Docket No. 10-035-13
Ken J. Slater
DPU Exhibit 3.2
April 26, 2010

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April 22, 2010

Dr. Philip Powlick, Director
Utah Division of Public Utilities
Heber Wells Building 4th Floor
160 East 300 South
Salt Lake City, Utah 84111

RE: Rocky Mountain Power's Request for Ratebase Treatment
of Transmission Line and Scrubber
in Docket No. 10-035-13

Dear Phil,

On February 1, 2010, Rocky Mountain Power (RMP) filed an Application for Alternative Cost Recovery concerning two major additions – a new transmission line (Ben Lomond to Terminal) and a new scrubber and fabric filter for Dave Johnston Unit 3. On February 25, Slater Consulting was engaged to evaluate and analyze certain matters presented in Rocky Mountain Power's Application. One of these matters is the cost claimed for the construction of the Ben Lomond to Terminal section of RMP's new 345 kV transmission line from Populus to Terminal. Another is the cost claimed for the addition of the new scrubber and fabric filter ("bag-house") to the Dave Johnston Unit 3

Ben Lomond to Terminal Transmission Line Segment

As presented in the testimonies of Darrell T. Gerrard[1] and John A. Cupparo[2] the Ben Lomond to Terminal line segment is 47 miles of double circuit pole-mounted 345 kV transmission line and is the first phase of the Populus to Terminal transmission line which is needed to increase the overall transmission capability and improve existing limitations in the corridor between Southern Idaho and Northern Utah, as well as meet immediate needs to improve system reliability. According to Mr. Gerrard and Mr. Cupparo, the benefits will also include improved opportunities for maintenance, a contribution to increased East-West transfer capability within PacifiCorp, increased flexibility for future resource planning, including renewable energy and potential new resources in Wyoming, Utah and Idaho, and in the longer term incremental increases in transmission capacity and reliability benefits from future transmission segments in the region.

Mr. Gerrard's testimony also includes a description of the competitive bidding process utilized by PacifiCorp to select the EPC contractor. This process, followed by some further negotiation with the selected bidder resulted in an October 2008 contract price of $584.6 million for the total 135 miles of line from Populus to Terminal. A little before that time, in September

[1] V.P. of Transmission System Planning for PacifiCorp.

[2] V.P. of Transmission for PacifiCorp.

2008 PacifiCorp management approved[3] the Populus to Terminal project with a total estimated cost of $930.5 million of which the primary contractor's price was estimated to be $580.6 million and a contingency allowance was provided at $45.8 million.

In December 2009, with construction well advanced, the final Populus to Terminal cost was estimated to be $872.5 million, of which the primary contractor's price was estimated to be $610 million with contingencies having shrunk to just $6.2 million.

At this same time, the estimated costs for the Ben Lomond to Terminal segment, the subject transmission line in this proceeding were shown[4] as follows.

Ben Lomond to Terminal Estimated Costs
December 2009

Description		Dec 2009 Update
Engineer, Procure & Construct (EPC) Ben Lomond to Terminal Segment		
	Ben Lomond Substation (south)	6,628,168
	Terminal Substation	13,280,169
	Ben Lomond - Terminal Transmission Line	165,451,853
	Parrish Substation	190,651
	Syracuse Substation	174,190
	Changes-in-Work	19,067,118
	Sub total	**$204,792,149**
Materials Purchased by PacifiCorp		
	Shunt Capacitors - Terminal Substation	372,321
	Shunt reactors - Terminal Substation	2,239,534
	Shunt Capacitor Ben Lomond Substation	372,321
	Shunt reactors - Ben Lomond Substation	2,239,534
	Miscellaneous Material	160,064
	Sub total	**$5,383,774**
Right of Way - Acquisitions		
	Ben Lomond - Terminal Acquisitions	14,076,025
	Right of Way Labor	2,079,954
	Sub total	**$16,155,979**
Legal Fees		
	Fees	470,400
	Sub total	**$470,400**
Internal labor		
	Construction Labor	338,444

[3] See Cupparo testimony at line 477.
[4] Gerrard testimony, Exhibit DTG-2

	Engineering Labor	714,483
	Project Management Office Labor	912,826
	Expenses	72,288
	Sub total	**$2,038,041**
Purchased services		
	Owners Engineer	2,994,803
	Permitting	782,008
	Environmental Oversight	167,208
	Project Management Office Services	1,180,424
	Inspection	2,195,119
	Sub total	**$7,319,562**
Allowance for Funds Used During Construction (AFUDC) & Surcharge		
	AFUDC	15,625,709
	PacifiCorp Overheads	5,760,000
	Forecast Risk	8,500,000
	Sub total	**$29,885,709**
Tax		
	Tax	2,156,421
	Sub total	**$2,156,421**
	Segment Total	**$268,202,035**

As part of our examination of these transmission line costs, Slater Consulting gathered cost information on five different transmission line segments, recently constructed, 20 to 50 miles in length and double circuit 345 kV configuration. The most comparable to the Ben Lomond – Terminal segment were two 50 mile, double-circuit pole segments in Wisconsin for which construction began in 2006. The direct costs for these line segments averaged $2.02M / mile. In contrast, the Ben Lomond – Terminal segment direct costs are $4.25M / mile, with just a three years delay.

This cost disparity caused us to look closely at the component costs, and we found that there were two items that we could compare directly. The poles for the Wisconsin segments were half the cost of the Ben Lomond –Terminal poles, while the conductor costs were less than 30%. With such differences, the disparity in costs between the segments begun in 2006, and the one begun just three years later is explainable. We found support for these sharp cost increases in a report by *The Brattle Group* for the Edison Electric Institute in April 2008, titled "Transforming America's Power Industry: The Investment Challenge." Page seven of the Brattle report, supported by page six, illuminates the matter

The overall cost for this segment is largely the result of a competitive bidding process and does not appear to be unreasonable. Further, as a fraction of the forecast cost of the total Populus to Terminal link, the segment cost is in reasonable proportion to its 47 miles out of a total length of 135 miles. However, Slater Consulting raised questions about two of the cost items.

The larger of these two items is the "Change in Work" portion of the EPC. At a little over $19 million, this represented more than 9% of the total EPC cost. Yet, the company has not provided an up-to-date description of what these work changes were and why they were necessary. Such explanations are needed so that the DPU can check the quality of the company's oversight of the project, and should have been provided. Without a reasonable explanation of the need for significant change orders, RMP's submission is deficient.

The other item is under the "AFUDC & Surcharge" heading and is listed as "Forecast Risk" in the amount of $8.5 million. An early listing of the items included in Forecast Risk shows that it is not in itself a cost. It is a summation of possible costs each weighted by an assessed probability of occurrence. Each of these possible costs may or may not occur. If it does, it will appear as either a change order or an owner's cost. Until this is the case there is no reason to recognize the possible except as a contingency.

As the Ben Lomond to Terminal line segment is stated as now being in service, there should be little doubt about contingencies and there should be a full accounting of all change orders.

RMP has responded to our requests for more detail of cost items, which has helped our understanding of their cost estimates. (See responses to DPU 8.1, 8.3 and 8.4, concerning a breakdown of the EPC cost, a listing of the change orders and a listing of the components of "forecast risk," respectively.)

RMP has also responded to our request for more current cost data by providing their latest summary of the Ben Lomond – Terminal line costs,, (Response to DPU 11.2,) and their latest change order listing, (Response to DPU 11.3.) RMP's responses put the cost of the transmission segment at $262,237,221, a little lower than the December 2009 estimate, put the total change orders at $16,816,549, again a little lower than in December and, forecast risk is now appropriately zero..

However, we are still left with two unresolved cost issues. $14,778,072 of the total $16,816,549 of change orders concerns "230 kV outage resequence," and I have not seen an explanation of this rather costly matter. Secondly, "Microwave Materials" and "Microwave Construction" have suddenly appeared as part of constructing the transmission segment at a total cost of over $3 million.

In summary, the cost of the Ben Lomond to Terminal transmission segment as presented in current estimates is not unreasonable, except for the two items mentioned in the previous paragraph.

Dave Johnston Unit 3 Scrubber and Bag-house

Dave Johnston Unit 3 is a 230 MW pulverized coal fired unit, built in 1964 near Glenrock, Wyoming. It burns the sub-bituminous coal of the region. Its previous environmental emission controls consisted only of an electrostatic precipitator installed in 1976. Apart from the Scrubber and bag-house, subjects of this proceeding, scheduled for completion by the end of May this year, the unit is also scheduled to have combustion control modifications for NO_X abatement this year.

Testimony by Chad A. Teply[5] on behalf of the Company describes the need for the $293

[5] V.P. of resource Development and Construction for PacifiCorp Energy

million investment in the dry scrubber and bag-house which are intended to remove 90% of the SO_2 emissions and over 90% of the particulate matter from the unit's air emissions.

According to Mr. Teply's testimony, Dave Johnston Unit 3 was identified as part of the Company's response to environmental regulations namely Regional Haze Rules adopted by the EPA in 2005, which require that Dave Johnston Unit 3 have the Best Available Retrofit Technology ("BART") to control its visibility impairing pollutants. Dave Johnston's BART is part of the Wyoming State Implementation Plan to deal with regional haze, and Wyoming has issued an approval order for the work.

Mr. Teply describes the scrubber and bag-house project and its cost of $293 million as if the whole expenditure was for a stand-alone installation for Unit 3. This would be a very high cost. Indeed, $1,117 /kW is a ridiculous cost for a scrubber / bag-house combination for a 230 MW coal-fired unit. Mr. Teply's testimony, in neglecting to discuss the project as it really is, a two unit project providing scrubber and bag-house for both units, is misleading.

When Slater Consulting reviewed the actual contract, we saw a different picture. The $293 million is for $257 million of a $330.6 million turn-key contract cost for the installation of scrubbers and bag-houses on both Units 3 and 4 at Dave Johnston, plus owner's costs of about $36 million. (Dave Johnston Unit 4 is another coal fired unit about 100 MW larger than Unit 3, burning the same local sub-bituminous coal.)

While Unit 3 is scheduled to have its new scrubber and bag-house installed during a major unit maintenance beginning in May of this year, Unit 4 will not have its new pollution control equipment connected until it has a major maintenance outage in 2012. Unit 4 will therefore accumulate some additional AFUDC and custodial cost on the mostly completed new equipment during this time.

The "Schedule of Values" associated with the contract shows how the $330.6 million contract price has been allocated between the units. All of the costs for common equipment are charged to Unit 3. The great majority of the remaining engineering costs are charged to unit 3, along with more than half of the procurement and construction costs for the non-common equipment. This results in the $257 million to $73.5 million split of the contract price between Unit 3 and Unit 4.

The Company is seeking to ratebase the whole $293 million when Unit 3 returns to service with its new scrubber and bag-house. Compared with recognizing equal portions of the contract as each unit returns to service following connection of the new apparatus, the company's request results in revenue requirement impacts that are higher during the period between the in service dates for the new equipment and lower following the Unit 4 in service date. There would be little difference between the net present values of the two revenue requirement streams.

Because all of the claimed expenditure is necessary for the design, procurement and construction of the Unit 3 equipment and common equipment needed for the running of the Unit 3 equipment, it is not unreasonable for the Company to request the ratebase treatment that it has.

The performing of the work as a single project rather than two separate projects results in a significant cost saving. This was shown by the comparison between the selected bid and the second place bid. There was a significant saving associated with the single project approach, much greater than any possible impact of the earlier capital recovery requested by the Company.

In an attempt to establish comparable costs for Dave Johnston 3 & 4 pollution control, Slater Consulting examined a number of other recent/current scrubber/bag-house retrofit projects in the Kansas, Arizona and Nevada area. Due to the relatively unique circumstances of each

project, leading to much individual engineering effort for each project, they all appeared to be largely "one off" projects, as indeed is the Dave Johnston project. Added to this, there is a shortage of actual cost data, as opposed to forecast cost data and there is the recent sharp escalation of costs as presented in the Brattle report discussed earlier. It was not possible to develop comparable costs for the Dave Johnston 3 & 4 project.

In summary, the costs for the Unit 3 scrubber/bag-house are not unreasonable when they are recognized as the larger part of a two-part cost for both Unit 3 and Unit 4 scrubber/bag-houses. Further, the overall Unit 3 plus Unit 4 cost resulted from a competitive bid procedure. The larger cost requested for Unit 3 is also reasonable.

There is an area of concern regarding the costs for Dave Johnston 3 & 4. The company did not present any analysis of the costs and benefits associated with moving the Unit 4 major maintenance outage closer to the Unit 3 outage. As is illustrated by the description of the contractor's custodial function during the waiting time for Unit 4's connection, (See response to DPU 10.1,) there is a significant associated cost. RMP has not provided any analysis to justify the expenditure. However, since these costs do not belong to Unit 3, resolution of the matter can wait till RMP seeks to ratebase the Unit 4 costs.

Please let me know if you have any questions on these issues, or need any additional information.

Sincerely,

Kenneth J Slater