

SCOTT WOODBURY
DEPUTY ATTORNEY GENERAL
IDAHO PUBLIC UTILITIES COMMISSION
PO BOX 83720
BOISE, IDAHO 83720-0074
(208) 334-0320
BAR NO. 1895

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IDAHO PUBLIC
UTILITIES COMMISSION

Street Address for Express Mail:
472 W. WASHINGTON
BOISE, IDAHO 83702-5983

Attorney for the Commission Staff

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA CORPORATION)
DBA AVISTA UTILITIES' 2003 INTEGRATED) CASE NO. AVU-E-03-2
RESOURCE PLAN (IRP).)
)
)
) COMMENTS OF THE
) COMMISSION STAFF
)

COMES NOW the Staff of the Idaho Public Utilities Commission, by and through its Attorney of record, Scott Woodbury, Deputy Attorney General, and in response to the Notice of Filing and Notice of Comment Deadline issued on May 23, 2003 submits the following comments.

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.

BACKGROUND

The Company views this IRP as a resource evaluation process, rather than a specific resource acquisition plan. This is primarily because significant resource deficiencies are many

years into the future. The 2005 IRP will likely include more specific plans for addressing future needs. The 2003 IRP is focused on developing a set of tools and methods within which various potential resource decisions may be evaluated in future IRPs, requests for proposals, and other resource planning analyses.

ANALYSIS

Load Forecast

Avista is projecting an overall average growth rate of retail electricity sales of 3.4 percent¹ per year over the 20-year planning period. On a monthly basis, the Company expects to encounter energy deficits during some months in all years of the forecast. In 2004, for example, the Company position is deficit in March, September and October, even though the annual position is surplus by 94 aMW. In other months, particularly during spring runoff, the Company is in a surplus position. As usual, the Company may balance its monthly positions through short-term market purchases or sales, exchanges or other resource arrangements. However, over the long term, the Company's strategy is to not rely on long-term market purchases to serve future base load requirements.

AURORA Model

Avista acquired a computer model called AURORA to help develop this IRP. The IRP says AURORA is an hourly production-cost model that dispatches resources, develops forward market prices and incorporates Company-specific demand side management programs (DSM). The Company says this model allows DSM programs to be evaluated against hourly market prices in parallel with supply side resources.

The AURORA model apparently has not previously been used to evaluate DSM resources and Avista has experienced some glitches in adapting the model to do this. However, the Company says it has identified the problems and is in the process of correcting them. The Company informed Staff on July 3, 2003 that it would revise the DSM resource net market values shown in Table 3.1 of the IRP and in Table Q.2 of the Technical Appendices.

¹ In a 7/1/03 e-mail from Avista, the Company acknowledged that its forecasted 20-year average sales growth rate of 3.2% per year stated on page 5 of the IRP is in error. Staff noted that Avista's forecasted growth rate is more than 40% higher than that which Idaho Power forecasted in its IRP and Avista provided a plausible explanation for its higher growth rate.

Demand Side Management (DSM)

The IRP describes Avista's energy savings achieved through 24 years of DSM programs. Going forward, the IRP forecasts between 4 and 5 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. The IRP explains that emergency DSM programs were used to respond to the 2001 regional energy crisis and notes that by the end of 2001 the Company's system-wide DSM tariff rider balance was a negative \$12 million. As a result, the IRP says that through 2005 only 62% of the incoming DSM rider revenue will be available for DSM programs and that the other 38% will be used to reduce the negative balance. But the IRP also says that Avista plans to deliver more energy savings per dollar spent on DSM than stated in its Schedule 90 goal.

According to the 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
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.

Tariff rider funds are also used by Avista for its participation in the Northwest Energy Efficiency Alliance (NEEA). However, the energy savings achieved through NEEA's programs are not included in the DSM savings that Avista lists or forecasts in its IRP. Staff believes the future energy savings achieved through NEEA will ultimately be reflected in lower subsequent demand forecasts. Avista's current obligation to NEEA ends in 2004 and the IRP says Avista will evaluate next year whether to extend its participation.

² In Appendix D, p. D-3, under the Demand Side Management heading, the IRP erroneously said that the Company focused its analytical efforts on understanding relatively low cost supply side resource options. In a 6/30/03 e-mail the Company acknowledged that the words *supply side resource* should read as *demand side resource*.

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 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.

The Company 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.

Historically, Avista's planning reserves have not been based on unit size or resource type. Instead, planning reserves have been set at a level equal to ten percent of the one-hour system peak load, plus 90 MW. Together, these have equated to approximately a 15 percent planning reserve margin during the Company's peak hour load. The Company's planning reserve level, while not explicitly considered in the calculation, meets its operating reserve requirement levels of five and seven percent for hydroelectric and thermal generation, respectively.

Avista contends that evaluation of the historical data shows that a superior planning criterion is the use of a "confidence interval" based on 80 percent of the monthly variability in load and hydroelectric generation. This means that for each month there is only a ten percent chance that the combination of load and hydro variability would exceed the planning criteria. In other words, for a given month there is a ten percent chance the Company would need to purchase some energy from the market. On a monthly basis, the 80 percent confidence level varies between 77 and 268 aMW. The average of the 80 percent confidence interval across the twelve 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 percent confidence interval planning is acceptable. While not substantially different from its former planning criteria, it does provide better assurance of resource adequacy by considering monthly, rather than annual, conditions.

Avista's risk analysis considered variability in hydroelectric generation, natural gas prices and WECC loads. Possibly the greatest power supply risk the Company presently faces is variation in hydroelectric generation. In evaluating possible new resource portfolios, lowest risk was weighted at 50 percent and lowest cost at 50 percent.

The selection of hydro variability, load variability and gas prices as primary factors for risk analysis is appropriate in Staff's opinion. Staff also concurs with the Company's decision to equally weight lowest cost and lowest risk in choosing its preferred resource portfolio.

For the first ten 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 CCCT
- 25 aMW of wind
- 197 aMW of coal
- 40 aMW of SCCT

This combination of new resources maintains planning reserve margins in excess of 12 percent through 2009.

During the second ten-year period of the IRP planning horizon (2014-2023), the modeling process recommended acquisition of coal generation due to improvements in technology and its fuel costs relative to other resources. After 2013, only coal is selected as a result of a change in the relationship between natural gas and coal prices. Natural gas prices over the IRP term increase faster than coal, making coal generation less costly in later years. In total, between 2014 and 2023, an additional 566 aMW of coal resources are selected.

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 is that wind cannot be relied on to meet peak load obligations. Avista contends 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 acquired. 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. However, the Company also proposes to continue the study of wind to stay well informed on issues, potential declining costs, and any future opportunities. Staff agrees that this is important, especially given the recent increase in wind development activity throughout the Northwest.

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. Overall, the Preferred Resource Strategy performed well, not only in the Base Case, but also under numerous scenarios. This chosen combination of resources provides for a significant reduction of risk at a very modest impact to expected costs. Avista believes that the Preferred Resource Strategy will meet not only the Company's load obligations over time, but will also provide for reserve margins of at least 12 percent. Staff concurs that the Preferred Resource Strategy selected by the Company is superior to the other resource strategies considered in the IRP.

Summary of Significant Action Plan Items

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 cost basis.
4. Prepare contingency plans for future emergency responses to unexpected fluctuations in wholesale electric markets.
5. Prepare for a reevaluation of continued participation in the Northwest Energy Efficiency Alliance upon expiration of the current contract period (expiring at the end of 2004).

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.

The 2003 Action Plan, Staff believes, is a reasonable set of actions that will allow the Company to continue to meet its load obligations cost effectively, while also supporting the preferred resource strategy identified in the IRP and improving the planning process going forward.

In summary, Avista has no immediate need for additional long-term resources. In fact, the Company does not anticipate a significant deficit in annual energy until 2008. Furthermore, the Company does not anticipate a deficit in capacity until 2010. The Company believes it is prepared, even under low water conditions, to sufficiently meet retail loads through at least 2007 while still maintaining adequate reserve margins.

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

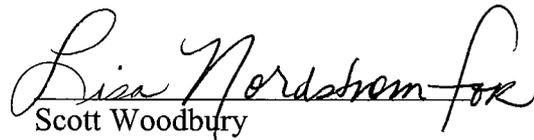
Staff believes that Avista has done a good job in assessing its load-resource conditions, incorporating demand-side management, evaluating new resource alternatives, analyzing risk, programs and in selecting a reasonable portfolio of new resources. More importantly, especially since Avista does not need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

prove valuable in the future. Staff expects that the Company will continue to make further progress in developing and applying these tools and techniques.

RECOMMENDATIONS

Staff recommends that Avista's 2003 IRP be accepted and acknowledged.

Respectively submitted this ^{3rd} day of July 2003.


Scott Woodbury
Deputy Attorney General

Technical Staff: Rick Sterling
Lynn Anderson

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 3RD DAY OF JULY 2003, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF**, IN CASE NO. AVU-E-03-02, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

CLINT KALICH
MANAGER OF RESOURCE PLANNING
& ANALYSIS
AVISTA CORP
PO BOX 3727
SPOKANE WA 99220-3727

KELLY NORWOOD
VICE PRESIDENT
AVISTA CORP
PO BOX 3727
SPOKANE WA 99220-3727



Andrew D. Koch
SECRETARY