#### BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Request of Rocky Mountain Power for Approval of Its Proposed Energy Cost Adjustment Mechanism its	DOCKET NO. 09-035-15 Exhibit No. DPU SR 2.0  Surrebuttal Testimony Douglas D. Wheelwright
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# FOR THE DIVISION OF PUBLIC UTILITIES DEPARTMENT OF COMMERCE STATE OF UTAH

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Testimony of

Douglas D. Wheelwright

August 10, 2010

- 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 84114.

5 Q: Have you previously filed testimony in this case?

6 A: I filed direct testimony on June 16, 2010 for The Division of Public Utilities.

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- Q: What is the purpose of your surrebuttal testimony?
- A: To respond to issues related to hedging that were raised by PacifiCorp in the rebuttal testimony of Gregory N. Duvall. The Division's surrebuttal testimony on market purchase and resource issues is being provided separately by Charles Peterson.

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- Q. Do you have additional information concerning the impact of the current hedging program on net power cost?
- A. The market value of the hedging contracts will fluctuate from inception date to settlement date based on the relationship of the contract price to the spot market price. The actual recognition of these contracts as operating revenue or energy costs occurs when the contracts settle as of their maturity date. In response to data requests, the Company provided the historical information for the realized cost of the settled contracts for both natural gas and electric hedging. Confidential DPU SR Exhibit 2.1 is a summary of the actual monthly cost for the completed contracts from January 2006 through May of 2010. The net result of these settled hedging contracts for year to date 2010 indicate BEGIN CONFIDENTIAL

<sup>&</sup>lt;sup>1</sup> DPU Data Request 4.14, 8.1 & 8.2.

the data presented in Exhibit 2.1 are from a period of 4 1/2 years and therefore represent a snapshot in time. As such, the net losses represented there may not necessarily continue in future years. However, as I will discuss below, the data tell us a lot about the historical relationship between the Company's gas and electric hedging, as I will discuss below.

### Q. Do you agree that a review of the Company's hedging strategy is not necessary before adopting an ECAM?

A. Because of the long term nature of the contracts that are currently in place, it will take some time to implement a change to the current strategy. As identified in Mr. Peterson's testimony, the Division proposes that the Commission provide hedging guidance and have the Company submit a hedging plan that will be approved by the Commission. We are not recommending that the ECAM be delayed until a hedging plan has been approved. Prior to approval of a hedging strategy, the Division has proposed that a smaller cost-sharing percentage be used in the ECAM. After a plan has been implemented, and if the Company is in compliance, the percentage of cost sharing could be modified.<sup>3</sup>

# Q. Do you agree that there is no need for further analysis or change to the hedging strategy prior to adopting the ECAM?

A. Since this is a cost recovery mechanism there must be a clear understanding of how hedging impacts net power costs in order to protect the ratepayers and allow the Company to recover their costs. The issue of hedging has been raised in this docket and in the last two general rate cases. Because of the complex nature and the lack of understanding of the issue, the Commission opened Docket No. 09-035-21 to further explore the issues. Mr. Duvall acknowledges in his rebuttal testimony that the market is dynamic and that this issue requires

<sup>&</sup>lt;sup>2</sup> Testimony of Douglas D. Wheelwright, line 580.

<sup>&</sup>lt;sup>3</sup> Phase II Testimony of Charles E. Peterson, August 4, 2010, line 240.

continual study and analysis.<sup>4</sup> The current natural gas hedging program has been designed to minimize the price volatility and is designed to work in an environment of rising natural gas prices over time. The Company has not been able to demonstrate that the current hedging program has been able to adapt to the change in market conditions as natural gas prices have dropped over the last two years.

### Q. What kind of timeline does the Division anticipate for putting a hedging plan into place?

A. With the goal of complying with a plan set in 2015 per Mr. Peterson's ECAM design testimony, the Division recommends that, should the Commission agree that an approved hedging plan is necessary, this process begin immediately after the completion of this ECAM docket. While hedging is a complicated issue, substantial amounts of discovery on hedging have already been completed by the parties. Therefore it should be possible for the Commission to approve a plan no later than the end of 2011. The Division notes that because the Company currently has a hedging portfolio that is substantially weighted toward contract expiries that are several years out, it could take a few years for the Company to create a portfolio that is in compliance with a Commission approved plan if the PSC requires substantial change.

#### O. Do you agree that this issue should not be addressed until the 2011 IRP?

A. No. The current hedging strategy has not been reviewed and approved by the Commission and leaves the Company open to criticism and second guessing. As part of the acknowledgement of the last IRP, the Commission directed the Company to include additional information concerning hedging and market purchases in the next IRP. This is an important step, but there still needs to be a Commission-approved plan in place in order to determine if the strategy has been effective or if changes may be necessary due to changing market conditions. In this proceeding and other dockets, parties have submitted multiple data requests and have recently reviewed the hedging strategy of other utilities. The Division would recommend that the Commission move forward with the ECAM and use the existing

<sup>&</sup>lt;sup>4</sup> Rebuttal Testimony of Gregory N. Duvall, line 53 and line 279.

natural gas hedging docket (Docket No. 09-035-21) as a vehicle for the Company and parties to propose hedging goals and plans to implement them. The Company and parties could present specific guidelines for the use of options and proposed changes to the amount and duration of future natural gas and electric hedging. This would allow the ECAM to proceed and allow all parties to further discuss hedging and to propose changes. This should be completed quickly while parties can utilize the research and data that has already been compiled.

### Q. Do you agree that the IRP process is the correct venue for resolving hedging policy concerns?

A. No, I do not for several reasons. First, the IRP process does not allow for the consideration of plans other than those generated by the Company. The way that the process has worked in recent years is for the Company to present a series of portfolios to participants. Parties can comment on the portfolios and the analysis used to ultimately select the "preferred portfolio," however, parties are not able to propose their own plans or portfolios. For non-Company parties, the IRP process is reactive and they are not able to present their own portfolios for the consideration of the Company, other parties, or the Commissions involved.

Second, the IRP process is not a litigated process, at least not in Utah. Once the Company's IRP is completed, it is submitted to the Commission and the Commission will then take comments, to which the Company has typically replied. However, there has not been the ability question the Company or other witnesses under oath, nor to cross-examine them. The Division believes that the kind of policy finding that the Commission should make with regard to hedging requires the formal information discovery process normally found in litigated cases.

Finally, the outcome of the IRP process in Utah is not an approval or disapproval of the IRP, but rather acknowledgement or non-acknowledgement. Exactly what this means in terms of effect on the Company's future actions has always been ambiguous. Acknowledgement does not ensure that actions consistent with the plan will be to be deemed to have been prudent,

nor does non-acknowledgement mean that such actions will be found to be imprudent. As has been recently said, this process lacks "teeth." The Division believes that a hedging policy and associated hedging plan require the full scrutiny of the Commission. Moreover, the phased-ECAM approach outlined in Mr. Peterson's testimony provides the Company with a further incentive to follow a Commission approved plan by being able to move to larger cost sharing percentages in the future.

- Q. The Company has indicated that the new TEVaR metric will provide a more accurate understanding of the commodity risk exposure and the historical correlation in prices. Do you believe that this new metric will resolve the concerns addressed by the Division and other parties?
- A. I do not. The TEVaR metric is a mechanism to look at the risk exposure to the expiration of the contracts as opposed to the VaR metric which looks at the risk at a particular point in time. Under the current hedging policy BEGIN CONFIDENTIAL

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END CONFIDENTIAL The TEVaR metric may show the associated risk of price movement but the current policy lacks guidelines or procedures to get out of contracts that may be substantially out of the money. These contracts could require the Company to provide additional cash collateral to counterparties that may not be factored into the TEVaR metric. With 100% of the natural gas requirement hedged, the only variable that could change is the amount of electricity hedging.

- Q. Referring to the relationship between the Company's natural gas and electricity swaps, what has the Company said is the net effect of these two sets of swaps?
- A. Since the issue of hedging was first raised in the 2008 rate case, the Company has

  consistently said that gas and electric swaps should be viewed together, and viewed

  positively. The Company indicated that the general correlation between natural gas and

  electricity market prices has tended to mean that hedging losses in one commodity would be

<sup>&</sup>lt;sup>5</sup> Prefiled Direct Testimony of Nancy Kelly, Phase II, Part 2, August 4, 2010, P. 5, referencing Commissioner Campbell.

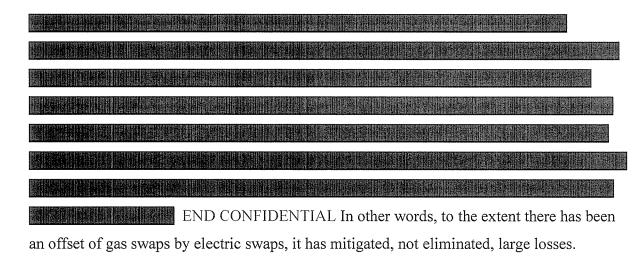
largely offset by hedging gains in the other. As indicated in Exhibit 2.1, there is a correlation in the price movement in one commodity compared to the other but the dollar values of the changes do not offset the dollar value change in the other commodity. Therefore, the gas and electric swaps should be viewed independently.

- Q. The Company believes that you are incorrect in stating that the current inverse relationship between natural gas and electric hedging will change. Do you still believe that the negative correlation between natural gas and electric hedging will change before the maturity of the existing contracts and are there other factors that could potentially change the relationship between the gas and electric hedges?
- A. Yes, it might. In the current environment the Company has excess power to sell and is a purchaser of natural gas. Based on the information provided in the recent IRP, the Company will soon need to purchase additional power. As the Company moves from the current position of being long on electricity and short on natural gas, the cost offsetting relationship between the two commodities will likely change. If the Company is successful in purchasing or building additional natural gas generation resources the quantity of natural gas required will increase, further changing the existing relationship whereby the Company is even more exposed to gas price volatility relative to electric prices than it is now. This relationship of the two commodities is confirmed in the testimony of Frank Graves.

Correlations among factor inputs are another very difficult to forecast element that affects the success of hedging. As was seen in Figure 4, gas and electricity prices tend to move somewhat in tandem, but quite imperfectly. Sometimes, the price of gas is driven by competition with coal plants, while at other times it may be driven by competition with oil or other sources of natural gas. Thus, the extent to which gas can be used to hedge electricity varies over time and circumstances. (Emphasis added)

- Q. Does Confidential DPU Exhibit 2.1 show us anything with regard to the idea of an offset from gas and electricity hedging?
- A. Confidential DPU Exhibit 2.1 show us that, while some offset can indeed be observed, the magnitude of BEGIN CONFIDENTIAL magnitude magnitude of BEGIN CONFIDENTIAL magnitude magn

<sup>&</sup>lt;sup>6</sup> Supplemental Direct Testimony of Frank C. Graves, August 12, 2009, Line 816.



Q. The Company disagreed with the recommendation to separate the gas and electric hedging since each commodity is linked to the spark spread. Do you still believe that that it would be advantageous to review and manage the two commodities separately?

A. That depends on the time frame that is being considered. In the near term the Company will look at the spark spread to determine if it is advantageous to purchase power or dispatch the natural gas facility. In that situation it does make sense to look at the relationship of the two commodities. The greater concern is for the contracts with maturity beyond the next few months or even the next 12 months. Historically, the Company has relied on the change in the price of the two commodities and the corresponding change in value of these contracts to offset each other. As DPU Exhibit 2.1 shows, the change in value of one commodity does not offset the change in value of the other.

There is also a basic conceptual reason to consider gas and electric swaps separately and that is the nature of the Company's position in each commodity. For natural gas, the Company is hedging its position as a buyer of gas. In electricity, the Company is hedging its position as a seller of electricity. Typically, a seller should not want to protect against price increases but seek to protect against price declines. A buyer should be averse to price increases but not decreases. To tie the positions as buyer of gas and seller of electricity is to combine completely different motives.

Reviewing the longer term natural gas and electric contracts as separate commodities will allow a more objective look at the underlying value of the contracts and those contracts that may be significantly out of the money. In addition it will identify tolerance bands and will help to establish guidelines for when the use of options would be appropriate. If independent limits are in place to minimize losses on both commodities the net result should be less variation and volatility in NPC.

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- O. Do you agree that there is no need for addition Commission guidelines or requirements prior to adoption of an ECAM? (Duvall – Line 705)
- A. The Commission specifically asked for information in this phase of the docket to address hedging and front office transactions. While all the issues and suggestions have not been resolved, the Commission should provide guidance to the Company on what a hedging plan is intended to achieve and then review and approve future plans on a regular basis.

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Q. Do you believe that the Company has provided adequate information to demonstrate that the current level of hedging provides the "best" or "optimal" protection for the Company and its customers?

A. No. The Company has not been able to demonstrate that the current program will result in the least cost or least risk to customers. BEGIN CONFIDENTIAL

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Duvall's rebuttal testimony he indicates that the Company would be open to feedback from the Commission and stakeholders concerning hedging. Testimony has been submitted by multiple parties that has identified specific areas of concern with the current strategy. Parties have submitted information on various strategies that are currently in place with other utilities throughout the county. The Company has indicated that they are open to the use of

<sup>&</sup>lt;sup>7</sup> PacifiCorp, Exhibit 10 – Commodity Price Exposure Hedge Program, p 2, Item 7.

options but suggested that this discussion be further delayed until the next IRP process.<sup>8</sup> The supplemental testimony of Frank C. Graves states the following;

Rocky Mountain Power needs to base its risk management goals and practices on the benefits of protecting its customers from disruptive cost variability and of preserving its own financial health. Initially, that can occur based on the utility's implicit understanding of past regulatory and intervener concerns over price changes, but eventually the right amount of risk management should become a policy that is decided with input and guidance from the Commission and customers. In general, Rocky Mountain Power can manage its ECAM risks to constrain likely costs to almost any ex ante risk range that is desired, within the practical limits of how much risk can be eliminated (discussed in Section V below). Rocky Mountain Power's own tastes for risk are not necessarily sufficient to identify what amount of risk reduction is best for its customers. (emphasis added)

The Company has not been able to demonstrate that the current program provides a sufficient level of protection for the Company or for ratepayers.

- Q. The Company states that you are incorrect in your assessment that the current hedging program prevents the ability to participate in short or intermediate-term changes in market prices. Do you agree that the current program is designed to respond to market price changes?
- A. Not at all. With the dynamic changes that have occurred and the significant reduction in the price of natural gas during the past two years, the Company has not been able to demonstrate that the current hedging program has been able to adapt and take advantage of the changing market conditions. This has been the topic of discussion between the Division and the Company for the past several years. The current guidelines require natural gas hedging to be between BEGIN CONFIDENTIAL
- 255 END CONFIDENTIAL As of year-end 2009 the Company had hedged 87% of the

forecast need for 2011<sup>10</sup>. Hedging costs as a percentage of total natural gas cost went from

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

<sup>&</sup>lt;sup>8</sup> Rebuttal Testimony of Gregory N. Duvall, line 709.

<sup>&</sup>lt;sup>9</sup> Supplemental Direct Testimony of Frank C. Graves, August 12, 2009, Line 463.

257 In Frank C.

258 Graves testimony he states the following;

"When a company chooses to lock down future prices (especially far in advance of delivery), it becomes more vulnerable to intervening price changes and resulting financial performance concerns about (and from) the counterparty to the contract." <sup>12</sup>

The current program does not allow the Company to move out of contracts that are out of the money. The appropriate use of options would allow the Company to put limits on potential losses.

# Q. How do you respond to the concern expressed by the Company that the use of options should be approved by other regulatory entities served by PacifiCorp?

A. While it is a concern, it is my understanding that none of the states in which Pacificorp provides service has provided guidance concerning the use of hedging generally or options specifically. There would thus be no conflict at the present time with any guidance or order that the Commission might provide. In the event that another state or states provides hedging requirements in the future, the Company could present any apparent contradiction to the Utah Commission, which could deal with the issue appropriately, whether by altering its guidance or otherwise allowing an appropriate exception. However, it should be pointed out that a utility operating in multiple states will always face this type of risk and it is a risk that the Company has assumed voluntarily. At this point, though, in the absence of action from other states, this risk appears to be low. Since Utah represents over 40% of the load of PacifiCorp, the responsibility should be on the Utah Commission to establish a policy and direction.

#### Q. Why do you believe the Commission should address this issue?

A. The Commission should provide guidance to the Company concerning the direction and appropriate goals for the hedging strategy. There should be an understanding of the importance of price stability versus cost minimization from the perspective of both the Company and ratepayers.

<sup>12</sup> Supplemental Direct Testimony of Frank C. Graves, line 754.

<sup>&</sup>lt;sup>11</sup> Direct Testimony of Douglas D. Wheelwright, June 12, 2010, line 580.

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287 Q. Does this conclude your testimony?

288 A. Yes