

**ORIGINAL**

**PUBLIC**

BEFORE THE UTAH PUBLIC SERVICE COMMISSION

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IN THE MATTER OF THE APPLICATION OF )	
ROCKY MOUNTAIN POWER FOR AUTHORITY )	
TO INCREASE ITS RETAIL ELECTRIC UTILITY )	DPU EXHIBIT 11.0 D-RR
SERVICE RATES IN UTAH AND FOR )	DOCKET NO. 10-035-124
APPROVAL OF ITS PROPOSED ELECTRIC )	NET POWER COST - HEDGING
SERVICE SCHEDULES AND ELECTRIC )	
SERVICE REGULATIONS )	

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Pre-filed Direct Testimony

of

Douglas D. Wheelwright

on Behalf of

Utah Division of Public Utilities

May 26, 2011

*Douglas D. Wheelwright Direct Testimony  
UIEC Exhibit 12-035-RR  
Docket No. 12-035-124*

Page 2

1 **Q: Please state your name, business address and title.**

2 A: My name is Douglas D. Wheelwright. I am a Utility Analyst in the Division of Public  
3 Utilities ("Division"). My business address is 160 East 300 South, Salt Lake City, Utah  
4 84114.

5 **Q: On whose behalf are you testifying?**

6 A: I am testifying on the Division's behalf.

7

8 **Q: Please describe your position and duties with the Division.**

9 A: I research, analyze, document, and establish regulatory positions on a variety of  
10 regulatory matters. I review operations reports and evaluate compliance with the laws  
11 and regulations. I provide testimony in hearings before the Utah Public Service  
12 Commission ("Commission"); and assist in the analysis of testimony and case  
13 preparation.

14 **Q: What is the purpose of your testimony?**

15 A: The Division believes that PacifiCorp's ("Company") current hedging practices have  
16 created significant additional expense to the projected total net power cost. The current  
17 hedging program does not provide enough flexibility and the Company has not  
18 recognized the internal and external changes in market conditions. My testimony will be  
19 in support of the Division's consultant, Mark Crisp who has looked specifically at what  
20 other utilities and commissions throughout the country are doing with their hedging  
21 programs.

22 **Q: Can you summarize the Division's position on the current hedging practices and  
23 provide recommendations to the Commission?**

24 A: The Division has reviewed the information provided by the Company and by the Division  
25 consultant and has determined that the Company should assume a portion of the  
26 additional costs associated with the swap contracts and should not be allowed to recover  
27 the full amount requested. The Company has not been able to demonstrate that the

*Douglas D. Wheelwright Direct Testimony  
DPP Exhibit 11 0 D-RR  
Docket No. 10-035-124*

Page 3

28 current hedging policies and practices provide the appropriate balance of risk to both the  
29 Company and ratepayers. The existing hedging strategy has been designed for price  
30 stability and does not adequately consider the potential cost impact. The current  
31 program creates additional cost to ratepayers and does not provide a mechanism to  
32 allow for possible cost reductions that could potentially benefit both the Company and  
33 ratepayers. Using financial swap transactions to hedge up to █████ of the price volatility  
34 does not provide enough flexibility to allow for changing load requirements or changes in  
35 market conditions. The program creates price stability for rate making purposes but  
36 reduces the incentive for the Company to look for possible cost savings opportunities. It  
37 is the position of the Division that the Company has not been prudent and should not be  
38 allowed to recover the full amount identified as swap costs. The Division is proposing a  
39 disallowance on swaps included in net power costs of \$57,948,207 in a system-wide  
40 basis with \$25,051,494 allocated to Utah.

41 **Q: Will you identify the Division's concerns?**

42 A: Several issues related to hedging have been addressed by various parties in previous  
43 rate cases,<sup>1</sup> in the EBA docket,<sup>2</sup> and in a separate docket created to address natural gas  
44 price risk and hedging practices.<sup>3</sup> In previous testimony, the Division and other parties  
45 have provided evidence and made recommendations to modify the Company's current  
46 program and have asked the Commission to establish standards or guidelines and  
47 create a review process.

48 In the recent EBA order, the Commission indicated it would not establish standards or  
49 targets, or set limits on the components of net power cost. The order further states that  
50 an appropriate venue to look at the inclusion or disallowance of costs associated with  
51 financial hedges is in a general rate case.<sup>4</sup>

52 The current practice of using financial swaps to hedge the future natural gas price is  
53 designed for an environment of increasing natural gas prices. With the increase in the  
54 availability of natural gas due to increased shale gas production, the price of natural gas

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<sup>1</sup> Docket No. 09-035-23.

<sup>2</sup> Docket No. 09-035-15.

<sup>3</sup> Docket No. 09-035-21.

<sup>4</sup> Docket No. 09-035-15 ECAM Order p.72.

136 While this may be the Company's goal, the projected cost of the hedging program is  
137 adding to the total Net Power Cost (NPC). Cost minimization does not appear to be a  
138 consideration in the current program.

139 **Q: What does the Company identify that should be included in the total hedging**  
140 **program?**

141 A: This is where the confusion begins. As a broad definition of hedging, the Company  
142 includes financial swaps for electric and gas along with the physical transactions for both  
143 gas and electric. For the test year the Company has identified the value of the natural  
144 gas and electric swap transactions in the UT GRC June 2012 (GOLD) report. The gas  
145 and electric swap transactions are the primary focus of my analysis.

146 **Q: How does the price volatility of natural gas affect the Company?**

147 A: PacifiCorp natural gas-fired generating facilities account for 21% of the total net owned  
148 generating capacity but only 12% of the total energy. In determining whether to dispatch  
149 its natural gas-fired facilities, PacifiCorp considers, among other factors, its operating  
150 requirements to balance electricity supply and demand and the current spark spread.  
151 Spark spread is the difference between the wholesale market price of electricity at any  
152 given hour and the cost to convert natural gas to electricity.<sup>13</sup> The decision to dispatch  
153 the natural gas facilities is affected by the volatility of the price of natural gas. A change  
154 in the forward price curve will change the spark spread and the decision to dispatch a  
155 natural gas facility or purchase electricity.

156 **Q: What is the impact of swap transactions that are included in NPC?**

157 A: In the UT GRC June 2012 (Gold) report, natural gas swaps add \$160.7 million to NPC  
158 while the electric swaps reduce NPC by \$61.7 for a net increase of \$99.0 million. The  
159 majority of the increase occurs in the last six months of the test year and, thus, the  
160 impact of the swap transactions increases significantly in the last six months of the test  
161 period. As of December 31, 2011, the net of electric and gas swaps is \$8,231,437.

162 **Q: How does the forecast compare with the historical values for swaps?**

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<sup>13</sup> PacifiCorp, 2009 10-K Report, p. 10.

293 averages calculations to the right of the test year months. Using this template I have  
294 calculated the anticipated upper and lower price band forecasts at various confidence  
295 levels. Page 2 of DPU Exhibit 11.1 D-RR identifies the forecast upper and lower natural  
296 gas price range for confidence intervals from 50% to 99%.

297 To review the projected price included in the test year I have compared the projected  
298 price provided by the Company to the EIA forecast price range. Using a 95% confidence  
299 estimate, the EIA forecast produces a forecast price range from a low of \$2.95 to a high  
300 of \$7.61. This places the test year forecast price of \$7.23 on the high end of the range  
301 and significantly above the average settled price of \$4.73. Thus, it appears that the  
302 actions of the Company and the current hedging policy have shifted nearly all of the  
303 price risk to ratepayers.

304

305 **Q: How does the hedging strategy at PacifiCorp compare to the strategy used by**  
306 **Questar Gas Company?**

307 **A:** Questar Gas Company ("Questar") prepares an annual hedging plan and makes a  
308 presentation to the Commission prior to implementation. Over the last 5 years, Questar  
309 has entered into fixed price agreements for approximately 63% of the forecast winter  
310 heating season need and has purchased the remaining quantity on the spot market.  
311 This has allowed Questar to take advantage of the recent drop in the market price which  
312 has been a benefit to both Questar and to rate payers. In the Questar Gas pass-through  
313 docket the Commission indicated that Questar should consider cost, reliability and price  
314 stability as the three factors that should influence a gas purchase strategy.<sup>19</sup>

315

316 **Q: How does the price for the natural gas commodity consumed by PacifiCorp**  
317 **ratepayers compare to the price of natural gas consumed by Questar's**  
318 **ratepayers?**

319 **A:** Chart 5 below is summary of the cost for natural gas paid by ratepayers of PacifiCorp  
320 and ratepayers of Questar compared to the Opal spot market price. The actual values  
321 used for the Questar information has been taken from information provided in the 191

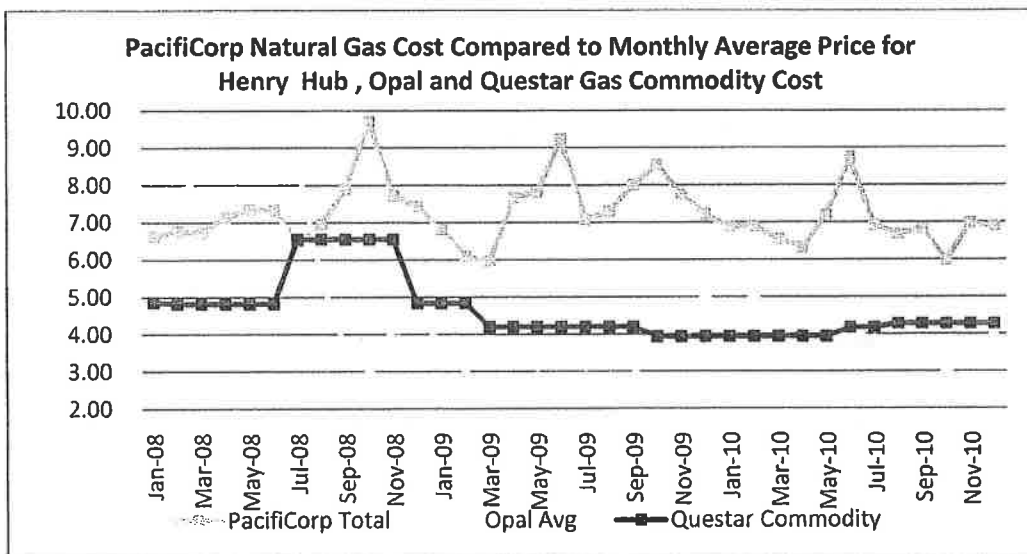
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<sup>19</sup> Questar Gas Order in Docket Nos. 00-057-08 and 00-057-10 p. 7.

Douglas D. Wheelwright Direct Testimony  
 DPU Exhibit 1101-RR  
 Docket No. 10-035-124

322 account. By using a shorter time horizon and allowing for some market purchases,  
 323 Questar has been able to stabilize prices and still take advantage of the reduction in gas  
 324 prices in recent years. Questar includes the WEXPRO production as part of their fixed  
 325 price contracts. This has helped to keep the price down, but the remaining 37% has  
 326 been purchased at market price.

327 **Chart 5**



328

329 **Q: What is the Company currently paying for natural gas contracts in future years?**

330 **A:** In response to DPU data request 32.3, the Company identified a few of the contracts  
 331 that have been completed in the last 6 months. [REDACTED]  
 332 [REDACTED]  
 333 [REDACTED] which confirms the flat nature of the forward markets. While  
 334 these new contract prices are lower than the historical information provided, due to the  
 335 long term nature of the program it will take several years to realize a reduction in the  
 336 price per MMBtu.

337

338 **Q: Are you suggesting that the Company completely abandon its hedging program?**

339 **A:** Not at all. The Division believes there is a benefit to hedging in order to stabilize price  
 340 and minimize dramatic price spikes that would affect both the Company and ratepayers.

341 While the current projections are for stable gas prices, there is a possibility that natural  
342 disasters or economic conditions could change causing prices to increase rapidly. For  
343 example, environmental concerns related to the "fracking" process used in shale gas  
344 recovery could affect the future price along with other environmental or natural resource  
345 issues. Therefore, the Division is supportive of a certain level of hedging and recognizes  
346 that there will be costs associated with any hedging program.

347  
348 Nevertheless, the Division is concerned that the current hedging strategy has been  
349 conducted without the scrutiny or approval of regulators and has not been explicitly  
350 determined to be in the best interest of the Company or ratepayers. Additionally, the  
351 Division is concerned that the Company's current hedging program and practices do not  
352 provide an appropriate degree of flexibility to adapt to changing conditions and are  
353 weighted too heavily toward price stability at the expense of cost minimization. With that  
354 said, the Division recognizes that there are likely as many different hedging programs as  
355 there are electric utility companies and probably no perfect hedging program exists.

356 **Q: How does the Division interpret the current EBA order that allows swaps to be**  
357 **included in base rates but excluded from the EBA calculation?**

358 **A:** This is a bit confusing. The Commission has been asked to review its decision to  
359 include or exclude swap transactions from the EBA, but has not yet acted.. The EBA  
360 order states;

361 ...swap transactions should be excluded from the calculation of both  
362 base and actual net power costs. We agree swap transactions do  
363 not track well with the statutory definition of energy cost. Swap  
364 transactions currently approved will remain in basic customer rates.  
365 We also conclude these transactions must be reviewed and  
366 approved in each general rate case, which is an appropriate  
367 proceeding for determining the prudence of Company decisions.<sup>20</sup>

368 The order indicates that swap transactions are excluded from the base and the  
369 balancing calculation but swaps already approved and included can remain in rates.  
370 The inclusion of any future swap transactions must be reviewed and approved in a  
371 general rate cases.

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<sup>20</sup> Docket No. 09-035-15, ECAM Order p 75.

