## BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Utility Service Schedules and Electric Service Regulations	DOCKET NO. 10-035-124 Exhibit No. DPU 7.0D-RR		
	Direct Revenue Requirement Testimony and Exhibits  Matthew Croft		

# FOR THE DIVISION OF PUBLIC UTILITIES DEPARTMENT OF COMMERCE STATE OF UTAH

Direct Revenue Requirement Testimony of

**Matthew Croft** 

**PUBLIC** 

May 26, 2011

- 1 Q. Please state your name and occupation?
- 2 A. My name is Matthew Allen Croft. I am employed by the Utah Division of Public Utilities
- 3 ("Division") as a Utility Analyst.
- 4 Q. What is your business address?
- 5 A. Heber M. Wells Office Building, 160 East 300 South, Salt Lake City, Utah, 84114.
- 6 Q. Are you the same Matthew Croft who provided direct testimony for the Division on the
- 7 Company's proposed test year in this case?
- 8 A. Yes.
- 9 Q. What is the purpose of the testimony that you are now filing?
- 10 A. The purpose of this testimony is to explain adjustments to Rocky Mountain Power's
- 11 ("Company") revenue requirement. The main focus of my testimony is concerning
- adjustments related to electric plant in service (EPIS). I will discuss certain pollution control
- projects as well as a small adjustment related to allocation factors associated with
- 14 accumulated deferred income taxes.
- 15 Q. Will you please summarize your EPIS related adjustments?
- 16 A. Yes. The table below summarizes the adjustments I have made.

Adjustment Summary				
		Andony	Approx	
	Total		Revenue	
	Company	UT	Requirement	
	Adjustment	Adjustment	Adjustment	
Plant Additions and Retirements	(155,620,223)	(72,385,568)	(6,929,574)	
Accumulated Depreciation	93,333,855	54,501,162	5,071,529	
Depreciation Expense	(4,594,139)	(1,322,135)	(1,099,148)	
Trapper (DPU 7.8) and Bridger (DPU 7.4)	499,387	212,672	23,761	
Accumulated Deferred Income Tax Allocation Adjustment			(106,906)	
Accumulated Deferred Income Tax Updates				
Reflect IRS Clarification on Bonus Depreciation		TBD by RMP		
Reflect Effect of Plant Addition Update above		TBD by RMP		
Total Adjustments			(3,040,338)	

### Q. Will you please explain the process by which you arrived at the EPIS related

### adjustments?

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A. Yes. The first step was to develop an Excel template that would "check" the Company's plant addition and retirement, depreciation expense and accumulated depreciation adjustments that are put into the JAM model. This template used the same inputs and methodologies used by the Company. This check resulted in the same adjustments as were determined by the Company. The second step was to update the Company's filed plant additions with actual plant additions and actual retirements through March 2011. The third step was to update the depreciation rate based on information as of December 2010.

Retirement rates were recalculated based on a four year average as opposed to the

<sup>&</sup>lt;sup>1</sup> This template has been filed with my testimony and is called "DPU 7.1 to 7.3 EPIS Template." The as filed template already includes adjustments to the Company's filing. To see the "check" of the Company's filing, go to the "Scenarios" tab and change all the switches to "1". Then refer to the summary on that same tab or go to the "JAM Inputs" tab to see that the DPU check matches the Company's filing.

<sup>&</sup>lt;sup>2</sup> Note: the February 2011 retirements are used for the March 2011 accumulated depreciation and EPIS balances. <sup>3</sup> These actuals include four projects that were not part of the original filing. I have accepted these unforcasted projects but have issued a data request concerning them. Should any issues arise concerning the prudency of these projects, I will remove them in my rebuttal testimony.

Company's five year average. The Company's five year average used a 9 month period as one of the years. I removed that particular year and then took the average of the remaining four 12 month years. The fourth step was to update the April 2011 to June 2012 forecast based on the actuals through March 2011 and the Company's revised forecast for several projects. The calculations involved with these first four steps are detailed in the electronic excel file "DPU 7.1 to 7.3 EPIS Templates." The fifth step was to update the Bridger and Trapper mines with actuals through February 2011. The sixth step consisted of a general review (checking for approval requisition forms or project change notices) by Division staff to see if there was supporting documentation for each project greater than \$5 million. There are approximately 110 projects that meet this \$5 million criteria. Together, these projects account for approximately 77% of the total forecasted plant additions for the period July 2010 through June 2012. Based on this review, the Division did find supporting documentation for each one of these projects. The seventh step consisted of a more detailed review of a sample of those projects. In this more detailed review, and for the specific projects (greater than \$5 million with non "various" inservice dates) the Division staff reviewed documents such as approval requisition forms, contracts, gant charts, recent weekly progress reports, project bid dates, permitting status, engineering status, procurement status, environmental requirements and other analysis. Although a detailed review was conducted for various types of projects, the greatest focus was on the various scrubber and baghouse projects contemplated in this case. This greater focus emerged as a result of the arbitration award regarding the Hunter 2 scrubber project ("Hunter 2")4.

Q. Will you please explain in more detail your adjustment to update the depreciation rate?

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<sup>&</sup>lt;sup>4</sup> This project is called "302 - Hunter U2 SO2 Project" in SRM-3

50	A.	The depreciation rates used in the Company's filing are based on the Commission approved
51		rates as well as June 2010 plant balances. I simply updated the rates based on the plant
52		balances for December 2010. This adjustment as well as the retirement rate adjustments are
53		embedded in the EPIS balance, depreciation expense and accumulated depreciation expense
54		adjustments shown in my adjustment summary table. The details for how this rate adjustment
55		occurred can be seen in the "Scenarios" tab in the "DPU 7.1 to 7.3 EPIS Templates."
56	Q.	Have you made the required adjustments to accumulated deferred income taxes as a
57		result of your EPIS related adjustments?
58	A.	No, but I recognize that they should be made and request that the Company calculate this
59		adjustment (assuming that these EPIS adjustments here are accepted) upon filing their
60		rebuttal testimony. I would also recommend that the Company update its accumulated
61		deferred income taxes to reflect the relatively recent clarification by the IRS on how to treat
62		bonus depreciation.
63	Q	Will you please explain your accumulated deferred income tax allocation adjustment?
64	A.	Yes. There were several accumulated deferred income tax factors that were not properly
65		assigned. In response to OCS 14.1 the Company corrected the misallocation and provided the
66		necessary JAM adjustments as well.
67	Q	. Will you please explain in more detail your adjustments regarding the various scrubber
68		projects?
69	A	. Yes. As the scrubber and baghouse projects have been of particular interest due to the lawsuit
70		between PacifiCorp and Deseret Power, the Division focused its attention on flue gas
71		desulfurization (scrubber) projects and baghouse projects.

Q. Do you have extensive experience in dealing with pollution control equipment and the applicable regulatory rules and regulations?

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A. No, I do not. However, given the magnitude of costs, and the scrutiny they have received in other venues, an investigation was required. I will begin by explaining some the environmental regulations in the state of Wyoming and then I will address the scrubber and baghouse projects as they relate to the Wyoming coal plants. I will then discuss the environmental regulations as they relate to Utah and I will address the scrubber projects that relate to Utah coal plants. These environmental laws and regulations surrounding the proposed projects are complicated and my testimony represents my best understanding of these rules that resulted from my research of various state (Utah and Wyoming) permits, analyses, arbitration documents, the Company's testimony as well as several conversations with members of Utah's Division of Air Quality, Wyoming's Division of Air Quality, and the Company.

## Q. Will you please explain, in general, the EPA's Regional Haze Rules as it relates to Wyoming?

Y. Yes. Under the EPA's Regional Haze Rules, states have the option of abiding by either Sec.

309 or Sec. 308 of the Regional Haze Rules. Sec. 308 requires units "subject to BART

(PacifiCorp has 14 units) to install, operate, and maintain additional control technology to

meet an established emission limit on a continuous basis." Under section 308, a five factor

analysis is applied by Wyoming to units subject to BART. Upon completion of this unit

<sup>&</sup>lt;sup>5</sup> 309(g) Wyoming State Implementation Plan (SIP) 6.2 (pg 90)

<sup>&</sup>lt;sup>6</sup> The WY SIP on pg 102 states "The five factors considered are 1) cost of compliance 2) the energy and non-air quality environmental impacts of compliance, 3) any pollution equipment in use or in existence at the source, 4)the

specific analysis, units are required to install specific pollution control technology that will achieve certain emission limits. As an alternative to this "source-by-source command and control BART implementation, EPA has allowed more flexible alternatives if they achieve greater progress towards the State's visibility goals than the standard BART approach." This alternative is known has Sec 309. Under Sec. 309, regional goals, or milestones, have been established for sulfur dioxide ("SO2"). The principal caveat is that this alternative "must achieve greater reasonable progress than would be accomplished by installing BART." For the pollutants of nitrogen oxide ("NOx") and particulate pollution ("PM"), Wyoming chose to follow Sec. 308. For SO2, Wyoming chose Sec 309. Although Wyoming chose Sec. 309 for SO2, sources subject to BART (as determined by Wyoming) are still required to address SO2 emissions in a BART analysis.9

- Q. Based on that understanding of the Regional Haze Rules as they relate to Wyoming, what is the general process by which the pollution control equipment are added?
- A. The steps below explain the general process by which pollution controls are added to PacifiCorp's coal units. While steps one and two have specific dates, the dates for the events thereafter vary depending on the plant. The focus in the process below is for projects involving SO2 and PM reductions. A general understanding of this process is important when determining whether or not the pollution control projects are required or needed.
  - 1. Regional Haze Rules issued by EPA in 2005

remaining useful life of the source, and 5) the degree of improvement in visibility (all five statutory factors) from each proposed technology."

<sup>&</sup>lt;sup>7</sup> 309(g) Wyoming State Implementation Plan (SIP) 6.1 (pg 89)

<sup>&</sup>lt;sup>8</sup> 309(g) Wyoming State Implementation Plan (SIP) 6.2 (pg 90)

<sup>&</sup>lt;sup>9</sup> WDAO BART Application Analysis: AP-6042 (Naughton), pg 2

- 2. In June 2006, Wyoming determines that PacifiCorp plants in Wyoming are subject to BART.
- 3. PacifiCorp requests CH2MHILL to perform the BART analysis (using the EPA's five factors) and makes recommendations as to the technology necessary to meet presumptive BART emission limits. (lbs/MMBtu)<sup>10</sup>

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- 4. PacifiCorp submits a Construction Permit Application for the recommended technology and requests certain emission limits (lbs/MMBtu) as well as Plantwide Applicability Limitations or "PALs" (tons/year).
- 5. WDAQ issues a construction permit that <u>requires specific emission limits(lbs/MMBtu)</u>, <u>including SO2</u>, and PALs. These limits and commands to install equipment are law and federally enforceable.
- 6. WDAQ conducts BART analysis<sup>11</sup> based on the EPA's *Guidelines for BART Determinations*. In this analysis, WDAQ determines the cost effectiveness of proposed pollution control equipment on a single pollutant basis (PM, NOX, and SO2). In every instance where PacifiCorp has proposed a baghouse project<sup>12</sup>, this analysis (which is done on a one pollutant-to-one control type basis) has determined that, for PM purposes, the PacifiCorp proposed baghouse(s) are NOT cost effective, yet still considered BART (required) due to the fact that PacifiCorp has already committed to the project and that the equipment has already been "permitted" (Step 5 above). In every instance (all

<sup>&</sup>lt;sup>10</sup> For some units, presumptive BART does not technically apply but is still used as a general goal unless the five factor analysis shows that an alternative control is justified. (CH2MHILL BART Analysis for Naughton Unit 2, pg ES-1)

<sup>&</sup>lt;sup>11</sup> All WDAQ BART Analyses, regardless of the plant are dated May 28, 2009.

<sup>&</sup>lt;sup>12</sup> Baghouse projects have been proposed for Wyodak, Dave Johnston (Unit 3 and 4) and Naughton (Unit 3 only) plants but NOT the Jim Bridger plant.

Wyoming plants), this analysis also explains that the PacifiCorp proposed BART 130 technology, for addressing SO2<sup>13</sup> will not be required to meet the corresponding SO2 131 emission limit but that PacifiCorp should participate in the Regional Milestone and 132 Backstop Trading program. 14 133 7. WDAQ issues a BART permit for each plant. This permit does not set specific 134 technology or limits that are specific just to SO2. Proposed baghouse projects that affect 135 both SO2 and PM are specifically mandated. 15 136 8. WDAQ incorporates the results of the analysis and permits above into the 309(g) 137 Wyoming Regional Haze State Implementation Plan ("WY SIP"). The WY SIP states 138 that "sources are not required to install BART controls to meet an SO2 emission limit. 139 Instead, sources will be required to participate in the Regional SO2 Milestone and 140 Backstop Trading Program authorized under Chapter 14 of the WAQSR." The WY SIP 141 also reviews the five factor BART analysis for NOX and PM for each Wyoming coal 142 plant. The WY SIP also requires PacifiCorp to install a new baghouse for Dave Johnston 143 Units 3 and 4, Naughton Unit 3 (not in this case) and on Wyodak Unit 1. In the WY SIP, 144 WDAQ determined that these baghouse projects are cost effective. 145 Q. The process you have outlined above appears to have several contradictions such as: 146 1) SO2 limits required in one regulation but then not in another. 147

2) Certain projects are required in one regulation and not in another.

http://deq.state.wy.us/aqd/309(g)%20Attachment%20A\_January%202011%20Submittal.asp

<sup>&</sup>lt;sup>13</sup> The proposed equipment to address SO2 have included just a baghouse (Wyodak 1, Naughton 3(not in this case)), new dry flue gas desulfurization (DFGD) equipment and a baghouse (Dave Johnston 3 and Dave Johnston 4), just new flue gas desulfurization projects (Naughton 1 and 2), and upgrades to FGD systems (Jim Bridger 1-3).

<sup>&</sup>lt;sup>14</sup> Each one of these WDAQ BART analyzes can be found on the WDAQ website:

<sup>15</sup> WYDAQ BART Permit MD-6043A pg 4(Wyodak), MD-6041A pg 5 (Dave Johnston 3 and 4) Nauton Unit 3

<sup>&</sup>lt;sup>16</sup> Section 6.2, pg 91

3) The baghouse projects are not cost effective in one regulation but are cost effective in another.

### Please explain.

A. This process has caused considerable confusion and not fully explained by the Company. However, based on discussions with personnel from WDAQ I will explain these apparent contradictions. The first contradiction relates to SO2. As mentioned in Step 5 of the process above, the permitted limits are law and federally enforceable. PacifiCorp is obligated to meet these emission limits. At the same time, since Wyoming is under Sec. 309, the Regional Milestones are in place and as such there are no specific SO2 limits dictated on a unit or plant basis. The idea of Sec. 309 was to give flexibility to the utilities to help meet the regional milestones.

# Q. Would that flexibility provide the option of doing nothing with regards to SO2 pollution control equipment?

A. Since a baghouse was ultimately required (which will be elaborated on later in my testimony) for Wyodak 1, Dave Johnston 3 and 4 and Naughton 3, this question revolves principally around the flue gas desulfurization (FGD) projects for Jim Bridger Units 1-3, Dave Johnston 3 and 4, and Naughton 1 and 2. In order for the "do nothing" option to be reasonable, considerations would have to be given to the following:

1) The Cost effectiveness or reasonableness of costs of the FGD projects

Based on the BART analysis performed by the WDAQ, all of the FGD projects
on Wyoming plants are cost effective or have reasonable costs.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup> AP-6041 pg 23, AP-6040 pg 26, AP-6042 pg 28

2) If the MEHC commitment to reduce SO2 emissions by more 50% using cost 170 effective equipment would be accomplished. 171 As shown in the first point above the costs are reasonable. Based on the 172 173 Company's compliance filing for the period April 2009 through March 31, 2010 all of the SO2 related projects (including scrubber (FGD)) listed by the Company 174 under general commitment 43 will result in a 62% reduction to SO2. I do not find 175 176 the additional 12% to be unreasonable for three reasons. First, these costs are reasonable. Second, the MEHC commitment does say "more than 50%." Third, I 177 would assume that the nature of the existing equipment, new equipment being 178 installed, and the complexities of managing a whole system of 14 units subject to 179 BART, does not lend kindly to achieving a percentage reduction that is say 180 50.1%. Even if such were to happen, I would imagine it would be more a matter 181 182 of coincidence than anything else. 3) If there are any end-of-life issues regarding the current equipment. 183 At this time, I am not aware of any specific end-of-life issues related to the 184 185 Wyoming plants. However, based on the end-of-life issues identified for the Utah plants in the Company's response to DPU 36 (received May 25<sup>th</sup>), there is the 186 possibility that similar issues exist for Wyoming plants. I will continue to explore 187 this issue and will address it in rebuttal testimony. 188 189 3) If the equipment is needed to meet permitted emissions limits.

Although specific FGD projects are not specifically required through the emission permits, <sup>18</sup> the Company's own applications for construction permits demonstrate the specific technology that will be needed to meet those permitted emission limits that are required. Additionally, condition number 2 of the permits for the various projects states, "That all substantive commitments and descriptions set forth in the application for this permit, unless superseded by a specific condition of this permit, are incorporate herin by this reference and are enforceable as conditions of this permit."<sup>19</sup>

### 4) If the regional milestones are being met.

Based on the 2011 WY SIP, "Each year, states have been able to demonstrate that actual SO2 milestones are well below the milestones." The years represented in the 2011 WY SIP are 2003 though 2007. On average, it appears that the states' reported emissions have been under the milestones by an average of 131,468 tons per year. I am not sure however, how the Company's forecast of SO2 emissions in future years without pollution control would have compared to future SO2 milestone limits. The Company's response to OCS 14.7 provides estimated SO2 reductions in tons per year for eight pollution control projects. The combined amount of SO2 reductions from all the projects, which include three Utah plants, is estimated to be 32,600 tons per year. All of these projects have been placed into service or are expected to be placed into service after December 2010. My

<sup>&</sup>lt;sup>18</sup> Also, Permit MD-5098 (Dave Johnston 3 and 4) does use the following language at page 4: "Limits shall become effective upon startup of the unit after FGD/baghouse installation and completion of the initial performance tests required by Condition 7 of this permit."

<sup>&</sup>lt;sup>19</sup> Permit MD-1552 as an example.

understanding however, is that the assumptions used in the future regional milestones and OCS 14.7 are different. The current Utah SIP indicates the SO2 regional milestones in 2008 were 269,083 tons per year and are required to be reduced to 141,849 tons by 2018. The DPU recently received a response to DPU data request 36.3 which does show forecasted emissions in tons per year for various but not all Utah and Wyoming coal units. The analyses shows emissions in tons per year with and without pollution control technology but not in relation to the regional milestones. The response to this data request was just recently received on May 25<sup>th</sup> and as such, the Division will continue to analyze its merits. What we do know is that over the years, various states have dropped out of the regional milestone program and as a result, PacifiCorp's assumed share of the total regional milestone has increased. We also know that regardless of how forecasted emissions would have compared to future milestones, pollution control equipment was needed to meet the Company's MEHC commitment to reduce emissions by more than 50%<sup>20</sup>. We also know, based on the Company's response to DPU 36.3 that the sulfur content is expected to go up significantly in the future for the Utah coal plants. This would obviously add to the difficulty of units contributing to the regional milestones.

Although there are still some issues that need to be explored like end-of-life issues for the Wyoming units and the total Company's contribution to the regional milestones, it does not appear based on the other factors analyzed above that the "do nothing" option could be considered reasonable.

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 $<sup>^{20}</sup>$  05-035-54 Compliance Filing to Commitment 49 of Stipulation Appendix A

Q. Will you please address the issue of projects being required in one regulation but not in 232 233 another? A. Yes. This has in part already been discussed. As mentioned previously, the FGD projects 234 were not specifically required to meet the regional milestones but were required to meet 235 permitted emission limits. With regards to the baghouse projects, the WDAQ determined that 236 that the projects were BART and were mandated to be installed.<sup>21</sup> The important concept to 237 understand with the baghouse projects is that it affects both SO2 and PM. Since SO2 falls 238 under the regional milestones the baghouse would not be specifically required. PM however, 239 does fall under Sec. 308 and so a specific determination was made to require the baghouse. 240 241 O. Will you please address the issue of the baghouse costs being effective in one regulation 242 but not another? A. Yes. As mentioned in the sixth step above, the BART analysis performed by WDAQ found 243 that the costs associated with each baghouse project were not reasonable. This analysis 244 however is done on a one pollutant to one control type basis. From just a PM standpoint the 245 costs were not reasonable. However, the baghouses affect SO2 and Mercury as well as PM. 246 The WY SIP specifically addresses this issue through the following statements: 247 248 Dave Johnston (WY SIP Sec 6.5.5 Pg 104-105) For control of PM/PM<sub>10</sub> emissions, the State of Wyoming requires that PacifiCorp install 249 and operate new full-scale fabric filters on Units 3 and 4 to meet corresponding BART 250 emission limits on a continuous basis. When considering all the factors above and beyond 251 252 the benefits associated with regional haze which include the existing precipitator's current condition and performance and end of life issues, the ability of the current 253 electrostatic precipitator to meet an ESP BART rate of 0.23 lb/MMBtu on a continuous 254 basis and the enhanced mercury removal co-benefits the baghouse provides, the 255 Wyoming Air Quality Division has determined that the costs associated with the 256 installation of a new full-scale fabric filter are reasonable. A full-scale fabric. 257

<sup>&</sup>lt;sup>21</sup> MD-6043A(Wyodak) pg 4, MD-6041A (Dave Johnston Units 3 and 4)

filter is the most stringent PM/PM10 control technology and therefore the Division accepts it as BART. The Division considers the installation and operation of the BART-determined PM/PM<sub>10</sub> controls of a new full-scale fabric filter on Unit 3 at Dave Johnston, as recently permitted in Air Quality Permit MD-5098, to meet the requirements of BART

When considering all the factors above and beyond the benefits associated with regional haze which include the existing venturi scrubber's current condition and performance and end of life issues, the ability of the current venturi scrubber to meet a venturi scrubber BART rate of 0.21 lb/MMBtu on a continuous basis and the enhanced mercury removal co-benefits the baghouse provides, the Wyoming Air Quality Division has determined that the costs associated with the installation of a new full-scale fabric filter are reasonable. A full-scale fabric filter is the most stringent PM/PM10 control technology and therefore the Division accepts it as BART. The Division considers the installation and operation of the BART-determined PM/PM10 controls of a new full-scale fabric filter on Unit 4 at Dave Johnston, as recently permitted in Air Quality Permit MD-5098, to meet the requirements of BART.

### Naughton Unit 3 (WY SIP Sec 6.5.6 Pg 106)

For control of PM/PM10 emissions from Unit 3, the State of Wyoming requires that PacifiCorp install and operate a new, full-scale fabric filter to meet a corresponding BART emission limit on a continuous basis. When considering all the factors above and beyond the benefits associated with regional haze which include the existing precipitator's current condition and performance and end-of-life issues, the ability of the current electrostatic precipitator to meet an ESP BART rate of 0.04 lb/MMBtu on a continuous basis, the enhanced mercury removal co-benefits the baghouse provides, and the reduced ash loading on the SO2 scrubber which will enhance the scrubber performance, the Wyoming Air Quality Division has determined that the costs associated with the installation of a new full-scale fabric filter are reasonable. A full-scale fabric filter is the most stringent PM/PM10 control technology and therefore the Division accepts it as BART. The Division considers the installation and operation of the BART-determined PM/PM10 controls of a new full-scale fabric filter on Unit 3 to meet the statutory requirements of BART.

#### Wyodak (WY SIP Sec 6.5.7 Pg 108)

For control of PM/PM10 emissions from Unit 1, the State of Wyoming requires that PacifiCorp install and operate a new, full-scale fabric filter to meet a corresponding BART emission limit on a continuous basis. When considering all the factors above and beyond the benefits associated with regional haze which include the existing precipitator's current condition and performance and end of life issues, the ability of the current electrostatic precipitator to meet an ESP BART rate of 0.10 lb/MMBtu on a continuous basis, and the enhanced mercury removal co-benefits the baghouse provides, the Wyoming Air Quality Division has determined that the costs associated with the installation of a new full-scale fabric filter are reasonable. A full-scale fabric filter is the most stringent PM/PM10 control technology and therefore the Division accepts it as BART. The Division considers the installation and operation of the BART-determined PM/PM10 controls of a new full-scale

fabric filter at Wyodak, as recently permitted under Air Quality Permit MD-7487, to meet the requirements of BART.

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- Q. Will you please summarize your position regarding the Wyoming FGD (scrubber) and baghouse projects?
- A. Yes. Through construction permits issued by WDAQ, certain SO2 limits were established on 308 a unit and plantwide basis for PacifiCorp's Wyoming coal plants. These limits are law, 309 310 federally enforceable and therefore the Company was required to incorporate technology that would meet those limits. In addition, PacifiCorp committed to install pollution control 311 technology to reduce SO2 emissions by more than 50% as long as the projects were cost 312 313 effective. This commitment was part of the MEHC transaction. As has been discussed above, both the baghouse and FGD projects were determined by WDAQ to be cost effective or have 314 reasonable costs. Although the Division will continue to explore these issues, it appears at 315 316 this time that there is sufficient evidence to allow the costs associated with the Wyoming 317 pollution control projects into rates.

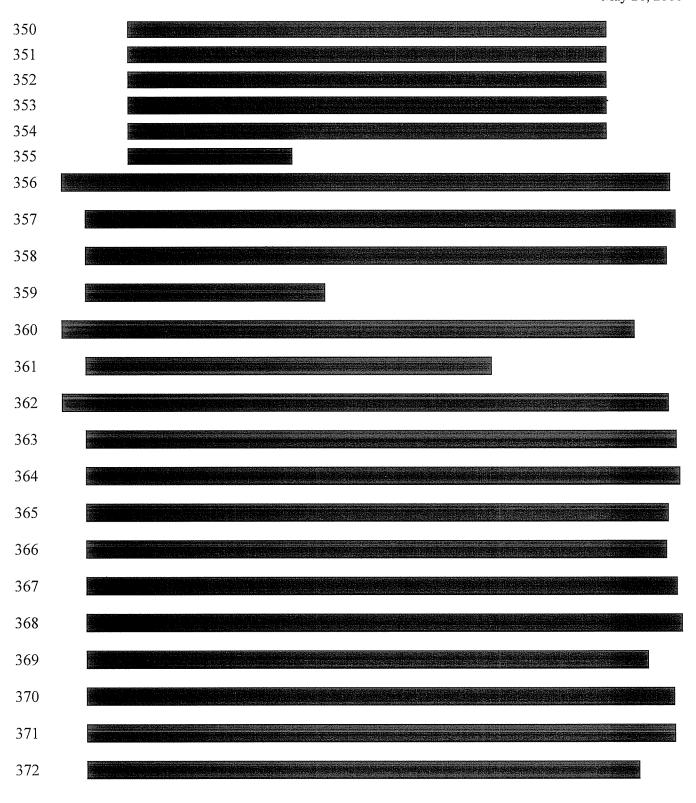
### Q. Will you please explain the regional haze rules as they relate to Utah?

A. Yes. Utah's regional haze rules are similar to Wyoming in that Utah is under Sec. 309. The two states are different however in the fact that Wyoming requires submission of a BART analysis while Utah does not. Also, Wyoming is required to show a reasonable progress demonstration that regional haze was on a path to natural conditions by 2064. Utah looks at BART by itself, in the context of a SIP. That BART analysis is based on EPA's BART analysis which is where the presumptive BART limits come from. The emission reductions in the UT SIP then role into the approval orders (construction permits) which detail specific

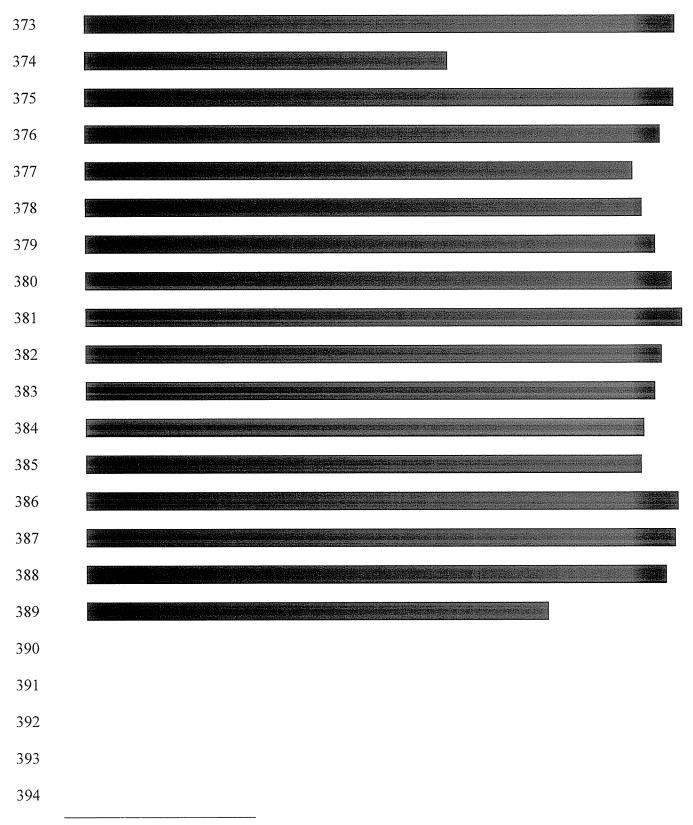
emission limits on a lb/MMBtu and PAL basis. The approval orders also specify the equipment that will be required to be installed to meet those limits. Q. Will you please explain the issues regarding the Utah scrubber and baghouse projects associated with Hunter 1, Hunter 2 and Huntington 1? A. Yes. I will start by describing, in general, the issues regarding the arbitration award<sup>22</sup>. 

<sup>&</sup>lt;sup>22</sup> See Confidential DPU Exhibit 7.5

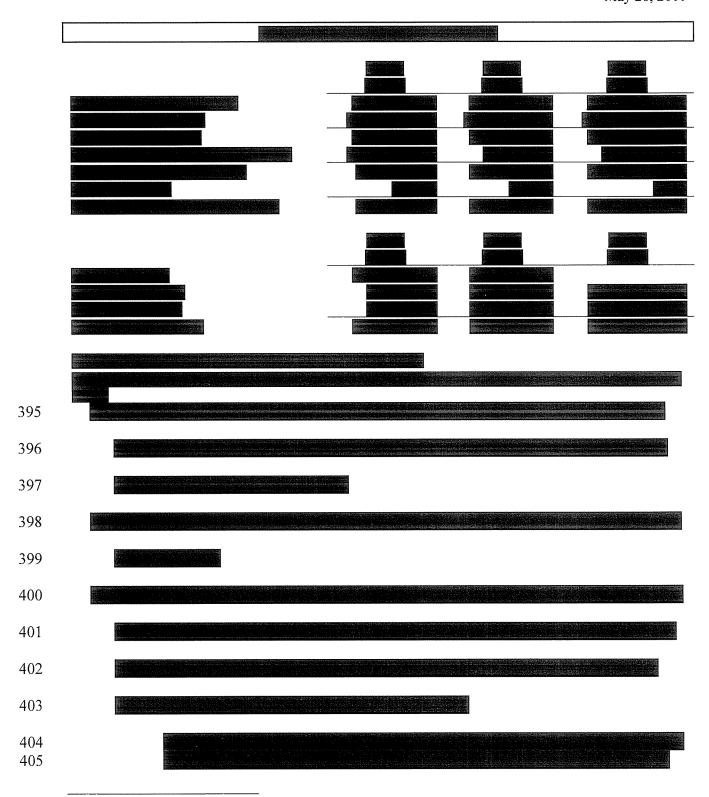
<sup>&</sup>lt;sup>23</sup> See DPU Exhibit 7.5 (Arbitration Award) pg 3



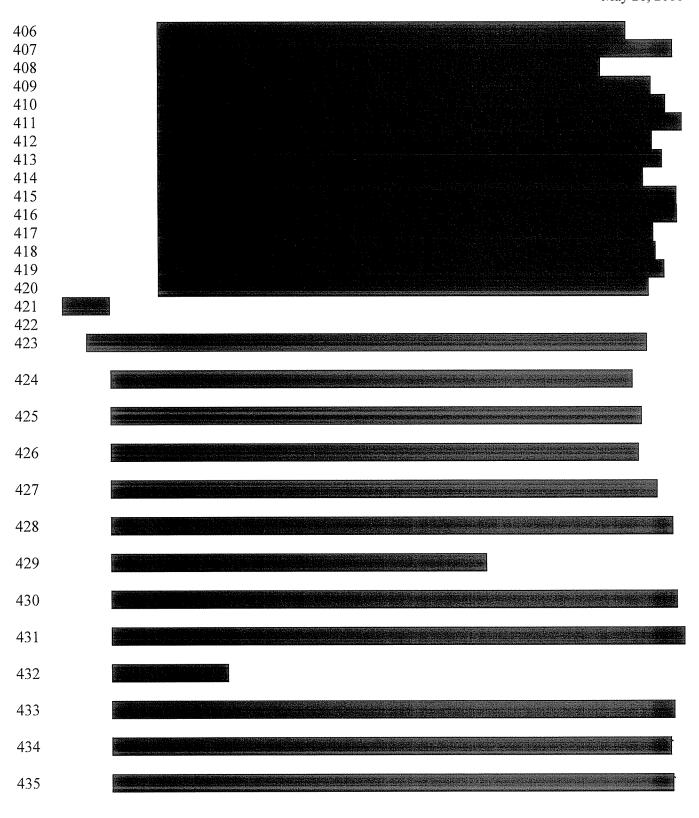
 $<sup>^{24}</sup>$  See Confidential DPU Exhibit 7.5 (Arbitration Award), pg 18  $\,$ 



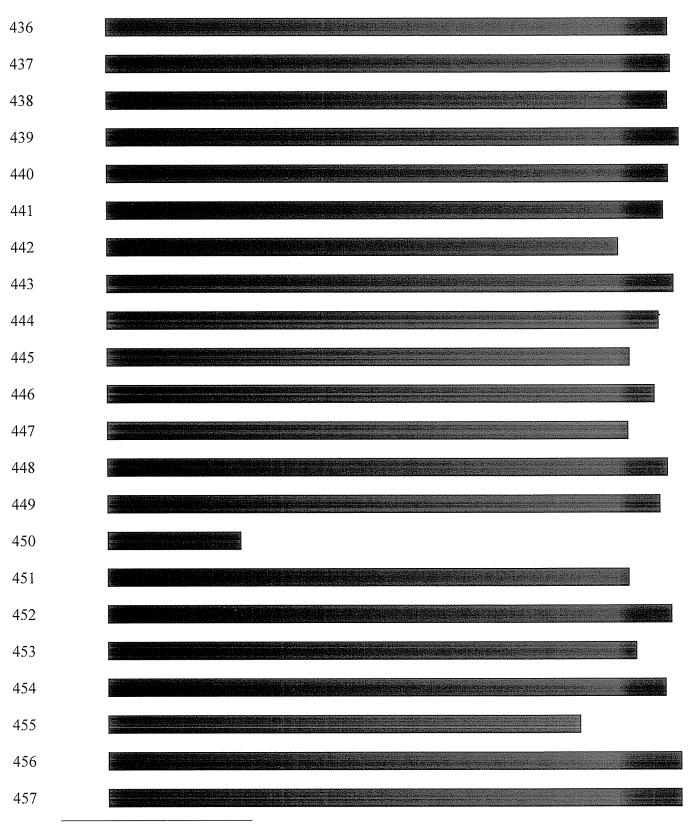
 $<sup>^{25}</sup>$  See Confidential DPU Exhibit 7.5 (Arbitration Award), bottom pg 15



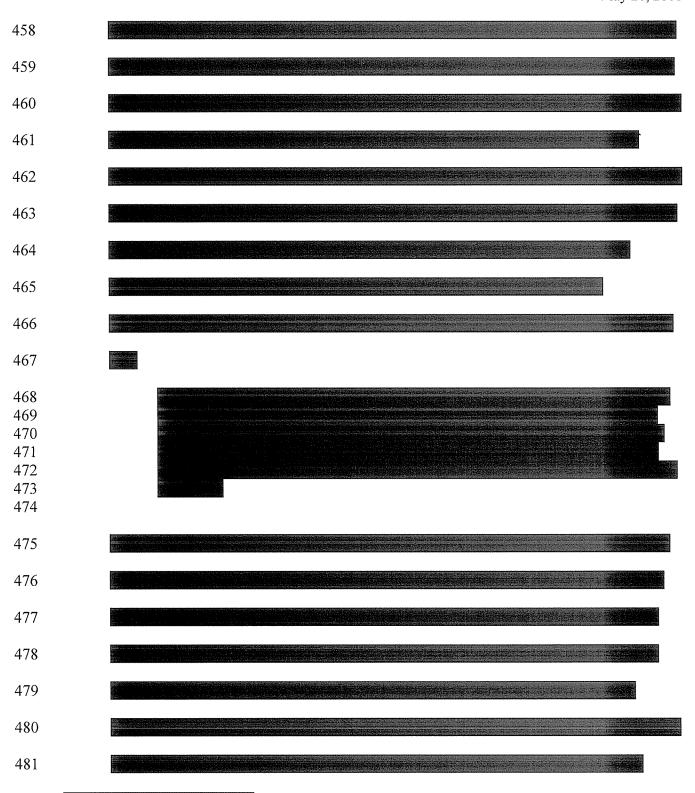
See Confidential DPU Exhibit 7.5 (Arbitration Award), pg 15
 The Company used the construction permit applications as proxy for "commitment" to install pollution control equipment. This is stated in DPU 36.7.



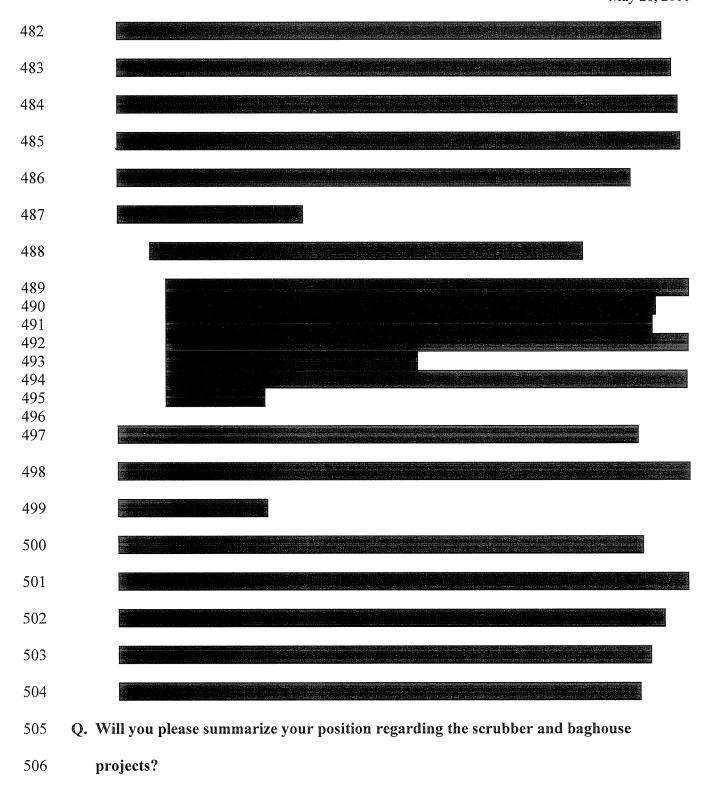
<sup>&</sup>lt;sup>28</sup> See Confidential DPU Exhibit 7.5 (Arbitration Award), end of first paragraph pg 16



<sup>&</sup>lt;sup>29</sup> See Confidential DPU Exhibit 7.5 (Arbitration Award), second paragraph pg 16



WY SIP 6.5.4 pg 102
 See Confidential DPU Exhibit 7.5 (Arbitration Award), first paragraph pg 17
 See Confidential DPU Exhibit 7.5 (Arbitration Award), first paragraph pg 17



<sup>&</sup>lt;sup>33</sup> See Confidential DPU Exhibit 7.5 (Arbitration Award), second paragraph pg 17

A. Yes. While it appears that reported emissions are well under regional milestones for SO2, the scrubber and baghouse projects in this case are needed to meet future or current SO2 emission limits, were committed to in the MEHC transaction and have reasonable costs. In addition, the Utah plants have several end-of-life issues that would have had to be resolved in the next few years regardless of the rest of the scrubber project. This conclusion is based principally on my research of Wyoming's regional haze rules and the Company's response to the arbitrator's issues regarding the Hunter 2 scrubber. As noted previously, the Division will continue to analyze the Company's response to DPU 36 since there has been only about a day for review.

- 516 Q. Does this conclude your testimony?
- 517 A. Yes

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