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**BEFORE THE  
WYOMING PUBLIC SERVICE COMMISSION**

In the Matter of the Application of Rocky Mountain Power for Authority to Increase Its Retail Electric Utility Service Rates in Wyoming Approximately \$36.1 Million per Year or 5.3 Percent

**Docket No. 20000-446-ER-14  
(Record No. 13816)**

**Direct Testimony of  
Jeremy I. Fisher, PhD**

**On Behalf of  
Sierra Club**

**REDACTED VERSION**

**July 25, 2014**

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

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

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

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

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

12 **A** I have provided consulting services for various clients, including the U.S. Environmental  
13 Protection Agency (“EPA”), the National Association of Regulatory Utility  
14 Commissioners (“NARUC”), the California Energy Commission (“CEC”), the California  
15 Division of Ratepayer Advocates (“CA DRA”), the National Association of State Utility  
16 Consumer Advocates (“NASUCA”), National Rural Electric Cooperative Association  
17 (“NRECA”), the State of Utah Energy Office, the State of Alaska, the State of Arkansas,  
18 the Regulatory Assistance Project (“RAP”), the Western Grid Group, the Union of  
19 Concerned Scientists (“UCS”), Sierra Club, Earthjustice, Natural Resources Defense  
20 Council (“NRDC”), Environmental Defense Fund (“EDF”), Stockholm Environment  
21 Institute (“SEI”), Civil Society Institute, and Clean Wisconsin. I developed a regulatory

1 tool for EPA and state air quality agencies, released by EPA in 2014 as the Avoided  
2 Emissions and Generation Tool (“AVERT”), and have provided technical support to EPA  
3 regarding electric utility planning practices.

4 I have provided testimony in electricity planning and general rate case dockets in  
5 Wyoming, Indiana, Louisiana, Kansas, Kentucky, Oregon, Nevada, Utah, and Wisconsin.  
6 I have reviewed and evaluated the energy planning practice of utilities in dockets  
7 involving integrated resource plans (“IRP”) and certificates of public convenience and  
8 necessity (“CPCN”).

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

11 My full curriculum vitae is attached as Exhibit 401.

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

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

14 **Q Have you testified in front of the Wyoming Public Service Commission previously?**

15 **A** Yes. Most recently, I provided direct and surrebuttal testimony in response to Rocky  
16 Mountain Power’s voluntary request for approval for the selective catalytic reduction  
17 (“SCR”) controls at Jim Bridger Units 3 and 4 (Docket No. 20000-418-EA-12), and in  
18 PacifiCorp’s 2011 general rate case (Docket No. 20000-384-ER-10). I have also provided  
19 testimony on PacifiCorp planning issues before the Utah and Oregon Commissions.

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

2 **A** My testimony responds to the direct testimony of Mr. Chad Teply with regards to the  
3 installation of an SCR at Hayden Unit 1 in Colorado. In particular, I review the extent to  
4 which the Company's request for recovery on an SCR system at Hayden is consistent  
5 with its own internal planning and due diligence documentation.

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

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

10 **Q Do you contest that the SCRs at Hayden are required by Federal and Colorado law**  
11 **as a condition of continued operation?**

12 **A** No.

13 **Q Is the SCR construction project at Hayden currently underway?**

14 **A** According to a Semi-Annual Progress Report to the Colorado Public Utilities  
15 Commission issued in March 17, 2014, Xcel has spent about 30% of the overall estimated  
16 project cost, or \$22 million.<sup>2</sup> PacifiCorp is a minority owner at Hayden, and owns 25% of  
17 Unit 1 (or 40 MW) and 13% of Unit 2 (or 36 MW).

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<sup>1</sup> Exhibit RMP\_\_\_\_(SRM-3), Page 8.6.21; provided in this docket in RMP's 1st Supplemental Response to Sierra Club Data Request 2.2. Attached as Exhibit 402.

<sup>2</sup> 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 403.

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

2 **A** The installation of the SCRs at Hayden is inconsistent with PacifiCorp's planning. My  
3 concern arose after inspection of a highly confidential Company document; therefore, the  
4 remainder of my testimony pertaining to Hayden is designated below as confidential.

5 **[BEGIN CONFIDENTIAL TESTIMONY]**

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

8 **A** [REDACTED]

9 [REDACTED]

10 [REDACTED], PacifiCorp produced an internal memo entitled "Hayden U1  
11 System Optimizer Model Financial Analysis."<sup>3</sup> [REDACTED]

12 [REDACTED]

13 [REDACTED]

14 [REDACTED] The analysis in  
15 the memo was the same type of analysis attached to Mr. Teply's testimony regarding the  
16 baghouse and low-NOx burner installations at Hunter 1, dated May 2012.<sup>4</sup>

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

<sup>3</sup> Existence of memo described in 1<sup>st</sup> Supplemental Response to Sierra Club DR 2.11e in Utah Docket 13-035-184; provided in this docket in response to Sierra Club DR 2.1.

<sup>4</sup> See Exhibit RMP\_\_\_\_(CAT-3) CONF.

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

7 **Confidential Table 1. Benefit (cost) of not retrofitting Hayden 1, according to 2012 analysis**  
8 **(M 2012\$).**

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

9  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]<sup>5</sup> [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]  
16 [REDACTED]

<sup>5</sup> Due to the Highly Confidential designation of the memo, I am unable to quote the Company's findings directly.

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

3   **A**   No. [REDACTED]  
4           [REDACTED]<sup>6</sup>

5   **Q**   [REDACTED]  
6           [REDACTED]

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

14           [REDACTED]  
15           [REDACTED]  
16           [REDACTED]  
17           [REDACTED]  
18           [REDACTED]  
19           [REDACTED]  
20           [REDACTED]  
21           [REDACTED]<sup>7</sup>

22          [REDACTED]  
23          [REDACTED]

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<sup>6</sup> See 2013 IRP, Confidential Volume III, pages 14-15.  
<sup>7</sup> See 2013 IRP, Confidential Volume III, pages 14-15.



1 [REDACTED]

2 [REDACTED]

3 [REDACTED]

4 [REDACTED]

5 **Q** [REDACTED]

6 [REDACTED]

7 **A** [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12 [REDACTED] <sup>8</sup> [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

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<sup>8</sup> Docket No. 20000-418-EA-12

1 **Q Did PacifiCorp's memo state whether the penalty provisions were likely to be**  
2 **applicable?**

3 **A** [REDACTED]  
4 [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]<sup>9</sup> [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]<sup>10</sup>  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]

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

17 **A** [REDACTED]  
18 [REDACTED]  
19 [REDACTED]  
20 [REDACTED]

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<sup>9</sup> Sierra Club DR 2.5(a)  
<sup>10</sup> Sierra Club DR 2.5(b)

1 [REDACTED]  
2 [REDACTED]  
3 [REDACTED]  
4 [REDACTED]<sup>11</sup> [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]

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

11 **A** Yes. On March 14, 2014, PacifiCorp announced a Request for Expressions of Interest for  
12 the sale of its shares of Hayden 1 & 2.<sup>12</sup>

13 **Q Has PacifiCorp received any offers for the acquisition of its share of Hayden?**

14 **A** No. As of July 7, 2014, PacifiCorp has received no offers, either in full or in part, for its  
15 share of Hayden or Craig plants.<sup>13</sup> PacifiCorp even offered its share of the unit to Xcel,  
16 but apparently received no offers from the majority owner as well.<sup>14</sup>

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<sup>11</sup> Colorado Docket 11A-917E, filed November 14, 2011.

<sup>12</sup> Attached as Exhibit 404.

<sup>13</sup> Sierra Club DR 2.8

<sup>14</sup> Sierra Club DR 2.9.

1 **Q** **Would a successful sale of PacifiCorp’s share of Hayden 1 have been in PacifiCorp’s**  
2 **interests?**

3 **A** [REDACTED]  
4 [REDACTED]<sup>15</sup> [REDACTED]  
5 [REDACTED]  
6 [REDACTED]  
7 [REDACTED]  
8 [REDACTED]  
9 [REDACTED]  
10 [REDACTED]  
11 [REDACTED]  
12 [REDACTED]

13 **Q** **Barring a sale, is the Company obligated to follow Xcel’s lead?**

14 **A** As a minority owner, barring arbitration or some other legal mechanism, PacifiCorp  
15 would be bound to pay for its share of the SCR. However, I assume a minority owner is  
16 not without rights. Having performed its own rigorous analysis of the retrofit, the  
17 Company may well have had sufficient grounds to contest the retrofit in arbitration. The  
18 participation agreement provides that capital expenditures must be “consistent with  
19 generally accepted practices in the electric utility industry.”<sup>16</sup> Generally accepted practice

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<sup>15</sup> [REDACTED]

<sup>16</sup> See 2013 IRP, Confidential Volume III, p15.

1 requires a rigorous and up-to-date analysis prior to the expenditure of large capital sums.  
2 PacifiCorp was aware that Xcel's justification for the project was at least a year stale in  
3 late 2012,<sup>17</sup> and was aware that Xcel had used an inflated gas price projection. PacifiCorp  
4 may have thought that an arbitration win was unlikely, but the costs of bringing this case  
5 to arbitration certainly would have paled in comparison with the penalty PacifiCorp's  
6 customers now face by holding a unit neither PacifiCorp nor Xcel currently believes is  
7 economic.

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

10 **A** The Company's forecast of natural gas prices has declined significantly since early 2013;

11 [REDACTED]  
12 [REDACTED]  
13 [REDACTED]  
14 [REDACTED]  
15 [REDACTED]

16 PacifiCorp offered its share in the plant just three months before EPA released the Clean  
17 Power Plan, the highly anticipated proposed CAA Section 111(d) rule for regulating  
18 carbon dioxide at existing stationary sources – a regulation anticipated to require most  
19 states and electric utilities to reduce their carbon footprint. [REDACTED]

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<sup>17</sup> Xcel filed its CPCN for Hayden's retrofits on November 14, 2011. Colorado docket 11A-917E.

1 [REDACTED]

2 [REDACTED]: Clearly, the unit has no value to another owner.

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

4 **A** [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 On a more general note, I'm concerned that PacifiCorp finds itself so beholden to  
11 onerous long-term contracts and penalty provisions that prevent the Company from  
12 making choices that would otherwise benefit ratepayers. From the Company's attachment  
13 to high cost captive coal mines and long-term contracts, to provisions that do not allow  
14 the Company to make economic decisions on its customers' behalf, PacifiCorp appears to  
15 have become entangled in a number of onerous deals.

16 The Commission should find the decision to install the SCRs at Hayden 1 imprudent, and  
17 deny recovery for these costs. Damages could be quantified by requiring the Company to  
18 assess the current value of Hayden 1 (i.e. the difference in present value assuming that  
19 the Company had liquidated its share of Hayden prior to the installation of SCRs, versus  
20 the least cost alternative). If that value is negative, the Company should be assessed that  
21 value. If the Company is able to sell its share of Hayden 1, the Commission should

1           require the Company to assess whether the costs of the SCR were appropriately  
2           recovered in the sales price of the unit. Recovery on the SCR should be contingent on  
3           proof that the sale price includes an appropriate premium for the SCRs reflecting the  
4           opportunity cost of not having sold the unit in early 2013 without the SCRs.

5           **[END CONFIDENTIAL TESTIMONY]**

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

7   **A**     It does.