DAVID J. MEYER SENIOR VICE PRESIDENT AND GENERAL COUNSEL AVISTA CORPORATION P.O. BOX 3727 1411 EAST MISSION AVENUE SPOKANE, WASHINGTON 99220-3727 TELEPHONE: (509) 495-4316 FACSIMILE: (509) 495-4361

### **BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE APPLICATION)OF AVISTA CORPORATION FOR THE)AUTHORITY TO INCREASE ITS RATES)AND CHARGES FOR ELECTRIC AND)NATURAL GAS SERVICE TO ELECTRIC AND)NATURAL GAS CUSTOMERS IN THE STATE)OF IDAHO)

CASE NO. AVU-E-04-01

DIRECT TESTIMONY OF RICHARD L. STORRO

### FOR AVISTA CORPORATION

(ELECTRIC ONLY)

1	I. INTRODUCTION
2	Q. Please state your name, employer and business address.
3	A. My name is Richard L. Storro. My business address is 1411 East Mission
4	Avenue, Spokane, Washington, and I am employed by the Company as the Director of Power
5	Supply.
6	Q. What is your educational background?
7	A. I participated in a program with the College of Idaho and the University of
8	Idaho, where upon completion I received a Bachelor of Science degree in physics from the
9	College of Idaho and a Bachelor of Science degree in electrical engineering from the
10	University of Idaho, both in 1973.
11	Q. How long have you been employed by the Company?
12	A. I started working for Avista in 1973 as a distribution engineer. I have worked in
13	various engineering positions, and have held management positions in line and gas
14	operations, system operations, hydro production and construction, and transmission. I joined
15	the Energy Resources Department as a Power Marketer in 1997 and became Director of
16	Power Supply in 2001. My primary responsibilities involve the oversight of both the short-
17	term and long-term planning and acquisition of power supply resources for the Company.
18	Q. What is the scope of your testimony in this proceeding?
19	A. My testimony will provide an overview of Avista's resource planning and power
20	operations. I will provide an update on the Company's Cabinet Unit #2 upgrade, a status
21	report on the Company's license commitments at the Clark Fork River hydroelectric projects,
22	and also on the current re-licensing effort for the Spokane River hydroelectric projects.

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1	Finally, my	testimony will address the Company's Risk Management Polic	y and some
2	general con	ments regarding power supply resource management in rela	tion to the
3	Commission	's order in Case No. AVU-E-03-6.	
4	A tab	le of contents for my testimony is as follows:	
5	Desci	ription	Page
6	I.	Introduction	1
7	П.	Avista's Resource Planning and Power Operations	2
8	Ш	Hydroelectric Projects Update	2 6
9	IV	Risk Policy and Resource Management	8
10			Ũ
11			

I am sponsoring Exhibit No. 5 and the schedules listed in the following table for 12 identification, which were prepared under my direction: 13

### 14 Exhibit No. 5

Schedule #	Description	
1	Resource Planning & Operations	
2	Photo – Cabinet Gorge Hydroelectric Project	
3	Energy Resources Risk Policy (Confidential)	

Would you please provide a brief overview of Avista's resource planning

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- 16

## **II. AVISTA'S RESOURCE PLANNING AND POWER OPERATIONS**

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### and power supply operations?

**Q**.

19 Yes. The Company uses a combination of owned, leased and contracted A. resources to serve its retail and wholesale load requirements. Dispatch decisions related to 20 these resources are made within the Energy Resources Department of Avista Utilities. The 21 Department conducts studies on a regular basis to determine the need for capacity and energy 22 resources on a short-term, medium-term and long-term basis. The Company enters into 23

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1 short-term and medium-term wholesale sales and purchases transactions to balance its 2 resources with load requirements. Longer-term resource decisions related to building new 3 resources, upgrades to existing resources, demand-side management (DSM) and long-term 4 contract purchases are generally made in conjunction with the Company's Integrated 5 Resource Plan (IRP) and RFP processes. The Company, however, also acquires resources outside of an RFP process. Schedule No. 1 of Exhibit No. 5 provides additional details 6 7 related to Avista's resource planning and power operations, as well as a tabulation of its 8 projected loads and resources for the next twenty years.

9 Q. Has the load forecast included in pages 8 and 9 of Schedule No. 1 been
10 updated as compared to that recently filed in the Company's 2003 Integrated Resource
11 Plan (IRP) in Case No. AVU-E-03-02?

- A. Yes. Avista prepared a new load forecast in fall of 2003 for the years 2005-2014. In general, retail load projections have been reduced somewhat from those included in the 2003 IRP. However, the Potlatch Lewiston plant load has been separated from their generation sale amount. The Potlatch load had been included in the 2003 IRP load figures net of Potlatch's generation. The effect of this change is an increase in load above the level in the 2003 IRP.
- Q. Has the Company's forecast of available resources been updated as
   compared to that recently filed in the 2003 IRP?
- A. There has been no substantial change to the forecast of available resources. The purchase of Potlatch generation, however, is now included in the Company's list of resources.

Storro, Di 3 Avista Corporation 1Q.Please summarize the future net load and resource position for the2Company.

A. The Company remains in a nearly balanced energy position for 2005 through 2007 on an average annual basis. However, there are monthly and quarterly deficits and surpluses within the years even though the annual averages are close to balanced. In general terms, the Company's annual net resource energy position becomes deficient in 2008 and beyond. The average energy resource deficiency is 22 aMW in 2008 and increases to 333 aMW in 2014. The Company's capacity position is either surplus or nearly balanced through 2007. The capacity deficiency is 33 MW in 2008 and increases to 481 MW in 2014.

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# Q. How will the Company plan to meet the future needs for resources beginning in 2008?

12 The Company plans to continue to pursue the preferred resource strategy laid Α. 13 out in its recent 2003 IRP. The Company would expect to evaluate a mix of options including medium-term market purchases in heavy load hour and light load hour time-blocks, 14 generation ownership options, renewable resource options, demand-side resource options, 15 and generation lease options or tolling<sup>1</sup> options. As stated earlier, longer-term resource 16 17 decisions related to building new resources, upgrades to existing resources, demand-side 18 management (DSM) and long-term contract purchases are generally made in conjunction with 19 the Company's IRP and RFP processes. As determined in the 2003 IRP, the Company's

<sup>&</sup>lt;sup>1</sup> "Tolling" is an energy conversion service whereby a provider takes customer supplied natural gas and converts it to an amount of electric energy which is delivered to the customer as determined by a defined conversion ratio. The conversion ratio can be tied to the heat rate and variable operating costs of a generating plant. The fixed cost of the plant can be covered in fixed fees charged by the tolling service provider. Tolling service may be contingent on the operation of a specific generation plant.

preferred resource strategy includes a mix of combined cycle combustion turbine, wind, coal-1 fired, and simple cycle natural gas combustion turbine generation. The Company, however, 2 3 is not precluded from acquiring resources outside of an RFP process. 4 The Company is currently in the process of concluding an RFP process for the 5 addition of a long-term renewable wind resource to its resource mix. The Company has entered into a letter of intent agreement for 25-35 MW of wind generation capability. The 6 average annual energy is estimated to be 8-10 aMW. The Company is hopeful that an 7 8 agreement will be signed by March 31, 2004 9 10 **III. HYDROELECTRIC PROJECTS UPDATE** 11 **Q**. Could you provide an update on generation upgrades on the Clark Fork 12 **River hydroelectric generation projects?** 13 Yes. The Company is in the process of upgrading the Cabinet Gorge Project Α. Unit #2. This approximately \$6.6 million capital project consists of removing the original 14 1952 propeller runner and replacing it with a modern design mixed-flow runner. Estimated 15 increases in capacity of up to 17 MW and energy of approximately 3 aMW are expected due 16 to the increased efficiencies and water flow from the new design. The Company expects the 17 18 project to be completed in March 2004. Mr. Falkner has included the costs associated with the upgrade in his revenue requirement calculations, and Mr. Johnson has included the 19 20 benefits from the upgrade in his power supply adjustments. The Company completed a similar upgrade project in 2001 for the Cabinet Gorge 21 Project Unit #3. The capacity of the unit was increased from 55 MW up to 72 MW and an 22

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estimated 4.5 aMW of additional energy can be produced as a result of the increased
 efficiency.

The Company is continuing to look for opportunities for additional efficiency upgrades, in conjunction with other maintenance work, on unit #4 at Cabinet and units #1 and #3 at Noxon.

Q. Could you provide an update regarding work being done under the
existing FERC operating license for the Company's Clark Fork River generation
projects?

9 Yes. The Clark Fork Settlement Agreement, signed in February 1999, was Α. subsequently incorporated into the 45-year FERC operating license for the Company's 10 Cabinet and Noxon hydroelectric generating facilities issued on February 23, 2000. Although 11 the new license became effective on March 1, 2001, implementation efforts under the 12 13 Agreement were already well underway at that time. With just over five years of implementation efforts complete, the Clark Fork Project has made significant progress 14 15 toward meeting the goals, terms, and conditions of the Protection, Mitigation and Enhancement (PM&E) measures. Specifically, the purchase of more than 1100 acres of 16 important bull trout, wetland, and associated upland habitat, will ensure protection of these 17 crucial resources. The fish passage program has reestablished bull trout connectivity between 18 Lake Pend Oreille and the Clark Fork River tributaries above Cabinet Gorge Dam. Over the 19 last four years, Avista has developed two experimental fish passage facilities, and has already 20 radio tagged and safely transported a total of 105 adult bull trout above Cabinet Gorge Dam. 21 Once the fish are transported, implementation staff monitor their movement and spawning 22

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efforts. Juvenile bull trout on their downstream migration are collected in tributary streams and transported to the Clark Fork River downstream of Cabinet Gorge Dam. Recreation facility improvements have been made to 19 different sites along the reservoirs. These upgrades range from improved access, new signage and addition of interpretation and education material, to the total redesign and reconstruction of 9 sites. Finally, tribal members continue to monitor known cultural and historic resources located within the project boundary, to ensure that these sites are appropriately protected.

8 When the new Clark Fork license was received, the high levels of total dissolved gas 9 occurring during spill periods at Cabinet Gorge Dam was an issue that remained unresolved. 10 A plan to mitigate the high total gas levels has been developed with stakeholders including the Idaho Department of Environmental Quality. The plan calls for the modification of an 11 existing diversion tunnel with engineering studies to commence in 2004. The tunnel 12 modification would be completed by 2010 at an estimated cost of \$37 million (including 13 AFUDC and inflation). If needed, the modification of a second tunnel would occur within 10 14 15 years of completion of the first tunnel at an estimated cost of \$23 million (including AFUDC and inflation). The second tunnel would be constructed only after an analysis of the 16 performance of the first tunnel and an evaluation of the environmental benefits. 17 A photograph of the Cabinet Gorge project and the existing tunnels is provided as Schedule No. 18 19 2.

The Company has not proposed an increase in rates in this filing related to these expected costs. The Company plans to defer the costs and address recovery of them in a future rate filing.

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### Would you please give an update on the status of your efforts to relicense **Q**. the Spokane River Hydroelectric Project?

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3 Α. Yes. The Company is in the process of preparing to relicense five hydroelectric generation projects located on the Spokane River. These projects, which are all 4 under one FERC license, include Long Lake, Nine Mile, Upper Falls, Monroe Street, and 5 Post Falls. The projects have a total generating capacity of 156 MW, and average annual 6 energy production of approximately 105 aMW. Our current license for these Spokane River 7 projects expires in July 2007, creating a deadline in July 2005 for filing a new application. 8 9 We are developing that application using FERC's alternative licensing procedures. Since 2001, we have been working with numerous stakeholders to understand and resolve issues 10 related to the Spokane River Project. That consultation has occurred within five technical 11 12 work groups and a lead, or plenary group. The first full season of field studies were completed in 2003, and we are currently reviewing those results. Stakeholders are also 13 beginning to work on proposals for PM&E measures. Our goal is similar to what was 14 15 accomplished on the Clark Fork Project: a comprehensive settlement agreement defining the terms and conditions of a new license based on a consensus of local, state and federal 16 agencies, tribes, and local citizens. We plan to have a draft license application completed at 17 18 the end of 2004.

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The Company has not proposed an increase in rates in this filing related to these 20 expected costs. The Company plans to defer the costs and address recovery of them in a 21 future rate filing.

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### IV. RISK POLICY AND RESOURCE MANAGEMENT

- 2 0. Could you please describe the purpose of the Company's Energy 3 **Resources Risk Policy?**
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Yes. Avista Utilities uses a variety of techniques to manage its business risks. Α. The Risk Policy is one risk management tool. The overall purpose of the Risk Policy is to provide general guidance to the Energy Resources workgroup with regard to the management 7 of the company's energy risk exposure, as it relates to electric power or natural gas resources.

8 The management of volumetric limits for the imbalance between projected loads and resources for an 18-month forward period is part of the Risk Policy guidance. The Risk 9 Policy also provides structure for the appropriate management approvals for longer-term 10 11 transactions depending on the term and time of delivery into the future. The Company's Risk 12 Policy is included as Confidential Schedule No. 3 of Exhibit No. 5.

13 The purpose of the Risk Policy is not to develop a specific procurement strategy for 14 buying or selling power or natural gas fuel for generation at any particular time. Rather, several factors, including the variability associated with loads, hydroelectric generation, and 15 electric power and natural gas prices, are considered in the decision-making process with 16 17 regard to procurement of electric power and natural gas fuel for generation, consistent with the Risk Policy. Those factors, and more specifically how they are taken into account with 18 19 respect to certain natural gas price hedges deferred to this case in the Commission's order on 20 the Company's PCA filing in Case No. AVU-E-03-6, are discussed in more detail in Witness 21 Lafferty's direct testimony.

1Q.The Commission, in the Company's recent PCA order, indicated that the2Company should present an acceptable risk management protocol for long-term sales3or purchases as part its PCA deferred case in its general rate case filing. Please4describe how the Company has addressed this issue.

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5 Α. The Company believes that the questions posed by the Commission and Staff in the PCA case are more closely associated with resource procurement strategies rather than 6 risk management, per se. The Company believes that the information provided as part of this 7 8 general rate case, primarily in Mr. Lafferty's testimony, will serve to answer the questions 9 associated with the Company's resource procurement strategies and more specifically those questions associated with medium-term natural gas hedges that were deferred from the PCA 10 11 case. The Company and Staff expect to have follow-up discussions following this general rate case regarding resource procurement strategies and risk management, in general. 12

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### Q. What is the scope of testimony of other Energy Resources witnesses?

A. Mr. Robert Lafferty will provide testimony concerning the prudence of the Coyote Springs 2, Boulder Park and the Kettle Falls Combustion Turbine resource acquisitions. Mr. Lafferty will also provide testimony addressing the issues deferred from the Company's PCA case regarding the prudence of medium-term natural gas hedge transactions. Mr. William Johnson will provide testimony regarding power supply pro-forma adjustments. Mr. Clint Kalich will provide testimony regarding the Aurora power supply model, inputs and assumptions.

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### Does that conclude your pre-filed direct testimony?

A. Yes it does.

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