# August 29, 2003 BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

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## IN THE MATTER OF AVISTA CORPORATION ) DBA AVISTA UTILITIES' 2003 INTEGRATED ) RESOURCE PLAN (IRP). )

**CASE NO. AVU-E-03-02** 

**ACCEPTANCE OF FILING** 

Office of the Secretary Service Date

On April 30, 2003, Avista Corporation dba Avista Utilities (Avista; Company) filed its 2003 Electric Integrated Resource Plan (IRP) with the Idaho Public Utilities Commission (Commission). The Company's filing complies with the Commission's direction in Order No. 22299 Case No. U-1500-165, which requires Avista to file a biennial resource management report (now IRP or Integrated Resource Plan) describing the status of the Company's electric resource planning.

#### **AVISTA 2003 IRP**

At this time, Avista states it has no immediate need for additional long-term resources. The Company does not anticipate a significant deficit in energy, on an annual average basis, until 2008. The Company does not anticipate a deficit in capacity until 2010. The Company views this IRP as a resource evaluation process, rather than a specific resource acquisition plan.

As reflected in a summary of its filing, for this IRP the Company undertook a significant effort in computer modeling. This effort was initiated with the acquisition of AURORA, an hourly production-cost model that dispatches resources and develops a set of forward market prices based on numerous conditions. This effort was substantiated through the development of numerous spreadsheet-based models, and the incorporation of a linear programming (LP) module.

For the first 10 years of the IRP timeframe (2004-2013), the IRP modeling process selected a combination of combined and simple cycle combustion turbines, wind and coal resources. During the second 10-year period of the IRP planning horizon period (2014-2023), the modeling process pointed toward acquisition of coal generation due to improvements and

technology and its fuel costs relative to other resources. Given no need for immediate resources, the Company will continue to evaluate available options for future generating requirements.

Included in the Company's IRP filing is a 2003 Action Plan which details the studies and actions the Company will take between now and the 2005 IRP. The Company's 2003 Action Plan contains the following elements:

**Public Process** 

- 1. Propose changes to WUTC on the IRP/RFP process that will provide improvements.
- 2. Continue to manage the free-flow of information with TAC participants.

## Demand-Side Management

- 1. Evaluate the cost-effectiveness and resource potential of conservation voltage reduction on the Company's system.
- 2. Acquire electric resources that are at least proportionate to the percentage of DSM revenues being expended.
- 3. Field a DSM portfolio that continues to be cost-effective on a societal and utility basis.
- 4. Prepare contingency plans for future emergency responses to unexpected fluctuations in wholesale electric markets.
- 5. Prepare for a re-evaluation of continued participation in the Northwest Energy Efficiency Alliance (NEEA) upon expiration of the current contract period (expiring at the end of 2004).
- 6. Convene a TAC meeting in the fall of 2003 to discuss the various alternatives for integrating DSM into the 2005 IRP process.

Supply-Side Resource Options

- 1. Pursue a new license for the Spokane River projects by filing a new license application by July 31, 2005.
- 2. Continue to evaluate the effects and costs of integrating wind generation into the Company's electrical system.
- 3. Consider and evaluate the potential to add coal facilities to the Company's mix of existing generating resources.

- 4. Determine the feasibility of entering into a medium-term firm power sale during the Company's surplus years.
- 5. Initiate a study to determine the optimal reserve margin for the Company, including the benefits of additional peaking capacity.
- 6. Continue to assess the cost-effectiveness of new resource additions.
- 7. Continue to work with Commission Staff on methods whereby the Company can acquire resources with development timelines beyond one or two years and increase the probability for full rate recovery.

**Resource Management Issues** 

- 1. Analyze the uncertainty of decisions as the Company confronts risks and opportunities.
- 2. Continue to assess the electric marketplace and its effect on the Company.

On May 23, 2003, the Commission issued Notices of Filing and Comment Deadline in Case No. AVU-E-03-02. The deadline for filing written comments was July 3, 2003. The Commission Staff was the only party to file comments.

### **Commission Staff Analysis and Recommendation**

Staff in its analysis addresses the Company's IRP load forecast, its use of the AURORA model, demand-side management (DSM), supply-side resources, and the Company's near term Action Plan. Specific comments of Staff on the Company's IRP can be summarized as follows:

#### Load Forecast

Staff notes that Avista is projecting an overall average growth rate of retail electricity sales of 3.4% per year over the 20-year planning period. On a monthly planning basis, the Company expects to encounter energy deficits during some months in all years of the forecast. The Company may balance its monthly positions through short-term market purchases or sales, exchanges or other resource arrangements. Over the long-term, however, the Company's strategy is to not rely on long-term market purchases to serve future base-load requirements.

Demand-Side Management (DSM)

Staff notes that the Company's 2003 IRP describes Avista's energy savings achieved through 24 years of DSM programs. Going forward, the IRP forecasts between four and five

aMW of new DSM savings being achieved annually after 2005. This amounts to over 6% of its forecasted load growth from 2004 through 2023. Avista funds most of its DSM efforts through tariff rider surcharges in Idaho and Washington, currently 1.95% and 1.48% of retail revenues, respectively.

According to the Company's IRP, Avista's future DSM activities funded from its tariff rider are based on three priorities:

- 1. Satisfaction of least-cost resource requirements and expectations.
- 2. Overall DSM portfolio that is cost-effective on a societal and utility basis.
- 3. Return its tariff rider balance to zero in a timely manner.

In addition to DSM tariff rider revenues, Avista receives nearly \$400,000 annually for Conservation and Renewable Discount DSM program benefits from Bonneville Power Administration. It will continue to receive this funding through 2006.

#### Supply-Side Resources

As a general guideline, the annual energy position of Avista is used to determine when the Company needs to acquire additional base-load energy resources. The first significant annual energy deficit is expected in 2008. This deficit is forecasted to grow to 411 aMW by 2013 and 976 aMW by 2023. Load growth and reduced mid-Columbia generation account for the significant majority of increasing deficits during this period.

As reflected in the Company's IRP, Avista is in a surplus capacity position through 2009. The Company currently has sufficient capacity resources, due primarily to the relatively large amount of hydroelectric generation in its resource portfolio. For the most part, future capacity requirements will be met through the acquisition of new resources, which provide both capacity and energy.

Avista contends that evaluation of the historical data shows that a superior planning criteria is the use of a "confidence interval" based on 80% of the monthly variability in load and hydroelectric generation. This means that for each month there is only a 10% chance that the combination of load and hydro variability would exceed the planning criteria. In other words, for a given month there is a 10% chance the Company would need to purchase some energy from the market. On a monthly basis, the 80% confidence level varies between 77 and 268 aMW. The average of the 80% confidence interval across the 12 months of the year equals 153 aMW.

This level is similar to critical water planning on an annual basis, but is more precise since it is based on the chance of exceedance by month.

Staff believes that Avista's decision to employ 80% confidence interval planning is acceptable. While not substantially different from its former planning criteria, Staff believes that it does provide better assurance of resource adequacy by considering monthly, rather than annual, conditions.

Avista's risk analysis considered variability and hydroelectric generation, natural gas prices and WECC loads. For the first 10 years of the IRP timeframe (2004-2013), the IRP modeling process selected a total of 411 aMW of new resources as follows:

□ 149 aMW of Combined Cycle Combustion Turbines (CCCT).

- $\square$  25 aMW of wind
- □ 197 aMW of coal
- □ 40 aMW of Single Cycle Combustion Turbines (SCCT)

This combination of new resources contains planning reserve margins in excess of 12% through 2009.

During the second 10-year period of the IRP planning horizon (2014-2023), the modeling process recommended acquisition of coal generation due to improvements and technology and its fuel costs relative to other resources.

Staff is satisfied with the mix of resources selected by the Company. However, Staff believes it is important to recognize that new resource additions are not needed for several years. Consequently, the quantity and mix of Avista's resource selections will likely change in future IRPs as conditions change, fuel prices become more certain, and technology improves.

In analyzing new resource options for this IRP, one notable conclusion made by the Company, Staff states, is that wind cannot be relied on to meet peak load obligations. Avista contends that it would most likely need to invest in other capacity resources (e.g., Simple Cycle Combustion Turbines) to meet peaking requirements if significant wind resources are required. Alternatively, it could purchase wind from other sources that already include shaping services. Given the uncertainty around wind, Avista has elected to limit the preferred strategy to 75 MW of this resource, or around 25 aMW of energy. The Company proposes to continue the study of wind to stay well informed on issues, potential declining costs, and any future opportunities.

In developing its IRP, Avista made a considerable analytical effort to evaluate the preferred resource strategy (the combination of new resources listed previously) against several alternative strategies under various scenarios. Staff concurs that the preferred resource strategy selected by the Company is superior to the other resource strategies considered in the IRP.

Staff notes that it actively participated in each of the public meetings held during the course of Avista's development of its 2003 IRP. Moreover, Staff states that it was in close contact with Avista throughout the IRP process and provided its opinions and input. Staff states that it thoroughly reviewed the draft IRP and provided extensive comments. Staff believes that the Company satisfactorily addressed its comments in the final IRP.

Staff believes that Avista has done a good job in assessing its load resource conditions, incorporating demand-side management, evaluating new resource alternatives, analyzing risk, programs and in selecting a reasonable portfolio of new resources. More importantly, especially since Avista does not need to acquire any new resources for some time, Staff believes that the Company has made impressive strides in developing new tools and refining analysis techniques that Staff believes will prove valuable in the future. Staff recommends that Avista's 2003 IRP be accepted and acknowledged.

### **COMMISSION FINDINGS**

The Commission has reviewed the filings of record in Case No. AVU-E-03-02, including Avista's 2003 Integrated Resource Plan and related comments. We find that the Company's biennial IRP contains the required information and is in the appropriate format as directed by the Commission in Order No. 22299. We recognize and commend Avista for its efforts in preparing its 2003 IRP.

As reflected in the Company's 2003 IRP, Avista has no immediate need for additional long-term resources, no significant deficit in energy on an annual basis until 2008 and no deficit in capacity until 2010. The Company views this filing as a resource evaluation process and not a specific resource acquisition plan. The Commission notes that we regard an Integrated Resource Plan as a utility planning document that incorporates assumptions and projections as of a point in time. It is the Company's ongoing planning process that we acknowledge, not the conclusions or results. We encourage Avista to regard its IRP as an actual planning document. As such, we expect the IRP to accurately represent the Company's best estimate of future

changes in loads, resources and contract obligations, and to be indicative of how the Company through supply and demand side resources intends to meet its statutory obligation to serve its native load. To such end, we encourage the Company to regard its IRP as a living document and not allow its planning document to grow stale. This is especially important, we find, in a time of regulatory change, industry restructuring and market volatility.

#### **CONCLUSIONS OF LAW**

The Idaho Public Utilities Commission has jurisdiction over Avista Corporation dba Avista Utilities, an electric utility, pursuant to Title 61 of the Idaho Code and the Commission's Rules of Procedure, IDAPA 31.01.01.000 *et seq*.

## **ACCEPTANCE OF FILING**

Based on our review, we find it reasonable to accept and acknowledge Avista's filed 2003 Integrated Resource Plan. Our acceptance of the 2003 IRP should not be interpreted as an endorsement of any particular element of the Plan, nor does it constitute approval of any resource acquisition contained in the Plan.

DATED at Boise, Idaho this  $28^{th}$  day of August 2003.

PRESIDENT

MARSHA H. SMITH, COMMISSIONER

Jean D. Jewell Commission Secretary

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