

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

DOCKET NO. UE-05\_\_\_\_\_

DOCKET NO. UG-05\_\_\_\_\_

DIRECT TESTIMONY OF

DON F. KOPCZYNSKI

REPRESENTING AVISTA CORPORATION

1 I. INTRODUCTION

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

3 A. My name is Don F. Kopczynski and I am employed as the Vice  
4 President of Transmission and Distribution Operations for Avista Utilities, at 1411  
5 East Mission Avenue, Spokane, Washington.

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

8 A. Yes. Prior to joining the Company in 1979, I earned a Bachelor of  
9 Science Degree in Engineering from the University of Idaho. I have also earned a  
10 Master's Degree in Business Management from Washington State University and a  
11 Master's Degree in Organizational Leadership from Gonzaga University. Over the  
12 past 26 years I have spent approximately 16 years in Energy Delivery, managing  
13 Engineering, various aspects of Operations, and Customer Service. In addition, I  
14 spent three years managing the Energy Resources Department, including Power  
15 Supply, Generation and Production, and Natural Gas Supply. More recently, I  
16 worked in the areas of Corporate business analysis and development, and served in  
17 a variety of leadership roles in subsidiary operations for Avista Corp. I was  
18 appointed General Manager of Energy Delivery in 2003 and Vice President in 2004. I  
19 serve on several boards of directors including the Eastern Washington University

1 Foundation Board, Washington State Electrical Board, and the Washington State  
2 University Engineering Advisory Board.

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

4 A. I will provide an overview of the Company's natural gas and electric  
5 energy delivery facilities, operations, and customer service programs in Washington.

6 I will also discuss significant investments being made in the Company's electric  
7 transmission system and describe our continuing focus on vegetation management.

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

9	<u>Description</u>	<u>Page</u>
10	I. Introduction	1
11	II. Overview of Avista's Energy Delivery Operations	3
12	III. Customer Service Programs	5
13	IV. Transmission Projects	10
14	V. Vegetation Management Program	18
15		

16 **Q. Are you sponsoring exhibits in this proceeding?**

17 A. Yes. I am sponsoring Exhibit \_\_\_(DFK-2), which was prepared under  
18 my direction.

19

20

21

22

1                   **II. OVERVIEW OF AVISTA'S ENERGY DELIVERY OPERATIONS**

2                   **Q.     Please provide an overview of the customers served by Avista**  
3                   **Utilities in Washington.**

4                   A.     As of December 31, 2004, the Company served 219,000 electric  
5                   customers and 134,000 natural gas customers in twelve counties of eastern  
6                   Washington. Avista's largest electric customer in Washington is the Inland Empire  
7                   Paper facility in the Spokane Valley. The Company anticipates residential and  
8                   commercial electric load growth to average between 2.0 and 2.5 percent annually for  
9                   the next four years, primarily due to expected increases in both population and the  
10                  number of businesses in its service territory. While the number of electric customers  
11                  is expected to increase, the average annual use per customer is not expected to  
12                  change significantly.

13                  For the next four years, Avista expects natural gas load growth to average  
14                  between 4.0 and 4.5% annually in its Washington and Idaho service territories. The  
15                  natural gas load growth is primarily due to expected conversions from electric and  
16                  oil space heat and electric water heating to natural gas, and increases in both  
17                  population and the number of businesses in Avista's service territory.

18                  **Q.     Please describe the Company's electric and natural gas delivery**  
19                  **facilities.**

1           A.     Avista Utilities operates a vertically-integrated electric system in  
2 eastern Washington. In addition to the hydroelectric and thermal generating  
3 resources described by Mr. Peterson, the Company has approximately 8,011 miles of  
4 lines in the following classes in Washington: 215 miles of 230 kV transmission, 928  
5 miles of 115 kV transmission, and 6,868 miles of sub-transmission and distribution  
6 line at a variety of voltages. The predominant distribution voltage is 13.2 kV.

7           Avista owns and maintains a total of 2,609 miles of natural gas distribution  
8 lines in the state of Washington, and is served off of the Williams Northwest and  
9 Trans-Canada pipelines.

10           **Q.     Please describe the Company's operations centers that support**  
11 **electric and gas customers in Washington.**

12           A.     The Company has construction offices in Spokane, Colville, Othello,  
13 Ritzville, Pullman, Deer Park, and Davenport. Avista's four customer contact  
14 centers in Coeur d'Alene, Lewiston, Spokane, and Medford, Oregon are networked,  
15 allowing the full pool of regular and part-time employees to respond to customer  
16 calls in all jurisdictions.

17           **Q.     What construction and maintenance programs does the Company**  
18 **have in place to maintain gas and electric facilities?**

1           A.     Avista Utilities utilizes Company seasonal and regular crews for gas  
2     and electric construction, including new and reconstructed lines, damage repair, and  
3     connecting new customers. The Company employs contract crews and temporary  
4     and part-time employees to meet customer needs during the peak construction  
5     season. The Company also has several maintenance programs to maintain the  
6     reliability of our electric and gas infrastructure. On the electric side, this includes  
7     underground cable replacement, wood pole inspection and replacement, vegetation  
8     management, electric transmission line inspection and reconstruction, and  
9     substation inspection. Regarding natural gas operations, ongoing maintenance  
10    focuses on valve and regulator stations, atmospheric corrosion protection, and leak  
11    surveys.

12                                   **III. CUSTOMER SERVICE PROGRAMS**

13           **Q.     Please explain the customer service programs that Avista provides**  
14    **for its customers in Washington.**

15           A.     Avista Utilities offers a number of programs for its Washington  
16    customers such as energy efficiency programs, Low Income Rate Assistance  
17    Program (LIRAP), Project Share for emergency assistance to customers, a CARES  
18    program, senior energy outreach, level pay plans, and payment arrangements.

1 Some of these programs will serve to mitigate the impact on customers of the  
2 proposed rate increase.

3 **Q. Please describe Avista Utilities' demand-side management (DSM),**  
4 **or energy efficiency, programs.**

5 A. The Company's innovative Energy Efficiency Tariff Rider is  
6 celebrating its tenth anniversary. The tariff rider, the country's first distribution  
7 charge to fund DSM and now replicated in most other states, has provided  
8 consistent funding for the delivery of energy efficiency services. Avista Utilities  
9 offers energy efficiency services to residential, commercial, and industrial  
10 customers. Programs include audits or direct incentives for residential  
11 weatherization, high-efficiency furnaces and water heaters, and qualifying  
12 commercial gas-efficiency projects.

13 Last year, the Washington State University was the recipient of the  
14 Governor's Energy Award for its conservation programs in partnership with Avista.  
15 In 2003, the American Council for an Energy-Efficient Economy (ACEEE) awarded  
16 Avista its "Recognition of Achievement Certificate" for its gas efficiency programs.  
17 The ACEEE recognized Avista's electric HVAC rooftop program with a similar  
18 award in 2002.

1           **Q.    What is the Company's Low Income Rate Assistance Program, or**  
2           **LIRAP?**

3           A.    The low-income rate assistance program, approved by the Washington  
4           Commission in 2001, collects approximately \$3 million (gas and electric combined)  
5           per year through electric and natural gas tariff surcharges on Schedules 91 and 191.  
6           These funds are distributed by community action agencies in a manner similar to  
7           the Federal and State-sponsored Low Income Heating Energy Assistance Program  
8           (LIHEAP). Avista Utilities' LIRAP supplements the reach of the LIHEAP funds. The  
9           Company, with the assistance of community action agencies, directs the funding  
10          from this program toward customers least able to pay for electric and natural gas  
11          service.

12          **Q.    Please describe the recent results of the Company's Project Share**  
13          **efforts?**

14          A.    Project Share is a voluntary contribution option allowing customers to  
15          contribute donations that are distributed through local community action agencies  
16          to customers in need. Avista Utilities has consistently had relatively high per-  
17          customer contributions when compared to other utilities with Project Share  
18          programs. Avista Utilities' customers donated \$326,436 on system basis in 2004 of



1 which \$225,699 was directed to Washington Community Action Agencies. In  
2 addition, the Company contributed \$150,000 to Washington in 2004.

3 **Q. Does the Company offer a bill averaging program?**

4 A. Yes. Comfort Level Billing is the Company's option for customers to  
5 pay the same bill amount each month of the year. This allows customers to more  
6 easily budget for energy bills and it also avoids higher winter bills. This program  
7 has been well-received by participating customers. Over 36,800, or 15%, of  
8 Washington electric and natural gas customers are on Comfort Level Billing.

9 In addition, the Company's Contact Center Representatives work with  
10 customers to set up payment arrangements to pay energy bills. In 2004, 66,519  
11 Washington customers were provided with over 207,644 such payment  
12 arrangements.

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

14 A. In Washington, Avista is currently working with over 4,800 special  
15 needs customers in the CARES (Customer Assistance Referral and Evaluation  
16 Service) program. Specially trained representatives provide referrals to area  
17 agencies and churches for customers with special needs for help with housing,  
18 utilities, medical assistance, etc.

1 In 2004, 14,928 Washington customers received \$6,557,000 in various forms of  
2 energy assistance (Avista LIRAP, Federal LIHEAP program, Project Share, and local  
3 community funds). This program and the partnerships we have formed have been  
4 invaluable to customers who often have nowhere else to go for help.

5 **Q. How does Avista address special needs of its elderly customer**  
6 **population?**

7 A. As part of its Low Income Rate Assistance Program, Avista has created  
8 a Senior Energy Outreach Program that is designed to assist senior customers (age  
9 60 or above). Company representatives have found that the senior population in  
10 need may be less inclined to seek assistance. This program, administered by the  
11 Company's CARES representatives in partnership with participating LIRAP  
12 agencies, provides a maximum grant of \$200 to eligible seniors (those within 200%  
13 of the federal poverty level) through a simplified certification process.

14 **Q. Please briefly describe Avista's efforts related to customer service**  
15 **automation.**

16 A. Customers are able to access Avista's Interactive Voice Response (IVR)  
17 system for automated transactions such as:

- 18 • Entering their own payment arrangements;
- 19
- 20 • Reporting an outage and listening to automated outage messages; and
- 21

- 1 • Conducting other business such as electronic payments, obtaining  
2 account balances (over 89,000 in 2004), and requesting a duplicate bill.  
3

4 Our goal is to provide convenient options to our customers. The IVR is  
5 available seven days a week, 24 hours a day. Many customers would rather use  
6 automation than speak to an agent. Over 29% of all callers used the automated  
7 system without speaking to a customer service agent in 2004. In addition to  
8 customer convenience, we are able to reduce labor costs by use of the IVR. In 2004,  
9 we would have needed an additional 20.5 full-time representatives to handle the  
10 automated volume (adding as much as \$1,370,000 in costs).

11 In addition, Avista's "Net Reps" responded to almost 65,000 e-mails in 2004,  
12 or over four times the amount of e-mails compared to 2000, which is an indicator  
13 that internet contact is gaining popularity. The number of E-Bill (Avista's electronic  
14 bill paying option) customers has increased from 3,000 in 2001 to 17,119 in 2004.  
15 Customers enjoy the easy, convenient options available with this service.  
16

#### 17 IV. TRANSMISSION PROJECTS

18 **Q. Please briefly describe Avista's Transmission upgrade projects.**

19 A. Avista's transmission upgrade plan will add over 100 circuit miles of  
20 new 230 kV transmission line to its system and will increase the capacity of another  
21 50 miles of transmission line. Avista is also constructing two new 230 kV substations

1 and is reconstructing three existing transmission substations. Related projects at six  
2 230 kV substations are necessary to meet capacity requirements, upgrade protective  
3 relaying systems and to meet regional and national reliability standards. In total,  
4 Avista will perform work in eleven of its thirteen 230 kV substations or 85% of its  
5 system.

6 **Q. What are the most significant projects Avista is undertaking?**

7 A. The most significant projects are described below. Exhibit \_\_\_(DFK-2)  
8 includes a map showing the location of each project.

- 9 • **Beacon-Rathdrum 230 kV:** Avista recently reconstructed 25 miles of double  
10 circuit 230 kV transmission line between Rathdrum, ID and Spokane, WA.  
11 This project includes reconstructing the Rathdrum 230 kV substation in  
12 Idaho. By adding a 230kV circuit and using larger conductor, the capacity of  
13 the transmission line was raised from 300 to 2000 MW. This relieves a  
14 significant transmission bottleneck between North Idaho and Eastern  
15 Washington. Conversely, Rathdrum substation was reconstructed to enable  
16 the higher transfer limits. In addition, a second 230 kV bus was added to  
17 Rathdrum, making the station fully redundant. Without this addition, 230kV  
18 main bus outages at Rathdrum would result in 200-350 MW of load loss to  
19 customers throughout North Idaho and Eastern Washington. This project was  
20 completed in April of 2004.
- 21  
22 • **Dry Creek:** Avista is constructing a new 230 kV substation near Clarkston,  
23 WA that will enable existing transmission lines to form a 35-mile transmission  
24 "ring" around the Lewiston, ID and Clarkston, WA area which will serve  
25 load and improve reliability by reducing congestion during peak energy  
26 flows. The 230 kV Dry Creek switchyard was completed in December of 2004  
27 and Avista crews are constructing an adjacent 200 MVAR capacitor bank  
28 slated to be completed in June of 2005. Avista will also add 250 MVA of 230  
29 kV to 115 kV transformation at Dry Creek in June of 2006 to improve  
30 reliability.

- 1
- 2 • **Spokane Valley Reinforcement:** Avista is adding 500 MVA of 230 kV to 115
- 3 kV transformation at the new Boulder Substation. Slated for full commercial
- 4 operation in December of 2005, the Boulder station will be capable of serving
- 5 customers throughout eastern Washington and Northern Idaho. The added
- 6 capacity at Boulder will relieve congestion at Avista's largest transmission
- 7 substation, Beacon. By shifting load from Beacon to Boulder we improve
- 8 service adequacy and overall reliability.
- 9
- 10 • **Pinecreek Substation:** Avista recently completed the reconstruction of this
- 11 230 kV facility located in Pinehurst, ID. The 500 MVA substation facility was
- 12 re-energized in November 2003. By modernizing the 50-year old substation,
- 13 capacity increases to circuit breakers and other equipment relieves
- 14 transmission congestion between Noxon Rapids Dam and delivery points in
- 15 the Silver Valley, Spokane and southward into the Palouse area.
- 16
- 17 • **Palouse Reinforcement:** Avista plans to construct 60 miles of 230 kV
- 18 transmission line between the Benewah and Shawnee substations to relieve
- 19 congestion on the existing Benewah-Moscow 230 kV line and to provide an
- 20 alternant source of power to the Shawnee Substation. The Benewah
- 21 Substation will be upgraded to increase its capacity and service reliability.
- 22 The new Benewah station is scheduled for energization in April 2006 with the
- 23 230 kV transmission line from Shawnee to follow in November of 2007.
- 24
- 25 • **Beacon-Bell 230 kV:** Avista is increasing the capacity of two (2) parallel path
- 26 transmission lines from Avista's Beacon to BPA's Bell Substations. Upgrading
- 27 capacities from 400 to 800 MVA will mitigate overloads between Avista and
- 28 BPA's largest substations in Spokane, WA. One of the transmission lines will
- 29 be reconducted in December 2005 with the other project to follow in
- 30 December of 2006.
- 31

32 **Q. What are the expected costs of these upgrades?**

33 A. The overall cost of these transmission projects is estimated to be over

34 \$100 million. In this filing the Company has included the cost of three projects with

1 completion dates in 2005. These projects are the Beacon-Bell 230 kV line, the Boulder  
2 230 kV substation, and the Dry Creek 230 kV substation at a system cost of  
3 approximately \$28 million. Mr. Falkner has included the Washington allocated cost  
4 of \$18 million in his revenue requirement analysis.

5 **Q. What is Avista doing to minimize the cost and environmental impact**  
6 **of these projects?**

7 A. Wherever possible, Avista is committed to upgrading existing  
8 transmission lines and using existing corridors rather than building new lines on  
9 Greenfield corridors. For example, routing of the 60-mile Benewah-Shawnee 230 kV  
10 Line will use 45-miles of existing transmission line corridor. Reconstructing new  
11 facilities using existing corridors reduces the impact to the environment, to property  
12 owners, and to other stakeholders. In total, Avista plans to reconstruct or  
13 reconductor over 120 miles of its 230 kV transmission line system, but only 15 miles  
14 of that plan requires the purchase of a new right-of-way. With regard to substations  
15 at Rathdrum, Dry Creek and Boulder, the Company believes it has achieved the  
16 right blend of reliability, cost and operational flexibility for now and into the  
17 foreseeable future.

1           **Q.    Has Avista involved communities and landowners in these projects?**

2           A.    Yes. Avista has a long history of seeking public input when planning  
3           and siting transmission lines and substation facilities. The vast majority of  
4           community involvement is conducted voluntarily outside the permitting and  
5           regulatory process. In fact, Avista believes that incorporating public input enhances  
6           these projects.

7           **Q.    Are these projects coordinated with BPA's projects in the region?**

8           A.    Yes. In August of 2002, Avista entered into an agreement with BPA  
9           known as the West of Hatwai letter agreement. Avista's plan to upgrade its 230 kV  
10          facilities supports and enhances BPA's transmission projects. By working together,  
11          both Avista and BPA have achieved a least cost plan of service that addresses  
12          commercial transactions, load service and regional reliability issues.

13          This plan has been reviewed by peer utilities and approved by other  
14          Northwest transmission owners and by utility members of the Western Electricity  
15          Coordinating Council (WECC). The Northwest Power Pool Transmission Planning  
16          Committee agreed that a blended plan of Avista's and BPA's stand-alone plans was  
17          the best plan. Avista, BPA, and other utilities in the region continue to coordinate,  
18          plan and schedule construction activities during this transmission expansion phase.

1           **Q.    What is the West of Hatwai cutplane and what is its effect on**  
2           **regional reliability?**

3           A.    The West of Hatwai cutplane or "transfer path" is identified by WECC  
4           as the combination of transmission lines that are crossed by an imaginary line drawn  
5           from BPA's Grand Coulee Bell 500/230/115 kV line corridor extending southward to  
6           the Lewiston-Clarkston area encompassing Avista's 230 kV lines to Wanapum  
7           (Pacificorp/Scottish Power) and Oxbow (Idaho Power), as well as three 115 kV lines  
8           in the area. It is shown as Path #6 on WECC's map of principal transmission lines.  
9           West of Hatwai will have a post-construction path rating of 4277 MW (up from the  
10          pre-construction rating of 2800 MW) and is continuously monitored by BPA and  
11          Avista to ensure that scheduled and real time power flows do not exceed the path  
12          rating. Typically, the generation output of hydropower during the spring runoff  
13          combines with light load conditions, which increases loading on West of Hatwai up  
14          to the path rating.

15          The loss of the Mead Aluminum smelter load in Spokane combined with the  
16          reductions at the Columbia Falls smelter in Columbia Falls, Montana and the Addy  
17          Mine Works in Addy, Washington have added significantly to the congestion and  
18          potential system overloads across the West of Hatwai cutplane. This loss of load on  
19          BPA's system has increased the use of transmission on both BPA's and Avista's



1 networked systems. The existing transmission system was developed to  
2 accommodate these large loads in the eastern Washington/northern Idaho/western  
3 Montana area. The absence of these large loads has increased the burden on the  
4 surrounding transmission network, which is now transferring this power west to the  
5 Interstate 5 corridor in western Washington and Oregon. BPA and Avista have  
6 deployed numerous short-term operational strategies to maximize the amount of  
7 transmission available across the cutplane.

8 **Q. What are the WECC's and the North American Electricity Reliability**  
9 **Council's (NERC) roles in Avista's transmission's system upgrades?**

10 A. WECC and NERC are the governing bodies that assign the  
11 transmission transfer capacity for all cutplanes in the western United States. They  
12 also establish planning and operating standards that member systems must adhere  
13 to in order to maintain reliability throughout the western interconnection. Avista  
14 and BPA are currently working through the WECC three-phase rating process to  
15 determine a new transfer limit for the West of Hatwai cutplane. This process  
16 demands considerable analysis of how these additions operate in conjunction with  
17 the bulk transmission system throughout the western interconnection (western  
18 United States as well as a portion of Canada and Mexico).

1           **Q.    Has Avista used any operational strategies to defer the expansion of**  
2           **transmission facilities?**

3           A.    Yes.   Avista has used several short-term strategies to defer the  
4           expansion.  These include efforts in demand side management, fuel switching to  
5           natural gas, thermally uprating several 230 kV transmission lines, installing  
6           numerous thermal relay protection schemes, and operating its 115 kV system in an  
7           open, radial system.  Under a radial scheme, transmission lines are "sectionalized"  
8           into two "independent" sections utilizing mid-line switches operated in a "normally  
9           open" configuration.  Thus, load can be served from transformers in a manner such  
10          that if one line section suffers an outage, the outage is isolated to that sectionalized  
11          portion of the line.  This reduces both the length of the outage and the number of  
12          customers affected by the outage.  Since February of 2000, Avista radialized its 115  
13          kV network to prevent bulk transfer across that system associated with outages on  
14          parallel path 230 kV and 500 kV transmission lines.  This has made the 115 kV lines  
15          primarily a sub-transmission or "load service" system and has created additional  
16          capacity and reduced customer outages for most end-use customers.  This has  
17          reduced transmission losses by 15-20 aMW and has increased reliability to customers  
18          as well as reducing the amount of time for restoration.

1           **Q. Have the efforts to form a Regional Transmission Organization**  
2           **affected Avista’s plans for transmission projects?**

3           A. No. Although Avista is actively engaged in the efforts related to a  
4 regional transmission organization (RTO), Avista’s transmission upgrade plan is  
5 required to serve load on Avista’s system and is being coordinated with other  
6 regional transmission upgrade efforts. Avista is proceeding with its transmission  
7 upgrade plan irrespective of RTO development efforts, because there are immediate  
8 capacity and reliability issues that must be addressed.

9

10   **V. VEGETATION MANAGEMENT PROGRAM**

11           **Q. Please provide an overview of the Company’s vegetation**  
12           **management program.**

13           A. Vegetation management, or “tree-trimming,” reduces customer  
14 outages, improves safety, and enhances system reliability. Vegetation management  
15 reduces future costs of responding to a series of outages from storm damage. Avista  
16 Utilities has a comprehensive and professionally-staffed vegetation management  
17 program to ensure facility rights-of-way are maintained in alignment with national  
18 utility vegetation management work practices. The systematic maintenance of  
19 rights-of-way occurs throughout the service territory. The Company’s vegetation

1 management approach is integrated, meaning that a variety of management  
2 techniques are selected to provide treatment for specific sites, based on terrain, line  
3 construction and voltage, and customer considerations.

4 **Q. Please further explain Integrated Vegetation Management.**

5 A. Integrated Vegetation Management is the practice of applying a  
6 variety of management techniques to move, over the longer term, toward a stable,  
7 low-growing plant community that does not interfere with overhead lines, pose a  
8 fire hazard, or affect accessibility. This approach involves an assessment that  
9 includes current vegetation type and composition, vegetation condition, and reviews  
10 of environmental requirements, line voltage, type of line construction, line loading,  
11 and the criticality of circuit customers (e.g., hospitals, etc.). Specific treatment work  
12 is then prescribed, which could include pruning, tree removals, right-of-way  
13 clearing, danger-tree removal, and/or application of herbicide or tree growth  
14 regulator. The combination of treatments is designed to meet Avista's multiple  
15 vegetation management objectives, including reliability, and specific customer  
16 considerations.

17 **Q. In addition to Integrated Vegetation Management, what efforts has**  
18 **Avista Utilities made to drive work-practice efficiencies into the program?**

1           A.     In the past several years the Company has moved to make vegetation  
2           management programs more efficient through the deployment of strategies using  
3           both herbicides, and more recently, tree-growth inhibitors. Both of these treatments  
4           can provide a lower-cost solution than conventional trimming, or more importantly,  
5           help manage vegetation where trimming and tree removal are not effective options.

6           The Company has also made use of tree trimming contract crews to gain  
7           efficiencies. Contract crews have larger and more diverse equipment pools to draw  
8           on, achieve efficiency through job-site reporting, and can be staffed to follow the  
9           seasonal nature of the workload. At the same time, contract employees receive the  
10          same customer training as Avista employees, generally live in our Washington and  
11          Idaho service territories, and have long-term relationships with the Company. The  
12          Company has also instituted the use of right-of-way clearing machinery and off-road  
13          trimming vehicles, and has adjusted crew sizes to better match the type of work.

14          **Q.     What is the advantage of approaching vegetation management on a**  
15          **systematic, cycle basis?**

16          A.     Setting appropriate cycle times for each circuit reduces costs of  
17          maintenance over time. There is an optimal time period for such circuit rotation that  
18          we seek to achieve. Importantly, the cycle time is not the same for each circuit, but is  
19          tailored to specific conditions, including moisture, soil type, vegetation composition

1 and condition, accessibility and customer considerations. Avista's cycle length  
2 ranges from two to eight years, with an average of four years for most residential  
3 communities.

4 **Q. What is the pro forma adjustment for vegetation management in this**  
5 **case?**

6 A. The Washington jurisdictional adjustment, as included in Mr. Falkner's  
7 testimony, is \$492,000. In that adjustment we have taken the annual vegetation  
8 management projects scheduled for 2006 through 2009, and calculated a levelized  
9 amount of \$2.8 million for our Washington jurisdiction. Actual vegetation  
10 management expenses included in the 2004 test period were \$2.3 million.

11 **Q. Does this conclude your prefiled direct testimony?**

12 A. Yes.