### BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

| In the Matter of the Application of Rocky (Mountain Power for Approval of Its (Mountain Power for Approval Other Mountain Power for Approval Other Mou | DOCKET NO. 09-035-15<br>Exhibit No. DPU 1.0            |
|--|--|
| Proposed Energy Cost Adjustment<br>Mechanism   | Direct Testimony for Phase I of<br>Charles E. Peterson |
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# FOR THE DIVISION OF PUBLIC UTILITIES DEPARTMENT OF COMMERCE STATE OF UTAH

**Direct Testimony for Phase I of** 

Charles E. Peterson

**November 16, 2009** 

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**Direct Testimony of Charles E. Peterson** 2 3 4 I. INTRODUCTION 5 6 Q. Please state your name, business address and title. 7 A. My name is Charles E. Peterson; my business address is 160 East 300 South, Salt Lake City, 8 Utah 84114; I am a Technical Consultant in the Utah Division of Public Utilities (Division, 9 or DPU). 10 11 Q. On whose behalf are you testifying? 12 A. The Division. 13 14 Q. Please summarize your educational and professional experience. 15 A. I attended the University of Utah and earned a B.A. in mathematics in 1978 and a Master of 16 Statistics (M.Stat.) through the Graduate School of Business in 1980. In 1990, I earned an 17 M.S. in economics, also from the University of Utah. 18 19 Between 1980 and 1991, I worked as an economic and financial consultant and business 20 appraiser for several local firms or local offices of national firms. My work frequently involved litigation support consulting and I have testified as an expert witness in both federal 21

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and state courts.

| 24 | In 1991, I joined the Property Tax Division of the Utah State Tax Commission. In 1992, I                     |
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| 25 | was promoted to manager over the Centrally Assessed Utility Valuation Section. I have                        |
| 26 | provided expert testimony regarding valuation, economic and cost of capital issues, both in                  |
| 27 | deposition and formal hearing before the Utah State Tax Commission.  |
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| 29 | I joined the Division in January 2005 as a Utility Analyst; in May 2006, I was promoted to                   |
| 30 | Technical Consultant. I have worked primarily in the energy section of the Division. In                      |
| 31 | 2007, I earned the Certified Rate of Return Analyst (CRRA) from the Society of Utility and                   |
| 32 | Regulatory Financial Analysts (SURFA).   |
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| 34 | My current resume is attached as DPU Exhibit 1.1.  |
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| 36 | Q. Please outline the projects you have worked on since coming to the Division.                              |
| 37 | A. I was involved in evaluating cost of capital issues in the 2004 rate case that was settled in             |
| 38 | February 2005. I subsequently co-authored a paper regarding the Capital Asset Pricing                        |
| 39 | Model (CAPM) published in <i>The NRRI Journal of Applied Regulation</i> . <sup>1</sup> In 2008 I co-         |
| 40 | authored an article related to ring-fencing that was published in Public Utilities Fortnightly. <sup>2</sup> |
| 41 |  |
| 42 | Before the Commission I have provided written and oral testimony on cost of equity in a                      |
| 43 | number of dockets. I testified on behalf of the Division in PacifiCorp's purchase of the                     |
| 44 | Chehalis power plant on July 17, 2008 (see Docket No. 08-035-35). I have been the lead on a                  |
| 45 | number of QF contract cases. I have worked on DSM, HELP, and service quality and                             |

 $<sup>^1</sup>$  The NRRI Journal of Applied Research, vol. 3, December 2005, Ohio State University, Columbus, OH, pp. 57-70. Public Utilities Fortnightly, Vol. 146, No. 2, February 2008, pp. 32-35, 66.

46 customer guarantees involving PacifiCorp. I was the Division lead on an internal research 47 project regarding ring-fencing that resulted in a report to the Utah Public Service Commission (Commission). I was the lead of the economics and finance group within the 48 49 Division assigned to evaluate the proposed acquisition (Acquisition) of PacifiCorp 50 (Company) by MidAmerican Energy Holdings Company (MEHC). 51 52 O. What is the purpose of your testimony in this matter? 53 A. My testimony discusses issues and the Division's analysis and policy recommendations relative to the Company's<sup>3</sup> application for an energy cost adjustment mechanism (ECAM). 54 55 56 57 II. SUMMARY 58 59 Q. Please outline the Division's understanding of what the Company's proposed ECAM 60 entails? A. In essence the Company's proposed ECAM is a mechanism wherein differences between 61 62 actual net power costs and a baseline net power cost are calculated monthly and are added to 63 a balancing account. On an annual basis, rates to customers will be adjusted upward 64 (downward) in order to recover (return) the cumulative under collection (over collection) of net power costs over the preceding twelve months. 65

<sup>&</sup>lt;sup>3</sup> Rocky Mountain Power (RMP) is an operating division of PacifiCorp primarily performing the retail distribution operations of PacifiCorp in the eastern part (i.e. Utah, Wyoming and Idaho) of PacifiCorp's system. RMP runs no electric generators; it has no debt, no preferred stock and no common stock. The fact that PacifiCorp files with the Commission under the name Rocky Mountain Power, doesn't change the fact that any energy cost adjustment mechanism is necessarily for the whole Company (i.e. PacifiCorp) and not just its local division. Therefore, throughout this testimony I will primarily refer to PacifiCorp, rather than RMP.

O. What are the reasons given by the Company to justify the implementation of the

A. The reasons PacifiCorp gives for implementing the proposed ECAM include the volatility in

the prices in electricity and natural gas wholesale markets, volatility in retail load, hydro

conditions, and wind generation. The Company also indicates that coal costs are becoming

more volatile. The Company claims these costs are out of its control. The Company adds

that it only wants to recover the costs it prudently incurs to supply electricity to its

A. As a general policy, the Division is not opposed, in principle, to a power cost adjustment

mechanism (PCAM) for PacifiCorp. However, the Division's support for a particular power

cost adjustment mechanism, such as the proposed ECAM, is contingent upon that power cost

adjustment mechanism satisfying certain conditions. The Division does not believe that the

ECAM, as proposed by the Company, meets these criteria. Therefore, the Division supports

allowing the docket to continue to Phase II, where an appropriate ECAM can be debated and

Q. What are some of the conditions the Division believes must be satisfied before it would

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Q. What is the Division's overall policy stance with respect to this ECAM?

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A. The Division's conditions for a power cost adjustment mechanism include the following:

<sup>4</sup> Direct Testimony of Gregory N. Duval, March 2009, pp. 2-5.

presented to the Commission for its assessment.

support a power cost adjustment mechanism?

- 1. That the mechanism does not reduce Company incentives to provide electricity to customers at the lowest cost and least risk prudently possible.
  - 2. That the mechanism does not reduce incentives to the Company to cover its load, and prospective load growth, with owned generation rather than through market purchases.
  - 3. That the mechanism does not unreasonably shift risk from the Company to ratepayers.
- 4. That incremental power costs be offset by any incremental revenues before any additions are made to a balancing account.
  - 5. That the mechanism only covers those costs that are truly outside of Company control and cannot be anticipated and/or significantly mitigated.

Q. Please briefly summarize the Division's comments regarding the Company's ECAM application and supporting testimony.

A. As will be discussed in more detail below, the Division does not believe the Company's evidence has been entirely persuasive in supporting the need for an ECAM. The Company's testimony filed to date makes broad assertions about volatile spot market prices and rising costs. The Division is aware of the volatility in spot market prices in electricity and natural gas, but the Company has not shown specifically how these have affected the Company's earnings despite all efforts to mitigate the effects of the price volatility. The Division also believes that the Company has substantially shielded itself from this volatility through its current hedging practices. The Division also believes that the proposed ECAM shifts too much risk from the Company to ratepayers.

The Company's witnesses have also implied that the Commission should approve the ECAM because most other states allow their electric utilities to have a power cost adjustment mechanism of some sort, and because bond rating agencies view such mechanisms as positive for bondholders. The Division does not believe the Commission should give much weight to the "everyone else is doing it" arguments. Rather, the Division believes that any power cost adjustment mechanism should be approved on the merits of demonstrated need for such a mechanism subject to the satisfaction of the conditions outlined above.

#### Q. What does the Division recommend to the Commission?

A. The Commission bifurcated the ECAM proceedings into two parts, or Phases. Phase I was primarily to provide analyses in support or against an ECAM being in the public interest. If an ECAM were found to be in the public interest in Phase I, then Phase II would focus on the design of an ECAM. Despite the Division's perceived deficiency in the Company's testimony to date, the Division believes that a power cost adjustment mechanism, although not necessarily the proposed ECAM may be in the public interest. Therefore, the Division recommends that the Commission allow the ECAM docket to proceed to Phase II, wherein the particulars of an ECAM will be analyzed and debated.

Based upon general information available to it, the Division makes the following observations in support of this recommendation. The Division believes that it is in the public interest that PacifiCorp remain a financially strong and stable utility. The Company has not been able to earn its authorized rate of return for a number of years, and this has caused rating agencies to reduce its "stand alone" bond rating to BBB or Baa. This is a weakening

from its historic stand alone A rating.<sup>5</sup> The continuing future inability of the Company to earn its authorized rate of return will be detrimental to both the Company and, eventually, to ratepayers as well. Part of the reason for this lower profitability may plausibly be due to higher net power costs than have been anticipated in rates, although as discussed below, in the Division's view, the Company has not done a good job to date of demonstrating to what degree the effect on profits has actually been from rising and volatile net power costs.

The Company does, in the Division's view, make a reasonable argument that it should be able to recover costs that are unpredictable and out of the Company's control. In extreme cases, these costs could be debilitating to the financial health of the Company. General rate cases do not appear to the Division to be good forums for the Company to recover such costs, particularly due to the bar to retroactive ratemaking. Therefore, the Division considers it reasonable that another mechanism be put in place to protect the Company from large cost fluctuations that are out of the Company's control and that are not substantially offset by fluctuations in revenue.

These two points support the recommendation that some cost recovery mechanism reasonably could be put in place. However, the issue becomes one of design and not so much one of whether, in the abstract, a power cost adjustment mechanism is in the interest of both the Company and ratepayers.

<sup>&</sup>lt;sup>5</sup> The Company has been able to maintain a rating in the "A" range due to its association with Berkshire Hathaway.

### 156 III. COMMENTS ON COMPANY'S APPLICATION AND TESTIMONY

158 <u>A. The Company's Application.</u>

#### Q. What comments, generally, do you have on the Company's ECAM application?

A. Generally, the application and Company witness Gregory Duvall's description of the ECAM is straight forward. The Company identifies broad reasons for needing the ECAM in its application. Mr. Duvall describes a relatively simple ECAM. Simply stated, the ECAM compares actual net power costs (NPC) with those that are imbedded in rates (the baseline NPC) each month. The difference, positive or negative, is added to a balancing account. At the end of each year, the net balance is used to adjust customer rates for the next twelve months in order to collect the shortfall, or to return the over collection.

#### Q. What are the reasons identified by the Company that support the need for the ECAM?

170 A. The Application itself identifies the following:

Changes in hydro conditions and wind generation, as wells (sic) as those caused by the dramatic global economic downturn in 2008 including changes in retail load, market prices, third party wheeling expenses and natural gas and coal fuel expenses, have had a dramatic impact on the Company. Consequently, these changes have caused the Company to experience a high degree of volatility...

 In addition, while the Company has been prudent in the management of its NPC, the volatility of NPC is primarily related to factors outside the Company's control. For example, hydro and weather conditions, the timing of forced outages and the variability in the wholesale market prices for electricity and gas are not within the Company's control. During a period of NPC volatility, establishing a fixed level of NPC in rates virtually ensures that customers will either over pay or under pay the cost of the energy they are using.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Application of Rocky Mountain Power, March 16, 2009, paragraphs 3 and 4.

In his testimony attached to the Application, Mr. Duvall elaborates on the above list of items. With respect to the volatility of the natural gas and electricity markets, Mr. Duvall cites the Company's need to balance the system, that is, to purchase (or sell) power to match the Company's hourly and daily load fluctuations. He also indicates that coal costs are rising due

to contract re-openers and "rapid changes in the costs of mining equipment and supplies."<sup>7</sup>

These reasons will be analyzed in the following sections.

#### B. Review of Company Witness Testimony.

#### Q. Which Company witnesses are you going to comment on?

In the Application the testimony of Mr. Duvall and Mr. William R Griffith was included. Mr. Duvall's testimony attempted to define the Company's need for the ECAM. Mr. Griffith discussed the Company's proposed tariff, Schedule 94. I will not be discussing Mr. Griffith's testimony further, since discussion of a specific tariff proposal is premature, unless the Commission simply adopts the Company's proposed ECAM in Phase I.

Subsequently the Company filed Supplemental Testimony on August 12, 2009. Mr. Duvall filed additional testimony at this time. Also filing testimony at this time were two outside witnesses, Frank C. Graves, a principal of The Brattle Group, Cambridge, Massachusetts, and Dr. Karl A. McDermott, the Ameren Distinguished Professor of Business and Government at

<sup>&</sup>lt;sup>7</sup> Direct Testimony of Gregory N. Duvall.

| 208 | the University of Illinois at Springville, and a Special Consultant to the National Economic      |
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| 209 | Research Associates, Inc. I will be discussing the testimony of these three gentlemen.            |
| 210 |   |
| 211 | Q. Please summarize Mr. Duvall's testimony.   |
| 212 | A. In his Direct Testimony in March 2009, Mr. Duvall outlined the basics of the proposed          |
| 213 | ECAM. In conjunction with graphical exhibits he provided, he discussed at some length the         |
| 214 | price volatility in the spot natural gas and electric power markets. However, he did not tie      |
| 215 | the market spot price volatility in any way to PacifiCorp's actual experience. Mr. Duvall did     |
| 216 | a better job of tying the market volatility to PacifiCorp in his Supplemental Direct Testimony    |
| 217 | dated August 12, 2009.  |
| 218 |   |
| 219 | Mr. Duvall included an example of two days, January 27 and February 7, 2009, in which             |
| 220 | actual system load exceeded, or fell short of the forecast system load by approximately 500       |
| 221 | MW, resulting in the Company either needing to purchase 500 MW or sell 500 MW. It may             |
| 222 | be of some interest that on those two days, Utah's contribution to the total excess or short fall |
| 223 | was 14.8 percent for January 27, and 3.1 percent for February 7, which are far less than the      |
| 224 | over 40 percent size Utah represents in the system. By themselves, the data presented by Mr       |
| 225 | Duvall suggests that the problems highlighted by this example may be better solved by other       |
| 226 | states. However, perhaps there are other days where 500 MW load swings occur and Utah             |
| 227 | accounts for a heftier percentage.  |
| 228 |   |
| 229 | With this example and his further testimony, Mr. Duvall does highlight how the Company            |
| 230 | may not be able to adequately prepare for extreme days through its current hedging practices      |

In the Supplemental Direct Testimony, Mr. Duvall provided data<sup>8</sup> that compared expected and actual NPC since 1990; in 2007 and 2008, Mr. Duvall indicates that system NPC was under collected by \$161.8 million and \$230.2 million, respectively. The causes of these under collections are not identified.

### Q. What would the effects have been on the Company, system-wide, had Utah's proposed

#### **ECAM** had been in effect?

A. DPU Exhibit 1.2 sets forth the Company's financial statements for 2007 and 2008 with the assumed recovery of an additional \$161.8 million for 2007 and \$230.2 million for 2008, the amounts that presumably would have been recovered as additional revenue for those years from ratepayers had the proposed ECAM been in effect. In adjusting the Company's financial statements, in addition to adding the \$161.8 million and \$230.2 million to 2007 and 2008 revenues, respectively, as discussed above, I assumed a marginal income tax rate of 35 percent, which is slightly higher than the Company's actual tax rates for those years; I added 65 percent of the \$161.8 million and \$230.2 million, the after-tax amount, to cash and retained earnings. With these additional revenues, page 3 of DPU Exhibit 1.2 indicates that PacifiCorp's return on equity for 2007 and 2008 would have been 11.38 percent and 10.78 percent. This suggests that had the proposed ECAM been in place for those years, the Company's ratepayers would have "fixed' the Company's under-earnings and cash flow short falls, and then some, single-handedly through the ECAM. Because DPU Exhibit 1.2

<sup>&</sup>lt;sup>8</sup> Supplemental Direct Testimony of Gregory N. Duvall, Table 1.

<sup>&</sup>lt;sup>9</sup> These financial statements are prepared on an SEC reporting basis and are based upon the financial statements I have previously filed in PacifiCorp general rate cases (for example see my work papers included with DPU Exhibit 1.0 in Docket No. 09-035-23).

indicates the Company would earn above its cost of equity suggests that PacifiCorp may be over collecting on its non-NPC costs. This result strikes the Division as somewhat implausible and raises questions about the accuracy of the NPC data that has been supplied.

- Q. You applied the NPC shortfalls for 2007 and 2008 back to those specific years, but the ECAM provides for a lag of at least one year before any shortfall in NPC collections is paid back to the Company. Are you overstating the income?
- A. No. The ECAM provides for the Company to earn a return on the under collected NPC at its cost of capital rate. Therefore, the present value of the revenue shortfall in, for example, 2007 is the same as the 2007 amount. Thus this analysis does not need to account for timing differences.

- Q. What comments do you have regarding PacifiCorp witness Dr. McDermott's testimony?
- A. I have just two or three comments regarding Dr. McDermott's testimony. Dr. McDermott provides a lengthy discussion of the "regulatory bargain" whereby "utilities are provided a reasonable opportunity to recover operations and capital costs and ratepayers pay no more than required to recover those costs." He discusses some of the ways regulation has changed over time and how various cost recovery mechanisms have been developed to protect utilities from unpredictable or uncontrollable costs. He argues that some type of power cost adjustment mechanism is needed since other mechanisms including interim rates, trackers, decoupling, and future test years do not satisfactorily solve the potential problems related to test years. Dr. McDermott discusses at length various ECAMs in other states,

<sup>&</sup>lt;sup>10</sup> Supplemental Direct Testimony of Karl A. McDermott, lines 114-116.

| presenting evidence that Utah is practically the last holdout in not providing an ECAM to its  |
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| electric utility. Implicitly he says that Utah should grant PacifiCorp the proposed ECAM       |
| because other states have found it prudent to give their utilities some type of ECAM.          |
|  |
| Dr. McDermott seems to admit that the normal rate case process could, in principle obviate     |
| the need for an ECAM: "If the forecasted level of net power costs could be set such that, on   |
| average, the utility would be expected to recover its costs from the rate case approach, a     |
| fundamental premise of ratemaking, then the rate case approach and the ECAM approach           |
| will produce, on average, the same rates."11 If so, then the issue really is the precision and |
| whether there is bias 12 in the Company's forecasts.   |
|  |
| Dr. McDermott presents national statistics showing the volatility of energy prices and how     |
| net power costs are a large fraction of an electric utility's operating and maintenance        |
| expenses—about 50 percent as a long-term average nationally and about 60 percent of            |
| PacifiCorp's costs.  |
|  |
| Dr. McDermott provides interesting background on ECAMs nationally and shows that power         |

Dr. McDermott provides interesting background on ECAMs nationally and shows that power costs are volatile and make up a large percentage of a utility's expenses. In these last two points he does not add much to what Mr. Duvall has already argued.

# Q. What comments do you have regarding Company witness Mr. Frank C. Graves supplemental direct testimony?

<sup>&</sup>lt;sup>11</sup> Supplemental Testimony of Karl A. McDermott, lines 369-373.

<sup>&</sup>lt;sup>12</sup> "Bias" here refers to the property whereby the forecast errors do not average out to zero over time. That is, the forecast is systematically high or low.

A. I have just a few brief comments on Mr. Graves' supplemental direct testimony. Mr. Graves discusses in depth various risk management issues. They are from the viewpoint of what Company management can do to control or mitigate risk. His conclusion is that while hedging strategies may be useful to supplement an ECAM, he seems to imply that with a comprehensive ECAM, the Company really does not need to do much hedging of power and natural gas costs. He points out that hedging is not cost-free in terms of personnel, time and money. His other points are similar to Mr. Duvall and Dr. McDermott in that he argues that net power costs are a significant cost to the Company and that they can be volatile. Both Mr. Graves and Dr. McDermott's comments on hedging seem to be substantially at odds with the Company's current hedging policy.

## Q. Do you have any final comments regarding the Company's witnesses and their defense of the proposed ECAM?

A. Yes. The Company's discussion focuses on the volatility of spot prices and its inability to forecast and control that volatility. The Division accepts that spot prices have been more volatile in recent years and that, to a large extent, such volatility cannot not be anticipated or mitigated, especially for the hourly and daily balancing needs of the Company. Longer term, Company planning and action could mitigate some of this volatility through, for example as possibilities, physical hedging of natural gas by building more storage capacity, options and banding of financial hedges, and having more Company owned generation capacity to meet peak demand and to provide more cover for a forced outage at a generation plant. The Company's current hedging practices on natural gas strongly suggest less need for an ECAM than their witnesses suggest.

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Two other aspects are starkly missing from the Company's discussion: the complete shifting of the risk of volatile prices onto ratepayers; and the fact that when demand increases due to warmer than expected weather, the Company doesn't sell the extra power for free, rather it collects its tariff price for it.

As indicated in the Company's answer to DPU DR 1.7 and DR 1.15, the Company declined

to discuss the issue of risk-shifting beyond stating that "[a]s discussed in Mr. Duvall's

testimony, 'The critical focus here, however, is not about risk assignment, but one of fairness

and balanced outcomes. The proposed ECAM will facilitate the long held regulatory

principle of customers pay the prudently incurred cost of service they receive." Logically, a

cost adjustment mechanism could be extended to all facets of the Company's operations such

that virtually all risk was transferred to ratepayers. The Division disagrees with this position.

In the first place, the Division believes that the Company is in much better position to react to

and take steps to mitigate price volatility than many ratepayers, particularly residential and

small business customers. Secondly, the Company's stockholder is being compensated to

assume costs normally associated with a for-profit business even if those costs entail volatile

costs "prudently incurred" to serve its customers. Reduction in risks may entail reduction in

allowed returns in the future.

The point regarding offsetting revenues to NPC will be discussed later.

| C. The Company's Withdrawal of a Previous Energy Balancing Account |
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Q. The Company withdrew a previous Energy Balancing Account (EBA) in the early 1990s. Does this have any relevance to this case?

A. In Docket No. 90-035-06, the Company requested the termination of its EBA. In some ways the EBA was similar to the proposed ECAM. The environment in the early 1990s included the strong anticipation of wholesale and even retail competition coming into the electric industry, and the Company wanted more flexibility in meeting that competition than the EBA would allow. That was also a time of fairly stable net power costs. Therefore the request to abandon the EBA made sense to the Company at the time. However, now competition is not a significant issue and net power costs have recently been much more volatile than in the past due to a shift away from coal generation and greater reliance on natural gas generation and wind energy to meet a much greater load. I conclude that the previous issues surrounding the termination of the previous EBA are not particularly relevant today.

#### IV. ANALYSIS AND DISCUSSION OF THE DIVISION'S POLICY POSITION

- Q. Through DPU Exhibit 1.2, you indicated that the implementation of the proposed ECAM may result in the Company over earning on its common equity, holding everything else constant. Is this the only numerical analysis that you performed?
- A. No. DPU Exhibit 1.3 is a portion the Company's response to DPU DR 4.3. The response to DR 4.3 is a large spreadsheet with a number of supporting tabs. For simplicity, I will only

discuss the portion related to calendar year 2008. The DPU Exhibit 1.3, page 1 of 2, sets forth the Company's analysis regarding what would happen had the ECAM been in place for 2008, the full spreadsheet begins with 2002 and brings the analysis through the present. As indicated on DPU Exhibit 1.3, page 1, the ECAM balance as of December 31, 2008 amounts to nearly \$84.8 million. Page 2 of DPU Exhibit 1.3 sets forth some additional data. In the far right, the additional MWh of load above the baseline load for 2008 was calculated to be 1,660,804 MWh. This was assumed to be sold for the system average price per MWh sold adjusted by an assumed 10 percent for line losses or about \$68.36 per MWh. This additional revenue of about \$113 million amounts to about \$1.92 per MWh which is added to the baseline cost per MWh. This reduces the ECAM balance to \$36.2 million at the end of 2008. This shows the effect of one year of the revenue collected for higher than expected load. Without a revenue adjustment in the ECAM, the detriment to the Company for higher than expected demand and higher NPC is overstated. In other words, the Company's proposal includes offsetting costs by third-party revenues as part of the NPC calculation, but does not include changes in revenues from its native load customers.

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#### Q. What is the Division's policy stance with respect to an ECAM?

A. As stated above and in its May 26, 2009 Memorandum to the Commission, the Division is not philosophically opposed to the idea of giving PacifiCorp a power cost adjustment mechanism.

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## Q. Are there qualifications that the Division would expect of an ECAM or power cost adjustment mechanism?

minimize this tendency.

- A. Some of the qualifications or conditions the Division would expect of a power cost adjustment mechanism include the following:
  - 1. That the mechanism does not reduce Company incentives to provide electricity to customers at the lowest cost and least risk prudently possible. The Company has indicated that the proposed ECAM would not affect the Company's efforts to generate or acquire energy at the lowest prudent cost to ratepayers. However, whatever the good intentions of the Company are, the fact remains that the proposed ECAM protects the Company from any adverse impacts of fluctuating costs as well as potential Company missteps. While it is true that regulators can still review the Company's actions for prudence, regulators face significant difficulty in, after the fact, discovering a potentially imprudent action and then clearly proving imprudence. This situation at least lends itself to the potential that the Company could become somewhat lax in pursuing lowest cost NPC.

2. That the mechanism does not reduce incentives to the Company to cover its load, and prospective load growth, with owned generation rather than through market purchases.
With the recovery of all NPC costs, the incentive for the Company would tend to be to maintain the status quo and not expend the large amount of capital necessary to build or acquire additional generation resources.<sup>13</sup> Ideally any adopted mechanism would

<sup>&</sup>lt;sup>13</sup> There is a natural incentive for the Company to invest since the Company would earn a return on that investment. However, with an ECAM protecting cash flows, this incentive may be weakened because the Company's parent may want to divert funds to investment opportunities outside of PacifiCorp.

revenues.

- 3. That the mechanism does not unreasonably shift risk from the Company to ratepayers.

  This was discussed earlier. The Company argues that this shift in risk should not be an issue. Basically the Company says that "the customers used the power, they should pay for any costs the Company incurs to deliver it to them." The Division believes that in many situations the Company is in a better position to mitigate NPC risks than customers. The Division believes that there are risks that the Company necessarily incurs that it is being compensated for and that not all risk should be passed on to ratepayers.
- 4. That incremental power costs be offset by any incremental revenues before any additions
  are made to a balancing account. It was demonstrated above that there are additional
  revenues that the Company receives that at least help to cover some of the additional
  costs. No ECAM should be implemented without consideration for these additional
  - 5. That the mechanism only covers those costs that are truly outside of Company control and cannot be anticipated and/or significantly mitigated. If this docket proceeds to Phase II, the Division will likely propose that not all NPC be included in the Company's power cost adjustment mechanism. The items the Division will propose excluding are those items over which the Division believes the Company has significant control or can reasonably anticipate and mitigate. Some of the excluded items include costs that the Company has flexibility over, especially in the intermediate to long term. In this regard too, the Division believes that the Company can and does deal with some volatility in costs and that a small amount of volatility is not necessarily always detrimental to a

| 433 | Company with sophisticated trading and hedging practices. Therefore, the Division              |
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| 434 | believes that only when volatility and costs start to be extreme do they warrant inclusion     |
| 435 | in an ECAM balancing account.  |
| 436 |  |
| 437 | Q. What are the items you mentioned above that could be included in an ECAM or power           |
| 438 | cost adjustment mechanism?   |
| 439 | A. The following gives a breakdown of some of the items that could be included, as well as     |
| 440 | those the Division is not convinced should be included in a power cost adjustment              |
| 441 | mechanism:   |
| 442 |  |
| 443 | NATURAL GAS: The Division believes that gas purchased under long-term hedges (of any           |
| 444 | kind) should not be included in an ECAM. Long term hedges can and have been included in        |
| 445 | rate cases and serve to shift risk on to customers. (The Division has filed in-depth testimony |
| 446 | by Douglas Wheelwright ton hedging issues in Docket 09-035-23. The Division suggests that      |
| 447 | any ECAM mechanism be harmonized with the issues raised in that testimony.) Although a         |
| 448 | hedging position is under the control of the Company and constituted a risk to the Company     |
| 449 | chose to accept, the Division has some concern about excluding short-term hedges from an       |
| 450 | ECAM. The concern is that this incents the Company to just buy on the spot market as           |
| 451 | "balancing purchases." Alternatively, in a volatile market situation, the Company may          |
| 452 | usefully hedge short-term to give price, and perhaps supply, certainty. The Division is open   |
| 453 | to further discussion regarding short-term hedges.   |
| 454 |  |
| 455 | Natural gas spot purchases that are not offset by short-term hedges should be included in an   |

| ECAM, with proper risk sharing bands around a baseline price. It is understood that spot       |
|--|
| purchases mostly occur for short-term, i.e. hourly, daily, and perhaps weekly, balancing       |
| needs. However, if the Commission requires a more balanced gas portfolio approach, (such       |
| as suggested by Mr. Wheelwright in Docket 09-035-23), spot or short-term purchases could       |
| increase.  |
|  |
| Other natural gas costs should not be included in an ECAM including Clay Basin gas storage     |
| costs, pipeline reservation fees, and "additional fixed costs." All of these are known or      |
| predictable and should be included in rate cases.  |
|  |
| <b>PURCHASED POWER:</b> The Division believes that long-term firm contract purchases,          |
| including QF contracts, should not be part of an ECAM. At this time the Division sees no       |
| basis to include "storage and exchange" costs either. Short-term firm purchases may be         |
| included in an ECAM as long as there are bands around a baseline price that support proper     |
| risk sharing between the Company and customers and that do not reward simply relying on        |
| the market for power rather than building or acquiring resources.                              |
|  |
| <b>SPECIAL SALES FOR RESALE:</b> The Division believes that long-term firm sales should        |
| not be part of an ECAM. Short-term firm sales might be included in an ECAM only after          |
| costs and revenues are netted.   |
|  |
| <b>COAL:</b> The Division believes that spot coal purchases, which are understood to typically |
| amount to about 1 or 2 percent of the Company's coal fuel needs, could be part of an ECAM      |

with appropriate banding around a baseline price. Otherwise, at this time the Division concludes that coal costs are generally either within the control of the Company, and/or generally predictable since the vast majority of the Company's coal is acquired through long-term contracts and since the Company can and does hedge through physical stockpiling. If transportation or other costs unexpectedly spike, the Company can apply for relief under the general "extraordinary cost" relief provision mentioned below.

WHEELING, UTILIZATION OF FACILITIES, and OTHER: At this time the Division concludes that wheeling costs are not appropriate for an ECAM. Costs related to the Blundell, (and presumably any other future geothermal) would not be included in an ECAM. Utilization of facilities costs should not be included.

Wind integration charges are up for further discussion. To the extent that they are included in any market purchases, then there is no need to assign them separately to an ECAM.

AUDITING: The auditing issue was brought up in the Division's May 26, 2009 Memorandum. This issue entails the ability of the Division's current staff to effectively audit the ECAM cost (and revenue) items while continuing to supply high quality support to other projects in the DPU. The Division continues to have these concerns. The Division believes that the audit situation would be helped if only certain costs arising from relatively extreme situations were included in the ECAM. Another possible mitigation is that there might be fewer general rate cases in which case Division auditors will have more time to devote to auditing the ECAM. Until the Division has actual experience auditing an ECAM, the

| 502   | Divisi   | on will remain concerned about its potential inadequacy of resources.   |
|---|----------|---|
| 503   |          |   |
| 504   | Q. You o | covered above a number of items, but what if something occurs that is unexpected  |
| 505   | and w    | vas not specified as part of the ECAM?  |
| 506   | A. The D | Division would support a provision in an ECAM that would allow the Company to apply   |
| 507   | to the   | Commission on an expedited and case-by-case basis for the inclusion of an   |
| 508   | extrac   | ordinary power cost in the ECAM that was not specifically approved for the ECAM.  |
| 509   | Howe     | ever, this provision would have to be carefully drafted, and judiciously applied by the   |
| 510   | Comn     | nission so that the exception did not become the rule.  |
| 511   |          |   |
| 512   | Q. As pa | art of a Scheduling Conference and Procedural Order issued June 18, 2009, the   |
| 513   | Com      | nission requested that the parties in Phase I of this Docket examine eight issues   |
| 514   | Please   | e summarize these issues.   |
| 515   | A. The C | Commission requested that the following issues be examined:   |
| 516<br>517<br>518   | 1.       | [A]n explicit and quantitative analysis of the risks of fluctuating power costs i.e., the magnitude and nature of the risks;  |
| 519   | 2.       | whether these risks are manageable and by whom;   |
| <ul><li>520</li><li>521</li><li>522</li></ul>             | 3.       | who should bear the risks;  |
| 523<br>524  | 4.       | what alternatives are available to manage these risks;  |
| 525<br>526  | 5.       | evaluation of rate-making issues associated with power costs and the valid regulatory processes which will effectively handle such costs;                               |
| 527<br>528<br>529   | 6.       | evaluation of regulatory objectives and the ability of a ratemaking treatment of power costs to balance the objectives;   |
| <ul><li>530</li><li>531</li><li>532</li><li>533</li></ul> | 7.       | an analysis of the impacts of alternative ratemaking treatments of power costs to management incentives for least cost risk adjusted planning, expansion and operation; |

8. alignment of Company and customer objectives.

### Q. How have these items been dealt with by PacifiCorp and by the Division in your testimony here?

A. With respect to item one, the Company has provided a numerical demonstration of the volatility of spot natural gas prices and spot electric wholesale prices. The Division generally accepts the Company's analysis of these items. The Division also accepts that the Company's net power costs may be volatile due to short-term weather or other conditions affecting the electric systems balancing needs. The Division continues to be uncertain about the typical level of these hourly and daily fluctuations and the frequency of extreme values. Likewise, it is uncertain how much these short-term balancing needs are included, for example, in the \$230 million above baseline NPC overage in 2008.

Items two and three deal with whether the NPC risks are manageable, and asks who should manage the risks and who should bear the risks. The Company claims in essence that it has done all it can to manage or mitigate these risks and wants the ratepayers to step up and assume the risks that cannot be managed. The Division believes that the Company is in the best position to manage and mitigate these risks relative to most ratepayers, especially residential and small business customers. The Division is not convinced that some of the costs faced currently by the Company could not be mitigated in the intermediate and longer terms though such things as more natural gas storage, a more balanced and multifaceted hedging strategy, and

more owned generation capability. While the Division believes that rate payers should pay prudently incurred costs, the Company needs to be responsible for running its business and assuming the risks that normally come with a for-profit business. The Division's sense is that the Company's proposed ECAM shifts too much risk from the Company to ratepayers.

Furthermore, despite the arguments of some Company witnesses, the ECAM as proposed by the Company will not provide good or timely price signals to customers. Under the Company's proposal, prices paid by customers are delayed up to a year under the ECAM recovery mechanism and may bear little or no relationship to the real costs of current consumption. Such delays in pricing signal, therefore, may actually hinder customers' ability to manage or mitigate NPC risks and volatility. However, as discussed above, mechanisms that share risk could, potentially, be in the public interest.

With respect to item four, the Company's witnesses have described a number of alternatives that management can employ or have available to it to deal with NPC risks. The Company has several of these alternatives already in place such as a sophisticated hedging program and forecasted test years. The Company witnesses uniformly concluded that despite these alternatives, the Company still needs the proposed ECAM. The Division has discussed at least two additional alternatives, namely, more natural gas storage (i.e. a physical hedge) and more Company owned

| 580 | generation that over the intermediate and longer-term may mitigate some of the NPC   |
|-----|--|
| 581 | problems raised by Company witnesses.  |
| 582 |  |
| 583 | The fifth, sixth, and seventh items relate to ratemaking and how NPC costs can be    |
| 584 | handled including alternative ratemaking treatments. The Company witnesses           |
| 585 | discussed at some length the ratemaking processes and alternatives within those      |
| 586 | processes. However, there was little discussion of management incentives for least   |
| 587 | cost/least risk planning, expansion and operation, or balancing objectives between   |
| 588 | ratepayers and the Company. The above discussion represents the Division's concern   |
| 589 | that the proposed ECAM may provide incentives for management to merely maintain      |
| 590 | the status quo, with the result being that over time the Company may pursue with     |
| 591 | less vigor efforts to keep costs and risks as low as prudently possible.             |
| 592 |  |
| 593 | In his seminal book, James C. Bonbright identifies several principles and objectives |
| 594 | that may have some bearing on the issues at hand. For example, Mr. Bonbright calls   |
| 595 | out four primary functions of public utility rates:                                  |
| 596 |  |
| 597 | 1. The Capital Attraction Function;  |
| 598 | 2. The Efficiency or Incentive Function;   |
| 599 | 3. The Consumer Rationing Function; and  |
| 600 | 4. The Income-Distribution Function.   |
| 601 |  |

Certainly, any additional certainty of the recovery of its prudent costs would enhance the Company's ability to earn a return compatible with attracting the necessary capital to continue supplying and expanding (where necessary) electric services and power. The Division believes that some form of an ECAM may be consistent with Mr. Bonbright's first function.

In previous comments, the division has expressed concern that any form of an ECAM that may eventually be adopted by the Commission preserve incentives for the Company to pursue least cost least risk net power costs for its customers. Thus, the explicit design of an ECAM will have to be carefully weighed to ensure compatibility with Mr. Bonbright's second function.

Under the third function, consumer rationing, Mr. Bonbright explains that utility rates should be "designed to avoid the necessity for overt rationing by making the consumer in effect, ration himself." (Bonbright, p. 55). Presumably, self-rationing is a function of timely prices. As previously expressed, the automatic delay built into an ECAM recovery mechanism may actually work against the consumer's ability to mitigate the volatility risk associated with NPC. Similarly, since the delay increases the time between the price signal and the consumption, the delay undercuts the consumer's incentive or ability to ration their consumption in an appropriate way. Therefore, the division concludes that an ECAM may be incompatible with Mr. Bonbright's third function.

Mr. Bonbright's fourth function, the income distribution function, is defined as "transferring . . . a desirable amount of purchasing power from the buyer to seller." (Bonbright, p. 59) If the transfer mechanism, i.e., the ECAM cost recovery mechanism, "is designed merely to offset or counterbalance the cost incurred by the producer in supplying the service," (Bonbright, p 60) then the ECAM may meet the fourth function as described by Mr. Bonbright.

Finally, as discussed earlier, the Division also believes that the Company has not addressed adequately the interests of ratepayers in the shifting of risk under the proposed ECAM. The Company's interests are in price stability, financial strength, and creditworthiness. Ratepayers likely desire price stability, affordable energy, and accurate price signals. Both the Company and ratepayers want least cost and least risk. While perhaps not entirely incompatible, these Company and customer objectives must be balanced, and it has been the role of regulators to try to find that balance. Assuming that the ratemaking processes for NPC may be out of balance against the Company's interests, at this point the Company has not adequately addressed how customer objectives will be balanced. The Division's analysis and discussion above suggests that this ECAM may go too far in tipping the balance back toward the Company.

#### V. CONCLUSION AND RECOMMENDATIONS

#### Q. What conclusions have you reached?

A. The Company has not made a good case that it needs the proposed ECAM. PacifiCorp's arguments basically amount to four points: 1. Spot prices for natural gas and wholesale electricity can be volatile; 2. Everyone else has an ECAM of some sort; 3. The Company cannot control or hedge all price fluctuations; and finally, 4. The Company has the right to collect from ratepayers all prudently incurred costs, and that this is only fair and reasonable and pursuant to the Regulatory Compact.

The Division agrees that spot prices for natural gas and wholesale electricity can be volatile, but given the Company's sophisticated hedging program and long-term contracts for coal, purchased power, and wheeling expenses, this does not convince the Division at this time that this is compelling. The Division rejects that because most other utilities have some sort of power cost adjustment mechanism is sufficient justification for the Commission to grant one to the Company. With respect to item three, the Company has not demonstrated the degree to which this may actually be a problem. And, finally, with respect to the fourth point, if this point were strictly true, then logically all other costs, including ultimately return on equity, should be subject to automatic adjustment mechanisms with Utah ratepayers then virtually guaranteeing PacifiCorp's profits.

The Company's proposed ECAM, while to its credit is conceptually simple, is unsatisfactory to the Division. First and foremost, the results as indicated by the Company's own data

suggest that the ECAM, by itself, would result in an increase in earnings to the entire Company that could result in returns to shareholders in excess of the Company's authorized rate of return. Put another way, ratepayers might single-handedly resolve all of the Company's profitability problems through implementation system wide of the proposed Utah ECAM. At this point it seems implausible to the Division that all of the Company's shortfall in income in recent years can be laid at the feet of ratepayers through our lack of the proposed ECAM. This result makes the Company's NPC data suspect. Finally, the Division may not have the resources to adequately audit the NPC making a resolution of this data question additionally problematic.

The proposed ECAM covers many cost items that the Division believes are predictable or otherwise within some significant control of the Company. In this regard too, the ECAM adjusts a balancing account for every single dollar that the Company's accounting system and accountants will calculate at the end of a month. This eliminates nearly all risk to the Company for over 60 percent of the Company's operating and maintenance expenses. This would suggest that 60 percent of the operations in Utah would have short-term debt-like risk.

#### Q. What do you recommend?

A. Despite the flaws in the proposed ECAM, the Division is not philosophically opposed to a power cost adjustment mechanism that complies with the criteria the set forth above and gives the Company some protection against extreme situations. Therefore the Division recommends that the Commission order this Docket to proceed to Phase II to design an acceptable power cost adjustment mechanism.

- 695 Q. Does this conclude your testimony?
- 696 **A.** Yes.