

**Exh. JES-1T  
Dockets UE-170485/UG-170486  
Witness: Jennifer Snyder**

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

**WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,**

**Complainant,**

**v.**

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

**Respondents.**

**DOCKETS UE-170485 and  
UG-170486 (*Consolidated*)**

**TESTIMONY OF**

**Jennifer Snyder**

**STAFF OF  
WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

*2017 General Rate Case Adjustment 3.13 LEAP Deferral Gas Line Ext.,  
LEAP Pilot and Fuel Conversion Program Review*

**October 27, 2017**

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**List of Exhibits**

- Exh. JES-2, Avista response to UTC Staff Data Request No. 178
- Exh. JES-3, Avista response to UTC Staff Data Request No. 180
- Exh. JES-4, Avista response to UTC Staff Data Request No. 172
- Exh. JES-5, Avista response to UTC Staff Data Request No. 174
- Exh. JES-6, My Avista – Rebates: Washington
- Exh. JES-7, Air Control Spokane: Avista Rebates Energy Efficiency Program
- Exh. JES-8, Avista response to UTC Staff Data Request No. 176
- Exh. JES-9, Avista response to UTC Staff Data Request No. 179
- Exh. JES-10, Avista Natural Gas Line Extension Allowance Program Semi-Annual Report No. 3 Docket UG-152394 (Sept. 29, 2017)
- Exh. JES-11, Avista 2018 Draft Electric Annual Conservation Plan (including Appendices A and F)

1 **I. INTRODUCTION**

2

3 **Q. Please state your name and business address.**

4 A. I am Jennifer Elizabeth Snyder. My business address is 1300 S. Evergreen Park  
5 Drive S.W., P.O. Box 47250, Olympia, WA 98504.

6

7 **Q. By whom are you employed and in what capacity?**

8 A. I am employed by the Washington Utilities and Transportation Commission  
9 (Commission) as a Regulatory Analyst in the Conservation and Energy Planning  
10 section of the Regulatory Services Division.

11

12 **Q. How long have you been employed by the Commission?**

13 A. I have been employed by the Commission since 2013.

14

15 **Q. Would you please state your educational and professional background?**

16 A. I have a Master's degree in Environmental Studies with an emphasis in Energy  
17 Policy and a Bachelor of Science degree, both from The Evergreen State College. I  
18 attended New Mexico State University's rate case basics workshop in May 2016, the  
19 National Association of Regulatory Utility Commissioners' Annual Regulatory  
20 Studies Program intermediate course in August 2016, the International Energy  
21 Program Evaluation Conference in August 2017, as well as other sector-specific  
22 workshops, trainings, and conferences. I completed Public Utilities Reports Guide's  
23 "Principles of Public Utilities Operations and Management" in October 2016.

1                   As a Regulatory Analyst, I am responsible for the development of Staff  
2                   recommendations concerning tariff filings and conservation plans by regulated  
3                   companies for presentation to the Commission at open public meetings and  
4                   adjudications. I have filed testimony in support of settlement in docket UE-161123  
5                   and on the prudence of acquiring innovative technology in docket UE-170033/UG-  
6                   170034.

7  
8                   **II.     SCOPE AND SUMMARY OF TESTIMONY**

9  
10                  **Q.     Please explain the purpose of your testimony.**

11                  A.     The purpose of my testimony is twofold: to provide Staff's review of the Line  
12                  Extension Allowance (LEAP) pilot program, the "Pro Forma LEAP Deferral"  
13                  adjustment 3.13, and its recommendation for the conditional continuation of the  
14                  LEAP pilot program; and, to provide Staff's recommendation for Avista's Fuel  
15                  Conversion program.

16  
17                  **Q.     Please summarize Staff's recommendations concerning Avista's LEAP pilot  
18                  program and its Fuel Conversion program.**

19                  A.     Staff believes strongly that the Company should discontinue its Fuel Conversion  
20                  program starting with the 2018-2019 biennium. Staff also believes strongly that,  
21                  while its continuation appears appropriate, the Commission should approve the  
22                  continuation of the LEAP pilot program subject to the following conditions:

- 1 • Avista works with Staff to identify appropriate measures for evaluating
- 2 the success of LEAP;
- 3 • Avista appropriately modifies the metrics reported in the semi-annual
- 4 reports;
- 5 • Avista updates tariff sheets to reflect programmatic changes; *and*
- 6 • Avista’s electric to natural gas Fuel Conversion program is discontinued
- 7 starting with the 2018-2019 biennium.

8 In addition, Staff requests that the Company be required to notify Staff no  
9 later than November 30, 2018, of its intent to either implement the LEAP pilot as a  
10 permanent program, modify and extend it as a pilot, or discontinue the program  
11 altogether (this date is approximately ninety days prior to the scheduled termination  
12 date of the pilot program).

13  
14 **III. MODIFY THE LEAP PILOT PROGRAM’S DESIGN AND REPORTING**

15  
16 **Q. Briefly describe the LEAP pilot.**

17 A. Avista proposed the LEAP in 2015, and the Commission approved it as a pilot  
18 program.<sup>1</sup> Through the program, when a residential customer applies for new natural  
19 gas service they are provided with a line extension allowance credit. In cases where  
20 the cost to the Company of installing natural gas facilities is less than the allowance,  
21 the LEAP allows any excess to be applied towards the purchase and installation of

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<sup>1</sup> *In the Matter of the Petition of Avista Corp. for an Order Authorizing Approval of Changes to the Company’s Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Order 01 (Feb. 25, 2016).

1 high efficiency space heating and/or water heating equipment. The current allowance  
2 is \$4,482 with the average customer receiving an excess allowance rebate of \$2,805.<sup>2</sup>

3

4 **Q. What is the purpose of natural gas adjustment 3.13 in Exhibit EMA-6?**

5 A. The adjustment, included in Avista witness Ms. Andrews' exhibit EMA-6, amortizes  
6 the \$2.9 million deferral balance of the LEAP pilot incurred between March 1, 2016,  
7 and March 31, 2017, over a five year period from May 1, 2018, to April 30, 2023.

8 The resulting annual amortization amount is \$580,000. The LEAP pilot and further  
9 description of the adjustment is addressed in the testimony of Avista witness Kevin  
10 J. Christie.<sup>3</sup>

11

12 **Q. Does Staff contest Adjustment 3.13, Pro Forma LEAP Deferral?**

13 A. No. Staff does not contest this adjustment. However, Staff has a number of concerns  
14 with the LEAP pilot and contests its continuation if the program is not appropriately  
15 updated and if Avista's Fuel Conversion program is not discontinued starting with  
16 the 2018-2019 biennium.

17

18 **Q. As a pilot program, does LEAP adhere to best practices for pilot program  
19 design?**

20 A. No. While Staff applauds Avista's willingness to try an innovative program design,  
21 the LEAP pilot lacks the data collection necessary to answer any particular technical

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<sup>2</sup> Snyder, Exh. JES-2, Avista Response to UTC Staff Data Request No. 178. The average rebate for customers participating in the LEAP pilot is up-to-date through February 28, 2017.

<sup>3</sup> Christie, Exh. KJC-1T.

1 question or to evaluate lessons learned from its implementation. These are hallmarks  
2 of any well-designed pilot program, but they are noticeably absent from the LEAP  
3 pilot. LEAP appears to be more of a demonstration program or, more accurately, a  
4 full-scale program approved on a temporary basis.

5  
6 **Q. How does Avista currently intend to evaluate the success of the LEAP pilot**  
7 **program?**

8 A. Staff is not sure and neither is Avista. Avista has not developed criteria to evaluate  
9 the success of the LEAP pilot at the end of three years. In response to Staff's  
10 questions, Avista speculated on criteria the Company will likely consider in its  
11 evaluation of the program, including:

- 12 • Total number of new customer hook-ups,
- 13 • Number of new development hook-ups,
- 14 • Number of new construction hook-ups (i.e., infill of existing developments  
15 or single lots),
- 16 • Total number of conversions,
- 17 • Number of conversions from Avista electric customers,
- 18 • Number of conversions from non-Avista electric customers,
- 19 • Customer satisfaction and feedback, and
- 20 • Emissions reductions.<sup>4</sup>

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<sup>4</sup> Snyder, Exh. JES-3, Avista response to UTC Staff Data Request No. 180.

1 As several of these metrics are not affected by LEAP (such as new construction  
2 hook-ups, since LEAP is only available to existing customers), it is apparent that the  
3 Company has yet to seriously consider how this program should be properly  
4 evaluated.

5  
6 **Q. What information is included in Avista’s semi-annual reports?**

7 A. In Order 01 of Docket UG-152394, the Commission required that Avista file semi-  
8 annual reports “showing the impact of the increased allowance and rebates.”<sup>5</sup> Prior to  
9 filing the first semi-annual report, Avista consulted with Staff concerning appropriate  
10 content and has complied with Staff’s recommendations at that time. The  
11 information included in these reports includes:

- 12 • Historical Residential Schedule 101 Hook-ups per year,
- 13 • New Residential Schedule 101 Hook-ups since the inception of the LEAP  
14 pilot,
- 15 • Conversions from Avista and Non-Avista Customers,
- 16 • Average Amount of Estimated Line Extension,
- 17 • Number of Customers that Received Equipment Rebate and Average  
18 Rebate Amount,
- 19 • Evaluation of Heating Season kWh Usage of Avista Electric Conversion  
20 Customers, and

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<sup>5</sup> *In the Matter of the Petition of Avista Corp. for an Order Authorizing Approval of Changes to the Company’s Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Order 01, 4, ¶ 17 (Feb. 25, 2016).



- Customer Survey Data.

**Q. Has the LEAP pilot been successful?**

A. On the surface the LEAP pilot appears to have been quite successful in providing customers access to natural gas. Judging solely from the recent uptick in residential natural gas hook-ups per year, connecting to natural gas has become more popular with customers since the inception of the LEAP pilot on March 1, 2016.<sup>6</sup> Table 1, below, shows this recent uptick in residential natural gas hook-ups per year. Hookups in 2016 increased by almost 33% from 2015, and hookups in 2017 are on track to even exceed the 2016 numbers.

**Table 1.**  
**Washington Residential Schedule 101 hook-ups per year**

<b>Calendar Year</b>	<b>Residential</b>
2005	3,521
2006	3,489
2007	2,866
2008	2,644
2009	1,723
2010	1,562
2011	1,482
2012	1,705
2013	2,030
2014	2,499
2015	2,174
2016	3,075
2017 – thru August	2,552

The evidence is insufficient, however, to show that the LEAP pilot is responsible for this increase in hookups. For example, the semi-annual report notes

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<sup>6</sup> Snyder, Exh. JES-10, Avista Natural Gas Line Extension Allowance Program Semi-Annual Report No. 3, Docket UG-152394 (Sep. 29, 2017).

1 that 90 percent of new homes where natural gas is available choose to install natural  
2 gas. So the trend evident in the table above could just as easily be attributed to new  
3 construction in Avista's natural gas service territory.<sup>7</sup> In 2016, 531 customers  
4 received LEAP rebates, representing 60 percent of the year-over-year increase from  
5 2015. Yet during the years 2005 and 2006, prior to the economic downturn, an even  
6 greater number of hookups were made as compared to the total number of hookups  
7 in 2016 and 2017 (expected). Other factors, such as low gas prices and the  
8 Company's Fuel Conversion program are also likely factors that help to drive  
9 conversions. Avista must perform additional evaluation and analysis on the program,  
10 with appropriate metrics, extricating the impact of the pilot program, before LEAP  
11 can be considered an absolute success.

12  
13 **Q. Does Staff have any suggestions of appropriate metrics to evaluate the success**  
14 **of the LEAP pilot program?**

15 A. Yes. In reviewing Avista's likely criteria for determining success of the program,  
16 Staff found certain aspects of a successful utility program missing or under-  
17 represented. The objective of the LEAP pilot program should not only be to  
18 maximize the number of new customers.<sup>8</sup> Staff suggests, therefore, that the Company  
19 incorporate additional measures of success that go beyond a mere tally of the number  
20 of new hookups. These measures should both account for the multiple perspectives

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<sup>7</sup> Avista has not analyzed the data to sort out LEAP eligible hook-ups for a more direct comparison. Snyder, Exh. JES-4, Avista response to UTC Staff Data Request No. 172.

<sup>8</sup> See *In the Matter of the Petition of Avista Corp. for an Order Authorizing Approval of Changes to the Company's Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Petition, 4, ¶ 11 (Dec. 16, 2015).

1 of all stakeholders to ensure fairness and more accurately reflect the original purpose  
2 of the program, which is to “help to expand natural gas distribution infrastructure to  
3 address environmental concerns associated with emissions, and further promote the  
4 efficient end-use of natural gas.”<sup>9</sup> Staff recommends improving metrics surrounding:  
5 1) cost-effectiveness; 2) long-term emissions comparisons; and 3) customer survey  
6 data.

7 The metrics Staff recommends are examples of the types of questions an  
8 appropriate evaluation should answer. They should not be considered an exhaustive  
9 list. Additional information, such as distances from the gas main and customer  
10 demographics could be informative. Staff encourages Avista to consider what other  
11 elements might be necessary to illustrate that this program is successful and should  
12 be continued as a full program, modified, or discontinued at the end of the three year  
13 pilot.

14  
15 **Q. Please elaborate on the recommendation for a cost-effectiveness metric.**

16 A. Staff recommends that Avista perform cost-effectiveness tests that include the  
17 participant’s costs and benefits, impacts on ratepayers, and full effects on the utility.  
18 The metric should be similar to those used for Avista’s demand side management  
19 (DSM) program, which relies on the Total Resource Cost (TRC) test to ensure the  
20 utility’s investment is also beneficial to participants in the program and on the Utility  
21 Cost Test (UCT) to ensure the utility is not overpaying for a resource. While the

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<sup>9</sup> *In the Matter of the Petition of Avista Corp. for an Order Authorizing Approval of Changes to the Company’s Natural Gas Line Extension Tariff and Accounting Ratemaking Treatment*, Docket UG-152394, Petition, 4, ¶ 11 (Dec. 16, 2015).

1 same threshold may not be necessary for the LEAP pilot, this type of test would  
2 demonstrate that, overall, the program provides benefits to Avista's customers.

3  
4 **Q. Please elaborate on the recommendation for long-term emissions comparisons.**

5 A. In reference to the "environmental concerns associated with emissions," identified in  
6 its original LEAP petition, Avista currently provides a simple calculation that  
7 compares an average electric residential customer with electric resistance heat to an  
8 average natural gas residential customer using a 90 percent efficient gas furnace and  
9 67 percent efficient gas water heater.<sup>10</sup> Average customer emissions are calculated  
10 using Avista's 2015 electric fuel supply and regional emissions.<sup>11</sup> Since the LEAP  
11 pilot's aim is to expand infrastructure, the effects will be long term and calculations  
12 should incorporate long term forecasts, not snap shots, of fuel supply and regional  
13 emissions. This should take into account the planned closures for a number of coal  
14 plants in the near future, as well as the energy policies of states in the region that will  
15 affect the energy mix for utilities delivering electricity to customers, especially  
16 Washington customers.

17 The direct burning of natural gas may currently be more efficient from an  
18 emissions perspective than Avista's current electric fuel mix.<sup>12</sup> Looking ahead,  
19 however, regional emissions intensity is likely to significantly decrease within the

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<sup>10</sup> Snyder, Exh. JES-5, Avista response to UTC Staff Data Request No. 174.

<sup>11</sup> Snyder, Exh. JES-5, Avista response to UTC Staff Data Request No. 174.

<sup>12</sup> Staff is concerned that Avista's emissions profile uses average efficiency electric appliances vs. the high efficiency appliances required by the LEAP. When possible the Company should keep track of the efficiency of the appliances replaced by the program to accurately calculate emissions reductions. The Company should also present continued analysis comparing scenarios upgrading customers to a highly efficient electric heat pump.

1 lifetime of the buildouts associated with LEAP.<sup>13</sup> If the LEAP pilot eventually  
2 becomes a full-fledged program, it is imperative that Avista establishes an emissions  
3 calculation that will accurately reflect the program's effect on future emissions and  
4 that can send a signal to program administrators and regulators if the emissions  
5 intensity of the grid becomes the cleaner option. The appropriate use of this metric  
6 will determine when continuation of the program would be inconsistent with  
7 environmental and emissions concerns – one of the stated primary intentions of the  
8 program.

9  
10 **Q. Please elaborate on the recommendation to improve customer survey data.**

11 A. Avista uses a voluntary survey, which is given to customers as part of the application  
12 for receiving a natural gas line extension allowance equipment rebate, to gain insight  
13 to customer views of the program. While customer satisfaction is one appropriate  
14 metric of program success, Staff recommends the Company conduct a survey that  
15 includes electric customers that have chosen not to take part in the program in order  
16 to ascertain areas where the program design or implementation might improve  
17 customer use of the program.

18  
19 **Q. Other than identifying appropriate parameters to measure the success of the**  
20 **program, does Staff have recommendations regarding the LEAP pilot?**

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<sup>13</sup> While Staff cannot know for sure that emissions intensity for the region will decline, the combination of nearly 3,000 MW of regional coal capacity already planned for retirement and significant policies aimed at lowering carbon emissions and promoting renewables in the regions two largest states make this a likely scenario. See Charles, Gillian; Northwest Carbon Footprint is Low and Getting Lower *available at* <https://www.nwcouncil.org/news/blog/carbon-emissions/> (last visited Oct. 23, 2017).

1 A. Yes. Once the Company has identified appropriate measures of success, Staff  
2 recommends Avista modify the information reported in the semi-annual reports to  
3 reflect the metrics against which the pilot will ultimately be measured. In addition,  
4 Staff recommends the Commission order Avista to update the tariff sheet associated  
5 with LEAP to reflect the removal of rebates for electric to natural gas conversions  
6 provided by electric ratepayers as proposed in Section IV of this testimony.

7  
8 **Q. Does Staff know what Avista’s future plans for the LEAP pilot program are?**

9 A. Not yet. The LEAP pilot is currently set to continue through February 1, 2019. Staff  
10 conditionally supports its continuation, as explained in this testimony. Staff,  
11 however, requests that the Company be required to notify Staff no later than  
12 November 31, 2018, of its intent to either implement the LEAP pilot as a permanent  
13 program, modify and extend it as a pilot, or discontinue the program altogether. This  
14 date is approximately ninety days prior to the scheduled termination date of the pilot  
15 program. This gives a reasonable amount of time to consider and evaluate any plans  
16 that Avista may have to continue the LEAP pilot or convert it into a permanent  
17 program.

18

19 **IV. DISCONTINUE THE FUEL CONVERSION PROGRAM**

20

21 **Q. Briefly describe the Fuel Conversion program.**

22 A. Avista’s Fuel Conversion program offers rebates to residential electric customers  
23 who replace their electric heat and/or water heat with natural gas heat and/or water

1 heat. It is not the only program that Avista implements to provide rebates related to  
2 natural gas, as Avista also has demand side management (DSM) programs that offer  
3 related incentives. The Fuel Conversion program is currently funded through the  
4 *electric* conservation rider, Electric Schedule 91. Staff believes it is time to  
5 discontinue funding of fuel conversion through the electric conservation rider.  
6 Increased access to natural gas is more properly funded through gas rates, as is being  
7 done with the LEAP pilot.

8  
9 **Q. How do Avista's Fuel Conversion program, the LEAP pilot program, and other**  
10 **DSM programs overlap?**

11 A. Currently, Avista's DSM programs provide generous fuel conversion rebates to the  
12 same customers, for the same actions, as the LEAP pilot. As mentioned above, the  
13 Fuel Conversion program provides rebates for customers who switch fuels for space  
14 and water heat. The gas DSM program provides rebates when these same customers  
15 choose to purchase the highly efficient versions of the space and water heat  
16 appliances. The LEAP pilot provides additional rebates towards the purchase and  
17 installation of high efficiency space heating and/or water heating equipment. Under  
18 the current suite of programs, it is difficult to parse out the effect of the LEAP pilot  
19 on expanding customer access to natural gas from the effect of other programs. Table  
20 2, below, illustrates the rebates an Avista electric customer converting to natural gas  
21 space and water heat in October 2017 would expect to receive from Avista:

1  
2

**Table 2.**

**Avista Rebates Available to Fuel Switching Customers<sup>14</sup>**

<b>Program</b>	<b>Rebate</b>	<b>Source of funding</b>
LEAP pilot – Average Rebate	\$2,805 <sup>15</sup>	Avista gas general rates
Fuel Conversion- Electric Heat to Natural Gas Furnace	\$1,500 <sup>16</sup>	Electric Schedule 91 Conservation Rider
Fuel Conversion- Electric to Natural Gas Water Heater	\$750	Electric Schedule 91 Conservation Rider
Natural Gas DSM- High Efficiency Natural Gas Furnace/Boiler <sup>17</sup>	\$300	Natural Gas Schedule 191 Conservation Rider
Natural Gas DSM- Natural Gas Tankless Water Heater	\$200	Natural Gas Schedule 191 Conservation Rider
<b>Total available rebate for average customer</b>	<b>\$5,555</b>	

3  
4  
5

If a customer searched on the internet for Avista rebates, they might even expect to receive more rebates to switch to natural gas. As marketed by the

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<sup>14</sup> As of October 27, 2017.

<sup>15</sup> Based on the average rebate. In some situations the cost for conversion is \$0 and the entire \$4,482 may be available for appliance rebates. In other cases the cost of the conversion may use the entire \$4,482. Snyder, Exh. JES-10 at 4, Avista Natural Gas Line Extension Allowance Program Semi-Annual Report No. 3, Docket UG-152394 (Sep. 29, 2017).

<sup>16</sup> Rebates for fuel conversion are currently planned to increase in 2018. Electric to natural gas furnace \$2,000; Electric to Natural Gas furnace and Water Heater \$2,750; and Electric to Natural Gas Direct Vent Wall Heat



1 contractor Air Control Spokane, a customer could receive “Up To \$7582.00!” from a  
2 combination of Avista Energy Efficiency Program Rebates, including LEAP.<sup>18</sup> Aside  
3 from information on the Avista website, marketing done for the LEAP pilot is done  
4 solely through HVAC dealers who are provided education about the program by the  
5 Company.<sup>19</sup>

6  
7 **Q. Who pays for Avista’s Fuel Conversion program?**

8 A. The rebates in the table above identified as “Electric Heat to Natural Gas Furnace”  
9 and “Electric to Natural Gas Water Heater” represent Avista’s fuel conversion  
10 program. Currently, Avista *electric* ratepayers pay for the fuel conversion program  
11 administration and incentives as a pass through as part of the electric conservation  
12 rider.

13 Staff believes this is unfair for two reasons. First, customers who choose to  
14 remain electric-only customers are burdened with paying the costs for customers  
15 who choose to switch to gas. It is more appropriate for gas customers to bear any  
16 costs of funding customer access to natural gas. Second, electric customers do not  
17 receive the same type of avoided cost benefit from fuel conversion as from

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\$1,300. Snyder, Exh. JES-11 at 47, Avista 2018 Draft Electric Annual Conservation Plan (2018 Draft ACP), Appendix A.

<sup>17</sup> In addition to the rebates Avista identified in its response to UTC Staff Data Request No. 178 (Snyder, Exh. JES-2), rebates for high-efficient natural gas furnace/boiler and high-efficient natural gas water heater are available to fuel switching customers who choose to take advantage of them. This is confirmed by an examination of Avista’s advertising of rebates on its website. Snyder, Exh. JES-6 (showing website “My Avista – Rebates: Washington,” available at <https://myavista.com/energy-savings/rebates-washington> (last visited Oct. 13, 2017).

<sup>18</sup> Snyder, Exh. JES-7, Air Control Spokane: Avista Rebates Energy Efficiency Program, available at <http://www.aircontrolspokane.com/landing-pages/avista-rebate-program-up-to-3200/> (last visited Oct. 23, 2017).

<sup>19</sup> Snyder, Exh. JES-8, Avista Response to UTC Staff Data Request No. 176.

1 traditional conservation measures. In the case of fuel conversion, this so-called  
2 benefit is accruing by customers partially leaving the electric system. Staff believes  
3 that counting this loss of load as a benefit of fuel conversion is just as inappropriate  
4 as counting avoided costs as benefits in other instances when a customer partially or  
5 fully leaves the system, such as from a retail wheeling program.<sup>20</sup>

6

7 **Q. Is fuel conversion considered conservation?**

8 A. No. While directly burning natural gas for space or water heat is more  
9 thermodynamically efficient than generating electricity with natural gas and sending  
10 it over transmission lines, the Northwest Power Act defines conservation as “any  
11 reduction in electric power consumption as a result of increases in the efficiency of  
12 energy use, production, or distribution.”<sup>21</sup> Working from this definition, the  
13 Northwest Power and Conservation Council has never included fuel conversion as a  
14 form of electric conservation in their regional power plan.<sup>22</sup>

15 The Washington State definition for conservation is found in WAC 480-109-  
16 060(6). It states that conservation is “any reduction in electric power consumption  
17 resulting from increases in the efficiency of energy use, production, or distribution.”

18 This mirrors the Northwest Power Act’s definition exactly.

19 While Avista’s fuel conversion programs have been recovered through the  
20 electric conservation rider, they have not been treated as conservation by the

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<sup>20</sup> The only technology with explicit authority to be treated the same as conservation is high efficiency cogeneration. *See* WAC 480-109-100(6)

<sup>21</sup> Pacific Northwest Electric Power Planning and Conservation Act, Pub. L. No. 96-501, §3(3), 94 Stat. 2697, 2698 (1980) (codified at 16 U.S.C. § 839a(3)).

<sup>22</sup> Northwest Power and Conservation Council, *7th Power Plan*, Appendix N: Direct Use of Natural Gas at N-4 (May 26, 2016) *available at* [https://www.nwcouncil.org/media/7149904/7thplanfinal\\_appdixn\\_duofnatgas.pdf](https://www.nwcouncil.org/media/7149904/7thplanfinal_appdixn_duofnatgas.pdf).

1 Commission, in Avista’s tariffs, or in Avista’s conservation practices. The  
2 Commission has not required utilities to pursue fuel conversion as part of the Energy  
3 Independence Act (EIA), which obliges utilities to pursue all available conservation.  
4 In fact, Avista’s fuel conversion program is held outside of the Company’s EIA  
5 target.

6 Avista’s Schedule 90 - Electric Energy Efficiency Programs states that the  
7 schedule is available “for the purpose of promoting the efficient use of electricity”  
8 and “assistance provided under this schedule is limited to end uses where electricity  
9 is the primary source of energy.” Avista’s fuel conversion program moves the  
10 primary source of end use energy from electricity to natural gas but does nothing to  
11 promote the efficient *use* of electricity.

12 Additionally, Avista has reported on actions it has taken towards natural gas  
13 conservation.<sup>23</sup> It has set a natural gas conservation target for itself in its integrated  
14 resource plans (IRPs) since 1993,<sup>24</sup> but has unfortunately failed to meet this target  
15 multiple times.<sup>25</sup> While Avista has included the effects of fuel conversions in its IRP

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<sup>23</sup> In the context of natural gas, “conservation” is defined as “any reduction in natural gas consumption that results from increases in the efficiency of energy use or distribution.” WAC 480-90-238(2)(c). This is consistent with the definition of conservation in the electric context.

<sup>24</sup> The Washington Water Power Company (a.k.a. Avista Corporation), Docket UG-910921, *1993 Natural Gas Integrated Resource Plan* at B-12 (1993) (indicating a target of 1,422,000 therms) (accessible through the Washington State Library).

<sup>25</sup> See e.g. Staff Investigation, Docket UG-111588, *2012 Natural Gas Integrated Resource Plan* at 4.10 (Aug. 31, 2012) (indicating a target of 1,310,000 therms); Staff Investigation, Docket UE-132045, *Washington 2014 Annual Conservation Report & Cost Effectiveness Analysis* at 2 (May 29, 2015) (Avista’s 2014 ACR) (indicating a conservation achievement of 529,763 therms); Staff Investigation, Docket UG-131621, *2014 Natural Gas Integrated Resource Plan* at 56 (Aug. 29, 2014) (indicating a target of 1,287,000 therms); Staff Investigation, Docket UG-132046, *Washington 2015 Annual Conservation Report & Cost-Effectiveness Analysis* at 5 (May 31, 2016) (Avista’s 2015 ACR) (indicating a conservation achievement of 659,033 therms).

1 load forecasts, these effects are not included in the reporting of Avista's conservation  
2 achievement.<sup>26</sup>

3 Thus, the Northwest Power and Conservation Council, the Commission, and  
4 Avista's own tariffs and reporting practices all indicate that fuel conversion is not  
5 conservation. These reasons support Staff's recommendation that the fuel conversion  
6 program no longer be funded through the Company's electric conservation rider.

7  
8 **Q. Has Staff recommended recovery of non-conservation programs, similar to the  
9 fuel conversion program, through the electric conservation rider in the past?**

10 A. Yes. Staff has recommended, and the Commission has approved, that numerous non-  
11 conservation programs be recovered through utilities' conservation riders. Examples  
12 of these programs include net metering, electric vehicle pilots, demand response  
13 pilots, and fuel conversion programs. Common themes among these programs are  
14 that they are small and have a minimal impact on the rate of the rider, they are  
15 recognized to provide a public benefit, and they are unlikely to be supported by the  
16 utility if not provided this type of recovery. These themes no longer exist in Avista's  
17 Fuel Conversion program.

18 Once these types of programs mature, or grow large enough to have  
19 significant impact on the rider, they should be moved off the conservation rider and  
20 in to general rates or another, more appropriate, funding source. Avista's Fuel

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<sup>26</sup> See Avista's 2014 ACR at 2; Avista's 2015 ACR at 5. Staff notes, unfortunately, that it is unclear whether Avista's 2016 Annual Conservation Report properly removes the effects of fuel conversion from its natural gas conservation achievement. See Docket UE-152076, Staff Investigation, *Washington 2016 DSM Annual Conservation Report & Cost-Effectiveness Analysis* at 2 (Jun. 1, 2017).

1 Conversion program is comparatively large. It continues to take up a larger  
2 percentage of rider funding while overlapping with other programs that aim to  
3 accomplish the same goals.<sup>27</sup> There is an increasing appearance that Avista is using  
4 electric conservation funding not just to improve customers' access to natural gas, or  
5 to avoid building a future electric generation plant, but to actually expand the  
6 Company's natural gas business. Staff recognizes the benefits of increasing access to  
7 natural gas for customers who choose to switch fuels, and Staff supports Avista's  
8 past development of the fuel conversion program. But Staff now believes it is time to  
9 discontinue funding of fuel conversion through the electric conservation rider.  
10 Increased access to natural gas is more properly funded through gas rates, as is being  
11 done with the LEAP pilot.

12  
13 **Q. Does the overall impact of all of Avista's fuel switching programs bias**  
14 **customers towards natural gas?**

15 A. Yes. In Staff's judgment the cumulative impact of the LEAP program, the fuel  
16 conversion incentive, and the rebate for energy efficient gas appliances puts more  
17 than just a thumb on the scale in favor of natural gas. These programs, taken as a  
18 whole, do more than provide access to natural gas – they appear to actually distort  
19 inter-fuel competition both inside and outside of Avista's electric service territory.  
20 Such distortion is unnecessary, given the current economics of natural gas, and  
21 undesirable, given the risk of unforeseen changes to these economic conditions.

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<sup>27</sup> Snyder, Exh. JES-11 at 71, Avista 2018 Draft ACP, Appendix F. The budget of the residential conversions program in the 2018 Draft ACP is over \$4.5 million (27 percent of total electric DSM budget), up from \$1.1 million (8 percent of total electric DSM budget) in the 2017 ACP. For 2017 budget, refer to Avista's Revised Annual Conservation Plan, Docket UG-152076, Appendix F (Dec. 16, 2016).

1 **Q. How does the LEAP pilot impact the cost-effectiveness of DSM programs?**

2 A. Staff does not know how to answer this question. Staff has not received from the  
3 Company any analysis or the information needed to perform a traditional cost-  
4 effectiveness analysis and, therefore, cannot answer this question. Staff asked Avista  
5 to provide this analysis and the information needed to perform it. Avista responded  
6 to Staff's request by stating that "the LEAP program is not a DSM program nor was  
7 it proposed to be treated like a DSM program."<sup>28</sup> Staff is disappointed by the  
8 Company's response. From the response, it appears to Staff that the Company wants  
9 to blatantly ignore the impact that the additional rebate (provided by the utility for  
10 high efficiency gas appliances through LEAP) has on the cost-effectiveness  
11 proposition for Avista's current DSM programs.

12 Cost-effectiveness tests are used for many corporate purposes, not just energy  
13 efficiency programs. Staff expects a company evaluating any program so directly  
14 connected to its energy efficiency program to perform a variety of cost-effectiveness  
15 tests that shed light on the value of the program to the utility, the customers in  
16 general, and the individual participants. Staff is appalled at Avista's inability or  
17 unwillingness to perform cost-effectiveness tests, or to even provide the information  
18 necessary to make such analyses, for the LEAP pilot program.

19  
20 **Q. Does Avista plan to offer a Fuel Conversion program through the conservation**  
21 **rider in the 2018-2019 biennium?**

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<sup>28</sup> Snyder, Exh. JES-9, Avista response to UTC Staff Data Request No. 179.

1 A. Yes. The Company is proposing to substantially increase fuel conversion budgets. In  
2 its draft Biennial Conservation Plan (BCP) and Annual Conservation Plan (ACP)  
3 shared with Avista's Demand Side Management Advisory Group (advisory group)  
4 on September 29, 2017, Avista included plans for continuing the Fuel Conversion  
5 program.<sup>29</sup> In fact, Avista's initial draft of its ACP included a budget of \$4,563,322  
6 for the residential fuel conversions program (including incentive costs, internal labor  
7 and other non-incentive utility costs) out of a total electric DSM budget of  
8 \$16,757,488 for all programs in the conservation rider.<sup>30</sup> If you include the natural  
9 gas multifamily market transformation program (which provides rebates to  
10 developers of new multifamily complexes who choose to install natural gas) along  
11 with the Fuel Conversion program, the amount of the electric conservation budget  
12 for 2018 that is planned to be spent on incentivizing customers to move to natural  
13 gas is \$7,072,799: more than *42 percent* of the total electric DSM budget.<sup>31</sup> This  
14 amount is four times greater than was budgeted in the Company's 2017 plan.

15 The proposed incentive expenditures (money paid directly to customers) for  
16 residential fuel conversion dwarfs the proposed incentives for all other residential  
17 programs, as illustrated in Table 3, below:

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<sup>29</sup> Avista's sharing of these plans is required by WAC 480-109-110(3).

<sup>30</sup> Snyder, Exh. JES-11 at 36, Avista 2018 Draft ACP (indicating the Total 2018 Washington Electric Budget); Snyder, Exh. JES-11 at 71, Avista 2018 Draft ACP, Appendix F (regarding Fuel Efficiency Conversions).

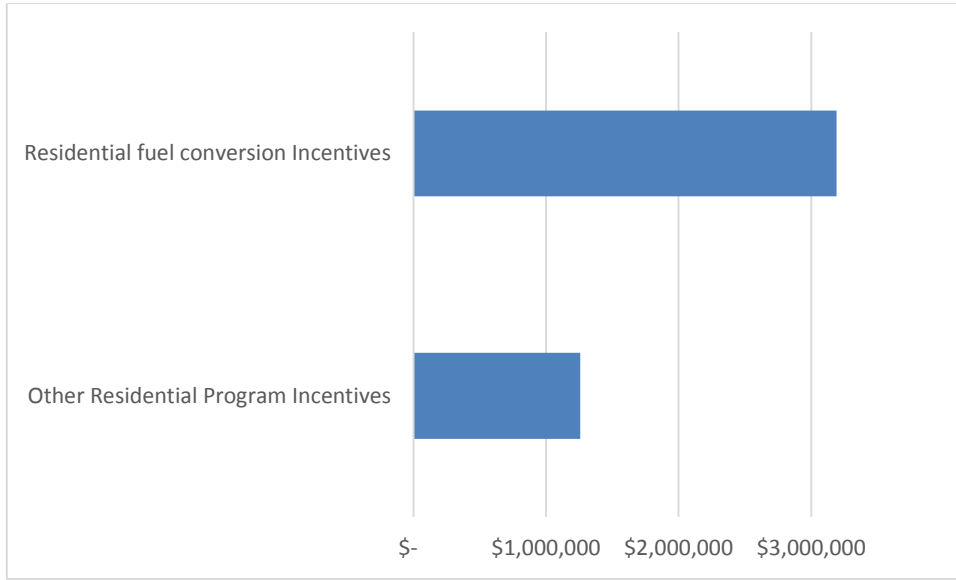
<sup>31</sup> Snyder, Exh. JES-11 at 71, Avista 2018 Draft ACP, Appendix F (indicating a Multifamily Market Transformation budget of \$2,509,562).

1

**Table 3.**

2

**2018 Draft Annual Conservation Plan Incentives**



3

4

Concerns with the fuel conversion program were expressed by several

5

members of the advisory group both during DSM Advisory Group meetings and via

6

email to the group.<sup>32</sup> Additionally, Staff clearly expressed its view to the Company

7

that Washington electric customers should no longer be paying for fuel conversions

8

through the conservation rider. Staff hopes that, in response to the feedback of its

9

conservation advisory group, Avista will include a voluntarily discontinuation of the

10

program for the 2018-2019 biennium in its BCP filing set for November 1, 2017. But

11

Staff is reticent to wait-and-see whether the Company will take this necessary action

12

voluntarily, and believes it is obligated to bring this issue before the Commission in

13

this general rate case in order to ensure resolution and Commission guidance.

14

<sup>32</sup> WAC 480-109-110(1)(ii) –A utility must maintain and use an external conservation advisory group of stakeholders to advise the utility on conservation issues including...incentives to customers for measures and services.



1 **Q. Why should electric customers not pay for the Fuel Conversion program**  
2 **through the electric conservation rider?**

3 A. As a non-conservation program, Staff supported recovery of the costs of the Fuel  
4 Conversion program through the electric conservation rider because it had a  
5 recognized public benefit, was not being funded in other utility programs, and did  
6 not severely impact the rate charged to customers. Now, however, Staff has  
7 discovered that Avista's Fuel Conversion program duplicates the intent and purpose  
8 of the LEAP pilot, unfairly burdens electric customers with charges for gas  
9 infrastructure, and raises questions around the degree and magnitude of supporting  
10 inter-fuel competition. Coupled with the scale of the program in comparison to the  
11 actual conservation program, it is readily apparent to Staff that electric customers  
12 should no longer support this program through the electric conservation rider.

13  
14 **Q. Who should be responsible for funding access to natural gas?**

15 A. Natural gas ratepayers. The LEAP pilot is funded by Avista's natural gas general  
16 rates. The apparent initial success of the LEAP pilot indicates that it is possible to  
17 move the cost of building Avista's natural gas business and expanding availability of  
18 this utility service to natural gas rate payers. This is more appropriate than funding  
19 natural gas business and service expansion through the electric conservation rider  
20 because natural gas ratepayers should be responsible for costs to build and expand  
21 natural gas service. It allows for the utility to expand access to natural gas without  
22 subsidies from electric customers. Additional conservation rebates for high

1 efficiency gas appliances will continue to save customers money and reduce  
2 emissions through the gas conservation rider.

3

4 **Q. What about low-income fuel conversion funding?**

5 A. Avista's low-income program allocates funds to seven Community Action Partner  
6 agencies in their service territory and allows these agencies to spend the funds on  
7 either electric or natural gas measures at their discretion. Staff sees no reason not to  
8 allow these agencies to fund low-income fuel conversions in cases when it is in the  
9 best interest of the low-income customer.

10

11 **Q. What should be the fate of the Fuel Conversion program?**

12 A. Staff recommends the Fuel Conversion program be discontinued starting with the  
13 2018-2019 biennium. Additionally, the 2018-2019 BCP should not be approved if  
14 Avista includes the Fuel Conversion program as proposed in its draft BCP.

15

16 **Q. What should be the fate of the LEAP pilot program?**

17 A. Staff recommends the Commission allow the LEAP pilot program to continue for the  
18 previously-approved three year time frame, including current accounting treatment,  
19 with the conditions that the Company must work with Staff to identify appropriate  
20 measures of success for the program, appropriately modify the metrics reported in  
21 the semi-annual reports, update tariff sheets to reflect programmatic changes, *and*  
22 discontinue the electric to natural gas residential Fuel Conversion program starting  
23 with the 2018-2019 biennium.

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

2 **A. Yes.**