EXHIBIT NO. \_\_\_ (DHH-1T)
DOCKETS UE-170033/UG-170034
2017 PSE GENERAL RATE CASE
WITNESS: DOUGLAS H. HOWELL

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND ENERGY,

Respondent.

**Docket UE-170033 Docket UG-170034** 

TESTIMONY OF

DOUGLAS H. HOWELL

ON BEHALF OF SIERRA CLUB

**September 15, 2017** 

### **Table of Contents**

| I.                    | Qualifications and Purpose of Testimony   | 1  |
|-----------------------|---|----|
| II.                   | Summary of Sierra Club Position   |    |
| III.                  | Colstrip Units 3 and 4 Depreciation   |    |
| IV.                   | The Settlement Provides Economic Benefits for PSE Customers                       |    |
| V.                    | Transitioning Off of Colstrip Will Provide Environmental Benefits                 |    |
| v.<br>VI.             | A Responsible Community Transition Plan will Help Provide an Equitable End to the | 13 |
| V 1.                  |   | 16 |
| <b>5</b> 7 <b>5 5</b> | Colstrip Plant  |    |
| VII.                  | Conclusion  | 17 |

### I. Qualifications and Purpose of Testimony

- 2 Q. Please state your name, occupation, and business address.
- 3 A. My name is Douglas H. Howell. I am a Senior Campaign Representative for the Sierra
- 4 Club's Beyond Coal Campaign. My business address is 180 Nickerson Street, Suite 202,
- 5 Seattle, Washington.
- 6 Q. Are you providing any exhibits with your testimony?
- 7 A. No.

14

15

16

17

18

19

1

- 8 Q. Please briefly describe the Sierra Club's Beyond Coal Campaign.
- 9 A. Sierra Club is a national, non-profit environmental and conservation organization

  10 incorporated under the laws of the State of California. Sierra Club is dedicated to the

  11 protection of public health and the environment. Sierra Club has more than 33,500

  12 members who live and purchase utility services in Washington, many of whom are
- residential customers of Puget Sound Energy ("PSE").<sup>1</sup>

Sierra Club's Beyond Coal Campaign advances the development of energy conservation and renewable energy policies, which reduce utility bills, and generate renewable energy. Sierra Club's work includes advocating for the implementation of robust incentive programs that assist its members and utility consumers to generate their own renewable energy and increase energy efficiency. The Sierra Club's work includes intervening in efficiency, renewable energy and ratemaking dockets at public

<sup>&</sup>lt;sup>1</sup> Sierra Club's membership numbers are based on data from August 2017. This number is higher than the approximately 26,000 members cited in Sierra Club's petition to intervene, which was based on data from December 2016.

utility commissions nationwide, submitting comments in numerous state and federal agency energy-related proceedings and rulemakings, attending and speaking at public hearings, speaking to students and civic and other organizations, and holding seminars and symposia - all in support of policies to reduce the impact of climate change and other air pollution by promoting clean energy alternatives and energy efficiency.

Sierra Club has worked to protect local customers from increased rates due to utility investment in aging coal plants, such as Colstrip, when clean energy alternatives and energy efficiency measures are possible.

### 9 Q. What are your responsibilities in the Sierra Club Beyond Coal Campaign?

I am responsible for coordinating advocacy and strategy for the Beyond Coal Campaign
in the Pacific Northwest. My work includes engaging with utilities such as PSE to
advocate for the responsible transition away from fossil generating resources toward
clean energy and energy efficiency. I have managed Sierra Club's advocacy work related
to Colstrip for the past six years.

### Q. Are you a technical expert?

- 16 A. No. I am providing testimony based on my knowledge and representation of the Sierra
   17 Club.
- 18 Q. Have you ever testified before the Washington Utilities and Transportation
  19 Commission (WUTC)?
- 20 A. No.

1

2

3

4

5

6

7

8

| Q. What is the purpose of your testimony | $^{\prime}$ in this | proceeding |
|--|---------------------|------------|
|--|---------------------|------------|

- 2 A. My testimony explains the basis for Sierra Club's decision to join and support the
- 3 Multiparty Settlement and Stipulation Agreement filed on September 15, 2017 in this
- 4 proceeding (the "Settlement").

1

13

### 5 Q. What is your recommendation?

- 6 A. I strongly recommend that the Commission approve the Settlement in full. The
- 7 Settlement is a landmark achievement that provides enormous economic, environmental
- and equity benefits for PSE ratepayers related to the future of the Colstrip coal plant. The
- 9 Commission has a unique opportunity in this proceeding to approve a multiparty
- agreement that comprehensively achieves this triple bottom-line. The Settlement also
- provides more certainty for PSE ratepayers and the community of Colstrip, and it can
- serve as a model for other Colstrip owners.

#### II. Summary of Sierra Club Position

- 14 Q. Please summarize Sierra Club's participation in this proceeding.
- 15 A. Sierra Club intervened in this proceeding primarily to address issues related to the
- 16 Colstrip coal plant in Montana. Sierra Club has advocated for years that PSE plan a
- 17 responsible transition away from Colstrip, which is one of the largest and most polluting
- coal plants in the Western United States.
- 19 PSE's application in this proceeding offered an opportunity for parties to address several
- issues regarding the future of the Colstrip plant. First, PSE proposed a change in
- depreciation rates for Colstrip Units 1 and 2 that reflected the obligations of a recent

- consent decree to close those units no later than 2022. Second, PSE proposed a change to
  the depreciation schedule for Colstrip Units 3 and 4, which are currently set at 2044 and
  2045, respectively.
- 4 Sierra Club submitted the pre-filed Response Testimony and Exhibits of Ezra D.
- 5 Hausman on June 30, 2017 (EDH-1T through EDH-9) and Cross-Answering Testimony
- of Ezra D. Hausman on August 9, 2017 (EDH-10T).

7

8

9

10

11

12

13

14

15

16

17

18

Sierra Club participated extensively in negotiations among the parties to address Colstrip and other issues. The resulting Settlement sets a clear path for PSE to pay down the undepreciated plant balances on a schedule that better recognizes the fact that the entire Colstrip coal plant is unlikely to operate past 2025. While the schedule is later than Sierra Club recommended in its pre-filed testimony, it represents a reasonable compromise for purposes of settlement that is in the public interest. The Settlement also includes additional terms that address Colstrip decommissioning and remediation expenses, reporting requirements, future use of its transmission line, and that provide funding for a community transition plan in Colstrip, Montana. It also provides important assistance to low-income households. Taken together, Sierra Club believes the terms of the Settlement are in the public interest.

### Q. Why does Sierra Club support the Settlement?

19 A. Sierra Club considered the following key issues that support its decision to support the
20 Settlement:

1. Accelerating the depreciation schedule for Colstrip Units 3 and 4 to December 31, 2027 (¶26) acknowledges a more realistic expectation for the remaining useful life of those units. While Sierra Club continues to believe that Units 3 and 4 are likely to close no later than 2025, the stipulated depreciation schedule significantly reduces the magnitude of undepreciated plant balances that would otherwise be in PSE's rate base when those units will likely retire. By accelerating the depreciation schedule from 2044/45 to 2027, PSE can now face the reality of the national and regional trends that make Colstrip uneconomic.

- 2. PSE agreed to make a crucial and laudable step toward a fair and orderly transition for the Colstrip workers and community by setting aside \$10 million for transition, with half of that money coming from PSE shareholders and the other half coming from accumulated production tax credits from wind generation (¶118).
- 3. The settlement would deliver on the funding plan that was mandated by the state legislature in 2016 to ensure money is set aside for cleanup of the toxic coal ash waste ponds and other remediation costs related to Colstrip Units 1 and 2 (¶116).
- 4. PSE agreed to establish a critical precedent of designating money for cleanup of the coal ash waste ponds for Colstrip Units 3 and 4. (¶117) This step will send a strong signal to other Colstrip owners that they need to be responsible and do the same.
- 5. PSE agreed to yearly reporting requirements on Colstrip to keep the Commission and stakeholders updated on retirement dates, the impact of retirement, cleanup costs for the toxic coal ash waste ponds, the sufficiency of funds for cleanup, and replacement power for Colstrip. (¶119) This reporting requirement creates a level of transparency that no other Colstrip owner has embraced and should serve as a model for other owners.
- 6. The Settlement requests that the Commission convene a workgroup in coordination with PSE and Commission Staff on the use of the transmission line for Colstrip Units 1 and 2. (¶121) This workgroup will allow transparency, public scrutiny and engagement that will facilitate future uses for the transmission line once Colstrip Units 1 and 2 retire. Overcoming transmission barriers will provide a critical opening for Montana wind development, which could be exported to Washington. Washington must diversify its renewable portfolio to become carbon free and Montana wind is the best complement to our existing renewable resources. Addressing the transmission barriers for the Colstrip line also ensures that PSE ratepayers are realizing the economic benefit of this valuable asset.
- 7. In addition to PSE extending its shareholder contribution of \$100,000 for weatherization programs and maintaining existing fund of \$500,000/annually, PSE is providing a one-time \$2 million addition for weatherization. (¶108)

### III. Colstrip Units 3 and 4 Depreciation

| 2  | Q. | How does the Settlement address depreciation at Colstrip Units 3 and 4?   |
|--|----|---|
| 3  | A. | Paragraph 26 of the Settlement states, "The Settling Parties agree to a depreciation  |
| 4  |    | schedule for Colstrip Units 3 and 4 that assumes a remaining useful life of those units   |
| 5  |    | through December 31, 2027." This provision represents a critical recognition among PSE  |
| 6  |    | Staff and other parties that the Colstrip coal plant is likely to stop providing service to   |
| 7  |    | PSE customers no later than Dec. 31, 2027.  |
| 8  |    | While Sierra Club continues to believe that an estimated end of useful life in 2027 is too  |
| 9  |    | late, the depreciation schedule in the Settlement represents a substantial improvement  |
| 10   |    | over both the current depreciation schedule of 2044/45 and PSE's filed-case of 2035.  |
| 11   |    | Furthermore, it facilitates the more likely retirement by 2025 or earlier.  |
|  |    |   |
| 12   | Q. | Why is it appropriate for the Commission to approve a depreciation schedule that  |
| 12<br>13                                   | Q. | Why is it appropriate for the Commission to approve a depreciation schedule that assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31,  |
|  | Q. |   |
| 13   | Q. | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31,   |
| 13<br>14                                   |    | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31, 2017?   |
| <ul><li>13</li><li>14</li><li>15</li></ul> |    | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31, 2017?  Setting the depreciation schedule for Colstrip Units 3 and 4 at December 31, 2027 is a   |
| 13<br>14<br>15<br>16                       |    | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31, 2017?  Setting the depreciation schedule for Colstrip Units 3 and 4 at December 31, 2027 is a critical step in planning for the retirement of those units. As discussed in detail in Dr.  |
| 13<br>14<br>15<br>16<br>17                 |    | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31, 2017?  Setting the depreciation schedule for Colstrip Units 3 and 4 at December 31, 2027 is a critical step in planning for the retirement of those units. As discussed in detail in Dr. Hausman's testimony, current economic, environmental and political factors demonstrate   |
| 13<br>14<br>15<br>16<br>17<br>18           |    | assumes the remaining useful life for Colstrip Units 3 and 4 ends on December 31, 2017?  Setting the depreciation schedule for Colstrip Units 3 and 4 at December 31, 2027 is a critical step in planning for the retirement of those units. As discussed in detail in Dr. Hausman's testimony, current economic, environmental and political factors demonstrate that Colstrip Units 3 and 4 are unlikely to operate past December 31, 2024. |

that calls for no more coal by 2025.<sup>2</sup> More recently, the City of Olympia passed
Resolution M-1898 on August 22, 2017, which calls for PSE to retire the Colstrip plant
by 2025 and replace it with 100 percent clean energy. Dozens of elected officials across
the service territory have also testified in favor of a 2025 retirement date. By removing 18
years off the depreciation schedule for the remaining Colstrip units, the Commission
would be ensuring that a responsible transition to a coal-free Washington State does not
leave customers or PSE with excess stranded costs.

### Q. What other factors make it likely that Colstrip Units 3 and 4 will close by 2025?

In 2014, Washington Governor Jay Inslee issued Executive Order 14-04<sup>3</sup> establishing a Governor's Carbon Emissions Reduction Taskforce tasked to "establish a cap on carbon pollution emissions, with binding requirements to meet our statutory emission limits, and it must include the market mechanisms needed to meet the limits in the most effective and efficient manner possible." Executive Order 14-04 also directed the Governor's Legislative Affairs and Policy Office to "seek negotiated agreements with key utilities and others to reduce and eliminate over time the use of electrical power produced from coal." And to "engage key electrical utilities that generate electricity through coal-fired facilities located outside the state and that rely on this electricity to meet their Washington electrical loads, with the objective of reducing overall greenhouse gas emissions from the generation of electricity." These goals cannot be met unless and until

A.

<sup>&</sup>lt;sup>2</sup> EDH-1T at 32.

<sup>&</sup>lt;sup>3</sup> Available at http://www.governor.wa.gov/sites/default/files/exe\_order/eo\_14-04.pdf.

<sup>&</sup>lt;sup>4</sup> Ibid, pp. 2-3.

<sup>&</sup>lt;sup>5</sup> Ibid, p. 4.

Colstrip is retired.

1

- 2 Q. Several coal plants across the country have closed when faced with new capital
- 3 expenditures necessary to comply with modern environmental laws and regulations.
- 4 Do Colstrip Units 3 and 4 face such regulations?
- A. Yes. Based on the best estimates of several Colstrip owners, it appears most likely that an 5 6 expensive and protective pollution control, selective catalytic reduction or "SCR," would be required in the mid-2020 timeframe to meet the reasonable progress requirements of 7 the Regional Haze Rule. Several of Colstrip's co-owners acknowledge this likelihood. 8 9 PacifiCorp's 2015 IRP included an assumption that it will incur costs to install SCR at Colstrip 3 and 4 in 2023 and 2022, respectively. Portland General Electric's 2016 IRP 10 assumed that SCR would be required by 2027 in order to meet the "reasonable progress" 11 requirements,<sup>7</sup> and Avista's recently completed 2017 IRP assumes an SCR will be 12 required by the end of 2026. While the ultimate timing of the Regional Haze regulations 13 14 remains uncertain, it is likely that some major capital expense will be needed during one of the mid-2020 compliance periods. Given the poor economic performance of Colstrip, 15

it is highly unlikely that large capital expenditures to comply with these regulations

16

17

would be a least-cost alternative.

<sup>&</sup>lt;sup>6</sup> EDH-1T at 35.

<sup>&</sup>lt;sup>7</sup> Id

<sup>&</sup>lt;sup>8</sup> Avista 2017 Integrated Resource Plan at p. 12-4.

## Q. What evidence supports the conclusion that Colstrip Units 3 and 4 will not be cost effective?

A. I am not an expert on economic modeling, but Dr. Hausman addressed this issue in detail in his testimony. The trends affecting the coal industry in general are similarly applicable to Colstrip. PSE's own analysis recently confirmed the marginal nature of the Colstrip plant during the 2017 IRP advisory group meeting on August 11, 2017 when it presented an analysis showing that a carbon price imposed in 2022 would render the Colstrip Units uneconomic. Even if a carbon tax is not specifically imposed, that cost provides an informative proxy for the type of regulations that are likely to be imposed at either the state or federal level – or both – in the 2020 timeframe.

# Q. Why is it important to align the depreciation schedule with the expected retirement date of Colstrip Units 3 and 4?

Aligning the depreciation schedule with estimated retirement dates appropriately balances customer and shareholder interests. Given the likelihood that Colstrip will retire sooner than its current depreciation schedule, accelerated depreciation protects the interests of utility shareholders by allowing recovery of plant assets during the life of the plant.

Accelerated depreciation also protects customers by minimizing the risk of intertemporal cost shifting between current ratepayers who are continuing to receive power from the

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

A.

<sup>&</sup>lt;sup>9</sup> EDH-1T at pp. 25-31.

<sup>&</sup>lt;sup>10</sup> See page 53 of presentation available here:

 $https://pse.com/aboutpse/EnergySupply/Documents/01\_PSE\_2017\_IRPAG\_DRAFT\_August\%\ 2011\_2017\_UPDAT\ ED.pdf$ 

| 1  |    | plant, and future ratepayers who may otherwise be required to pay off undepreciated          |
|----|----|--|
| 2  |    | assets after the plant has stopped providing power. This risk of intertemporal inequities is |
| 3  |    | highlighted by the situation facing PSE in this proceeding whereby PSE has had to            |
| 4  |    | dramatically accelerate the depreciation schedule at Colstrip Units 1 and 2 over a short     |
| 5  |    | period of time.  |
| 6  |    | It is highly unlikely that Colstrip Units 3 and 4 will operate until the currently scheduled |
| 7  |    | dates of 2044 and 2045, or even as long as the 2035 date proposed by PSE in its              |
| 8  |    | application. If the Commission does not approve the 2027 depreciation schedule, it is        |
| 9  |    | likely that it will require a future Commission to choose between either (1) forcing future  |
| 10 |    | customers to pay for a plant that is not providing any benefit to them, or (2) forcing PSE   |
| 11 |    | shareholders to absorb the stranded assets at the end of the Colstrip's useful life, or some |
| 12 |    | combination of the two.  |
| 13 |    | Accelerating the depreciation schedule at Colstrip Units 3 and 4 will help to mitigate that  |
| 14 |    | problem. While it is still likely that Colstrip Units 3 and 4 will close earlier than 2027,  |
| 15 |    | accelerating the depreciation schedule now significantly reduces the plant balance that      |
| 16 |    | would remain if and when the plant retires before 2027.                                      |
| 17 | Q. | Does approval of the December 31, 2027 depreciation schedule mean that Colstrip              |
| 18 |    | Units 3 and 4 will retire on that date?  |
| 19 | A. | No. In fact, as I discussed above, Colstrip Units 3 and 4 are likely to retire before that   |
| 20 |    | date.  |

- Q. Why should the Commission change the depreciation date to December 31, 2027 for Colstrip Units 3 and 4 if it is not certain about the date that it will retire?
- The depreciation schedule should align with the expected retirement of the units. As A. 3 discussed above, this schedule reduces the intergenerational inequities of customers who 4 may have to pay for units that they do not receive power from. However, certainty in 5 retirement dates is not required – nor is it advisable – in setting a depreciation date. There 6 are several factors that go into a decision to retire a coal unit, and regulators will rarely 7 have perfect insight into a future retirement date. Regulators must therefore use their best 8 judgment based on the evidence available to them to estimate the likely end of useful life 9 for the units. For Colstrip Units 3 and 4, the evidence overwhelmingly points to a 10 retirement date no later than 2027. Ignoring this overwhelming evidence because it is not 11 "certain" is unfair to future ratepayers. If in future years the Commission concludes based 12 on additional evidence that a different retirement date – either earlier or later – is likely, it 13 will be free to readjust the depreciation schedule to match that evidence. Reviewing the 14 depreciation schedule is, in part, the function of the Colstrip reporting requirements in 15 this settlement. 16

### IV. The Settlement Provides Economic Benefits for PSE Customers

- 18 Q. Does the Settlement provide economic benefits to PSE customers?
- Yes. One of the critical lessons learned from Colstrip Units 1 and 2 was that when stakeholders fully understood the economic costs of those units, the more quickly the retirement date was realized. Originally, PSE and other parties believed those units

would retire in 2035, then 2030, then 2025. Now it is 2022 or earlier. We are about to repeat that mistake with Units 3 and 4. The economic reality of a 2025 retirement date for Colstrip Units 3 and 4 is increasingly obvious. To the extent that stakeholders do not fully understand the trends, they are putting PSE ratepayers at risk. In fact, PSE's most recent analysis reveals just that: Colstrip Units 3 and 4 will not be economic in the near future.

It is time to acknowledge economic realities. When parties agreed in the 2007 rate case to extend the debt on Colstrip Units 3 and 4 to 2045, they began a now 10-year process of ratepayers under-paying the debt on those units. Now ratepayers need to reverse that trend to catch up on under payments, and a 1 percent rate increase is a very modest rate impact to remedy that deficiency.

### Q. Why is it in ratepayer interests to depreciate Colstrip Units 3 and 4 faster?

13 A. Ratepayers do not want to be paying off undepreciated plant balances in 2028 and beyond
14 if the plant retires in 2027 or sooner. That would require ratepayers to pay twice because
15 of the need for replacement power. It is in the ratepayers' economic interest to get this
16 financial liability behind them as soon as possible. Even as it stands in the Settlement,
17 ratepayers in 2026 and 2027 will likely be paying for a plant that is going to close in 2025.
18 While not ideal, the Settlement at least mitigates that problem significantly.

### Q. Are there other ways ratepayers will save?

1

2

3

4

5

6

7

8

9

10

11

12

- 20 A. Yes. Depreciation schedules often set expectations for the useful life of coal plants.
- 21 While it is supposed to work the other way (i.e. depreciation dates are set based on

rationale least-cost expectations), depreciation dates that are too far out tend to create a willingness to continue operational, maintenance and capital expenses out to the depreciation date that, if properly scrutinized, would otherwise not be deemed prudent. Utilities are wary of recognizing signals that could put them at risk of having stranded assets, and customer advocates do not want to face any changes that put upward pressure on rates.

These factors can lead to less-than-optimal resource planning decisions. Different stakeholders' wariness of acting out of sync with an existing depreciation schedule can lead to assumptions about the useful life of the plant that are not accurate. In other words, even though the depreciation schedule does not actually impact the least-cost solution in resources planning, it can influence the decisions made in that process. "Fixing" the depreciation schedule therefore frees up stakeholders to more readily accept lower cost solutions.

#### Q. Does Colstrip face this problem?

- A. Yes. The plant is aging and becoming more expensive. Avista recently filed a rate case in Idaho that revealed Colstrip owners expect to pay \$160 million in 2018 through 2020 just to keep Units 3 and 4 running. The usefulness of some of those expenses may likely extend beyond 2025 or 2027 and therefore deserve intense scrutiny. The 2027 depreciation schedule encourages additional scrutiny by PSE and other owners regarding potential maintenance expenses that may not be necessary beyond 2027.
  - The price tag for cleaning up the toxic coal ash waste ponds will also continue to grow

over time. While the Colstrip owners are now under a legal mandate to alter the disposal system for the toxic waste, the underground toxic plume continues to expand creating increasing cleanup costs. A recent Commission investigation concluded that the longer the Colstrip Units 1 and 2 stay opens, the greater the cost of cleanup. That same logic regarding the expanding cleanup liability similarly applies to continued operation of Units 3 and 4.

Finally, as discussed above, PSE now finds that even modest carbon pricing will make the units uneconomic.<sup>12</sup> Regardless of whether a carbon price comes from a new federal administration, Congress or Washington State, most experts agree that climate accountability is inevitable. We must assume a carbon price and plan accordingly.

### Q. Does the Rosebud coal mine, which feeds Colstrip, face economic risks?

12 A. Yes. Coal mines across the country are struggling. The Rosebud mine in particular is
13 facing higher overburden ratios in its currently permitted seams. Westmoreland reported
14 to the Securities and Exchange Commission that the "estimated mine life for current
15 plans" is 2024 for the Colstrip mine. Westmoreland is applying for three separate
16 permits to expand the mine to gain access to additional coal. However, state and federal
17 law require Westmoreland to restore the land to previous conditions before expanding.
18 The mine has destroyed 26,000 acres of habitat, polluted groundwater, and dried up part

1

2

3

4

5

6

7

8

9

10

<sup>&</sup>lt;sup>11</sup> Investigation Report, UE-151500 at p.11.

<sup>&</sup>lt;sup>12</sup> See page 53 of presentation available here:

 $https://pse.com/aboutpse/EnergySupply/Documents/01\_PSE\_2017\_IRPAG\_DRAFT\_August\%2011\_2017\_UPDAT\_ED.pdf$ 

<sup>&</sup>lt;sup>13</sup> Westmoreland Coal's 2016 10-k. Available at:

https://www.sec.gov/Archives/edgar/data/106455/000010645517000012/wlb-123116 10k.htm

of a stream. Restoration is unlikely or impossible, and environmental advocates have claimed that any expansion would be unlawful. Westmoreland is the only economically-viable source of coal for Colstrip and its future is tentative, and will likely create price increases and PSE ratepayer liability.

1

2

3

4

12

21

- 5 Q. Does the settlement provide any other benefits to ratepayers related to Colstrip?
- A. Yes. The request for the Commission to study the use of the Colstrip transmission line
  ensures that this valuable asset will more likely be put to use once Colstrip Units 1 and 2
  are retired. Montana has one of the most robust wind regimes in the country and rights to
  develop projects exist all along the Colstrip line. Transmission barriers have been the
  biggest barrier for developing and exporting Montana wind. This study will ensure PSE
  ratepayers have a better chance of utilizing this valuable asset.

### V. Transitioning Off of Colstrip Will Provide Environmental Benefits

- 13 Q. Why is it important to plan a transition away from Colstrip?
- A. According to the U.S. Environmental Protection Agency, in 2015, Colstrip was the third largest climate polluter in the country. Colstrip is the largest climate polluter in the four Northwest states. Annual carbon emissions for all four units average approximately 15 million tons, equal to approximately 3 million cars. No current initiative in the Northwest will create as many carbon reductions as retiring Colstrip. Establishing a clear schedule for PSE to pay down the undepreciated plant balance at Colstrip is a critically important step as the plant moves closer to retirement.
  - Colstrip has approximately twice as many nitrogen oxide and sulfur emissions as the

| 1  |     | combined total of the next nine largest air polluters in Montana. Colstrip has 800 acres of |
|----|-----|---|
| 2  |     | leaking toxic coal ash ponds where this toxic plume continues to expand to the aquifer.     |
| 3  |     | And as stated above, continued reliance on the Colstrip mine further destroys habitat and   |
| 4  |     | pollutes groundwater.   |
| 5  |     | Such highly destructive environmental impacts are completely unnecessary when cheap         |
| 6  |     | and abundant renewable energy and energy efficiency continue to demonstrate their           |
| 7  |     | economic advantages.  |
| 8  | VI. | A Responsible Community Transition Plan will Help Provide an Equitable End to               |
| 9  |     | the Colstrip Plant  |
| 10 | Q.  | How does the Settlement support an equitable transition for the community?                  |
| 11 | A.  | Sierra Club is committed to addressing concerns of communities that endure economic         |
| 12 |     | hardship from the retirement of coal plants. In 2011, Sierra Club was the primary           |
| 13 |     | organization insisting that the retirement of the TransAlta coal plant in Centralia,        |
| 14 |     | Washington include funding for community transition. That commitment applies to             |
| 15 |     | Colstrip and we have made this clear to PSE.  |
| 16 |     | Sierra Club applauds PSE for providing \$10 million for community transition at Colstrip    |
| 17 |     | (¶120). Additional accolades are due because half of this money comes from PSE              |
| 18 |     | shareholders. This is a model that other Colstrip owners now need to replicate.             |
| 19 |     | PSE supported Washington legislation that mandated setting aside money for cleanup of       |
| 20 |     | the toxic coal ash waste sites for Colstrip Units 1 and 2. This Settlement now provides a   |

plan to ensure those funds are available. In addition, PSE through the Settlement will designate money for the cleanup of the coal ash ponds for Units 3 and 4. This is a first among Colstrip owners and ensures a more viable future for the town of Colstrip and surrounding areas. Without clean, usable water in arid Eastern Montana, future economic viability is at risk.

### 6 Q. What other aspects of the Settlement provide equity benefits?

7 A. The low-income energy assistance is critical. Services for low-income families are at risk.

8 The Settlement's additional \$2 million for weatherization programs helps fill a significant

9 needs (¶108).

1

2

3

4

5

10

11

12

13

14

The reporting requirements create their own equity (¶121). Colstrip owners have not been forthcoming with essential data to help plan for a fair and orderly transition. Now PSE distinguishes itself by instituting yearly reporting requirements on retirement plans, cleanup and funding, and replacement power. The remaining Colstrip owners need to follow suit.

### 15 VII. Conclusion

### 16 Q. What do you recommend?

17 A. This settlement represents a landmark in achieving economic, environmental and equity
18 benefits. While critical work is yet to be achieved, this is the single most important step
19 in: protecting PSE ratepayers; beginning a fair and orderly transition for the Colstrip
20 community; retiring the largest climate polluter in the Northwest; achieving additional
21 environmental benefits; helping low-income ratepayers; and creating open and honest

- processes. I recommend that the Commission approve the Settlement in full.
- 2 Q. Does this conclude your testimony?
- 3 A. Yes.