
**BEFORE THE
PUBLIC SERVICE COMMISSION OF UTAH**

In the Matter of the Application of Rocky Mountain Power for Authority to Increase its Retail Electric Utility Service Rates in Utah and for Approval of its Proposed Electric Service Schedules and Electric Service Regulations

Docket No. 13-035-184

**Direct Testimony of
Jeremy I. Fisher, PhD
On Behalf of
Sierra Club**

REDACTED

May 1, 2014

Table of Contents

1. Introduction and Purpose of Testimony	1
2. Coal Cost Increases At Jim Bridger are Inconsistent with the 2012 Pre-Approval Application.....	5
3. Hayden SCR Retrofit is Inconsistent with Company Planning.....	27
4. Costs and Revenues from Naughton are Inconsistent with Company Plans.....	37
5. Overall Recommendations	44

Table of Figures

Figure 1. Timeline of Bridger SCR analyses and Bridger Coal Company (BCC) costs 9

Confidential Figure 2. Coal costs as delivered to Jim Bridger, historic and projected in the Bridger SCR application and in this rate case.**Error! Bookmark not defined.**

Confidential Figure 3. Gas prices in the SCR Rebuttal Analysis (vintage 9/2012) and during the due diligence period (9/2013).....**Error! Bookmark not defined.**

Confidential Figure 4. Gas price breakeven analysis from SCR Approval Docket (12-035-92), Exhibit RMP__(RTL-6R).....**Error! Bookmark not defined.**

Confidential Figure 5. Re-analysis of gas-price breakeven using due diligence period coal and gas prices..... 20

Table of Tables

Confidential Table 1. System Optimizer Cost/(Benefit) results from SCR Rebuttal Analysis with updated Jim Bridger delivered coal costs. Based on Exhibit RMP__(RTL-5R) in 12-035-92.**Error! Bookmark not defined.**

1 **1. INTRODUCTION AND PURPOSE OF TESTIMONY**

2 **Q Please state your name, business address, and position.**

3 **A** My name is Jeremy Fisher. I am a Principal Associate at Synapse Energy
4 Economics, Inc. (Synapse), which is located at 485 Massachusetts Avenue, Suite
5 2, in Cambridge, Massachusetts.

6 **Q Please describe Synapse Energy Economics.**

7 **A** Synapse Energy Economics is a research and consulting firm specializing in
8 energy and environmental issues, including electric generation, transmission and
9 distribution system reliability, ratemaking and rate design, electric industry
10 restructuring and market power, electricity market prices, stranded costs,
11 efficiency, renewable energy, environmental quality, and nuclear power.

12 **Q Please summarize your work experience and educational background.**

13 **A** I have ten years of applied experience as a geological scientist, and seven years of
14 working within the energy planning sector, including work on integrated resource
15 plans, long-term planning for utilities, states and municipalities, electrical system
16 dispatch, emissions modeling, the economics of regulatory compliance, and
17 evaluating social and environmental externalities. I have provided consulting
18 services for various clients, including the U.S. Environmental Protection Agency
19 (EPA), the National Association of Regulatory Utility Commissioners (NARUC),
20 the California Energy Commission (CEC), the California Division of Ratepayer

1 Advocates (CA DRA), the National Association of State Utility Consumer
2 Advocates (NASUCA), National Rural Electric Cooperative Association
3 (NRECA), the state of Utah Energy Office, the state of Alaska, the state of
4 Arkansas, the Regulatory Assistance Project (RAP), the Western Grid Group, the
5 Union of Concerned Scientists (UCS), Sierra Club, Earthjustice, Natural
6 Resources Defense Council (NRDC), Environmental Defense Fund (EDF),
7 Stockholm Environment Institute (SEI), Citizens Action Coalition of Indiana,
8 Civil Society Institute, and Clean Wisconsin.

9 I have provided testimony in electricity planning and general rate case dockets
10 here in Utah, as well as Wyoming, Oregon, Indiana, Kansas, Kentucky,
11 Louisiana, and Wisconsin, and provided testimony in the MidAmerican merger in
12 Nevada in 2013. Outside of utility planning, I am also the lead developer of
13 EPA's AVERT model, used to help states reach air quality compliance through
14 energy efficiency and renewable energy means.

15 Prior to joining Synapse, I held a post doctorate research position at the
16 University of New Hampshire and Tulane University examining the impacts of
17 Hurricane Katrina.

18 I hold a B.S. in Geology and a B.S. in Geography from the University of
19 Maryland, and a Sc.M. and Ph.D. in Geological Sciences from Brown University.

1 My full curriculum vitae is attached as Exhibit SC__JIF-1.

2 **Q On whose behalf are you testifying in this case?**

3 **A** I am testifying on behalf of Sierra Club.

4 **Q Have you testified in front of the Utah Public Service Commission**
5 **previously?**

6 **A** Yes. Most recently, I provided direct and surrebuttal testimony in response to
7 Rocky Mountain Power's voluntary request for approval for the selective catalytic
8 reduction (SCR) controls at Jim Bridger Units 3 and 4 (Docket 12-035-92), and in
9 PacifiCorp's 2011 general rate case (Docket 10-035-124). I have also provided
10 testimony on PacifiCorp planning issues before the Wyoming and Oregon
11 Commissions.

12 **Q What is the purpose of your testimony?**

13 **A** The purpose of my testimony is to evaluate several key cost driver increases
14 described and presented by PacifiCorp (d.b.a. Rocky Mountain Power in Utah, the
15 "Company") in this case. My testimony reviews the following issues:

16 1. The extent to which coal cost increases at Jim Bridger are consistent with
17 forecasts provided in the recent pre-approval docket for selective catalytic
18 reduction (SCR) systems at Jim Bridger, and the impact that the coal costs
19 recently disclosed in this case might have had on the Commission's 2013
20 decision;

1 2. The extent to which the Company's request for recovery on an SCR system at
2 Hayden is consistent with its own internal planning and due diligence
3 documentation;

4 3. Whether the coal cost increase identified by the Company at Naughton is
5 consistent with the Company's current plan to delay the conversion of
6 Naughton 3 until 2017.

7 It is my expert opinion that the Company's planning, while improved from the
8 last rate case in which I participated, is poorly coordinated, consistently shifts risk
9 to PacifiCorp's customers, and results in decisions that burden the Company's
10 customers with unnecessary costs.

11 Each of the issues that I present here has a common thread: information presented
12 by the Company in public planning forums is deeply inconsistent with the
13 Company's own planning and internal information. In my opinion, the concerns
14 that I describe in my testimony are not errors of simple omission or neglect. In
15 each case, the Company and its officers are explicitly aware of inconsistencies
16 between internal planning and external messaging.

1 **2. COAL COST INCREASES AT JIM BRIDGER ARE INCONSISTENT WITH THE 2012**
2 **PRE-APPROVAL APPLICATION**

3 **Q Please describe your concerns with the Jim Bridger coal cost increases.**

4 **A** In the current rate case application, PacifiCorp requests an increase of [REDACTED]
5 [REDACTED] at the Bridger Coal Company,¹ or about [REDACTED] of the total coal cost
6 increases identified in this case. Overall, the cost increase at Bridger coal mine
7 accounts for nearly [REDACTED] of the total rate increase requested in Utah.² In support,
8 the Company provided a new long-term forecast for coal delivered to the Jim
9 Bridger coal plant, a trajectory which is significantly higher than the costs
10 projected in the Company's recently closed voluntary approval docket for SCR
11 equipment at Jim Bridger units 3 & 4, Utah docket 12-035-92.

12 Critically, the Company's application for pre-approval hinged on a projection of
13 fuel costs for both coal supplied to the plant, as well as natural gas forecasts for
14 replacement generation. The proceeding for the Company's SCR application,
15 formally concluded December 30, 2013, never contemplated coal prices at
16 Bridger coal mine anywhere close to the prices now forecasted in this docket.

17 The Company's workpapers supporting the 2012 Bridger SCR case showed
18 significantly lower coal prices than the coal prices now projected for delivery at
19 Jim Bridger. Substituting the currently disclosed coal prices from this docket into
20 the SCR analysis from Docket 12-035-92 cuts the projected benefit of the SCRs

¹ See Direct Testimony of Cindy Crane, Table 4.

² Company requests \$76.3 million (see Direct Testimony of Richard Walje, line 35). Utah share represents approximately 43% of Company total. [REDACTED] * 43% / \$76.3 = [REDACTED].

1 in half. Had the Company disclosed its most up-to-date coal *and* gas price
2 projections from the 3rd quarter of 2013 while the SCR docket was still active, an
3 analysis would have resulted in a net benefit of approximately zero.

4 Specifically, had the Company provided the Commission with its best and most
5 up-to-date coal and gas prices prior to the conclusion of the SCR docket, this
6 Commission's final decision may have been very different. It is unclear whether
7 the Company's omission was a deliberate or inadvertent withholding of
8 information. In either case, a reasonable utility would have known of these price
9 changes and immediately alerted the Commission. Effective regulation is made
10 with the benefit of full disclosure and correct information. By failing to provide
11 information to this Commission indicating that circumstances at Bridger coal
12 mine had changed significantly, the Company denied this Commission the
13 opportunity to evaluate ratepayer risks effectively and appropriately.

14 **Q Why has the cost of coal increased at Bridger coal mine?**

15 **A** According to Company witness Ms. Cindy Crane, higher than expected ash
16 content in the next longwall seam of the underground complex at Bridger coal
17 mine has caused a delay and increased expense to move an extra longwall panel.³
18 Reduced production,⁴ "increased [costs for] materials and supplied and outside
19 services, increased final reclamation expense, and increased royalty and

³ Direct Testimony of Cindy Crane, pages 20-21.

⁴ Direct Testimony of Cindy Crane, lines 428-431.

1 production tax expense”⁵ all contributed to the higher costs of coal delivered to
2 Jim Bridger.

3 According to Ms. Crane, well over half of the cost increase is attributable to
4 reduced production during the extended longwall move.⁶

5 **Q What was the estimated benefit of retrofitting Jim Bridger with SCRs in**
6 **Docket 12-035-92?**

7 **A** In the Company’s initial application (“SCR Application Analysis”), filed August
8 24, 2012, the Company’s analysis found that in the base case the SCRs were
9 favorable by [REDACTED].⁷ That analysis relied on outdated coal and gas prices
10 from March 2012.⁸

11 In the analysis filed with rebuttal testimony (“SCR Rebuttal Analysis”), filed
12 February 11, 2013, PacifiCorp made several adjustments, including using more
13 contemporary coal and gas price projections from January 2013.⁹ This rebuttal
14 analysis, representing the Company’s best and final analysis contemplated in this
15 case, found that the SCR benefit had shrunk by 40%, down to [REDACTED] on a
16 net present value basis.¹⁰

⁵ Direct Testimony of Cindy Crane, lines 425-427.

⁶ Direct Testimony of Cindy Crane, lines 428-431.

⁷ See Direct Testimony of Rick Link in Docket 12-035-92, page 2, line 28.

⁸ See Response to Sierra Club 9.1, referencing Response to OCS 1.17 1st Supp CONF in 12-035-92. Bridger Coal Company files are titled “CPCN – BCC – March 7 2012.” Attached as Exhibit SC___JIF-2.

⁹ See workpapers of Cindy Crane in 12-035-92 rebuttal. Bridger workbook titled “BRIDGER Rev 1-18-13.”

¹⁰ See Rebuttal Testimony of Rick Link in Docket 12-035-92, page 2, line 23.

1 On May 10, 2013, the Utah Commission ruled on the Company's application,¹¹
2 approving the SCRs and requesting to review the Company's final EPC budget.
3 The EPC contract was provided on October 10, 2013, and was approved by this
4 Commission on December 30, 2013.¹²

5 I will refer to the period between the May 10 conditional approval of the SCR
6 retrofit¹³ and the Commission's final Engineering, Procurement and Construction
7 (EPC) approval¹⁴ on December 30, 2013 as the "due diligence period." During
8 this timeframe, the Company had a clear, continuing obligation to evaluate its
9 own resource decisions and investments, and a responsibility to this Commission
10 to ensure that the best possible information was available to decision-makers.

11 **Q When were the coal costs in this instant case (Utah GRC 13-035-184)**
12 **projected for Jim Bridger?**

13 **A** The workpapers associated with Ms. Crane's testimony indicate that the forecast
14 was generated October 4, 2013,¹⁵ a week prior to the date upon which this

¹¹ Rocky Mountain Power Resource Decision Jim Bridger Units 3 and 4. Issued May 10, 2013. Utah Docket 12-035-92. Attached as Confidential Exhibit SC___JIF-3.

¹² Notice of Final Approved Projected Cost of Resource Decision. Issued December 30, 2013. Utah Docket 12-035-92. Attached as Confidential Exhibit SC___JIF-4.

¹³ Rocky Mountain Power Resource Decision Jim Bridger Units 3 and 4. Issued May 10, 2013. Utah Docket 12-035-92. Attached as Confidential Exhibit SC___JIF-3.

¹⁴ Notice of Final Approved Projected Cost of Resource Decision. Issued December 30, 2013. Utah Docket 12-035-92. Attached as Confidential Exhibit SC___JIF-4.

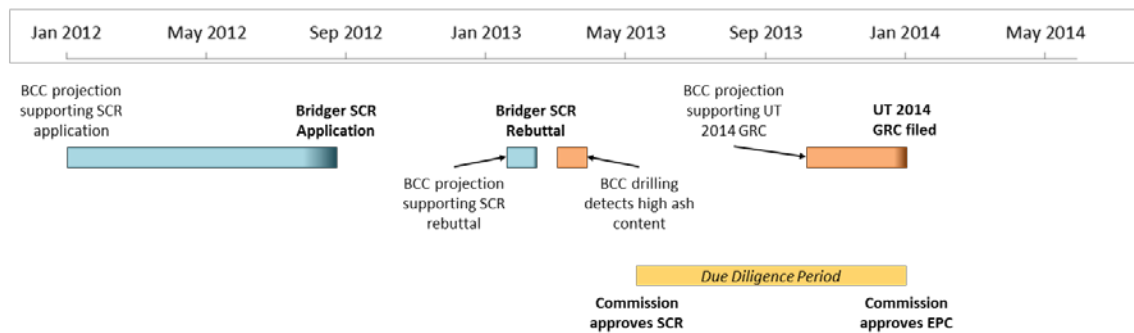
¹⁵ See workpapers of Cindy Crane in 12-035-92 rebuttal. Bridger workbook titled "BRIDGER Rev 1-18-13."

1 Commission had received the EPC contract for Jim Bridger’s SCR, and nearly
 2 three months before the Commission issued its approval of the EPC contract.

3 In testimony for this case, Ms. Crane explains that the immediate coal shortfall
 4 and price increase is due to an extended longwall move in the underground coal
 5 mine, bypassing a problematic area that was detected “this last summer.”¹⁶

6 In response to a data request, Ms. Crane further explained that the problem was
 7 detected “as a result of additional drilling in March/April of 2013.”¹⁷ This
 8 indicates that Company officials were aware of the problems in Jim Bridger’s coal
 9 supply even prior to the Commission’s initial decision in this case, even if the
 10 Company had not yet determined the monetary impact of the discovery.

11 The key events are charted in Figure 1, below.



12

13 **Figure 1. Timeline of Bridger SCR analyses and Bridger Coal Company (BCC)**
 14 **costs**

¹⁶ See Direct Testimony of Ms. Cindy Crane, pages 21 and 22, lines 408-411, specifically.

¹⁷ See response to Sierra Club data request 4.9b. Attached as Exhibit SC___JIF-5.

1 **Q What is your evidence that the higher cost of Bridger coal contemplated here**
2 **was not incorporated into the SCR application?**

3 **A** I compared the long-term forecast of Bridger coal prices from Ms. Crane's
4 workpapers in this docket¹⁸ to Ms. Crane's base-case workpapers from the SCR
5 docket.¹⁹ In the SCR docket, these prices are provided as the annual composite
6 price of coal produced at the surface mine, the underground mine, and from Black
7 Butte and Kemmerer mines through 2034.²⁰ In the present case, this composite
8 price is not provided, and long term forecasts from Black Butte and Kemmerer are
9 also not provided. I have assumed that both of these sources have a [REDACTED]
10 [REDACTED] Company's projected coal price over the long run.²¹

11 The Company does provide long-term forecasts for the operating and capital
12 expense of Bridger coal mine, the same source data that is used to inform the
13 short-term forecast provided for this rate case. I used the same data for dollars per

¹⁸ See file "BRIDGER.xlsx" in workpaper filing 700-23 CONF\C.8.f Conf.

¹⁹ See workpapers of Cindy Crane in 12-035-92 rebuttal. Bridger workbook titled "BRIDGER Rev 1-18-13."

²⁰ Long term forecasts were provided through 2030 in the workpapers supporting the initial filing, and 2034 in the rebuttal analysis.

²¹ Black Butte: [REDACTED]

Kemmerer: [REDACTED]

1 ton received and heat content (in btu/lb)²² as used by Ms. Crane for the short term
2 projection,²³ but included the annual estimates through 2037.²⁴

3 Comparing the cost of coal delivered to Jim Bridger projected in this case against
4 the prices presented in the SCR Rebuttal Analysis indicate prices in 2014-2034 as
5 projected in October 2013 [REDACTED]
6 [REDACTED] above prices projected in January 2013 (see
7 Confidential Figure 2).

8 Reviewing historic data, as reported to the US Energy Information Administration
9 (EIA), the average cost of coal delivered to Bridger actually spiked in 2011 and
10 has maintained well above the projections provided in the Bridger SCR case (see
11 Confidential Figure 2).²⁵

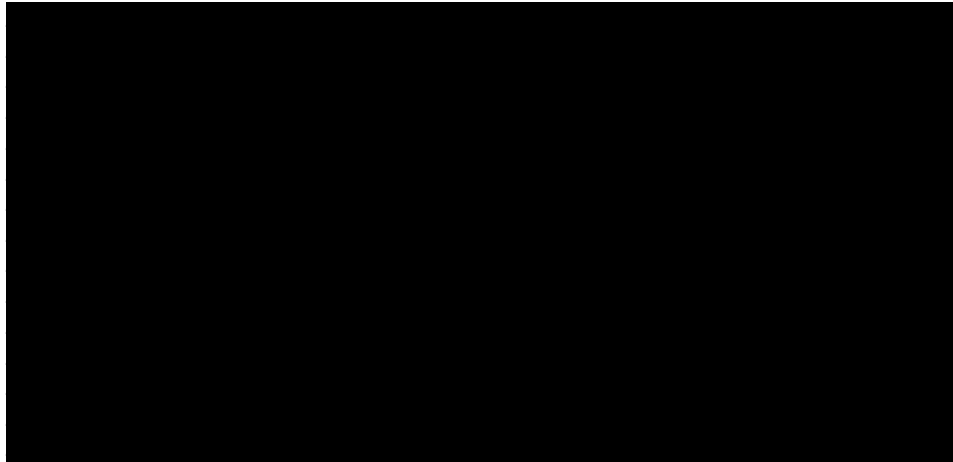
[REDACTED]

²² Heat content projections only provided through 2016; 2017-2037 are average heat contents.

²³ Price from 700-23 CONF\C.8.f Conf.\BCC Budget 10-4-2013\OPEX-CAPEX\01
OpsCostSchedules.xlsx, tab OPEX (dollars/ton received); Heat content from 700-23 CONF\C.8.f
Conf.\BCC Budget 10-4-2013\OPEX-CAPEX\Coal Quality Royalty 10-2013.xlsx, tab sep"13 mp-
[2014,2015,2016] fcst-cq-4x4

²⁴ For heat content, I simply took the average heat content 2014-2016 and extended it from 2017-2034.

²⁵ Data from EIA Form 923, 2008-2013. Data represents all sources.



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Q Why is this coal cost increase data relevant to the 2012 Bridger SCR approval docket?

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A The coal cost increase has a substantial impact on the economics of the Bridger

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SCR decision. The Company's SCR Rebuttal Analysis, provided by Mr. Rick

8

Link, found the decision to retrofit was beneficial by [REDACTED] relative to a

9

repowering option.²⁶ Keeping the Company's assumptions about the accelerated

10

closure costs for the Bridger mine in the case of unit closure fully intact,²⁷ but

11

simply augmenting the price of coal delivered to Jim Bridger to match Ms.

12

Crane's projection in this case slashes the benefit of the SCRs by nearly 70% -

13

down to [REDACTED].

²⁶ See Exhibit RMP___(RTL-5R) in Utah Docket 12-035-92

²⁷ In the Bridger SCR approval docket, Ms. Crane explained that in the case that either if Jim Bridger 3 or 4 or both were closed, the surface mine would be abandoned and remediation activities would commence immediately. Moving expensive remediation activities forward resulted in substantively higher coal prices for the two remaining Jim Bridger units. I have maintained this differential in the instant analysis.

1 Confidential Table 1, below, shows the outcome of the Company's SCR Rebuttal
2 Analysis with higher coal costs at Jim Bridger, reflective of the projections from
3 this rate case.

4 [REDACTED]
5 [REDACTED]
6 [REDACTED]

[REDACTED]

7

1 **Q** **Is a [REDACTED] benefit sufficient justification to support the Jim Bridger**
2 **SCRs?**

3 **A** No. A [REDACTED] benefit on a [REDACTED] investment²⁸ is a fairly slim margin
4 in the first place. The decision to install SCR is also questionable given two other
5 relevant facts:

- 6 1. The Company's model is insensitive to noise at this order of magnitude.
- 7 2. In late 2013, the Company's forecast for natural gas prices was considerably
8 below the forecast price used in the SCR Rebuttal Analysis.

9 According to the Company's most recent information, a [REDACTED] difference
10 between two scenarios in PacifiCorp's \$30 billion system²⁹ is within the noise, or
11 uncertainty, of the System Optimizer model. Because the Company provided
12 relevant information that it also deemed highly confidential, the remainder of my
13 assessment discussed below is has been redacted as highly confidential. However,
14 I can say here that, in general, System Optimizer is unable resolve costs down to
15 this level of granularity.

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²⁸ Notice of Final Approved Projected Cost of Resource Decision. Issued December 30, 2013. Utah Docket 12-035-92. Table 1. Attached as Exhibit SC__JIF-4.

²⁹ Approximate net present value of revenue requirements from Company's System Optimizer runs in the 2013 IRP. See Table 8.1 on p219 in the 2013 IRP.

1 **[BEGIN HIGHLY CONFIDENTIAL TESTIMONY]**

2 Notice: Rocky Mountain Power has asserted a claim of confidentiality under Utah
3 Code Ann. §63G-2-309 for portions of this section on the grounds that
4 information referenced in this testimony has been designated by Rocky Mountain
5 Power as Highly Confidential and constitutes confidential business information.
6 Sierra Club makes no claim of confidentiality and includes this notice at the
7 request of Rocky Mountain Power.

8 **Q Please describe why you believe that a [REDACTED] benefit for the SCR at Jim**
9 **Bridger is insignificant with respect to the System Optimizer model.**

10 **Q The Company has described the particular limitations of the System Optimizer**
11 **model, and of capacity expansion models in general.³⁰ Specifically, System**
12 **Optimizer is a model known as a mixed integer programming (MIP) solver,**
13 **meaning that its final outcome is a near optimal mix of whole unit resources. This**
14 **is in contrast to linear programming (LP) solvers, which result in a perfectly**
15 **optimal mix of partial unit resources. In other words, a linear program may**
16 **choose to procure 73% of one new unit, and 49% of another resource. Because**
17 **these fractional resources are not generally available for procurement, pure LPs**
18 **are difficult to use in real system planning. MIP solvers start from LP solutions**
19 **and seek to generate a mix of resources that are realistic (i.e. whole units) but sub-**
20 **optimal.**

21 The degree to which the MIP solution (i.e., System Optimizer) is sub-optimal can
22 be set manually through a toggle termed the “gap” fraction. Setting a smaller gap

³⁰ See Highly Confidential 1st Supplemental Response to SC 2.11(e), Attachment B, November 2012
“Hayden U1 System Optimizer Model Financial Analysis.”

1 (i.e. demanding that the MIP solution be closer to optimal) can require
2 significantly more solving time and computing power. While the Company does
3 not explicitly state the gap used in the Hayden analysis (or the Bridger SCR
4 analysis), they give a detailed illustration of a gap set at [REDACTED] of PVRR. This
5 means that if the LP solver finds an optimal resource plan worth [REDACTED]
6 PVRR, the MIP solution – or the solution that the Company presents to
7 stakeholders and commissions – would be satisfied if it is within [REDACTED]
8 PVRR of the LP solution.

9 The Company provides an illustrative table in the Hayden analysis with LP
10 solutions and MIP solutions for the Hayden retire/retrofit decision, indicating that
11 the solution has an uncertainty bound of about [REDACTED]

12 [REDACTED]

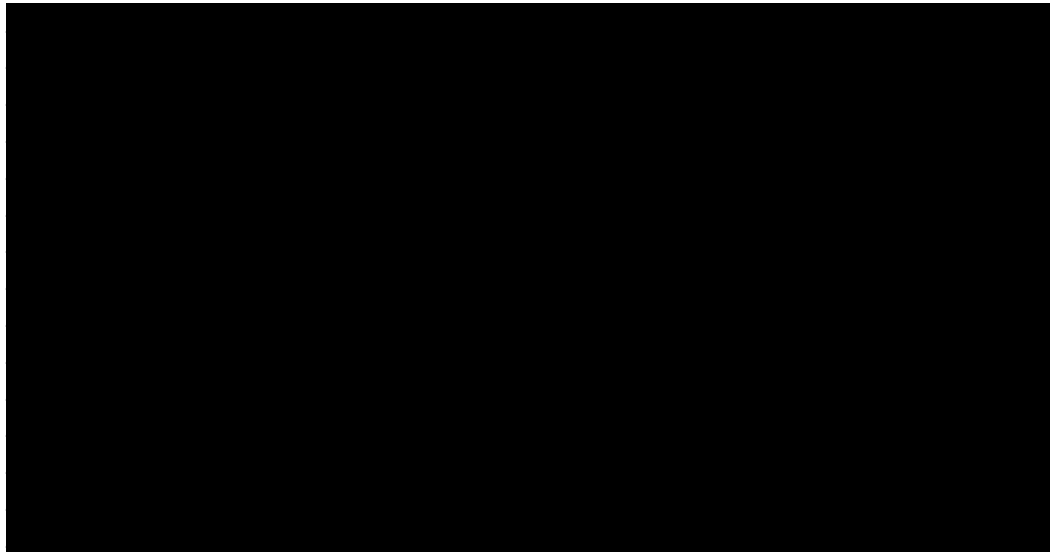
13 If the gap used to generate the Bridger SCR analysis is consistent with the
14 illustration in the Hayden analysis [REDACTED] then a [REDACTED] for
15 installing the SCR would be well within the mathematical uncertainty of the
16 System Optimizer model. Assuming the resulting gap is approximately [REDACTED]
17 [REDACTED] between LP optimal solutions and MIP sub-optimal solutions, the actual
18 [REDACTED]

19 The gap uncertainty between the LP and MIP solutions are completely
20 independent of the uncertainty resulting from unknown fuel prices, market
21 electricity prices, emissions prices, demand fluctuations, or capital costs.

1 **[END HIGHLY CONFIDENTIAL TESTIMONY]**

2 **Q Did any other factors affect your analysis of Jim Bridger?**

3 **A Yes. Changing coal prices were not the only substantial shift during the due**
4 diligence period – the Company’s projected natural gas prices also fell from the
5 prices used in the SCR rebuttal analysis, as shown in Confidential Figure 3,
6 below.



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11 Gas price projections from Opal hub fell by over [REDACTED] from September 2012 to

12 September 2013.³¹ The impact of this price drop was to effectively eliminate any

³¹ Nominal, levelized from 2016-2030.

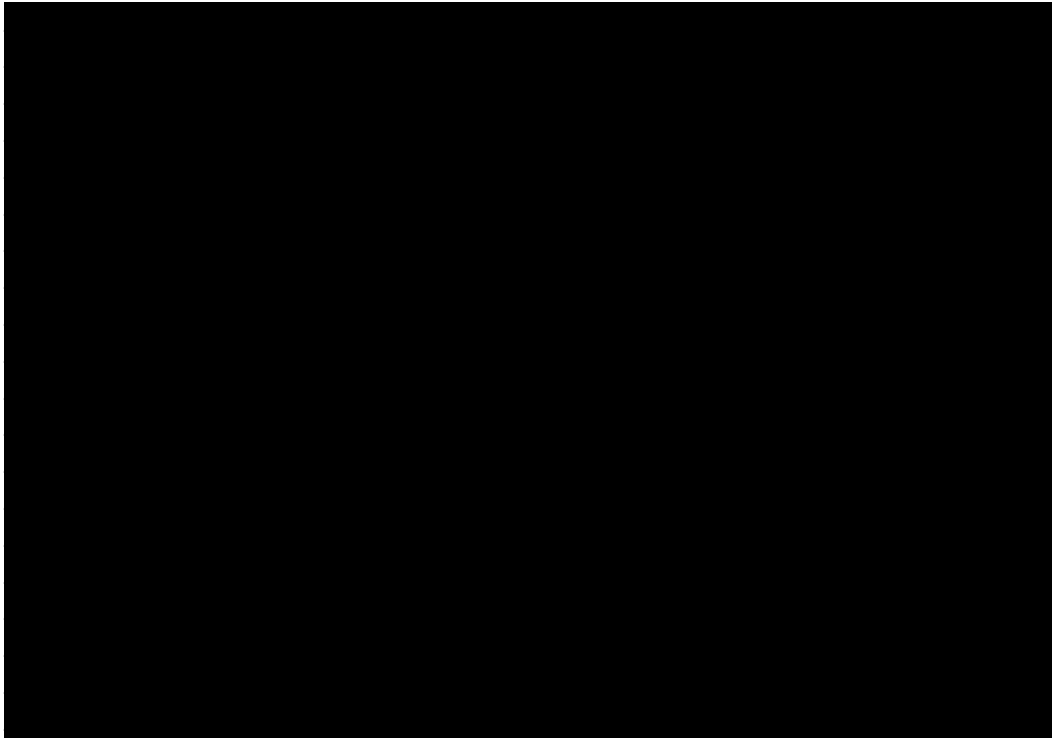
1 benefit of the SCR retrofit at Jim Bridger 3 & 4, taking into account the
2 contemporaneous coal cost increase projected by Ms. Crane.

3 **Q Did you re-run the Company's System Optimizer model with the coal and**
4 **gas prices available to the Company during the due diligence period?**

5 **A** No. I did not have access to the Company's model. However, I used a process
6 similar to that presented by Mr. Rick Link, Director of Structuring and Pricing at
7 PacifiCorp, in the Bridger SCR proceeding. For coal prices, I created a manual
8 *post-hoc* adjustment to prices paid for coal at Jim Bridger, assuming the same
9 dispatch and consumption as determined by the System Optimizer model. For the
10 case in which Jim Bridger 3 & 4 were retired in 2015/2016, I included the coal
11 price increase propounded by the Company for advanced recovery of coal
12 remediation funds. I performed this *post-hoc* adjustment for the low, mid and high
13 gas price scenarios, and re-produced the breakeven gas price analysis presented
14 by the Company in that proceeding.

15 In the SCR Rebuttal Analysis, Mr. Link presented an exhibit suggesting it would
16 require a nominal levelized gas price of █████/MMBtu to reach a zero benefit for
17 the SCRs at Jim Bridger 3 & 4, █████/MMBtu less than the Company's
18 September 2012 gas prices (see Confidential Figure 4, below).³²

³² Rebuttal Testimony of Rick Link in 12-035-92, Exhibit RMP____(RTL-6R)



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5 In my re-analysis, I find a breakeven gas price of [REDACTED]/MMBtu. The nominal
6 levelized gas price projected by the Company in September 2013 was
7 \$5.35/MMbtu, extremely close to the breakeven price.³³

³³ September 2013 Official Forward Price Curves for gas provided in Oregon 2013 IRP docket LC-57, OPUC 279. Not marked confidential. Attached as Exhibit SC___JIF-6.

[REDACTED]

1

[REDACTED]

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In short, the linear trend, identical to the process used by Mr. Link in the Bridger
SCR approval docket, predicts that at the coal and gas prices available to the
Company in late 2013, the Jim Bridger SCRs would have had a net benefit of just
[REDACTED], well within any reasonable margin of error.

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1 **Q The Company's final EPC contract indicates that the cost of this project will**
2 **be [REDACTED] less than projected in the SCR approval docket. Does this**
3 **reduced cost change the outcome of your assessment?**

4 No. Even after adjusting for this reduced cost, the benefit as of late 2013 would
5 have been [REDACTED] – or just 16% of the capital costs of implementing the SCR
6 retrofit. This marginal benefit is a different story than the [REDACTED], and then
7 [REDACTED] benefit touted by the Company in their analyses. As described
8 earlier, this minimal benefit is well within the noise of the System Optimizer
9 model.

10 **Q Have you made any other changes to the Company's analysis aside from the**
11 **coal price adjustment you described above, and a review of the breakeven**
12 **analysis with lower gas prices?**

13 **A** No.

14 **Q Was all of the information you used fully available to the Company during**
15 **the due diligence period?**

16 **A** Yes.

17 **Q Was all of the information you used made available to this Commission**
18 **during the due diligence period?**

19 **A** No. The Company did not provide its new coal or gas price projections to this
20 Commission after the SCR Rebuttal Analysis.

1 **Q Did the Company perform its own re-analysis of the benefit of the SCR**
2 **retrofits using the up-to-date coal prices?**

3 **A** No. According to the Company, “a comparison of test period costs to the CPCN
4 approval docket for the Bridger 3 & 4 SCR has not been completed.”³⁴ This
5 admission was in response to a discovery request inquiring whether the updated
6 coal costs were taken into account in the Jim Bridger SCR proceedings in Utah or
7 Wyoming.

8 **Q Are the SCRs at Jim Bridger 3 & 4 required by federal law?**

9 **A** Yes, as of January 30, 2014 EPA’s final Regional Haze Federal Implementation
10 Plan (FIP) for Wyoming requires that, if the units are to continue operation past
11 December 31, 2015 and December 31, 2016, respectively, they must be meet an
12 SCR-based emission limit of 0.07 lb/MMBtu.³⁵

13 **Q Are you objecting to the Company’s request for an increase in fuel costs at**
14 **Jim Bridger due to difficulties and additional costs at the Bridger Coal**
15 **Mine?**

16 **A** Not at this time. I do not have a basis for determining if the higher costs at the
17 Bridger coal mine are prudently incurred or not.

³⁴ See Response to SC 4.10(d). Attached as Exhibit SC____JIF-7.

³⁵ 79 FR 5046, January 30, 2014.

1 **Q Should the Company have brought the changes in coal and gas price to the**
2 **Commission's immediate attention during the due diligence period?**

3 **A** Yes. The basis of the Commission's May 10, 2013 conclusion in the Bridger SCR
4 approval docket was a finding that the economic analysis in that docket favored
5 the retrofit. This Commission found:

6 The Company's economic analysis not only demonstrates the
7 Project is favored in six of nine cases, but substantially so. We find
8 no compelling evidence, arguments, or analysis shifting the
9 economics to favor to an alternative strategy to comply with the
10 Wyoming SIP requirements.³⁶

11 However, the conditions creating those favorable conditions were clearly tenuous
12 according to information available to the Company (but not the Commission),
13 even as the Commission wrote this finding. Again, the Company may not have
14 monetized the problems revealed in March and April, but assuredly understood
15 that the results of testing at Bridger coal mine were not as favorable as presented
16 during the SCR proceeding. During the due diligence period, the Company would
17 have been fully aware of the problem, and had already formulated a plan to
18 request [REDACTED] in increased fuel costs at Bridger coal mine in the rate case
19 now before the Commission. This Commission clearly was, and remains, entitled
20 to the best possible information available from the Company to ensure that their
21 decision remained founded in factually correct analysis.

³⁶ Rocky Mountain Power Resource Decision Jim Bridger Units 3 and 4. Issued May 10, 2013. Utah Docket 12-035-92. Page 32. Attached as Confidential Exhibit SC___JIF-3.

1 In rebuttal testimony in the SCR approval docket, Sierra Club addressed
2 potentially higher coal costs directly:

3 The Company has not tested the net present value of the Bridger
4 retrofits under a range of coal prices, and has implied in response
5 to discovery that because much of the coal is not provided by a
6 third party, there is no uncertainty in its pricing. It is clear that
7 third party pricing, however, is not the only source of uncertainty
8 in the Company's coal price forecast.³⁷

9 The Company was aware of the coal price increase while the SCR docket was still
10 open and under consideration, had been notified of the concern that coal price
11 uncertainty could markedly change the outcome of the SCR analysis, and was
12 aware that this Commission had predicated their finding on the understanding that
13 the economics of the SCRs were firmly established and immobile. While it is not
14 clear whether the Company deliberately withheld information vital to the
15 evaluation of the SCR, the information would clearly have been meaningful in the
16 earlier SCR proceeding before ratepayer funds were already committed.

17 **Q What are your recommendations to this Commission regarding the Jim**
18 **Bridger SCRs?**

19 **A** I recommend that the Commission consider four possible sets of sanctions with
20 regards to the Company's omitting adequate, timely and complete data to this
21 Commission. The SCRs at Jim Bridger are not currently part of this rate case, and

³⁷ See Rebuttal Testimony of Dr. Jeremy Fisher in Utah Docket 12-035-92, p9 lines 6-10.

1 thus are not available for a full or partial disallowance. However, other options
2 are as follows. These options may be considered singularly or in combination.

3 1. The Commission could consider the failure to provide critical information to
4 the Commission represents a poor management decision, effectively shifting
5 excess risk to ratepayers, rather than the Company. In this light, the
6 Commission should consider a meaningfully penalizing reduction in the
7 Company's return on equity (ROE). Alternatively, the Commission could
8 consider a one-time penalty against the Company, equivalent to the difference
9 between the Company's return on equity and debt service for the return on the
10 \$250 million investment, or approximately \$21 million (Utah share).³⁸

11 2. The Commission could disallow the incremental costs of coal delivered at Jim
12 Bridger above and beyond those used in the SCR Rebuttal Analysis. The
13 Company's SCR analysis failed to examine high coal cost risk, and omitted
14 the higher coal costs that are now incurred at Bridger coal mine. The
15 Company would have reasonably known of these higher costs prior to the
16 closure of that docket. As such, the Company, and not consumers, should be
17 encumbered by the incrementally higher coal costs delivered to Jim Bridger
18 above those modeled in the SCR Rebuttal Analysis. Effectively, this would

³⁸ Assume debt service at 7.17% (WACC), requested ROE at 10%, [REDACTED] investment over 23 years, and Utah share of 43%.

1 result in a disallowance of approximately \$10 million during the test period
2 (Utah share).³⁹

3 3. The Commission could effectively reopen the matter of Jim Bridger's SCR
4 retrofits, and immediately require additional analysis to determine whether
5 any stranded costs should either entirely or largely be attributable to the
6 Company if the retrofits do not pass a full contemporary analysis. The
7 Company should be required to disclose a precise record of when it first
8 understood that the long-term trajectory of coal costs at Jim Bridger were
9 likely be significantly higher than presented in rebuttal testimony, and run an
10 analysis from information known at that time.

11 4. Finally, this case does consider additional capital expenses associated with
12 Jim Bridger. PacifiCorp is requesting recovery of \$37 million of
13 improvements to the Jim Bridger plant, at least \$23 million of which are
14 directly attributable to the long-term operation and maintenance of Jim
15 Bridger 3 & 4. The recovery on these costs should be deferred until such time
16 that the SCR analysis is rendered complete. Then, the Commission could
17 determine if life extension measures were warranted, depending on the
18 disposition of Jim Bridger 3 & 4.

³⁹ Coal prices in 2014 and 2015 are [REDACTED] above SCR Rebuttal Analysis costs. Over the test period, Bridger 3&4 are predicted to consume approximately [REDACTED] MMBtu, or an average of about \$22.6 million Company share incremental costs. Multiplying by a 43% Utah share yields approximately a \$10 million increment attributable to Utah.

1 **3. HAYDEN SCR RETROFIT IS INCONSISTENT WITH COMPANY PLANNING**

2 **Q What is the Company requesting for recovery at the Hayden plant?**

3 **A** The Company anticipates spending \$19,975,680 through June 2015 at Hayden 1
4 to install SCR in compliance with Colorado's federally approved regional haze
5 SIP. The Company seeks recovery of approximately \$3 million within the test
6 period of this docket.⁴⁰

7 **Q Do you contest that the SCRs at Hayden are required by Federal and**
8 **Colorado law?**

9 **A** No.

10 **Q How far along is the SCR construction project at Hayden?**

11 **A** According to a Semi-Annual Progress Report to the Colorado Public Utilities
12 Commission issued in March 17, 2014, Xcel has spent about 30% of the overall
13 estimated project cost, or \$22 million.⁴¹

14 **Q What is the nature of your concern with the Hayden retrofits?**

15 **A** The installation of the SCRs at Hayden is inconsistent with PacifiCorp's planning.
16 The precise nature of this concern was informed by a highly confidential

⁴⁰ Exhibit RMP____(SRM-3), Page 8.6.21

⁴¹ Semi-Annual Progress Report of Public Service Company of Colorado for the Hayden Emissions Control Project. March 17, 2014. Docket 11A-917E, Attachment 2.0: Summary Cost Estimate Report. Attached as Exhibit SC___JIF-8.

1 Company document; therefore, the remainder of my testimony pertaining to
2 Hayden is designated below as highly confidential.

3 **[BEGIN HIGHLY CONFIDENTIAL TESTIMONY]**

4 Notice: Rocky Mountain Power has asserted a claim of confidentiality under Utah
5 Code Ann. §63G-2-309 for portions of this section on the grounds that
6 information referenced in this testimony has been designated by Rocky Mountain
7 Power as Highly Confidential and constitutes confidential business information.
8 Sierra Club makes no claim of confidentiality and includes this notice at the
9 request of Rocky Mountain Power.

10 **Q Please describe the nature of your concern with the recovery of the Hayden 1**
11 **SCR retrofit in this docket.**

12 **A** [REDACTED]
13 [REDACTED]
14 [REDACTED], PacifiCorp produced an internal memo entitled “Hayden
15 U1 System Optimizer Model Financial Analysis.”⁴² [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED] The analysis in the memo was the same type of
20 analysis attached to Mr. Teply’s testimony regarding the baghouse and low-NOx
21 burner installations at Hunter 1, dated May 2012.⁴³

⁴² Memo provided in response to 1st Supplemental Response to Sierra Club DR 2.11e.

⁴³ See Exhibit RMP____(CAT-3) CONF.

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED] 44 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 **Q Did the Company review the economics of the Hayden 1 retrofit as part of**
13 **the recently concluded 2013 IRP process?**

14 **A No.** [REDACTED]
15 [REDACTED] 45

⁴⁴ Due to the Highly Confidential designation of the memo, I am unable to quote the Company's findings directly.
⁴⁵ See 2013 IRP, Confidential Volume III, pages 14-15.

1 Q

[REDACTED]

2

[REDACTED]

3 A

[REDACTED]

4

[REDACTED]

5

[REDACTED]

6

[REDACTED]

7

[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

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[REDACTED]

21

[REDACTED]

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[REDACTED]

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[REDACTED]

⁴⁶ See 2013 IRP, Confidential Volume III, pages 14-15.

1 [REDACTED]

2 [REDACTED]

3 **Q** [REDACTED]

4 [REDACTED]

5 **A** [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]⁴⁷ [REDACTED]

11 [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

⁴⁷ Docket 12-035-92

1 **Q Did the Hayden 1 analysis review the potential of selling Hayden?**

2 **A** [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED] 48 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]

17 **Q Has PacifiCorp offered Hayden for sale?**

18 **A** Yes. On March 14, 2014, PacifiCorp announced a Request for Expressions of
19 Interest for the sale of their shares of Hayden 1 & 2.⁴⁹

⁴⁸ Colorado Docket 11A-917E, filed November 14, 2011.
⁴⁹ Attached as Exhibit SC___JIF-9.

1 **Q** **Would a successful sale of PacifiCorp's share of Hayden 1 be in PacifiCorp's**
2 **interests?**

3 **A** [REDACTED]
4 [REDACTED]
5 [REDACTED] 50
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 **Q** [REDACTED]
13 [REDACTED]

14 **A** [REDACTED]
15 [REDACTED]
16 1. [REDACTED]
17 [REDACTED]

50 [REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵¹

Q Why should the Company have sought the sale of Hayden expediently, rather than waiting until March of this year?

A [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵¹ PacifiCorp 2013 Integrated Resource Plan, Confidential Volume III, page 14-15.

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]

7 **Q What is your conclusion and recommendation regarding Hayden 1?**

8 **A** [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]

15 The Commission should find the decision to install SCRs imprudent, and defer
16 recovery of any SCR expenses until after the sale of Hayden 1 is complete. At that
17 time, the Commission should require the Company to assess whether the costs of
18 the SCR were appropriately recovered in the sales price of the unit. Recovery on
19 the SCR should be contingent on proof that the sale price includes an appropriate
20 premium for the SCRs reflecting the opportunity cost of not having sold the unit
21 in early 2013 without the SCRs. If PacifiCorp is unable to sell the unit, the costs

1 of the SCR should be disallowed in full, and the Commission should examine if
2 the Company failed to take advantage of more favorable market conditions in
3 2013.

4 **[END HIGHLY CONFIDENTIAL TESTIMONY]**

5 **4. COSTS AND REVENUES FROM NAUGHTON ARE INCONSISTENT WITH COMPANY**
6 **PLANS**

7 **Q Please describe your concerns with the Company's estimate of costs and**
8 **revenues from Naughton unit 3 in this case.**

9 **A** The Company's request for recovery assumes that Naughton 3 will be converted
10 to a gas-fired boiler by December 31, 2014.⁵² In this proceeding, operating and
11 fuel costs, revenues, and recovery are all predicated on the assumption of a 2014
12 conversion. At the same time, however, the Company also discusses its intent to
13 delay Naughton 3's gas conversion until December 31, 2017.⁵³ If successful and
14 EPA approves the extension, the costs and penalties recovered by the Company in
15 this docket will not be applicable, and the Company will likely over-recover costs.
16 I believe that the Company's projection for net power costs should be internally
17 consistent with current events, and should not burden ratepayers with undue risks.

⁵² As determined by the Company in Wyoming docket 20000-400-EA-11, the Certificate for Public Convenience and Necessity (CPCN) for SCR and a baghouse at Naughton 3 which ultimately resulted in the Company's decision to convert the unit to a gas-fired boiler preferentially.

⁵³ See Direct Testimony of Mr. Chad Teply, page 43, lines 931-938.

1 At the present time, the Company's revenue requirements should reflect their
2 expected and intended plan, which appears to be a conversion of the Naughton 3
3 unit in 2017.

4 **Q Why is the Company pursuing a 2017 conversion of Naughton 3 rather than**
5 **the original 2014 conversion?**

6 **A** PacifiCorp had initially determined that compliance under Wyoming's regional
7 haze SIP required the Company to reduce emissions before December 31, 2014,⁵⁴
8 The Company supposed that it had to meet the lower emissions limit with an SCR
9 and baghouse at Naughton 3.⁵⁵ The Company filed a CPCN application in
10 Wyoming,⁵⁶ but – following intervenor testimony, corrected analysis errors, and
11 updated commodity price forecasts – the Company found that the retrofit of the
12 unit was non-economic. Consequently, the Company withdrew the application
13 and committed to convert to a gas-fired boiler by the end of 2014.

14 However, in the final Regional Haze FIP for Wyoming, EPA re-stated a point that
15 Sierra Club has brought to this Commission attention before: BART requirements
16 under the Regional Haze Rule do not become enforceable until five years after the
17 EPA takes final action on the SIP or issues a FIP. The final rule stated:

⁵⁴ See Application for a certificate of public convenience and necessity to construct the selective catalytic reduction system, pulse jet fabric filter system and related upgrades for Naughton Unit 3, Wyoming Docket 20000-400-EA-11, page 2. "Both projects are required to continue to operate Naughton Unit 3 beyond December 31, 2014."

⁵⁵ See RMP____(CAT-4).

⁵⁶ Wyoming Docket 20000-400-EA-11.

1 Under the terms of the SIP, the compliance deadlines for the
2 emission limits in the SIP for Naughton Unit 3 do not become
3 effective until five years after our final action.⁵⁷

4 PacifiCorp requested a permit modification for Naughton 3, requesting emissions
5 limits consistent with a conversion to natural gas “in 2018,”⁵⁸ and the state has
6 granted a permit that “require(s) that the coal pulverizers for Unit 3 be removed
7 from service no later than January 1, 2018 to ensure that Unit 3 cannot operate on
8 coal during the conversion to a natural-gas fired unit.”⁵⁹

9 **Q What types of costs are incurred by the Company for a December 31, 2014**
10 **conversion of Naughton 3?**

11 **A** One of the most significant costs that the Company expects to incur for the
12 advanced conversion of Naughton 3 is an increase in coal costs at the Naughton
13 plant.

14 According to Ms. Crane, “coal costs at the Naughton generating plant will
15 increase...due to the discontinuation of the Naughton Unit 3 as a coal fired
16 generating facility at the end of 2014.”⁶⁰ She describes that the coal contract that
17 PacifiCorp holds with Kemmerer mine [REDACTED]

⁵⁷ 79 FR 5045.

⁵⁸ See Wyoming DEQ permit in Exhibit RMP____(CAT-5), Response to Comments, page 1.

⁵⁹ See Wyoming DEQ permit in Exhibit RMP____(CAT-5), Response to Comments, page 3. See also permit conditions 20 and 21.

⁶⁰ Direct Testimony of Cindy Crane, pages 6-7, lines 105-109.

1 [REDACTED]⁶¹ With the
2 2014 retirement of Naughton 3, Ms. Crane projects that Naughton will consume
3 [REDACTED] of coal during the 2014-2015 test period.⁶² [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]⁶³ [REDACTED]
7 [REDACTED] In total, Ms. Crane estimates that
8 Naughton would incur about [REDACTED] above the costs estimated in the 2012
9 Utah General Rate Case.⁶⁴
10 Overall, with a 2014 conversion of Naughton 3, Ms. Crane estimates that
11 anywhere from [REDACTED] of the coal received from Kemmerer would be
12 shipped [REDACTED] in early 2015.⁶⁵ Because this rate case blends normal
13 deliveries in 2014 with [REDACTED]
14 [REDACTED] this Commission could
15 expect to see yet an additional request for coal cost increases at Naughton in the
16 next general rate case.

⁶¹ Direct Testimony of Cindy Crane, pages 6, lines 91-96.

⁶² See Direct Testimony of Cindy Crane, Confidential Table 3 (page 8)

⁶³ See line 106 of tab "Detail" in 700-23 CONF\C.8.f Conf\NAUGHTON.xlsx of Ms. Crane's workpapers. Attached as Confidential Exhibit SC___JIF-10.

⁶⁴ See Direct Testimony of Cindy Crane, Confidential Table 2 (page 5)

⁶⁵ See lines 106 ([REDACTED]) and 74 ([REDACTED]) of tab "Detail" in 700-23 CONF\C.8.f Conf\NAUGHTON.xlsx of Ms. Crane's workpapers. Attached as Confidential Exhibit SC___JIF-10.

1 **Q If EPA rejects the Company’s request for a 2018 gas conversion date for**
2 **Naughton 3, what are the implications for the Company?**

3 **A** [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED]
9 [REDACTED] ⁶⁶ [REDACTED]
10 [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]

⁶⁶ See Confidential Attachment Sierra Club 4.3-1, p.3-4, Attached as Confidential Exhibit SC___JIF-11, see section “[REDACTED]”

1 [REDACTED] In mid-2011, I provided testimony to this Commission detailing the
2 risks facing the Company's fleet, and the potential incumbent costs in the
3 forthcoming environmental regulations.⁶⁷ As I indicated then, PacifiCorp was
4 well aware of the magnitude of the impending regulations it faced, and the risks
5 therein, [REDACTED] It was no surprise that
6 the Naughton 3 unit was found to be non-economic in Wyoming's CPCN docket
7 20000-400-EA-11, and the Company should have reasonably anticipated that
8 outcome [REDACTED].

9 **Q Has the Company filed an update to its case in chief regarding recovery of**
10 **Naughton's conversion costs?**

11 **A** Yes. On April 10, 2014 the Company filed a Net Power Cost Update correcting
12 several items within its GRID model, and provided a "Naughton Unit 4 [sic] Gas
13 Conversion Update." This update explained that the Company was aware of the
14 inconsistency between the revenue requirement case prepared by Mr. Steven
15 McDougal, assuming a 2014 cessation of coal-firing at Naughton 3, and the
16 testimony of Mr. Chad Teply, assuming the 2017 cessation of coal operations at
17 Naughton 3. The Company asks to maintain its current assumption up to the time
18 that Wyoming accepts the Company's request to modify its Regional Haze
19 permit. If the permit is modified prior to rebuttal testimony in June, the Company
20 will amend their filing, reflecting the later date. If the permit is modified after

⁶⁷ See Direct Testimony of Jeremy Fisher in Utah Docket 10-035-124.

1 June 4, the Company proposes to “measure and defer any cost savings from
2 continued Naughton Unit 3 coal operations past December 2014 for future rate
3 making treatment.”⁶⁸

4 **Q What are your recommendations to this Commission?**

5 **A** The Company’s anticipated increase in costs attributable to the 2014 conversion
6 of Naughton 3 should be eliminated entirely from this case. To the best I am able
7 to determine, these costs amount to approximately \$5 million attributable to
8 Utah.⁶⁹ The Company’s proposal to maintain the current rate treatment until
9 Wyoming modifies their permit unacceptably shifts risks and costs to the Utah
10 ratepayers. The Company currently has an air permit from Wyoming with a 2017
11 conversion date explicitly identified,⁷⁰ and may reasonably assume a postponed
12 conversion date. The Company’s proposal to create a deferred savings account to
13 reimburse ratepayers inappropriately puts ratepayers in the position of holding the
14 Company’s excess risk. First, the Company’s generous ROE theoretically reflects
15 the fact that the Company’s shareholders, not customers, accept investment risks.
16 Second, the EPA’s plainly stated position that the Company’s push to control
17 Naughton 3 ahead of a federal requirement was not required by law only further

⁶⁸ April 10, 2014 Letter from Jeffrey Larsen re Net Power Cost Update, page 4.

⁶⁹ Attachment OCS 9.1, Attached as Exhibit SC___JIF-12, indicates how Exhibit RMP__(SRM-3), page 1.0 (“Normalized Results of Operations – 2010 Protocol), would change with the assumption that Naughton 3 operates through 2018. Using a mechanism similar to that shown in RMP__(SRM-3) page 1.1, I estimate a price change of \$71 million, instead of \$76 million.

⁷⁰ See Exhibit RMP__(CAT-5).

1 reinforces that this is a Company strategic initiative. It is unacceptable and

2 inconsistent to burden the Company's ratepayers with the investment risk.

3 If EPA ultimately decides that Naughton 3 must be converted in 2014, the

4 Company must then demonstrate that the [REDACTED] was

5 advantageous to ratepayers, regardless of the retirement date, [REDACTED]

6 [REDACTED]

7 **5. OVERALL RECOMMENDATIONS**

8 **Q Please summarize your overall recommendations to this Commission.**

9 **A** Generally, I find that in certain key areas relating to the PacifiCorp's existing
10 assets, the Company has made inconsistent decisions, or presented inconsistent
11 information to this Commission, resulting in incomplete and poor outcomes for
12 ratepayers.

13 With regards to the increased costs of coal at Jim Bridger, I found that the
14 Company should have disclosed to this Commission information leading to the
15 escalation of costs. This information should have been critical to the recently
16 closed Jim Bridger SCR approval docket (12-035-92). Had the Company
17 disclosed its rapidly escalating (and maintained) costs, this Commission could
18 have reasonably reached an alternative conclusion. Instead, the Company
19 withheld key data from the decision-making process. As such, I recommend a
20 series of sanctions that may be taken individually, or together:

- 1 • Reduce ROE for poor management, or penalize the Company the
2 difference of their net income on the SCRs, approximately \$21 million
3 reduction in price change;
- 4 • Disallow the incremental costs of coal delivered to Jim Bridger 3 & 4
5 above those considered in the SCR analysis, approximately \$10 million
6 reduction in price change;
- 7 • Require the Company to re-assess the Jim Bridger SCRs in light of
8 information acquired in late 2013, and hold the Company accountable for
9 stranded costs incurred between the start of construction and the time of
10 the analysis;
- 11 • Disallow or defer other capital expenses at Jim Bridger 3 & 4 requested in
12 this case, amounting to \$23 million in rate base, until such time that the
13 SCR is determined to be useful or not.

14 With regards to Hayden 1, the Commission should find the decision to install
15 SCRs imprudent, and defer recovery of any SCR expenses until after the sale of
16 Hayden 1 is complete. [REDACTED]

17 [REDACTED]
18 [REDACTED] If PacifiCorp is unable to sell the unit, the costs of the SCR
19 should be disallowed in full.

1 With regards to the increased cost of operations due to the 2014 retirement of
2 Naughton 3, these costs should be removed from this case in their entirety; unless
3 it is determined that Naughton 3 must be converted in 2014. This amounts to a
4 reduction in price change of \$5 million.

5 **Q Does this conclude your testimony?**

6 **A** It does.