does not
789 see the need for additional analysis of option products at this time. The Company
790 believes the best approach is a carefully-staged program that will work through
791 the regulatory recovery process of these more advanced products. The Company
792 is willing to include discussion of options in the next IRP hedging strategy
793 section, such as discussion of potential option products, criteria for selecting
794 options and specific criteria for the carefully-staged approach.

795 **Q. Mr. Wheelwright recommends that the Commission provide a clearly stated**
796 **goal or set of goals that it expects the Company's hedging program to achieve**
797 **in this docket (Wheelwright, lines 816-818). How do you respond?**

798 A. If this recommendation suggests that the analyses recommended by Mr.
799 Wheelwright must be concluded in this docket, the Company objects to this
800 recommendation. As previously mentioned, these analyses are best conducted in
801 the context of the IRP process. If this recommendation suggests that the
802 Commission provide some general guidance to the Company, the Company has
803 no objection to the recommendation.

804 **Q. Does Dr. Schell recommend any changes to the Company's hedging**
805 **program?**

806 A. Yes. Dr. Schell contends the Company should reduce its hedging levels and
807 increase its exposure to wholesale market price volatility (Schell, lines 145-155).
808 She proposes no other changes to the Company's hedging program.

809 **Q. Does the Company agree with Dr. Schell's recommendation?**

810 A. No. The Company disagrees with Dr. Schell's recommendation to reduce hedging
811 and increase market exposure. The Company's hedge program is robust in its
812 ability to respond to market price changes as noted previously in response to the
813 testimony of Mr. Wheelwright. This robust process allows Company traders and
814 management to understand exposures, trade to stay within risk management
815 policy limits and approved hedge targets and make the best decisions on behalf of
816 customers.

817 **Q. Dr. Schell states that the TEVaR metric is less transparent than the volume-**
818 **based hedge targets (Schell, lines 235-236). Do you agree?**

819 A. No. The TEVaR metric is more transparent because, unlike volume-based hedge
820 targets, the Company's TEVaR metric accounts for size of open positions, prices,
821 volatilities, and correlations of power and natural gas commodities. Volume-
822 based hedge targets report percentage-hedged values that do not provide an
823 indication of the size of the underlying positions and therefore the size of
824 potential losses that could be incurred from adverse market price movements. The
825 TEVaR metric calculates risk exposures on the size of all open positions versus
826 displaying percentage-hedged values. Volume-based hedge targets do not provide
827 an indication of changes in risk exposure stemming from increases and decreases
828 in forward prices and volatilities of the underlying commodities. The TEVaR
829 metric responds daily to changes in forward prices and volatilities. Volume-based
830 hedge targets also do not provide an indication of changes in risk exposure
831 stemming from changes in correlations. The TEVaR metric responds daily to

832 changes in historically observed correlations. Finally, as noted in the May 25,
833 2010 technical conference, PacifiCorp monitors both the TEVaR metric as well as
834 volume-based information in its daily risk management reports.

835 **Q. Dr. Schell recommends that the acceptable range of TEVaR values should be**
836 **re-examined (Schell, lines 277-279). Does the Company agree with this**
837 **recommendation?**

838 A. Not to the extent the OCS uses this recommendation as a basis for recommending
839 that hedging costs be excluded from an ECAM. The TEVaR levels correspond to
840 the current hedging program metrics which have proven beneficial to customers.
841 The Company is willing to have this issue analyzed further in connection with the
842 2011 IRP, but does not believe it needs re-examination at this time prior to
843 adoption of an ECAM.

844 **Q. Does Mr. Wielgus recommend any changes to the Company's hedging**
845 **program?**

846 A. No. However, Mr. Wielgus recommends more time be taken to perform additional
847 analysis and collect stakeholder input into policy formulation. Mr. Wielgus
848 recommends the following actions: 1) thorough analysis of associated transaction
849 costs, 2) thorough analysis of the use of options, 3) value the partial leveling of
850 rates, 4) compare hedging to other ways of reducing volatility including enterprise
851 risk management, and 5) provide ample opportunity for all stakeholders to have
852 input into this policy formulation (Wielgus, lines 215-223).

853 **Q. Does the Company agree with Mr. Wielgus' recommendations?**

854 A. Not to the extent that the OCS uses the recommendations as a basis for
855 recommending that hedging costs and natural gas purchases be excluded from an
856 ECAM until these analyses have been completed. The Company does not believe
857 any additional analysis is required before an ECAM is implemented.

858 **Q. Please respond to Mr. Wielgus' first recommendation that associated**
859 **transaction costs should be thoroughly analyzed?**

860 A. The costs associated with the front, mid and back-office would largely be incurred
861 whether or not the Company had a hedging program. As discussed previously, the
862 Company has demonstrated that its hedging program effectively reduces customer
863 risk to price volatility. Further, the exposure to NPC due to price volatility has
864 been made more transparent through the new TEVaR hedge metric. There is no
865 need for further analysis of this issue prior to approval of an ECAM.

866 The Company is not opposed, however, to continuing evaluation of these
867 dynamic issues and believes they may be best addressed in the biennial review
868 process suggested by Mr. Wheelwright.

869 **Q. Please respond to Mr. Wielgus' second recommendation that the use of**
870 **options to reduce price volatility should be evaluated?**

871 A. The Company is open to the use of options as has been discussed earlier, but on a
872 carefully-staged approach. It would be unreasonable to require the use of options
873 as a condition to approval of an ECAM without first considering the level of
874 comfort of regulators and customers with options.

875 **Q. Please respond to Mr. Wielgus' third recommendation that the partial**
876 **leveling of rates that results from hedging natural gas should be valued.**

877 A. The value of hedging and resulting reduction of price exposure has been presented
878 and discussed in multiple analyses and technical conferences, including in
879 testimony in Phase I in this docket. While the Company is always open for further
880 analysis and input from the Commission and interested stakeholders on this issue,
881 there is no need for further analysis before an ECAM is approved.

882 **Q. Please respond to Mr. Wielgus' fourth recommendation that how the value of**
883 **hedging compares to other ways to address ratepayer pricing volatility,**
884 **including enterprise risk management methodology, should be analyzed.**

885 A. The Company's hedging program is an integral part of its robust enterprise risk
886 management oversight program that addresses multiple risks including market
887 price, credit, liquidity, collateral, legal, and operational risks. These risks are
888 governed by the PacifiCorp Energy Commercial & Trading Risk Management
889 Policy.

890 Market price risk is the exposure to financial loss resulting from changes
891 in market conditions, created primarily by position imbalances in location, time,
892 or instrument characteristics combined with market price volatility, and managed
893 by tracking Commercial & Trading's open positions and ensuring these positions
894 at any point in time do not create risk outside of approved limits.

895 Credit risk is the risk of financial loss resulting from a counterparty's
896 inability or unwillingness to honor its contractual obligations, a function of a

897 counterparty's probability of default and credit exposure, and managed on both a
898 counterparty and portfolio basis in accordance with approved credit risk limits.

899 Liquidity risk includes the risk of financial loss in the event of market
900 illiquidity (market liquidity risk), varies based on the number of counterparties
901 willing to transact and depth of market (indicators of market liquidity), and is
902 managed by the credit risk management department through pre-approval of
903 eligible trading instruments available to Commercial & Trading and the number
904 and diversity of approved counterparties.

905 Collateral risk is the risk of working capital becoming insufficient to meet
906 near term financial demands. Funding liquidity risk results when actual payment
907 obligations deviate significantly from planned obligations and may arise from
908 margin calls, a significant downgrade event of PacifiCorp, or other unexpected
909 events that require immediately available funds and is managed by the PacifiCorp
910 treasury department.

911 Legal risk includes the risk of financial loss or liability from inadequate
912 documentation and incurring penalties or fines associated with non-compliant
913 activities and is managed by standardized contracts as well as daily coordination
914 with the PacifiCorp Energy legal department.

915 Operational risk is the exposure to financial loss resulting from human
916 error, systems failure, or fraud and is managed through effective staffing and
917 developing strong processes and internal controls.

918 The Company provides information regarding these risks in its Securities
919 and Exchange Commission disclosures in addition to responses to numerous data
920 requests.

921 The hedging program incorporates all of the aspects of the Company's
922 enterprise risk management program that deal with NPC.

923 **Q. Please respond to Mr. Wielgus' fifth recommendation that this process**
924 **should provide ample opportunity for all of the affected stakeholders to have**
925 **input into this process.**

926 A. Stakeholders have ample opportunity to provide input to the Company through
927 multiple processes including the IRP, RFPs and rate case dockets. Stakeholders
928 will have an additional opportunity for input through the ECAM process because
929 they will retain the right to question the prudence of all aspects of NPC in pass-
930 through filings under the ECAM. The Company has no objection to additional
931 stakeholder input. However, receipt of that additional input is not necessary prior
932 to implementation of an ECAM.

933 **Conclusion**

934 **Q. What are your conclusions?**

935 A. The Company's reliance on wholesale markets for meeting a portion of its load
936 requirements has been examined in the context of its IRPs and will be subject to
937 further examination in that process in the future. The Company's decision in
938 February 2009 to terminate the Lake Side II resource selected in the last RFP and
939 to rely on front office transactions is reasonably expected to provide
940 approximately [BEGIN HIGHLY CONFIDENTIAL] ██████████ [END

941 HIGHLY CONFIDENTIAL] in present value revenue requirement savings to
942 customers. As effectively acknowledged by Mr. Wheelwright, Mr. Gimble and
943 Ms. Kelly, the mix of resources, including front office transactions, relied upon by
944 the Company to meet its load requirements is an IRP issue, and the Company is
945 committed to providing the additional information on risk of market reliance
946 requested by the Commission in the 2008 IRP acknowledgment order in the 2011
947 IRP.

948 The Company has provided substantial information regarding its hedging program
949 previously and in this docket and is committed to continuing analysis of the
950 program in the context of the next IRP and in subsequent IRPs. The Company's
951 hedging program provides benefits to customers by reducing the risk of NPC
952 being substantially higher than forecasted.

953 There is no need for the Commission to delay implementation of an ECAM or to
954 restrict its scope to exclude the most volatile components of NPC (costs the
955 Commission already reviews in general rate cases) while a thorough analysis of
956 the Company's reliance on front office transactions and its hedging strategy and
957 policies, which the Company is committed to do in the 2011 IRP process, is
958 undertaken.

959 In addition, appropriate levels of reliance on market energy and hedging,
960 and the types of hedging instruments used, will likely vary over time as market
961 conditions change. Therefore, these issues should be scrutinized on a going-
962 forward basis while an ECAM is in place. As discussed in the testimony of Mr.
963 Graves in Phase I, the Company and the other stakeholders will benefit from

964 experience under the ECAM in determining the appropriate level of risk tolerance
965 for customers. Mr. Wheelwright's suggestion for a biennial review of hedging in
966 conjunction with IRPs is a sensible plan.

967 Although it is not an appropriate issue for this docket, it is always possible
968 with hindsight to second-guess decisions made by the Company with regard to
969 NPC. However, even with hindsight, none of the parties has demonstrated that the
970 Company's level of reliance on front office transactions or its hedging program
971 have harmed customers in the past or will likely harm them in the future. In fact,
972 the Company has demonstrated significant cost savings associated with its current
973 level of market reliance and risk mitigation associated with its hedging program.

974 I recommend that the Commission conclude that there is no need to
975 require the Company to adjust its reliance on market energy and its hedging
976 program with adoption of an ECAM. I further recommend that the Commission
977 reject the suggestions of the parties that an ECAM not include all front office
978 transactions, hedging costs or natural gas fuel costs. Exclusion of these highly
979 volatile and interrelated components of NPC from an ECAM will defeat the very
980 purpose of an ECAM.

981 **Q. Does this conclude your testimony?**

982 A. Yes.