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**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION ) CASE NO. AVU-E-16-03  
OF AVISTA CORPORATION FOR THE )  
AUTHORITY TO INCREASE ITS RATES )  
AND CHARGES FOR ELECTRIC SERVICE ) DIRECT TESTIMONY  
TO ELECTRIC CUSTOMERS IN THE ) OF  
STATE OF IDAHO ) HEATHER L. ROSENTRATER  
\_\_\_\_\_ )

FOR AVISTA CORPORATION

(ELECTRIC)

1 I. INTRODUCTION

2 Q. Please state your name, employer and business  
3 address.

4 A. My name is Heather Rosentrater and I am employed as  
5 the Vice President of Energy Delivery for Avista Utilities, at  
6 1411 East Mission Avenue, Spokane, Washington.

7 Q. Would you briefly describe your educational  
8 background and professional experience?

9 A. Yes. I received a Bachelor of Science degree in  
10 electrical engineering from Gonzaga University, and hold a  
11 Professional Engineer (PE) credential. I joined Avista in 1996,  
12 and worked initially as an electrical engineer at Avista's  
13 former subsidiary Avista Labs, where I developed electrical  
14 systems for fuel cells. I joined Avista Utilities in 2003, and  
15 have broad experience on both the electric and natural gas side  
16 of the business, having managed departments and projects in  
17 transmission, distribution, SCADA, asset management and supply  
18 chain, as well as business process improvement using LEAN and  
19 Six Sigma techniques. I was named to my current position in  
20 December 2015. In this role, I am responsible for electric and  
21 natural gas engineering, operations, and shared services -  
22 fleet, facilities, and business process improvement.

1 I currently serve on the board of directors for the Vanessa  
2 Behan Crisis Nursery and the West Valley Education Foundation  
3 in Spokane. In addition, I am a member of the Washington State  
4 University School of Engineering and Computer Science Executive  
5 Council.

6 **Q. What is the scope of your testimony?**

7 A. I will provide an overview of the Company's electric  
8 energy delivery facilities, our distribution capital investment  
9 as well as our Asset Management programs. Finally, I will  
10 summarize Avista's customer support programs in Idaho.

11 A table of the contents for my testimony is as follows:

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17  
18 **Q. Are you sponsoring any exhibits in this proceeding?**

19 A. Yes. I am sponsoring Exhibit No. 7, Schedules 1-4.  
20 Schedule 1 shows the number of customers and customer energy  
21 usage for each customer class. Schedule 2 is the Company's  
22 Electric Transmission System 2016 Asset Management Plan,  
23 Schedule 3 is the Company's Electric Substations 2016 System  
24 Review performed by Asset Management and finally Schedule 4 is

1 the Company's Electric Distribution System 2016 Asset  
2 Management Plan.

3  
4 **II. OVERVIEW OF AVISTA'S ENERGY DELIVERY SERVICE**

5 **Q. Please describe Avista Utilities' electric utility**  
6 **operations.**

7 A. Avista Utilities operates a vertically-integrated  
8 electric system in Idaho and Washington. In addition to the  
9 hydroelectric and thermal generating resources described by  
10 Company witness Mr. Kinney, Avista has an electric transmission  
11 system of 685 miles of 230 kV lines and 1,534 miles of 115 kV  
12 lines. The Company has approximately 18,300 miles of primary  
13 and secondary electric distribution lines.

14 A map showing the Company's electric and natural gas  
15 service area in Idaho, Washington, and Oregon is provided by  
16 Company witness Mr. Morris in Exhibit No. 1, Schedule 2.

17 As detailed in the Company's 2015 Electric Integrated  
18 Resource Plan<sup>1</sup>, Avista expects retail electric sales growth to  
19 average 0.6% annually for the next ten years in Avista's service  
20 territory, primarily due to increased population and business  
21 growth.

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<sup>1</sup> A copy of the Company's 2015 Electric IRP has been provided by Mr. Kinney as Exhibit No. 4, Schedule 1.

1           **Q.    How many customers are served by Avista Utilities in**  
2 **Idaho?**

3           A.    Of the Company's 374,962 electric customers (as of  
4 December 31, 2015), 128,499 were Idaho customers.

5           **Q.    Please describe the Company's operation centers that**  
6 **support electric customers in Idaho.**

7           A.    The Company has construction offices in Coeur  
8 d'Alene, Spokane, Colville, Othello, Pullman, Clarkston, Deer  
9 Park, and Davenport. Avista's three customer contact centers,  
10 located in Spokane, Washington, Coeur d'Alene and Lewiston,  
11 Idaho, are networked, allowing the full pool of regular and  
12 part-time employees to respond to customer calls in all  
13 jurisdictions.

14  
15           **III.   DISTRIBUTION CAPITAL INVESTMENT & ASSET MANAGEMENT**

16           **Q.    Would you please describe the factors driving**  
17 **Avista's investment in electric distribution capital assets?**

18           A.    Avista's investment in electric distribution capital  
19 assets is primarily driven by a combination of the following  
20 factors: (1) new customer connections and changing customer  
21 usage, (2) maintaining system reliability and safety, (3)  
22 realizing operational and electrical efficiencies, and (4)

1 minimizing life cycle costs of assets (e.g., Asset Management  
2 programs).

3 **Q. What distribution plant investment is driven by the**  
4 **new customer connections and changing customer usage category?**

5 A. Distribution plant capital investment related to new  
6 customer connections and changing customer usage consists of  
7 the distribution plant assets required to serve new customers  
8 and includes the costs to construct new overhead and underground  
9 lines, as well as the costs for devices, such as transformers,  
10 meters, and network transformers and protectors. Additionally,  
11 as individual new customer connections aggregate over time,  
12 additional investment may be required for either new or upgraded  
13 feeders, transformers, substations, or other distribution  
14 assets. Finally, changing customer loads in a given area may  
15 require new or upgraded distribution plant equipment in order  
16 to continue to serve customers reliably. Given Avista's  
17 obligation to provide safe and reliable service to customers,  
18 responsible capital investment in response to customer  
19 connections and customer usage is imperative.

20 **Q. Turning now to Asset Management, and its role in**  
21 **maintaining system reliability and safety, realizing**  
22 **operational and electrical efficiencies, and minimizing life**

1 **cycle costs of assets, would you please describe the history of**  
2 **Avista's Asset Management function?**

3 A. Yes. Avista's asset management approach began in  
4 2003 with a report analyzing electric asset optimization. In  
5 2005, the Asset Management group was formally established,  
6 focusing on Electric Distribution, Substations, and  
7 Transmission assets. In 2008, a number of organizations, led  
8 by the Institute of Asset Management, published PAS 55:2008<sup>2</sup>,  
9 which provided a top down description of the goals and  
10 objectives of Asset Management programs. This specification  
11 was formalized in 2014 as an international standard, ISO 55000,  
12 by the International Organization for Standardization.  
13 Avista's Asset Management function is informed by this  
14 standard.

15 As discussed by the Institute of Asset Management,<sup>3</sup> ISO  
16 55000 defines Asset Management as the "coordinated activity of  
17 an organization to realize value from assets." "Asset  
18 Management involves the balancing of costs, opportunities, and  
19 risks against the desired performance of assets, to achieve the  
20 organizational objectives." Summarized briefly, "Asset  
21 Management is the art and science of making the right decisions

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<sup>2</sup> PAS is an acronym for Publicly Available Specification.

<sup>3</sup> "What is Asset Management," <https://theiam.org/What-is-Asset-Management>  
(accessed February 3, 2016).

1 and optimizing the delivery of value. A common objective is to  
2 minimize the whole life cost of assets.”

3 **Q. What is the mission of Avista’s Asset Management**  
4 **function?**

5 A. The Asset Management group works to maximize the  
6 value of Avista’s physical assets by applying a systematic  
7 evaluation and modeling approach which determines the optimum  
8 mix of cost and value. Asset Management strives to prioritize  
9 and plan work that results in maximizing the lifecycle values  
10 associated with maintenance and replacement of our assets by  
11 integrating information about repairing, maintaining,  
12 inspecting, monitoring, and replacing physical assets into a  
13 comprehensive analysis. This analysis encompasses strategic  
14 and tactical consideration of materials, labor, equipment,  
15 risk, safety, supply chain, training, system capacity and  
16 growth, energy efficiency, regulations, and other stakeholder  
17 issues.

18 **Q. Would you briefly describe the Company’s Asset**  
19 **Management approach to optimizing and managing the lifecycle**  
20 **costs of various assets in its system?**

21 A. Yes. The Company regularly reviews and assesses all  
22 elements of its Asset Management effort through program plans  
23 that document the management of its facilities, along with



1 metrics of results and impacts associated with that investment.  
2 Through the active management of each individual asset type,  
3 and overall review of the entire Asset Management program, the  
4 Company is able to better-optimize its system investments. The  
5 Company looks at many factors when determining how it should  
6 manage a type of asset and the associated costs, such as safety,  
7 reliability, avoided costs, operational ability, capital  
8 offsets, code requirements, clearances, street relocations, and  
9 others. All planning and assessment is done for the benefit of  
10 our customers, and with the safety of our employees in mind.

11 Additionally, the Asset Management group evaluates assets  
12 for which Asset Management programs do not currently exist, to  
13 determine whether the implementation of a new asset management  
14 plan is necessary. This evaluation periodically results in new  
15 asset management programs. In other instances, the evaluation  
16 may determine that the economic benefit of a program would be  
17 insufficient, and no further action is taken at that time.

18 **Q. Would you provide examples of the Company's electric**  
19 **distribution Asset Management programs?**

20 A. Yes. The "Wood Pole Management" asset management  
21 program is one of Avista's most mature Asset Management  
22 programs. Wood poles and their accompanying fixtures are the  
23 backbone of Avista's electric distribution system (Avista's net

1 distribution plant assets related to distribution poles,  
2 towers, and fixtures represent nearly 25% of the Company's net  
3 distribution plant assets), which made distribution wood poles  
4 prime candidates for an asset management program. The average  
5 age of a wood pole in Avista's electric distribution system is  
6 28 years old. Additionally, nearly 20 percent of Avista's wood  
7 poles are over 50 years old. Given the age profile of Avista's  
8 distribution poles, the Asset Management department determined  
9 that the inspection and maintenance of distribution wood poles  
10 on a 20 year cycle was the optimal asset management plan. That  
11 is to say, over a 20 year period, under this plan, each  
12 distribution wood pole in Avista's system will be inspected one  
13 time (along with the inspection of crossarms, distribution  
14 transformers, wildlife guards, and other components on the  
15 pole). Any poles or components that are identified for follow  
16 up through inspection are subsequently repaired or replaced.  
17 The implementation of this plan has enabled to Company to better  
18 maintain the distribution system by proactively performing  
19 maintenance and has resulted in the reduction of the number of  
20 outages due to wood pole-related issues.

21 In addition to the distribution wood pole program, the  
22 Company currently has active distribution plant asset  
23 management programs in the following areas, grid modernization,

1 transformer change-out, segment reconductor and feeder tie  
2 switch installation, improving worst feeders, street light  
3 management, and underground residential district (URD) cable  
4 replacement. All of these proactive maintenance programs are  
5 driven by one or more factors, such as age of assets or feeder  
6 overloading, among other reasons. The most recently completed  
7 Electric Distribution System 2016 Asset Management Plan report  
8 has been included as Exhibit No. 7, Schedule 4. Certain of  
9 Avista's substation capital maintenance activities are driven  
10 by asset management programs as well and the 2016 Substation  
11 System Review has been included as Exhibit No. 7, Schedule 3.  
12 The Electric Transmission System 2016 Asset Management Plan has  
13 been included as Exhibit No. 7, Schedule 2.

14 **Q. Finally, please discuss the distribution plant**  
15 **investment and related drivers for the remaining investment not**  
16 **driven by new customers or changing customer usage or by Asset**  
17 **Management strategies.**

18 A. These remaining investments generally address  
19 responding to distribution system issues that do not lend  
20 themselves to Asset Management-type maintenance. Examples of  
21 investments that fall under this group include storm damage  
22 repair, non-discretionary rebuild of structures due to an  
23 unplanned trouble or emergency event (e.g., replacing burned or

1 damaged poles and equipment), overhead to underground line  
2 conversions or other service changes, and replacement or  
3 relocation of facilities due to franchise agreements, among  
4 other activities. The capital investment associated with these  
5 activities is the direct result of an external influence which  
6 must be addressed in order to maintain system reliability and  
7 safety.

8 Additionally, other electric distribution plant investment  
9 in this group is related to maintaining compliance with  
10 regulatory requirements or mandates, or to keep the Company's  
11 system up to code. For example, the standards and regulations  
12 associated with the distribution of electric power have evolved  
13 over time. Updating the Company's feeders to meet the current  
14 requirements is a comprehensive activity that requires  
15 substantial investment. While some of this investment is  
16 managed through Asset Management programs, compliance  
17 requirements must also be considered as end-of-life or damaged  
18 plant assets are replaced.

19 **Q. Is the distribution plant investment presented in**  
20 **this case necessary in order to provide safe, reliable service**  
21 **to customers?**

22 A. Yes. The factors driving Avista's electric  
23 distribution investment included in this case represent a

1 prudent balance of maintaining the efficacy of the electric  
2 distribution system to enable the Company to continue to provide  
3 safe, reliable service to our customers, maintain a high level  
4 of customer service, and meet the current and future needs and  
5 expectations of our customers and other stakeholders, while at  
6 the same time being sensitive to the rate impacts to customers  
7 resulting from the investments. As Company witness Mr. Thies  
8 states in his testimony:

9 Although we could choose to put off for tomorrow what does  
10 not absolutely need to be done today, it would be imprudent  
11 to allow the system to deteriorate and begin to jeopardize  
12 reliability, as well as potentially create a "bow-wave" of  
13 investment that needs to be made in a relatively short  
14 period of time.<sup>4</sup>

15 Avista's approach to managing its electric distribution  
16 plant investment is no different from that of any other  
17 functional group, in that the focus is on the ability to  
18 continue to provide safe, reliable service to our customers.

19 **Q. Would you please provide a brief description of the**  
20 **electric distribution-related capital projects that are**  
21 **included in the Company's Pro Forma Study from January 1, 2016**  
22 **through December 31, 2017?**

23 A. Yes. As shown in Table No. 1 below, the electric  
24 distribution capital projects that include investment in Idaho

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<sup>4</sup> Thies, Di, page 15, lines 2-7.

1 total \$48.0 million for 2016 and \$59.5 million for 2017, on a  
 2 system basis. Details about these electric distribution-  
 3 related capital projects are discussed below. Please note that,  
 4 while I have briefly discussed Avista's electric transmission  
 5 operations, Company Witness Bryan Cox discusses the Company's  
 6 electric transmission operations in greater detail, including  
 7 capital investments related to electric transmission  
 8 operations.

9 **Table No. 1: Distribution-Related Capital Projects (System \$)**

Business Case Name	2016 \$ (000's)	2017 \$ (000's)
Meter Minor Blanket	\$ 403	\$ 403
Elec Replacement/Relocation	2,750	2,600
Distribution Minor Rebuild	8,609	8,867
Storms (Distribution)	2,090	2,183
Primary URD Cable Replacement	200	500
Street Light Management	1,500	2,720
Substation - Asset Mgmt. Capital Maintenance	18	52
Worst Feeders	1,500	2,499
Distribution Transformer Change-Out Program	8,406	8,115
Distribution Wood Pole Management	7,840	12,000
Substation - New Distribution Stations	400	275
Distribution Grid Modernization	6,359	13,118
Segment Reconductor and FDR Tie Program	3,801	4,175
Distribution Line Protection	125	125
Environmental Compliance	350	350
	<b>\$ 44,351</b>	<b>\$ 57,982</b>

30 **Meter Minor Blanket - 2016: \$403,000; 2017: \$403,000 [System]**

31 This project covers the replacement of failed, damaged, or  
 32 otherwise improperly functioning electric meters at service  
 33 locations where a meter has previously been installed. Meters  
 34 are replaced in order to ensure accurate billing for electricity  
 35 usage.  
 36

1 **Electric Replacement/Relocation - 2016: \$2,750,000; 2017:**  
2 **\$2,600,000 [System]**

3 This annual program replaces sections of existing  
4 infrastructure that require replacement due to relocation or  
5 improvement of streets or highways. Requirements may come from  
6 our franchise agreements or permits. Avista installs many of  
7 its facilities in public right-of-way under established  
8 franchise agreements. Avista is required under the franchise  
9 agreements, in most cases, to relocate its facilities when they  
10 are in conflict with road or highway improvements.  
11

12 **Distribution Minor Rebuild - 2016: \$8,609,000; 2017: \$8,867,000**  
13 **[System]**

14 This program is for distribution minor rebuilds as requested by  
15 the customer or initiated by Avista. Examples of construction  
16 work includes replacing meters, services, transformers, primary  
17 overhead or underground lines, or devices. This also includes  
18 addressing trouble related jobs (i.e. replacing burnt or  
19 damaged poles).  
20

21 **Storms - 2016: \$2,090,000; 2017: \$2,183,000 [System]**

22 Weather events associated with wind, lightning, rain, and snow  
23 create a number of outage situations. Estimated capital spend  
24 is based on historical averages.  
25

26 **Primary URD Cable Replacement - 2016: \$200,000; 2017: \$500,000**  
27 **[System]**

28 This program involves replacing the first generation of  
29 Underground Residential District (URD) cable. This project has  
30 been ongoing for the past several years and focuses on replacing  
31 a vintage and type of cable that has reached its end of life  
32 and contributes significantly to URD cable failures.  
33

34 **Street Light Management - 2016: \$1,500,000; 2017: \$2,720,000**  
35 **[System]**

36 This program is a five year planned replacement of street light  
37 fixtures to LED, which includes replacement of photocells too.  
38 Currently, existing street lights are only being replaced with  
39 LED when they fail. Efficiencies result from converting 100  
40 and 200 Watt street lights from High Pressure Sodium to LED.  
41 The savings come from eliminating the labor, equipment,  
42 material, and overhead costs associated with repairing older  
43 lights.

1 **Substation Asset Management Capital Maintenance - 2016:**  
2 **\$18,000; 2017: \$52,000 [System]**

3 Avista has several different equipment replacement programs to  
4 improve reliability by replacing aged equipment that is beyond  
5 its useful life. These programs include transmission air switch  
6 upgrades, restoration of substation rock and fencing, recloser  
7 replacements, replacement of obsolete circuit switchers,  
8 substation battery replacement, meter replacements and  
9 upgrades, relay replacements, high voltage fuse upgrades,  
10 transformer replacements, breaker replacements, installation of  
11 diagnostic monitors, substation air switch replacements, and  
12 voltage regulator replacements. These projects improve system  
13 reliability and customer service. The equipment is generally  
14 replaced when its useful life has been reached or exceeded.  
15 The System-Install Autotransformer Diagnostic Monitor program  
16 is one of the projects included in Substation Asset Management  
17 Capital Maintenance.

18  
19 **Worst Feeders - 2016: \$1,500,000; 2017: \$2,499,000 [System]**

20 In 2009, Avista initiated a program to target the reinforcement  
21 of the most underperforming electric circuits. This program is  
22 coordinated with regional engineers and focuses treatment on  
23 those feeders (FDRs) whose sustained outage statistics (SAIFI)  
24 and customer experiencing multiple interruptions (CEMI) are at  
25 the top of the 'worst performing FDR list'. Most of these  
26 circuits are located in rural areas and many involve significant  
27 exposure to tree related outages (national forests). In 2016  
28 in Idaho, the circuits served from Sandpoint, Jaype, Weippe,  
29 and Cottonwood substations will be targeted for reliability  
30 projects. Project scope generally involves the addition of  
31 protection devices, circuit hardening, facility conversion from  
32 overhead to underground, and circuit rerouting.

33  
34 **Distribution Transformer Change Out Program - 2016: \$8,406,000;**  
35 **2016: \$8,115,000 [System]**

36 The Distribution Transformer Change-Out Program has three main  
37 drivers. First, the pre-1981 distribution transformers that  
38 are targeted for replacement average 42 years of age and are a  
39 minimum of 30 years old. Their replacement will increase the  
40 reliability and availability of the system. Secondly, the  
41 transformers to be replaced are inefficient compared to current  
42 standards. Thirdly, pre-1981 transformers have the potential  
43 to have PCB containing oil. The transformers to be removed  
44 early in the program are those that are most likely to have PCB  
45 containing oil and their replacement will reduce the risk of  
46 oil spills containing PCBs.



1 **Distribution Wood Pole Management - 2016: \$7,840,000; 2017:**  
2 **\$12,000,000 [System]**

3 The distribution wood pole management program evaluates wood  
4 pole strength of a certain percentage of the wood pole  
5 population each year such that the entire system is inspected  
6 every 20 years. Avista has over 240,000 distribution wood poles  
7 and 33,000 transmission wood poles in its electric system.  
8 Depending on the test results for a given pole, the pole is  
9 either considered satisfactory, needing to be reinforced with  
10 a steel stub, or needing to be replaced. In addition to pole  
11 condition and strength, inspection crews inspect crossarms,  
12 insulators, transformers, guy wires, ground and bonding wires,  
13 and primary and secondary conductors. This project also funds  
14 the work required to resolve those issues (i.e., potentially  
15 leaking transformers, transformers containing more than or  
16 equal to 1 ppm polychlorinated biphenyls (PCBs), failed  
17 arresters, missing grounds, damaged cutouts, failed insulators  
18 and other visible issues). Transformers older than 1981 have  
19 the potential to have oil that contains PCBs. These older  
20 transformers present increased risk because of the potential to  
21 leak oil that contains PCBs. Poles installed during the pre-  
22 World War II buildup have reached the end of their useful life.  
23 Avista's Wood Pole Management program was put into place to  
24 prevent the Pole-Rotten events and Crossarm - Rotten events  
25 from increasing. The Company estimates the cost of an event  
26 associated with a bad wood pole based on crew response and labor  
27 is approximately \$600. For 2017 we anticipate a reduction of  
28 107 events.

29  
30 **Substation - New Distribution Stations - 2016: \$400,000; 2017:**  
31 **\$275,000; [System]**

32 This program adds new distribution substations to the system in  
33 order to serve new and growing load as well as for increased  
34 system reliability and operational flexibility. New  
35 substations under this program will require planning and  
36 operational studies, justifications, and approved project  
37 diagrams prior to funding. Planned new substation projects  
38 include Tamarack (NE Moscow), Greenacres and Irvin (Spokane  
39 Valley), and Lewiston Mill Road.

40  
41 **Distribution Grid Modernization - 2016: \$6,359,000; 2017:**  
42 **\$13,118,000 [System]**

43 In 2012, Avista began a program to upgrade distribution feeders  
44 to reduce energy losses, increase efficiency, improve safety  
45 and operations, and to increase long-term reliability. The  
46 program includes the replacement of undersized and

1 deteriorating conductors, replacement of failed and end-of-life  
2 infrastructure materials including wood poles, cross arms,  
3 fuses and insulators. Inaccessible pole alignment, right-of-  
4 away issues, and undergrounding and clear zone compliance  
5 issues are addressed for each feeder section as well as regular  
6 maintenance work such as leaning poles, guy anchors,  
7 unauthorized attachments and joint-use management. Also being  
8 installed is distribution automation with elements of Avista's  
9 Smart Grid on select feeders where appropriate. Electric  
10 circuits are selected based on a selection criteria including:  
11 1) reliability, 2) avoided costs, and 3) capital offset of  
12 future O&M. Once selected, circuits are analyzed by engineering  
13 staff to determine the scope of work including structure  
14 replacement, line reroutes, conversion from overhead to  
15 underground, automation scheme, transformer & equipment  
16 replacement, and reconductor segments. This program along with  
17 other asset maintenance programs uses the Distribution Feeder  
18 Management Plan to define the scope for the designers and  
19 construction personnel.

20  
21 **Segment Reconductor and Feeder Tie program - 2016: \$3,801,000;**  
22 **2017: \$4,175,000 [System]**

23 This program improves the capacity and reliability of the  
24 Company's distribution grid through targeted  
25 reconductoring/rebuild and feeder tie projects. In Idaho there  
26 are thirty (24) segment reconductor projects scheduled between  
27 2016 and 2017 (2016 - 13 projects). These projects are  
28 identified, prioritized, and coordinated through the combined  
29 effort of Avista's central system planning function together  
30 with the assistance of regional operating engineer analysis and  
31 study. This is an on-going effort to identify and mitigate the  
32 capacity constrained portions of Avista's 18,000 mile  
33 distribution grid. In addition to circuit capacity projects,  
34 Avista constructs several new feeder tie points annually in  
35 order to effect seasonal and or permanent load shifts from  
36 either heavily loaded circuits or to relieve substation  
37 transformer loading.

38  
39 **Distribution Line Protection - 2016: \$125,000; 2017; \$125,000;**  
40 **[System]**

41 Avista's Electric Distribution system is configured into a  
42 trunk and lateral system. Lateral circuits are protected via  
43 fuse-links and operate under fault conditions to isolate the  
44 lateral in order to minimize the number of affected customers  
45 in an outage. Engineering recommends treatment of the removal  
46 and replacement of Chance Cutouts, the removal and replacement

1 of Durabute cutouts and the installation of cut-outs on un-  
2 fused lateral circuits. This is a targeted program to ensure  
3 adequate protection of lateral circuits and to replace known  
4 defective equipment.

5  
6 **Environmental Compliance - 2016: \$350,000; 2017: \$350,000;**  
7 **[System]**

8 This item includes implementation of Forest Service Special Use  
9 Permits, waste oil disposal, including PCBs, and environmental  
10 compliance requirements related to storm water management,  
11 water quality protection, property cleanup and related issues.  
12

13 **IV. CUSTOMER SUPPORT PROGRAMS**

14 **Q. What customer support programs does Avista provide**  
15 **for its customers in Idaho?**

16 A. Avista Utilities offers a number of programs for its  
17 Idaho customers, such as energy efficiency programs, Project  
18 Share for emergency assistance to customers, a Customer  
19 Assistance Referral and Evaluation Service (CARES) program,  
20 senior programs, level pay plans, and payment arrangements.  
21 Through these programs, the Company works to build lasting ways  
22 to ease the burden of energy costs for customers that have the  
23 greatest need.

24 To assist our customers in their ability to pay, the  
25 Company focuses on actions and programs in four primary areas:  
26 1) advocacy for, and support of, energy assistance programs  
27 providing direct financial assistance; 2) low income and senior  
28 outreach programs; 3) energy efficiency and energy conservation

1 education; and 4) support of community programs that increase  
2 customers' ability to pay basic costs of living.

3 **Q. Please describe the recent results of Project Share.**

4 A. Project Share is a community-funded program Avista  
5 sponsors to provide one-time emergency support to families  
6 where Avista provides service. Avista customers and  
7 shareholders help support the fund with voluntary contributions  
8 that are distributed through local community action agencies to  
9 customers in need. Grants are available to those in need  
10 without regard to their heating source. In 2015, Avista  
11 Utilities' customers donated \$458,406 on a system-wide basis,  
12 of which \$143,664 was distributed by Idaho Community Action  
13 Agencies.

14 **Q. What other bill-assistance programs does the Company**  
15 **offer?**

16 A. In an effort to assist and educate customers about  
17 payment options such as Comfort Level Billing, flexible payment  
18 plans, and preferred due dates, we developed a campaign  
19 (Customer Bill Assistance Campaign) encouraging customers to  
20 learn about and enroll in the various bill assistance options  
21 available to them. This Campaign was launched in December 2013  
22 in all of the Company's service areas. It briefly explains the

1 payment options above and encourages the customer to contact  
2 Avista to enroll or find out more.

3 In addition, the Company's Contact Center Representatives  
4 work with customers to set up payment arrangements to pay energy  
5 bills, and choose a preferred due date. For the twelve month  
6 period ending December 31, 2015, 19,562 Idaho customers were  
7 provided with over 31,212 such payment arrangements.

8 **Q. Please summarize Avista's CARES program.**

9 A. In Idaho, Avista is currently working with over 794  
10 special needs customers in the CARES program. Specially-  
11 trained representatives provide referrals to area agencies and  
12 churches for customers with special needs for help with housing,  
13 utilities, medical assistance, etc. One of the benefits we  
14 have in utilizing CARES representatives is the ability to  
15 evaluate each customer, based on their specific need, and to  
16 educate them on what assistance is available within the  
17 community. A goal of the program is to enable customers to  
18 manage not only their Avista bill, but other bills and needs as  
19 well.

20 **Q. Does the Company perform any other outreach to its**  
21 **customers?**

22 A. Yes. The following are examples of outreach programs  
23 that are available to customers:

1           **1. Senior and Low-Income Outreach:** Avista has developed  
2 specific strategic outreach efforts to reach our more  
3 vulnerable fixed and low-income customers (with special  
4 emphasis on seniors and disabled customers) with bill  
5 paying assistance and energy efficiency information  
6 that emphasizes comfort and safety. Avista accomplishes  
7 this outreach mainly through Energy Workshops. During  
8 the 2014/2015 heating season 18 workshops were conducted  
9 reaching nearly 621 seniors and low-income individuals.  
10 All workshop participants were given Home Energy  
11 Efficiency kits along with tips for low-cost/no-cost  
12 ways to manage energy use. Each kit contains energy-  
13 saving items such as LED light bulbs, plastic window  
14 covering, draft stoppers for exterior light switches  
15 and outlets, v-seal for drafty doors and a polar fleece  
16 lap blanket. The Company also conducts general outreach  
17 in partnership with organizations that are in contact  
18 with vulnerable individuals through resource fairs or  
19 in-home services. For example, home energy kits have  
20 been provided for distribution through senior meal  
21 delivery programs. Through all of these venues,  
22 individuals are provided with information to  
23 effectively manage their home energy use and the  
24 Company's bill assistance programs.

25  
26           **2. Senior Publications:** Avista has created a one-page  
27 advertisement that has been placed in senior resource  
28 directories and targeted senior publications to reach  
29 seniors with information about energy efficiency,  
30 Comfort Level Billing, Avista CARES and energy  
31 assistance.

32  
33           **3. Energy Fairs:** In 2015, Avista hosted two energy fairs,  
34 in which nearly 550 individuals were reached. These  
35 outreach events provided information and demonstrations  
36 on energy assistance, energy efficiency and home  
37 weatherization to limited income families and senior  
38 citizens as well as provided an environment for  
39 customers to learn about billing options and energy  
40 assistance, while offering them tips and tools to use  
41 to help manage their limited financial resources.

42  
43           **4. Mobile Outreach Van:** Avista offers many opportunities  
44 throughout the year for customers to attend energy fairs  
45 or workshops to learn more about energy assistance,  
46 energy efficiency and the resources available to them.

1 But some of our more vulnerable customers have a hard  
2 time getting to an event to access these resources. So  
3 to ensure that we're reaching as many customers who need  
4 our help as we can, Avista created the Energy Resource  
5 Team van. The van is fully loaded with energy  
6 efficiency items such as rope caulk, V-seals and coil  
7 cleaners, as well as informational materials about bill  
8 options, assistance and efficiency. A laptop resides  
9 with the van, so employees can demonstrate our many  
10 online tools in action. In 2015, (see Illustration No.  
11 1 below) the van expanded outreach efforts to 6,596  
12 individuals through 69 events throughout Avista's Idaho  
13 and Washington service territory, many of which were in  
14 conjunction with Second Harvest Food Bank mobile food  
15 pantry.  
16

17 **Illustration No. 1 - Customers being assisted through the Mobile**  
18 **Outreach Van**



28

29 **Q. Please describe how the Company measures customer**  
30 **satisfaction, and how important it is to Avista.**

31 A. Our customer satisfaction is very important to  
32 Avista. We measure satisfaction by conducting a quarterly

1 survey we refer to as "Voice of the Customer" (VOC). The  
2 purpose of the VOC Survey is to measure and track customer  
3 satisfaction for Avista Utilities' "contact" customers - i.e.,  
4 customers who have contact with Avista through the Call Center  
5 and/or work performed through an Avista construction office.

6 Customers are asked to rate the importance of several key  
7 service attributes. They are then asked to rate Avista's  
8 performance with respect to the same attributes (time for  
9 connection to a representative, representative being courteous  
10 and friendly, representative being knowledgeable, being  
11 informed of job status, leaving property in condition found,  
12 etc.). Customers are also asked to rate their satisfaction  
13 with the overall service received from Avista Utilities.  
14 Customer verbatim comments are also captured and recorded.

15 Our most recent 2016 results show an overall customer  
16 satisfaction rating of 93% in our Idaho, Washington, and Oregon  
17 operating divisions. This rating reflects a positive experience  
18 for customers who have contacted Avista related to the customer  
19 service they received.

20 **Q. Does this conclude your pre-filed direct testimony?**

21 A. Yes it does.