

Exhibit No. \_\_\_\_ (Exh. EDH-1T)  
Dockets UE-190334/UG-190335/UE-190222  
2019 Avista General Rate Case  
Witness: Ezra D. Hausman, Ph.D.

**BEFORE THE  
WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

**AVISTA CORPORATION d/b/a  
AVISTA UTILITIES,**

**Respondent.**

**DOCKETS UE-190334, UG-190335,  
and UE-190222(Consolidated)**

**RESPONSE TESTIMONY OF  
EZRA D. HAUSMAN, PH.D.  
ON BEHALF OF SIERRA CLUB**

**October 3, 2019**

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Exhibit EDH-3	Puget Sound Energy 2017 IRP Appendix K
Exhibit EDH-4	Avista response to Sierra Club Production Request 1-5, Idaho Public Utilities Commission Case Nos. AVU-E-17-01 and AVU-G-17-01
Exhibit EDH-5	Avista response to Sierra Club Production Request 3-6, Idaho Public Utilities Commission Case Nos. AVU-E-17-01 and AVU-G-17-01
Exhibit EDH-6	Avista response to Sierra Club Data Request SC-012 in the current Docket
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1     **I. Professional Qualifications**

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

3     A. My name is Ezra D. Hausman, Ph.D. I am an independent consultant doing business as  
4     Ezra Hausman Consulting, operating from offices at 77 Kaposia Street, Auburndale,  
5     Massachusetts 02466.

6     **Q. What is your educational and professional background?**

7     A. I hold a B.A. in Psychology from Wesleyan University, an MS in Environmental  
8     Engineering from Tufts University, an SM in Applied Physics from Harvard University,  
9     and a Ph.D. in Atmospheric Chemistry from Harvard University. I have analyzed both  
10    regulated and restructured electricity markets and other electric utility matters for over 20  
11    years. I have provided a detailed resume as Exhibit EDH-2.

12           I have served as an independent analyst and expert in energy market issues since  
13    2014. Before that, from 2005 until early 2014, I was employed at Synapse Energy  
14    Economics, Inc., a research and consulting company located in Cambridge,  
15    Massachusetts, where I served as Senior Associate, Vice President, and Chief Operating  
16    Officer. At Synapse, and continuing as an independent consultant, I served as an analyst  
17    and expert in several areas related to my expertise in energy economics, planning, and  
18    energy market regulation, including these specific areas: state and regional energy,  
19    capacity, and transmission planning, including both utility resource planning and long-  
20    term (multi-decadal) climate-constrained resource planning; regulatory and ratemaking  
21    proceedings; electricity and generating capacity market design and analysis; electric  
22    system dispatch modeling; economic analysis of environmental and other regulations,

1 including greenhouse gas regulation, in electricity markets; economic analysis, price  
2 forecasting, and asset valuation in electricity markets; quantification of the economic and  
3 environmental benefits of displaced emissions; treatment of energy efficiency and  
4 renewable energy in electricity and capacity markets; and regulation and mitigation of  
5 greenhouse gas emissions from the supply and demand sides of the U.S. electricity sector.

6 I have provided testimony before public utility commissions or legislative  
7 committees in Arizona, Florida, Illinois, Indiana, Iowa, Kansas, Louisiana, Maryland,  
8 Massachusetts, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, Nevada,  
9 North Carolina, South Carolina, South Dakota, Vermont, Virginia, and Washington State,  
10 as well as at the Federal level. I have provided expert representation for stakeholders at  
11 the PJM ISO, the California ISO, the Midcontinent ISO, and at the Federal Energy  
12 Regulatory Commission (“FERC”). While most of my testimony and analytical work has  
13 centered on issues in electricity market economics, I have also brought my expertise as a  
14 scientist to bear on cases involving greenhouse gas regulation and mitigation in the  
15 electric sector.

16 Before joining Synapse, I was employed from 1998 through 2004 as a Senior  
17 Associate at Tabors Caramanis and Associates (“TCA”) of Cambridge, Massachusetts. In  
18 2004, TCA was acquired by Charles River Associates (“CRA”), where I remained until I  
19 joined Synapse in 2005. At TCA/CRA, I performed a wide range of electricity market  
20 and economic analyses and price forecast modeling studies. These included asset  
21 valuation studies, market transition cost/benefit studies, market power analyses, and  
22 litigation support. I have extensive experience with market simulation, production cost

1 modeling, and resource planning methodologies and software.

2 **Q. Have you ever testified before the Washington Utilities and Transportation**  
3 **Commission?**

4 A. Yes. I testified on behalf of Sierra Club in Puget Sound Energy's ("PSE") 2012 General  
5 Rate Case, Docket Nos. UE-111048 and UG-111049. I also testified on behalf of Sierra  
6 Club in PSE's 2017 General Rate Case, Docket Nos. UE-170033 and UG-170034.

7 **II. Scope of Testimony and Recommendations to the Commission**

8 **Q. What is the scope of your testimony in this proceeding?**

9 A. In its filing, Avista proposes a two-year rate plan including an electric billed revenue  
10 increase of 8.8% in the first year and 3.3% in the second year. As part of its request,  
11 Avista is seeking recovery of its Washington jurisdictional share of the capital  
12 expenditures made on behalf of the Company and other co-owners of Units 3 and 4  
13 (collectively referred to herein as "the Owners") of the Colstrip coal-fired powerplant in  
14 Montana by Talen Energy, the plant operator and a partial owner Colstrip Units 1, 2 and  
15 3. I review certain of these expenditures and demonstrate that they were unnecessary and  
16 inconsistent with Washington policy, that the costs were poorly justified, and that the  
17 associated costs should not be recoverable from Washington ratepayers. Further, I  
18 demonstrate that the Company has not adequately complied with the Commission's  
19 specific directive in Order No. 07, Docket No. UE-170485 that any future request for  
20 recovery on capital expenditures at Colstrip Units 3 and 4 in a general rate case "must be  
21 accompanied by a comprehensive, up-to-date analysis of the economics and

1 environmental liabilities and risks of Colstrip Units 3 and 4 over their expected life.”<sup>1</sup>

2 Finally, I address issues related to Avista’s proposal for recovery of its  
3 undepreciated balance in Colstrip Units 3 and 4. Avista’s continued participation in the  
4 Colstrip plant subjects its customers to long-term costs that will far outlive the usefulness  
5 of the plant to Washington ratepayers, and the Company’s proposal to convert a large  
6 portion of its undepreciated balance into a “regulatory asset”, and to offset the cost by  
7 timing it to coincide with otherwise unrelated tax benefits, does not change a simple and  
8 troubling fact: Avista is asking future generations of ratepayers to foot the bill for its  
9 remaining investment in this plant, along with a substantial bill for environmental  
10 liabilities *and* a generous return on equity, despite the fact that these future customers  
11 will receive no benefit from the plant. This is a clear violation of the principle of  
12 “intergenerational equity” that is a fundamental principle of just and reasonable  
13 ratemaking in the United States. At the very least, Avista’s shareholders should share  
14 responsibility for these costs as I will describe herein.

15 **Q. What are your recommendations for this Commission?**

16 A. I make the following recommendations:

17 (1) The Commission should require the Company to remove its Washington-  
18 jurisdictional share of the cost of the SmartBurn installation on Colstrip Units 3 and 4,  
19 and should not recover those costs, or any return on that investment, from ratepayers.

20 (2) The Commission should disallow recovery of *all* capital costs associated  
21 with Colstrip units 3 and 4 at issue in this case, because the Company did not provide “a

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<sup>1</sup> Order 07, *Wash. Util. and Transp. Comm’n, Complainant, v. Avista Corp., d/b/a Avista Util., Respondent*, Docket Nos. UE-170485 and UG-170486 at ¶ 205 n.314 (Apr. 26, 2018) (“Order 07”).

1 comprehensive, up-to-date analysis of the economics and environmental liabilities and  
2 risks of Colstrip Units 3 and 4 over their expected life” as the Commission directed it to  
3 do in Order 07 in WUTC Docket No. UE-170485 at ¶ 205 n.314.

4 (3) The Company should be directed to apply a portion of the termination fee  
5 from the failed Hydro One merger to reduce the size of the regulatory asset formed from  
6 the unrecovered capital cost of Colstrip.

7 (4) The Company should not earn a return on the regulatory asset containing  
8 the unrecovered balance of the Colstrip units—or at a minimum, it must earn a far lower  
9 return than it does on regular utility capital assets. This reduced ROI would recognize  
10 that (a) the asset is not used or useful to Avista’s ratepayers; and (b) the Company would  
11 bear none of the regulatory, physical, or other risks with this regulatory asset that  
12 typically justify a higher than risk-free rate of return.

### 13 **III. Investments in SmartBurn at Colstrip**

#### 14 **Q. Please briefly explain what “SmartBurn” is, and when and by whom it was installed** 15 **at Colstrip Units 3 and 4.**

16 A. As Avista witness Jason R. Thackston describes, “SmartBurn was originally developed as  
17 the part of Alliant Energy’s Combustion Initiative Program focused on the reduction of  
18 nitrogen oxides [NOx]...by optimizing the combustion process in coal-fired generation  
19 plants.”<sup>2</sup> In other words, it is a technology designed to reduce NOx production in the  
20 boiler by improving combustion, in contrast to post-combustion technologies such as  
21 selective catalytic reduction (“SCR”) that remove NOx from the flue gas. Talen Energy

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<sup>2</sup> Exh. JRT-1T, Direct Testimony of Jason R. Thackston at 39:7-9 (Apr. 29, 2019) (“Thackston Direct”).



1 completed installation of SmartBurn on Unit 4 in 2016, and on Unit 3 in 2017.<sup>3</sup> Each of  
2 the owners of each unit<sup>4</sup> was responsible for a share of the costs, and each had an  
3 opportunity to review and potentially object to the projects.<sup>5</sup> In response to discovery in  
4 its most recent Idaho rate case, Avista stated that has never objected to any capital  
5 expense that was ultimately installed at the Colstrip units, including SmartBurn.<sup>6</sup>

6 **Q. Were the Colstrip owners required to install SmartBurn technology, or other NOx  
7 controls, on Units 3 and 4?**

8 **A.** No. The projects were completely discretionary, and in fact unnecessary. There has never  
9 been any regulatory or statutory compliance obligation that required Colstrip Units 3 and  
10 4 to reduce its NOx emissions to below what they were prior to installing SmartBurn.  
11 Avista provided no evidence showing these projects improved the economics or  
12 production capabilities of Colstrip Units 3 and 4. In addition, the emissions data from  
13 Colstrip show almost no reduction in the average emission rate of NOx from either unit  
14 after the installation of the SmartBurn controls. These projects neither meaningfully  
15 improved air quality nor otherwise benefited ratepayers.

16 **Q. Was the installation of SmartBurn on Colstrip Units 3 and 4 required for Montana  
17 to meet its requirements under the Regional Haze rule?**

18 **A.** No. Mr. Thackston states, misleadingly in my opinion, that “the combination of

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<sup>3</sup> *Id.* at 42:12-13.

<sup>4</sup> Avista owns 15% each of Colstrip Units 3 and 4. The other owners of Unit 3 are Talen (30%), Puget Sound Energy (PSE) (25%), Portland Gas & Electric (PGE) (20%), and PacifiCorp (10%); the other owners of Unit 4 are NorthWestern Energy (NWE), (30%), PSE (25%), PGE (20%), and PacifiCorp (10%). *See* Puget Sound Energy, *2017 PSE Integrated Resource Plan*, Appendix K at K-4 (attached as Exh. EDH-3).

<sup>5</sup> This process is discussed generally in Exh. JRT-1T, Thackston Direct at 27:6-28:2.

<sup>6</sup> Avista response to Sierra Club Production Request 1-5 subpart (f), Case Nos. AVU-E-17-01/AVU-G-17-01 (Idaho Pub. Util. Comm’n Aug. 23, 2017) (attached as Exh. EDH-4): “With respect to an instance where Avista objected to a project that was ultimately included in the budget, we do not recall an instance at this time.”

1 SmartBurn and regional plant closures place Colstrip Units 3 and 4 within the glide path  
2 and SCR is not expected to be required.”<sup>7</sup> However, what he failed to mention is that the  
3 same fact regarding the need for SCR would be true absent SmartBurn. The installation  
4 of SmartBurn resulted in almost no reduction in NOx emissions, and would make no  
5 difference in the likelihood of whether SCR *may* one day be required on these units.

6 **Q. You state that SmartBurn led to almost no reduction in NOx emissions. What is**  
7 **your evidence for this?**

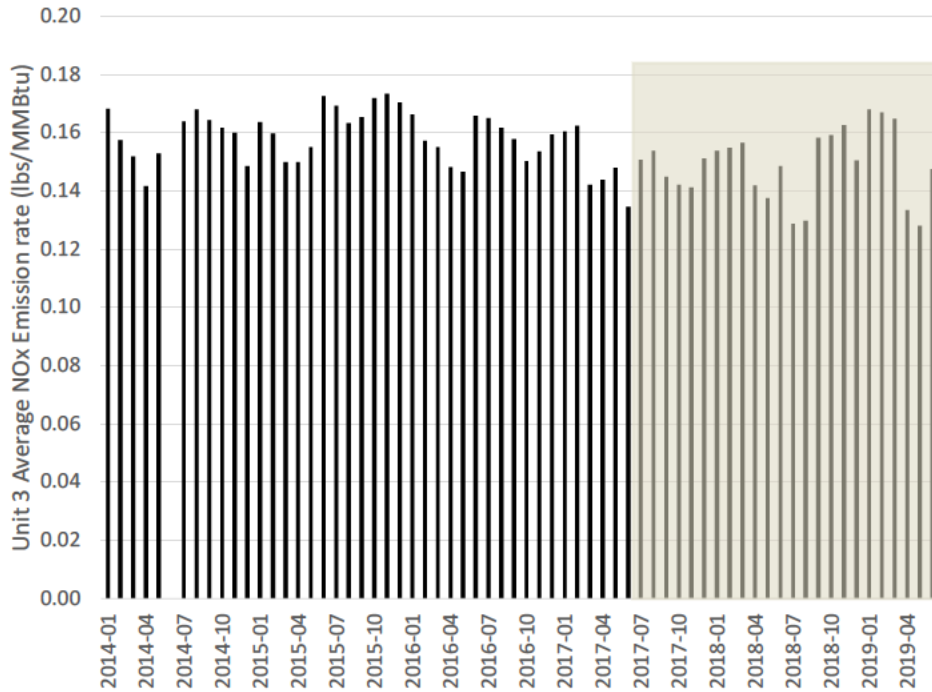
8 A. I reviewed monthly NOx emissions and gross generation data for Colstrip Units 3 and 4  
9 submitted to the EPA Air Markets Program Database<sup>8</sup> from January 2014 – well before  
10 SmartBurn was installed on either unit – through April 2019, the most recent data  
11 available as of this writing. The emissions rate in pounds per MWh from these data are  
12 shown in Figure 1 and Figure 2. In both figures, the months following the installation of  
13 SmartBurn on the indicated unit are shaded. While there may have been a nominal  
14 decrease in the average NOx emission rate following the SmartBurn installation at each  
15 unit, it was very small relative to the month-to-month variations in average rate.

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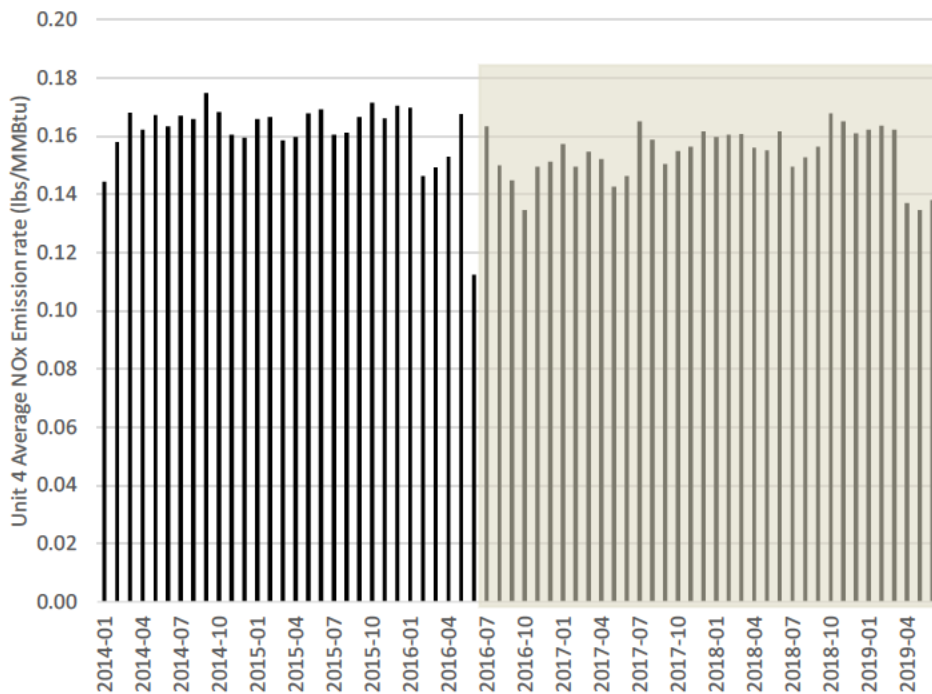
<sup>7</sup> Exh. JRT-1T, Thackston Direct at 34:21-23.

<sup>8</sup> EPA, *Air Markets Program Data*, available at <https://ampd.epa.gov/ampd/> (last accessed Oct. 2, 2019).

**Figure 1. Monthly NOx emission rate at Colstrip Unit 3, 2014-2019. Shaded area represents period with SmartBurn operational at Unit 3**



**Figure 2. Monthly NOx emission rate at Colstrip Unit 4, 2014-2019. Shaded area represents period with SmartBurn operational at Unit 4.**



1 **Q. Has Avista explained why Talen installed SmartBurn at Units 3 and 4?**

2 A. Avista has provided a number of evolving explanations and rationales, in this and in  
3 previous rate cases about why it installed SmartBurn. In response to discovery in its 2017  
4 rate case in Idaho, Avista stated:<sup>9</sup>

5 Anticipating that Colstrip Units 3 & 4 could be ordered to install Selective  
6 Catalytic Reduction (SCR) during the 2017 review period, the Colstrip  
7 Owners' proactively installed the Smart Burn technology to reduce the  
8 formation of Nitrous Oxides (NOx) in combustion zone for two major  
9 benefits:

10 Make proactive and verifiable NOx reductions and  
11 Optimize the size, scope and ammonia use of any future SCR  
12 installation.

13 In the current case, Mr. Thackston provides a range of somewhat scattershot and  
14 inconsistent explanations on pages 39-45 of his direct testimony, some of which I will  
15 summarize here.

16 First, Mr. Thackston implies the company expected to be *required* to install SCR,  
17 stating that:

18 The NOx emissions data received from Colstrip Units 3 and 4 after  
19 SmartBurn was installed would be used to determine the appropriate size  
20 of the technology needed to address the next expected step in NOx  
21 reduction - Selective Catalytic Reduction.<sup>10</sup>

22 Mr. Thackston further states that “[t]he SmartBurn technology saves future capital  
23 expenditures, reduces future O&M expenditures, and provides an earlier environmental  
24 benefit by reducing the production of NOx.”<sup>11</sup> This statement would only make sense if  
25 EPA were to actually require the Owners to install SCR at some future date, based on

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<sup>9</sup> Avista response to Sierra Club Production Request 3-6 subpart (d), Case Nos. AVU-E-17-01/AVU-G-17-01 (Idaho Pub. Util. Comm’n Sept. 22, 2017) (attached as Exh. EDH-5).

<sup>10</sup> Exh. JRT-1T, Thackston Direct at 39:12-15.

<sup>11</sup> *Id.* at 41:14-16.

1 specific regulatory requirements; or if EPA found that SmartBurn led to NOx reductions  
2 significant enough to meet the new requirement, obviating the need for SCR. These  
3 highly speculative scenarios are not supported by facts in the record.

4 Later in his testimony, Mr. Thackston states: “[t]he [Colstrip unit 3 and 4]  
5 owners...proactively decided to install SmartBurn in an effort to manage a future  
6 regulatory obligation, doing so in a strategic and cost-effective manner” because “[i]n the  
7 2012 decision timeframe, SCRs were being ordered in many surrounding states and  
8 previous litigation against Colstrip demanded a requirement of SCR for alleged “New  
9 Source Review” violations.”<sup>12</sup> What Mr. Thackston omitted was that Colstrip units 3 and  
10 4 were not subject to the Regional Haze Rule’s “BART” requirement that led to the SCR  
11 requirements in the 2012 timeframe in surrounding states. Those BART-eligible units,  
12 unlike Colstrip units 3 and 4, were all subject to best available retrofit technology under  
13 the Clean Air Act. In addition, Mr. Thackston seems to argue that the Owners hoped to  
14 stave off any EPA requirement for a truly effective NOx control technology, by making a  
15 much more modest improvement in advance of any such legal requirement.

16 Finally, Mr. Thackston states (boldface emphasis added, underline in original):

17 Although the [Colstrip] plant was in compliance before the addition of  
18 Smart Burn, this project provided margin in the event upset conditions  
19 were/are encountered. In order to comply with the “Glide Path” that is  
20 associated with the federal Regional Haze rules, it was expected that a  
21 Selective Catalytic Converter would eventually be required. At the time of  
22 the Smart Burn installations, Talen and Avista believed that a SCR would  
23 be required around the 2027 timeframe. **Talen analyzed Regional Haze**  
24 **requirements and determined that a final NOx Regional Haze solution**

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<sup>12</sup> *Id.* at 42:3-7 (emphasis in original).

1           **would have required both Smart Burn and a SCR.**<sup>13</sup>

2   **Q.    In the quote above, Mr. Thackston claimed that Talen “analyzed” future Regional**  
3   **Haze requirements and concluded that “both Smart Burn and a SCR” would be**  
4   **required. Have you reviewed this or other technical or policy analyses in support of**  
5   **the owners’ decision to install SmartBurn?**

6   **A.**    No. If such analyses exist, Avista did not provide them. Sierra Club specifically asked  
7    Avista for this and other analyses performed by or on behalf of Talen, Avista, and/or the  
8    other co-owners showing the need for SCR, SmartBurn, or other NOx controls, and in  
9    every case the Company responded with a reiteration of the various unsupported  
10   statements in its testimony, but provided no underlying factual or legal analysis.

11           For example, in Sierra Club Data Request SC-012, Sierra Club asked for any and  
12   all analyses in support of Mr. Thackston’s statement that “Talen reviewed a wide variety  
13   of NOx control solutions over the years, including selective non-catalytic reduction  
14   (SNCR), SCR, SmartBurn and others.”<sup>14</sup> Avista replied by referring to the Regional Haze  
15   Federal Implementation Plan (“FIP”) and stated that “[t]he owners’ of Unit 3 & 4 became  
16   aware of the SmartBurn technology (described in Mr. Thackstons’ testimony on page 39)  
17   after it was installed on Unit 2, we are not aware of any other available NOx control  
18   solution reviews.”<sup>15</sup>

19           In Data Request SC-013,<sup>16</sup> Sierra Club requested any analyses supporting Mr.  
20   Thackston’s description of the Owners’ “proactive[.]” decision “to install SmartBurn in an

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<sup>13</sup> *Id.* at 45:12-19.

<sup>14</sup> *Id.* at 41:5-6.

<sup>15</sup> Avista response to Sierra Club Data Request SC-012 (July 8, 2019) (attached as Exh. EDH-6).

<sup>16</sup> Avista response to Sierra Club Data Request SC-013 (July 8, 2019) (attached as Exh. EDH-7).

1 effort to manage a future regulatory obligation, doing so in a strategic and cost-effective  
2 manner.”<sup>17</sup> In response, the Company merely restated Mr. Thackston’s unsupported  
3 statement, and added that “[b]ased on the information available to the Company at the  
4 time...no additional detailed analysis was necessary to see the potential benefits of the  
5 SmartBurn technology and the decision to install SmartBurn.”

6 Next, in Data Request SC-014<sup>18</sup> Sierra Club asked specifically about the analysis  
7 explicitly described in the quote above—the statement that “Talen analyzed Regional Haze  
8 requirements and determined that a final NOx Regional Haze solution would have  
9 required both Smart Burn and a SCR.”<sup>19</sup> Once again the Company simply reiterated the  
10 text of Mr. Thackston’s unsupported testimony. When Sierra Club asked Avista a second  
11 time for the referenced analysis, Avista responded with a “revised” response to SC-014,  
12 merely adding a reference to other data responses, none of which contained any analysis  
13 performed by or on behalf of Talen, and the comment that “No other analysis was  
14 undertaken by Avista.”<sup>20</sup>

15 To put the matter to rest, Sierra Club asked in Data Request SC-019<sup>21</sup> for the  
16 Company to “admit that neither Avista, nor any of its affiliates, parents or subsidiaries,  
17 including Talen, performed any analysis that supports Mr. Thackston’s statement.” The  
18 Company replied that “Avista makes no such admission” but did not explain why it had  
19 failed to produce any such analyses in response to Sierra Club’s repeated requests.

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<sup>17</sup> Exh. JRT-1T, Thackston Direct at 42:5-7.

<sup>18</sup> Avista response to Sierra Club Data Request SC-014 (July 8, 2019) (attached as Exh. EDH-8).

<sup>19</sup> Exh. JRT-1T, Thackston Direct at 45:17-19.

<sup>20</sup> Revised Avista response to Sierra Club Data Request SC-014 (July 30, 2019) (attached as Exh. EDH-9).

<sup>21</sup> Avista response to Sierra Club Data Request SC-019 (Aug. 19, 2019) (attached as Exh. EDH-10).

1 **Q. What are your conclusions regarding the owners' decision to install SmartBurn at**  
2 **Colstrip Units 3 and 4?**

3 A. I conclude that the installation of SmartBurn was unnecessary, ineffective, and not legally  
4 or technically required for compliance with any existing or future known EPA  
5 requirement under the Clean Air Act. Perhaps the Owners hoped that installation of  
6 SmartBurn would inoculate them from any risk that they would be required to install  
7 truly effective NOx control technology in the future. Whatever its true motivations, the  
8 evidence shows that the Company has been attempting to "back-fill" a rationale with  
9 misleading references to non-existing analyses and decision processes. Such unsupported  
10 statements must be disregarded by the Commission.

11 **IV. Prior approval of Colstrip-related capital costs**

12 **Q. Were costs associated with SmartBurn approved by this commission in a prior rate**  
13 **case?**

14 A. Avista requested inclusion of SmartBurn costs for Unit 4, completed in 2016, in its 2017  
15 rate case (Docket No. UE-170485.) In its final order, the Commission emphasized  
16 Commission staff witness Kathi Scanlan's testimony that justification for the Company's  
17 SmartBurn investments was "sparse, vague and lacking sufficient detail."<sup>22</sup> Ms. Scanlan  
18 recommended "that the Commission revisit the issue and explicitly consider whether  
19 Avista should recover the costs of Smart Burn in a future rate case."<sup>23</sup>

20 In addressing Ms. Scanlan's concerns, the Commission stated:

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<sup>22</sup> As quoted in Order 07 ¶188.

<sup>23</sup> *Id.*



1 On a final note, we concur with Staff's assessment that Avista has  
2 provided insufficient information related to its investments at Colstrip  
3 Units 3 and 4. The Company presents an argument for the Smart Burn  
4 investment on rebuttal, but it does not dispel Staff's primary concern: that  
5 the investment does not appear to have been required by any state or  
6 federal laws. Any future compliance obligations that the Smart Burn  
7 investment might have helped mitigate are purely speculative, and it is  
8 unclear whether the decision by the Colstrip owners to proactively take on  
9 future assumed compliance obligations reflected that retirements of other  
10 coal units in the region might reduce any compliance obligations for  
11 Colstrip Units 3 and 4.<sup>24</sup>

12 The Commission further stated that:

13 Given the weak economic conditions for coal plants, the age of Colstrip  
14 Units 3 and 4, as well as the unidentified upward bounds of potential  
15 environmental liabilities, the Commission agrees with Staff's  
16 recommendation that Avista must provide a more detailed examination of  
17 its justification for its investments at Colstrip in its next GRC.<sup>25</sup>

18 The Commission finally added, in a footnote, that:

19 If and when the Company requests recovery of a portion of Colstrip  
20 capital expense in a GRC, the request must be accompanied by a  
21 comprehensive, up-to-date analysis of the economics and environmental  
22 liabilities and risks of Colstrip Units 3 and 4 over their expected life.<sup>26</sup>

23 The Commission neither excluded nor approved the cost of SmartBurn on Unit 4 from  
24 the Company's 2017 rate base. Instead, it signaled that Avista would be required to fully  
25 explain and justify such expenditures in a future rate case. Here, the Commission must  
26 consider SmartBurn based on the Company's proffered analysis as presented in this rate  
27 case.

28 With regard to SmartBurn on Unit 3, this installation was not operational until  
29 June 30, 2017, and thus was not included in the Company's 2017 rate request. The

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<sup>24</sup> *Id.* ¶204 (internal citation omitted).

<sup>25</sup> *Id.* ¶205.

<sup>26</sup> *Id.* ¶ 205 n.314.

1 current case uses a test year of 2018, so depreciation of and a return on the costs of both  
2 SmartBurn installations are included in the current request.

3 **V. Colstrip economic and risk analysis**

4 **Q. You note that the Commission directed Avista to provide it with an “up-to-date”**  
5 **economic and risk analysis of the Colstrip units with any request for recovery of**  
6 **capital expenses in any future GRC, such as its current request. Has the Company**  
7 **provided such an analysis?**

8 A. No. Mr. Thackston addresses this issue on pages 29 through 33 of his direct testimony, in  
9 which he describes the scenario analysis performed by the Company in support of its IRP.  
10 This analysis consisted of a number of assumptions regarding the Colstrip units, and three  
11 “early” retirement scenarios—that is, retirement in 2030 or 2035, either five or ten years  
12 beyond the end of the Company’s currently proposed depreciable life, beyond the time  
13 when it can legally serve Washington customers with electricity from the units, and too  
14 late to avoid the then-speculated installation of SCR on the units in 2028.<sup>27</sup>

15 Such an analysis is not “up-to-date” because, for example, it presumed SCR  
16 installation in 2028—a very high-cost expenditure—while the Company’s current  
17 expectation is that “the Company does not anticipate the need to install SCR during the  
18 20-year IRP planning horizon.”<sup>28</sup> Nor can the analysis be described as “comprehensive”  
19 because it only considered retirement dates ten or fifteen years in the future, and

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<sup>27</sup> The Company also considered a “High Colstrip Cost” case in which SCRs would be installed in 2023 and various other unexpectedly high environmental compliance costs would be encountered.

<sup>28</sup> Exh. JRT-1T, Thackston Direct at 33:5-6. While Mr. Thackston attributes the Company’s expectation in part to the previous installation of SmartBurn, there is no analysis or support provided to show why this should be determinative. As this testimony shows in Figures 1 and 2, the impact of SmartBurn on NOx emissions from the Colstrip units has been very small at best.

1 considered an extremely limited range of options for meeting customers' needs in the  
2 absence of the plant, even though the plant cannot legally meet Washington customers'  
3 requirements after 2025. The Company has thus not met the Commission's minimum  
4 requirement for supporting its requests for recovery of capital spending on the Colstrip  
5 units.

6 **Q. What would an appropriate remedy be for the Company's failure to comply with**  
7 **the Commission's directive in its current filing?**

8 A. The Commission must not allow any Colstrip capital costs to be included in rate base  
9 because it did not justify its request for recovery based on the comprehensive and up-to-  
10 date analysis mandated by the Commission in Docket No. UE-170485. The Commission  
11 mandated a specific condition for approval of capital expenditures with which the  
12 Company did not comply; further, such an analysis is necessary to determine whether the  
13 Company's ongoing expenditures on the Colstrip units are prudent.

## 14 **VI. Colstrip Depreciation**

15 **Q. Why is the plan for depreciation of the remaining Colstrip balance an issue in the**  
16 **current rate case?**

17 A. As Avista witness Ms. Andrews notes, in Avista's recent depreciation case, WUTC  
18 Docket No. UE-180167, "the Commission determined the Colstrip depreciation issues  
19 were to be determined in this general rate case, including the method to recover the  
20 \$104.1 million of undepreciated costs of Colstrip."<sup>29</sup> Specifically, the Commission stated:

21 The Commission determines...that the method proposed to recover the

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<sup>29</sup> Exh. EMA-1T, Direct Testimony of Elizabeth M. Andrews at 72:3-5 (Apr. 29, 2019) ("Andrews Direct").

1           \$104.1 million undepreciated balance for Colstrip Units 3 and 4 should not  
2           be approved outside of a general rate case. Accordingly, the method for  
3           recovering the \$104.1 million undepreciated balance for Colstrip Units 3  
4           and 4 in rates, including any proposals involving unprotected excess  
5           deferred income tax set aside in Dockets UE-170485, UG-170486, and U-  
6           170970, will be considered in Avista’s next general rate case,  
7           commensurate with the Parties’ agreement in the Settlement Stipulation to  
8           avoid any change to customer rates until the next general rate case. This is  
9           the only term of the Settlement Stipulation that the Commission does not  
10          approve.<sup>30</sup>

11       **Q.     Please briefly describe the Company’s proposal for recovering its outstanding**  
12       **investment in Colstrip Units 3 and 4 in this case.**

13       A.     The Company currently claims an unrecovered balance, plus asset retirement obligations  
14       (“ARO”), totaling approximately \$105 million for Colstrip Units 3 and 4,<sup>31</sup> which “had  
15       been on a depreciation schedule of 2034 and 2036, respectively.”<sup>32</sup> In its current filing,<sup>33</sup>  
16       the Company proposes to shorten the depreciable life of Colstrip by setting an end-of-life  
17       for depreciation purposes of 2027.<sup>34</sup> All else being equal, were the Company to recover  
18       its entire undepreciated balance over this shorter time frame, it would have to recover a  
19       much larger annual depreciation amount from ratepayers. However, as Avista witness Ms.  
20       Andrews describes, the Company proposed a two-part mechanism that would allow it to  
21       accelerate the depreciation of the plant consistent with Washington law, without  
22       increasing its annual depreciation on the plant.

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<sup>30</sup> Order 4 (Modified), *In the Matter of the Petition of Avista Corporation d/b/a Avista Utilities For an Order Authorizing the Company to Revise its Electric and Natural Gas Book Depreciation Rates and Authorizing Deferred Accounting Treatment for the Difference in Depreciation Expense*, Docket Nos. UE-180167 and UG-180168 at p. 2 (Apr. 3, 2019).

<sup>31</sup> Exh. EMA-1T, Andrews Direct at 74:13-75:15.

<sup>32</sup> *Id.* at 72 n.63.

<sup>33</sup> The Company’s proposal was originally included as part of its now-terminated Hydro One acquisition settlement, but was deferred for consideration in the current proceeding.

<sup>34</sup> The Company acknowledges that this proposal is already out of date, because Washington law requires depreciation by the end of 2025. The Company intends to make this relatively minor adjustment its proposal as required.

1 First, the Company proposes to use the tax credits it received based on the 2017  
2 federal tax cut to reduce the depreciable balance of the plant by \$11.7 million. Second,  
3 Avista proposes to convert the remaining balance<sup>35</sup> of \$58.2 million into a “regulatory  
4 asset” which it will amortize, and on which it proposes to earn its rate of return,<sup>36</sup> over 34  
5 years, commencing on April 1, 2020.<sup>37</sup>

6 **Q. Does it benefit ratepayers that the Company is applying its reduced corporate taxes**  
7 **to the undepreciated balance of the plant?**

8 A. No. As a regulated utility, the Company does not have the right to increase its after-tax  
9 earnings based on a change in the tax laws. It would have to credit these funds to  
10 ratepayers in any case, so to say they are specifically offsetting the undepreciated balance  
11 of the Colstrip units makes little difference to ratepayers.

12 **Q. Are ratepayer considerations such as intergenerational equity fully addressed by**  
13 **Avista’s proposal to convert the undepreciated balance on the Colstrip into a**  
14 **regulatory asset?**

15 A. No. While Avista proposes a fig leaf of shortening the depreciable lives of the Colstrip  
16 units to 2027 (or 2025) it in fact proposes to continue charging customers for this asset,  
17 including the Company’s full return on equity, for decades after Washington customers  
18 receive the last kWh of power from the plant. In fact, by converting the unrecovered  
19 balance into a regulatory asset as it proposes, Avista would significantly reduce its own  
20 regulatory risk—circumventing any review of prudence, any regulatory risk, and the

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<sup>35</sup> Remaining balance net of depreciation through the end of the plants depreciable life, now projected to be the end of 2025.

<sup>36</sup> Exh. EMA-1T, Andrews Direct at 77:2-3, 77 n.69.

<sup>37</sup> *Id.* at 78:1-14.

1 requirement that customers only be charged or “used and useful” assets—while still  
2 recovering and earning its full return on the unrecovered balance.

3 **Q. Does Avista have a plan for offsetting the intergenerational equity issues raised by**  
4 **its long-term amortization of an asset from which customers will be receiving no**  
5 **benefit?**

6 A. Yes. As Ms. Andrews notes, the Company plans to amortize the regulatory asset over the  
7 same time period that customers are enjoying the benefit of Avista’s large reserve of  
8 Excess Deferred Income Taxes (“EDIT”) resulting from the recent reduction in the  
9 corporate tax rate. As Ms. Andrews explains it, “the amortization schedule of the  
10 Regulatory Asset over 33.75 years is structured to match the amortization schedule of  
11 protected Plant EDIT, so that the amortization of protected Plant EDIT coincides with the  
12 amortization of the remaining depreciable Colstrip balance.”<sup>38</sup> Avista’s argument, in  
13 essence, is that by lining up these otherwise unrelated impacts, two intergenerational  
14 wrongs can make a right: customers have historically *underpaid* for depreciation because  
15 the depreciable life of the plant was set to far into the future, but they have *overpaid* for  
16 income taxes, at least according to the new tax law. By implementing these two  
17 corrections over a concurrent lifetime, the impact on ratepayers partially cancels.

18 **Q. Do you agree that this resolves intergenerational equity concerns?**

19 A. I agree that the net impact on ratepayers of these two unrelated phenomena are in  
20 opposite directions, and that therefore the impact of each intergenerational inequity is  
21 mitigated by the other. However, I do not agree that it “creatively solves the issue of

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<sup>38</sup> Exh. EMA-1T, Andrews Direct at 77:4-8.

1 intergenerational inequity” as Ms. Andrews suggests, quoting staff witness Jing Liu from  
2 his testimony in the depreciation case.<sup>39</sup> The fact that a change in the federal corporate  
3 income tax rate results in a rebate due to customers—regardless of the treatment of the  
4 outstanding balance on Colstrip—does not change the fact that the Company is asking  
5 ratepayers to fund a full utility rate of return on an asset from which they will be  
6 receiving no benefit.

7 **Q. What do you propose?**

8 A. Avista’s shareholders should bear at least some of the burden for carrying this large,  
9 outdated, undepreciated asset on its books, whether disguised as a “regulatory asset” or  
10 not. For example, I note that Avista recently received a \$103 million windfall as a  
11 termination fee for its failed merger with Hydro One. Of this, according to the Company,  
12 “approximately \$52 million was used to reimburse Avista for expenses incurred related to  
13 the failed transaction, and taxes. The remaining \$51 million was used to compensate the  
14 shareholders of Avista for the lost opportunity cost of the failed merger, by reducing the  
15 Company’s need for external financing.”<sup>40</sup> Avista argues, in response to Sierra Club Data  
16 Request SC-17, that shareholders assumed all of the risk associated with the attempted  
17 merger and should not be denied the \$51 million windfall; at the same time the Company  
18 seems unconcerned that future ratepayers are being asked to pay for decades for an asset  
19 from which they will receive no benefit—again, even if they are paying from a “fund” of  
20 their own money created by a change in the tax law. It seems to me that some reasonable

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<sup>39</sup> See Exh. EMA-1T, Andrews Direct at 79:3-80:6 (quoting Dockets UE-180167 & UG-180168, Testimony of Jing Liu, Exh. JL-1T at pp. 11-12).

<sup>40</sup> Avista response to Sierra Club Date Request SC-017 (Aug. 14, 2019) (attached as Exh. EDH-11).

1           compromise might be appropriate, where future ratepayers pay a portion from the tax  
2           reduction, which is wholly owed to them, while Avista’s shareholders pay a portion from  
3           the termination fee that would otherwise not be shared with ratepayers.

4           In addition, the Commission should eliminate or significantly reduce Avista’s  
5           return on its proposed regulatory asset, again in recognition that it is not used and useful  
6           for the ratepayers that are being asked to foot the bill, and also in recognition of the much  
7           lower risk associated with this asset relative to physical infrastructure. These proposals  
8           would result in a more equitable sharing of the costs of Units 3 and 4 after they retire.

9   **Q.   What are your recommendations for the Commission?**

10  A.   I make the following recommendations:

11           (1)   The Commission should require the Company to remove its Washington-  
12           jurisdictional share of the cost of the SmartBurn installation on Colstrip Units 3 and 4,  
13           and should not recover those costs, or any return on that investment, from ratepayers.

14           (2)   The Commission should disallow recovery of *all* capital costs associated  
15           with Colstrip units 3 and 4 at issue in this case, because the Company did not provide “a  
16           comprehensive, up-to-date analysis of the economics and environmental liabilities and  
17           risks of Colstrip Units 3 and 4 over their expected life” as the Commission directed it to  
18           do in Order 07 in WUTC Docket No. UE-170485.

19           (3)   The Company should be directed to apply a portion of the termination fee  
20           from the failed Hydro One merger to reduce the size of the regulatory asset formed from  
21           the unrecovered capital cost of Colstrip.

22           (4)   The Company should not earn a return on the regulatory asset containing



1 the unrecovered balance of the Colstrip units—or at a minimum, it must earn a far lower  
2 return than it does on regular utility capital assets. This reduced ROI would recognize  
3 that (a) the asset is not used or useful to Avista’s ratepayers; and (b) the Company would  
4 bear none of the regulatory, physical, or other risks with this regulatory asset that  
5 typically justify a higher than risk-free rate of return.

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

7 A. Yes.