BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA CORPORATION'S 2011 ELECTRIC INTEGRATED RESOURCE PLAN	)	**CASE NO. AVU-E-11-04**
	)	**ACCEPTANCE OF FILING**
	)	**ORDER NO. 32444**

On August 25, 2011, Avista Corporation filed its 2011 Electric Integrated Resource Plan ("IRP"). The IRP is a biennial planning document describing how the Company intends to serve its customers' expected electric requirements. *See* Order Nos. 22299 and 24729. On October 5, 2011, the Commission issued a Notice of Filing and Notice of Modified Procedure allowing interested parties 60 days to comment on the IRP. *See* Order No. 32377. Commission Staff, Benewah County, and an individual member of the public filed timely comments. Having reviewed these comments and the IRP, the Commission issues this Order accepting the filing of Avista's 2011 IRP.

AVISTA'S 2011 IRP

Avista's IRP notes that it guides Avista's resource planning strategy for the next two years while considering resource procurements over a 20-year planning horizon. *See* IRP Executive Summary at i. According to the IRP, Avista's "Preferred Resource Strategy (PRS) is a mix of wind generation, energy efficiency, upgrades at existing generation and distribution facilities, and new gas-fired generation." *Id.* The IRP further states, in sum, as follows.

Resource Needs

According to the IRP, plant upgrades and conservation measures are essential but will be inadequate to meet expected load growth. Without new resources or conservation measures, Avista's annual energy deficits will be 49 aMW in 2020, 218 aMW in 2026, and 475 aMW in 2031. Summer capacity deficits will be 98 MW in 2019, 352 MW in 2026, and 774 MW in 2031, and winter capacity deficits will be 42 MW in 2020, 401 MW in 2026, and 883 MW in 2031. These increasing deficits result from 1.6% energy-and-capacity load growth through 2031, coupled with expiring long-term purchase and sale contracts. *Id.*

Modeling and Results

The IRP notes that Avista developed its PRS in multiple steps. The Company identifies and quantifies potential new generation resources to serve projected demand. It then maps Company resources to the present transmission grid configuration in a model simulating hourly operations for the Western Interconnect from 2012 to 2031. *Id.* at iii.

Avista's model adds cost-effective new resources and transmission to meet growing loads. The Company's risk analysis covers over 500 iterations of potential future market conditions. The Company's simulation estimates Mid-Columbia electricity markets, and the iterations collectively form the IRP Expected Case Mid-Columbia electricity market. *Id.*

Avista values each new resource and energy efficiency option against the Expected Case to identify the option's future value to the Company, as well as its inherent risk measured as year-to-year cost volatility. Avista inputs these values and associated capital and costs into a model, which in turn develops optional mixes of new resources at each point on an efficient frontier. The PRS provides a least reasonable-cost portfolio that minimizes future costs and risks given legislatively-mandated or expected future environmental constraints. *Id.* The PRS selection is the location on the efficient frontier where the increased cost justified the reduction in risk. *Id.* at iv.

Scenarios for load growth, capital costs, higher energy efficiency acquisitions, and greenhouse gas policies help identify tipping points where the PRS could change under alternative conditions to the Expected Case. *Id.*

Electricity and Natural Gas Market Forecasts

According to the IRP, the forecasted levelized average Mid-Columbia market price is $70.50 per MWh in nominal dollars over the next 20 years; the off-peak price is $63.94 per MWh and the on-peak price is $75.42 per MWh. These prices include the market impacts of greenhouse gas mitigation beginning in 2015. *Id.* at iv and v.

The IRP notes that electricity and natural gas prices are highly correlated because natural gas fuels marginal generation resources in the northwest during most of the year. The nominal levelized Expected Case natural gas prices at Henry Hub, and the range of forecasts from the 500 Monte Carlo iterations, result in an average $6.70 per decatherm over the next 20 years. *Id.* at v.

Energy Efficiency Acquisition

In 2010, Avista commissioned a 20-year Conservation Potential Assessment ("CPA"). The CPA analyzed over 4,300 equipment and measure options for residential, commercial, and industrial applications. Avista based its IRP conservation potential evaluations on the CPA's data. Energy efficiency measures decrease Avista's energy requirements by 120.2 aMW, or about 10%. Further, by 2031 energy efficiency reduces load by 310 aMW (288 aMW net after measure life expectancy adjustments). *Id.* at vi.

Preferred Resource Strategy

According to the IRP, Avista's management and Technical Advisory Committee carefully considered the information obtained during the IRP process when developing the PRS. The PRS meets future load growth with efficiency upgrades at existing generation and distribution facilities, conservation, wind, and simple- and combined-cycle natural gas-fired combustion turbines. *Id.* at vii. The PRS has changed only modestly from the 2009 IRP. *Id.* at viii. The PRS resources for the 2011 IRP, on a nameplate capacity basis, are: 120 (nameplate) MW of NW wind by the end of 2012 and 2019-2020; 83 MW of SCCT by the end of 2018 and 46 MW by 2029; 4 MW of existing thermal resource upgrades by the end of 2019; 83 MW of SCCT by the end of 2020; 270 MW of combined-cycle combustion turbine (CCCT) by the end of 2023 and 2026. Efficiency improvements on a peak reduction (MW) basis are: 28 MW of distribution efficiencies by the end of 2012-2031; and 419 MW of energy efficiency by the end of 2012-2031. *Id.*

The present value of investment required to support the 2011 PRS slightly exceeds $0.84 billion; the nominal total capital expense is $1.7 billion over the IRP timeframe. Avista forecasts spending $1.4 billion over the IRP timeframe on conservation acquisitions. *Id.* at ix.

Greenhouse Gas Emissions

As with all IRPs since 2007, this IRP's Expected Case includes the costs associated with potential greenhouse gas (GHG) policies. The IRP attempts to address uncertainty about these future GHG policies by considering four potential policy options beginning in 2015: (1) a regional cap and trade regime, (2) a national cap and trade regime, (3) a national carbon tax, and (4) the absence of any greenhouse gas policy. *Id.* The Company then accounts for the impact of the GHG policies on the Expected Case by looking to their weighted average. The Company allocated 30% to a regional GHG policy, 30% to a national GHG policy, 30% to a national

carbon tax, and 10% to the status quo. IRP at 4-12 (Table 4.1). Using this approach, the 2011 IRP predicts a carbon cost ranging from about $15 per short ton in 2015 to $80 per short ton in 2031. *Id.* at 4-14 (Figure 4-2).

Action Items

Avista's 2011 Action Plan outlines activities and studies between now and the 2013 IRP. The Action Plan includes input from Commission Staff and the Company's management team and Technical Advisory Committee. Action item categories include resource additions and analysis, demand-side management, environmental policy, modeling and forecasting enhancements, and transmission planning. *See* IRP Executive Summary at ix.

STAFF COMMENTS

Commission Staff reviewed Avista's 2011 IRP. Staff noted that the 2011 IRP is the Company's 12th plan, and that it describes Avista's process for involving stakeholders, current and forecasted loads and resources, energy efficiency programs, environmental policy considerations, transmission and distribution systems, generations resources options, market analysis, preferred resource strategies, and actions to be taken by the company. Staff Comments at 1. Based on this review, Staff believes "Avista generally has demonstrated a rigorous approach in developing its IRP." *Id.* at 2. Staff said "Avista performed extensive analyses, gave reasonably equal consideration of supply-and-demand-side resources, and provided acceptable opportunities for public input, resulting in an [IRP] that satisfies the requirements set forth in Commission Order Nos. 24729 and 22299." *Id.* at 15. Accordingly, Staff recommended that the Commission acknowledge Avista's 2011 IRP. *Id.*

PUBLIC COMMENTS

Benewah County, Idaho and an individual member of the public filed the only public comments. The individual commented that there is no reason not to accept the IRP, but that Avista should receive "no public money" or rate increases for wind resources. The County expressed concern that the potential federal GHG policies referenced in the IRP would increase rates and negatively impact the County. The County said science does not support a greenhouse gas/global warming theory, and it urged Avista to rethink the proposed policies and to develop alternatives that will benefit the environment and the County.

DISCUSSION

The Commission has jurisdiction over Avista, an electric utility, and the issues in this case under Title 61 of the Idaho Code and the Commission Rules of Procedure, IDAPA 31.01.01.000 et seq.

The Commission has reviewed the filings in this case, including Avista's 2011 IRP and the comments. Based on that review, the Commission finds that the Company's 2011 IRP contains the required information and is in the appropriate format as established in Commission Order No. 22299. Accordingly, we find it reasonable to accept the Company's filing of the 2011 IRP.

Although the Commission accepts Avista's filing, we are concerned that Avista may not pursue "all" cost-effective conservation if it adheres to certain conservation-potential limitations expressed in the IRP. Avista's CPA study identified two levels of achievable conservation potential: (1) "maximum achievable potential," which is the "upper boundary of the achievable potential range or the maximum achievable savings that could be achieved through Avista's energy efficiency programs," and (2) "realistic achievable potential," which is "the lower boundary of achievable potential or a forecast of achievable savings resulting from customer behavior and penetration rates of efficient technologies." IRP at 3-6. However, Avista's IRP only includes the "realistic achievable" levels of conservation. *Id.* at 3-7 (Table 301 and Figure 3-3). The Commission notes that the 2007 and draft 2012 versions of the Idaho State Energy Plan respectively direct the Commission to "encourage . . . utilities . . . to pursue" "all cost effective conservation" and "cost effective conservation." We are mindful of that direction and have consistently instructed energy utilities to pursue "all" cost-effective efficiency programs. We are concerned that Avista may not achieve "all" cost-effective efficiency if it omits the "maximum achievable" levels of conservation from its IRP.

The Commission supports the Company's continuing efforts to obtain stakeholder and public input during the IRP process. The Commission also appreciates the public comments it received on wind resource and GHG issues. With respect to these issues, the Commission will continue to evaluate the prudency of a utility's resource purchases, including any wind resource purchases. As for GHG policies, the Commission recognizes the uncertainty surrounding federal environmental policies. Avista's IRP summarizes the Company's understanding of these uncertainties by describing "some of the more pertinent policy issues facing the Company" (IRP

at 4-1) and presenting "four hypothetical greenhouse gas policy models" (*Id.* at 4-6) that represent "potential path[s] governments could take. . . ." *Id.* at 4-11. The Commission does not, however, interpret Avista's IRP to advocate for any particular policy. *See id.*, at 4-4 (stating: "Avista does not have a preferred form of greenhouse gas policy at this time"). The Commission observes that the IRP says Avista generally supports the adoption of federal policy that is workable and cost-effective, fair, protective of the economy and consumers, supportive of technological innovation, and includes emissions from developing nations. *Id.* at 4-4. Of these considerations, the Company states: "Protecting the economy and consumers is of utmost importance." *Id.* The Commission finds it was appropriate for the Company to discuss potential federal policies in its IRP. It is also appropriate that the Company's PRS does not rest upon those considerations.

Our acceptance of Avista's 2011 IRP should not be interpreted as an approval of the plan or of any resource acquisition contained in the plan. We again note that an IRP is a utility planning document that incorporates many assumptions and projections at a specific point in time. By accepting the Company's filing, we acknowledge only the Company's ongoing planning process, not the conclusions or results reached through that process.

ACCEPTANCE OF FILING

Based on our review, we find it reasonable to accept for filing and to acknowledge Idaho Power's 2011 Electric Integrated Resource Plan. Our acceptance of the 2011 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.

O R D E R

IT IS HEREBY ORDERED that Avista's 2011 IRP is acknowledged and accepted for filing.

DONE by Order of the Idaho Public Utilities Commission at Boise, Idaho this 23rd day of January 2012.

PAUL KJELLANDER, PRESIDENT

MACK A. REDFORD, COMMISSIONER

MARSHA H. SMITH, COMMISSIONER

ATTEST:

Jean D. Jewell
Commission Secretary

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