

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 55

In the Matter of
Avista Utilities
2012 Integrated Resource Plan

STAFF'S FINAL COMMENTS

Based on Staff's review of Avista Utilities (Avista or Company) 2012 Natural Gas Integrated Resource Plan (IRP or Plan) and participation in the planning process, it has been determined that the Plan meets the Commission's guidelines in Order Nos. 07-002 and 07-047. Staff concludes that Avista's IRP meets the Commission's substantive IRP requirements. Staff also concludes the demand-side and supply-side resources identified to fill the deficiencies expected in Avista's Oregon service territory beginning in 2013 are appropriate.

However, Staff does not support the suspension of Schedules 486 and 490, Residential Energy Efficiency Programs, and all prescriptive efficiency measures in Schedule 492, Commercial/Industrial Demand Side Management (DSM) Incentive Program, as filed by Avista in Advice No. 12-09-G.¹ To ensure that the Company's next IRP Update and next IRP will contain sufficient analyses regarding the actions undertaken pursuant to the Company's Action Plan, Staff recommends the Commission acknowledge the 2012 IRP subject to replacement of the Action Plan, found in Chapter 9 of Avista's 2012 IRP, with the following:

2013-2014 ACTION PLAN

The Company will extend the energy efficiency measures identified in Tables 2, 3 and 4, the residential regular income program at the program level, and the residential low-income program at the program level.

Continue DSM programs in Oregon and achieve a minimum savings of 225,000 therms in 2013 and 250,000 therms in 2014.

Two years from the date of acknowledgement of this IRP, Avista will provide the results of the following:

- Savings and cost effectiveness of the DSM program.

¹ On October 25, 2012, the Commission adopted Staff's recommendation to suspend Avista's tariff filing Advice No. 12-09-G while parties investigate options in the context of the Company's 2012 IRP.

- Actions taken to reduce delivery costs, including administration costs and audit costs.
- Actions taken to increase the number of cost effective efficiency measures in the portfolio.
- An analysis of non-natural gas benefits of existing and proposed DSM measures.
- An analysis of measure lives for all measures.

Within six months of the date of acknowledgement of this IRP, Avista will develop a potential mechanism for allocating funding for a separate low-income energy efficiency program, and will submit a report to Staff outlining the mechanism.

Overview

In Avista's 2012 IRP, specifically the section titled "2012 IRP Key Messages," Avista identifies an important risk associated with the identified future resource deficits of the relatively flat slope of forecasted demand growth. They indicate that "should demand growth accelerate, the steepening of the demand curve could quickly accelerate resource shortages by several years." In the same section, Avista identifies other risks associated with long term natural gas pricing levels and future availability of existing regional resources. Staff recognizes DSM as an important resource and a valuable tool for hedging against natural gas price volatility, mitigating demand risk, and as a means to obtain a less risky portfolio.

The overarching intent of Staff's position relative to DSM is to achieve cost-effective energy efficiency programs *over the long run*. To do this, the transition to new avoided costs needs to be managed in a way that is strategic, preserves infrastructure, and allows for further improvements in situations where cost-effectiveness can be improved (i.e., administrative costs and transaction costs reduced, measure cost decreased, and/or saving realized per measure increased). It is important to avoid damaging the market capacity to deliver energy efficiency and thereby retain flexibility to react to future market or policy changes. Reacting too quickly to low avoided gas forecasts could reduce the ability, in the long run, to deliver cost-effective gas efficiency.

Staff proposes to monitor programs and natural gas costs for a two year period before they are substantively downsized or suspended. This is consistent with the approach the Commission has taken with Energy Trust of Oregon's (ETO or the Trust) gas DSM programs. During this period, Staff encourages the Company to work to reduce delivery costs and increase savings, where possible, and to collect detailed data regarding

customer utilization of programs, costs, etc., that can be used for a more detailed analysis at the end of the two-year exception period.

Existing Commission Policy

Commission Order No. 94-590 (Docket UM 551) specifies that the total resource cost (TRC) test must be used to determine if energy efficiency measures and programs are cost-effective. The same order allows for measures that are not cost-effective to be included in utility programs if it is demonstrated that:

- A. The measure produces significant non-quantifiable non-energy benefits. In this case, the incentive payment should be set at no greater than the cost-effective limit (defined as present value of avoided costs plus 10 percent) less the perceived value of bill savings, e.g. two years of bill savings.
- B. Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure.
- C. The measure is included for consistency with other DSM program in the region.
- D. Inclusion of the measure helps to increase participation in a cost-effective program.
- E. The package of measures cannot be changed frequently and the measure will be cost-effective during the period the program is offered.
- F. The measure or package of measures is included in a pilot or research project intended to be offered to a limited number of customers.
- G. The measure is required by law or is consistent with Commission policy and/or direction.

History

Avista filed Advice No. 12-03-G on July 16th, 2012, proposing to suspend certain programs included in Schedule 490, Residential Energy Efficiency Equipment Program, and cancelling Schedule 491, High Efficiency Water Heating Equipment Program. As a result of this filing, the Commission accepted Staff's recommendation to allow the Company's filed tariff changes. Tank water heaters, tankless water heaters, direct vent space heat, and chimney dampers were suspended, effective September 1, 2012.

Avista filed Advice No. 12-09-G on September 7th, 2012, proposing to suspend Schedules 486 and 490, Residential Energy Efficiency Programs, and all prescriptive efficiency measures in Schedule 492, Commercial/Industrial DSM Incentive Program. In the same Advice filing, the Company stated that after December 31, 2012, audits would still be offered but incentives would only be provided for cost-effective projects that qualify within its Commercial/Industrial Site-Specific Energy-Efficient Program. This

filing, if approved, would suspend all of Avista's residential and prescriptive commercial energy efficiency programs.

The Commission opened Docket No. UG 240 to consider Avista's proposal to suspend DSM in Oregon. As a result, Staff recommended, and the Commission approved, the tariffs associated with Advice No. 12-09-G be suspended for six months and the programs be investigated concurrently with the Company's 2012 IRP.²

2009 IRP Action Plan

In Avista's 2009 IRP Action Plan, the Company identified an action to continue the pursuit of cost-effective demand side solutions. In Oregon, conservation measures were targeted to reduce demand by approximately 303,000 therms in the first year of the two-year Action Plan. The result of this action item was that Avista reduced Oregon demand by 312,000 therms in 2010 and 313,000 therms in 2011.³

2012 IRP Action Plan

Specific details are not provided about DSM in Avista's 2012 IRP Action Plan. However, the Company states "Over the next two to three years, Avista will be watching natural gas prices as a sign post of the cost-effectiveness of DSM programs. Should prices move significantly Avista will again be proactive in seeking to reinstate a full complement of our natural gas DSM programs."

The analysis of available DSM potential in Avista's service territory was comprised of two main steps in its 2012 IRP. First, a third-party independent, external Conservation Potential Assessment (CPA) was performed by Global Energy Partners, which identified the total conservation potential available over the next 20 years for Avista's service territory. Global Energy Partners identified three types of potential conservation: technical, economic and achievable.

1. Technical is the theoretical upper limit of potential conservation.
2. Economic potential represents the adoption of cost-effective conservation measures based on the total resource cost test.
3. Achievable potential established a realistic target for conservation savings that a utility can expect to achieve throughout its program, taking into account market maturity, customer preferences and expected program participation.

² Order No. 12-404, entered into on October 25, 2012.

³ Avista 2012 Natural Gas Integrated Resource Plan, page 9.2.

Global Energy Partners’ CPA analysis was specific to Avista’s service territory and based on “Avista’s service territory characteristics.”⁴

Once achievable targets were established by Global Energy Partners, the second step was to input the achievable potential identified by CAP in Avista’s IRP model SENDOUT® where it would be compared to supply side resources. The SENDOUT® model recognizes that investments made in DSM are a long-term resource decision. Within SENDOUT® the aggregated potential and costs by region and class are tested against supply side resources. The model also recognizes that some potential may not be cost-effective in the initial forecast years; however, the total cost over the life of the measure, coupled with the cumulative therms savings, is economic.

The following table shows achievable DSM potential for Oregon in 2013 and 2014 from the Global Energy Partners CPA and then as selected by the SENDOUT® model.⁵

Table 1. Achievable DSM Potential in Oregon from 3rd Party Assessment and Avista’s Modeling

	2013	2014
CPA results of achievable conservation potential (1000 therm)	289	715
SENDOUT® model results of conservation potential (1000 therm)	289	426

As Table 1 shows, Global Energy Partners determined that the amount of efficiency savings that were cost effective and achievable in Avista’s Oregon service territory were 289,000 therms in 2013 and 715,000 therms in 2014. Avista’s own resource modeling showed that 289,000 therms were cost effective and achievable in 2013 and 426,000 therms in 2014. Despite these results, Avista proposes to suspend its DSM programs in Oregon.

Avista explains that there are substantial differences between the Global Energy Partners’ CPA and Avista’s operational business planning, including “how measures are aggregated into program offerings and evaluated, how non-incentive infrastructure costs are treated, and how specific the results are to Avista’s service territory and program offerings.”⁶ Avista makes the example of differences in the ‘splintering’ of measures into numerous scenarios.⁷ The independent CPA performed by Global Energy Partners, dated April 30th, 2012, utilizes data provided by the utility, such as avoided cost forecasts, price forecasts, etc., in conducting the conservation potential analysis.⁸

⁴ Avista 2012 Natural Gas IRP, Appendix 4, Avista Utilities Gas Conservation Potential Assessment by Global Energy Partners, April 17, 2012, page iii.

⁵ See Avista 2012 IRP Table 4.4 (page 4.6) and Table 4.8 (page 4.10).

⁶ See Avista 2012 IRP Page 4.10.

⁷ Ibid.

⁸ See Avista 2012 IRP Appendix 4.1 (page 36).

The purpose of a third-party conservation potential assessment is to get an external and independent view of what is cost effective and achievable. Staff notes there may be slight differences between the potential noted by a third-party and actual company operations. However, if actual company costs or procedures are such that 30-50 percent of potential identified by a third-party no longer is cost-effective, that may have serious implications as to the efficacy and efficiency of the company's method of 'splintering' measures and delivering programs.

Avista indicates that the determinations of the CPA study and SENDOUT® model runs resulted in its natural gas avoided cost numbers being reduced by another 25 percent, making all its DSM non cost effective. Staff concludes that additional time and analysis are needed to evaluate DSM prior to its suspension.

Results of DSM Analysis Measure by Measure

Total Resource Cost Test

Commission Order 94-590 states:⁹

The Total Resource Cost (TRC) test should be used to determine program measure cost-effectiveness. The TRC of a measure of program is the present value of retail revenue requirements plus the participant's cost of the measure(s), including operating costs, less quantified non-energy benefits and cost savings. TRC includes avoidable administrative cost. A program or measure passes the TRC test if the TRC is less than the conservation cost-effectiveness limit (CEL). The CEL is the present value of revenue requirements of avoided utility supply, transmission, and distribution costs and the value of firm wholesale sales or purchases before new resources are on-line. CEL for programs or measures also includes a minimum value of ten percent of these costs to account for risk and uncertainty.

A utility should calculate cost savings and other non-energy benefits if they are significant and there is a reasonable and practical method for calculating them.

Staff, Avista, and intervening parties held a workshop on December 12th, 2012, to discuss the direction of DSM programs in the context of the 2012 IRP. Following the workshop, the Company agreed to assess various changes to the cost-effectiveness calculation used in evaluating DSM measures to make them more in line with Commission policy and industry best practices and to determine the sensitivity of benefit-cost ratios to various inputs. The changes discussed included looking at alternative measure lives, including non-natural gas benefits as required by Order 94-590, how audit and administration costs are applied, changing measures from prescriptive to site-specific, and creating a separate

⁹ UM 551, Order 94-590 page 14.

low-income residential DSM program similar to those used by other utilities. Tables 2, 3 and 4 provide TRC calculations for Avista's standard residential, low-income residential, and commercial programs DSM. Below is a summary of the key elements considered relative to cost effectiveness calculations of Avista's DSM portfolio.

Non-Natural Gas Benefits

Up to this point, the Company has not included non-natural gas benefits in its TRC calculations for the residential programs. As indicated above, Order 94-590 clearly indicates that non-energy benefits should be included in cost savings if there is a reasonable and practical method for calculating them. As part of suggested refinements to the Company's TRC calculation, Avista has conducted an analysis to quantify non-natural gas benefits in residential applications, primarily the reduction in electricity usage from participating in the insulation portion of the DSM program. The present value of the non-natural gas benefits are only calculated for residential attic insulation measures. Avista's analysis yields a lifetime non-natural gas benefit of \$6,342 for residential attic insulation currently at a level between R0 and R18. The Company has indicated a willingness to incorporate this non-natural gas benefit into its TRC calculations for both the regular and low-income residential programs.

Staff has reviewed Avista's calculations and believes they are reasonable. Although Avista only provides natural gas in Oregon, the Company provides both electricity and natural gas services in its Washington and Idaho service territories. Staff encourages Avista to use this two year period, and the unique availability of data in its Washington and Idaho service territories, to conduct further analysis regarding determining and quantifying non-natural gas benefits for all measures in the DSM portfolio.

Measure Life

Currently, Avista uses measure lives consistent with those specified in OAR 860-030-0010(4)(a-h). Under the above-cited Oregon Administrative Rule, insulation measures have a life of 30 years. The Energy Trust of Oregon (ETO or Trust), as well as other utilities participating with the ETO, has moved toward longer measure lives in insulation measures. For example, the ETO currently uses a measure life of 45 years for all insulation measures and windows.

Staff performed an analysis of cost effectiveness with modified measure lives. In the regular-income program, the TRC for floor insulation increased to a level greater than 1 and the TRC for wall insulation increased from a marginally cost-effective level of 1.02 to 1.21. In the low-income program, attic insulation and wall insulation become cost-effective when using the updated measure lives. In the commercial program, attic insulation at approximately R11 (existing) changes from a TRC level of 0.84 to 1 and attic insulation at approximately R19 (existing) changes from 0.94 to 1.11.

Low-income Separation

In evaluating and analyzing the residential DSM program, parties agreed that Avista should separate out low-income and regular-income customers. This is consistent with how other investor-owned utilities (IOUs) in the state are handling their programs. Currently, Avista uses specialized agencies to solicit and conduct low-income DSM implementation. Due to the structure of Avista's DSM program regarding low-income customers, separating customers into two categories was relatively easy and data was readily available.

Table 3 contains benefit-cost ratio (B/C) information for low-income customers. Historically, implementation of DSM measures in low-income households has a higher cost (largely due to the age and condition of the home), which has a negative effect on B/C ratios for the entire residential program when assessed as a whole and produces lower B/C ratios when compared to regular-income B/C ratios. Table 3 contains TRC and Utility Cost Test (UCT) information for the low-income weatherization program. Using the Company's current measure lives, none of the measures exceed a TRC of 1. Using measure lives consistent with the ETO, only attic insulation and wall insulation exceed a TRC of 1. However, when including audit costs to calculate the TRC of the entire program, the low-income program TRC does not exceed 1 in either scenario. Consistent with other programs in the state, Staff recommends continuing furnace incentives for low-income customers, even though furnace incentives are recommended to be suspended for regular-income residential customers.

UTC and TRC

As Order 94-590 indicates, the TRC test is the test used in Oregon. However, Staff also considers measures and programs from a UCT perspective. If the UCT results are greater than one, the Commission and the Company can be assured that the amount of money the company is paying for energy efficiency is less than what would be paid for the least cost alternative. UCT numbers are included in the analysis here simply as a point of reference.

Residential Program

Table 2 represents the preferred design of Avista's residential DSM program during the two-year exception/action plan period. After detailed analysis and collaboration with Avista, Staff agrees that the residential program should be separated into low-income and regular-income programs.

Insulation of water pipes, weather-stripping, and caulking, as specified under OAR 860-030-0010, is included with the installation of new measures for either program. Consequently, Avista does not track savings or cost data for these measures, therefore they are not included in the TRC calculations. These measures should continue over the next two years.

Staff and Avista agree that incentives for regular-income residential gas furnaces and thermostats should be suspended going forward. This suspension is recommended as a result of updates to building codes that require more efficient furnaces and thermostats, as well as information provided by the ETO. The Trust no longer offers incentives for high efficiency furnaces (except to moderate income customers) as it has been determined that the furnace market has been transformed and customers are buying high efficiency equipment without requiring incentives. Staff recommends furnace incentives remain in place for low-income customers.

Staff and Avista agree that attic insulation, where the existing condition is R19-R30, should be suspended going forward.

Staff, recommends that Avista continue to offer the following measures and programs based on the following Order 94-590 Exception Criteria:

- Windows, residential and low income - Historically windows have not had a TRC greater than one, but are used as an incentive for attracting customers to the other cost effective programs, such as insulation and home envelope improvements. Staff recommends windows be continued under Order 94-590 Exception Criterion D, (*Inclusion of the measure helps to increase participation in a cost-effective program*). The Company's DSM tariff also states that it will continue to offer windows, even if cost-effective, as long as the measure is part of the overall package being installed.
- Residential floor insulation - Staff recommends an exception under Order 94-590 for floor insulation. This measure fits the criteria of Order 94-590 Exception Criterion B (*Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure*), Exception Criterion C (*The measure is included for consistency with other DSM program in the region*), and Exception Criterion D (*Inclusion of the measure helps to increase participation in a cost-effective program*). A significant amount of lost opportunity will be avoided by including this measure. Frequently, installation of DSM measures takes place at the same time. Auditors and contractors are already in the home installing insulation and have the opportunity to more easily add floor insulation at that time rather than returning at a much later date to specifically install floor insulation. Because of this lost opportunity, a TRC value of close to one (0.88), and the Order 94-590 exception criteria, Staff fully supports including floor insulation during the two-year period.
- Residential regular income at the program level - Although some measures within the residential program are cost effective, because audit costs are added in at the program level, the overall regular residential program is not cost effective from a TRC perspective. Staff recommends that a two-year exception be approved by the Commission at the program level, under Order 94-590 Exception Criteria B and E. Exception Criterion B is *Inclusion of the measure will increase market acceptance and is expected to lead to reduced cost of the measure* and Exception Criterion E is *The package of measures cannot be changed frequently and the measure will be cost-effective during the period the program is offered*. Over the two-year exception

period, Avista will work to reduce administrative costs and look for ways to increase total program savings. These numbers will be evaluated again at the end of two years.

- Residential low income at the program level - For the low-income DSM program, Avista indicates that rebates paid for residential energy efficiency weatherization measures as described in the Company's tariffs that are completed by Low-Income Agencies would not be subject to cost-effectiveness testing. Staff recommends exception for each of the measures in the low-income program and comments that these measures and the overall program also meet Order 94-590 Exception Criterion A (*significant non-energy benefits*) and Exception Criterion C (*Inclusion of the measure is consistent with other programs in the region*). For low-income programs, non-energy benefits relate to equity and social benefits. Consistency with other programs in the region relates to the fact that other IOUs in the state have separate low-income programs that are not subject to standard cost effectiveness requirements.

As shown in Table 2 and in Table 4, attic insulation, wall insulation and duct sealing continue to be cost effective and should continue. Also, the mandated measures of water pipes, weather stripping and caulking should be continued.

Commercial Program

In the Company's draft revision of the 2012 IRP Action Plan, Avista stated "The Company's Recommendation is to run all commercial measures through the site-specific program." Staff takes the position that these should remain as prescriptive¹⁰ measures in order to induce customer participation in the DSM program, similar to the way that windows are used in the residential programs to attract customers to other measures. Staff also contends that prescriptive programs will reduce transaction costs, audit costs, and administration costs.

Table 4 contains the TRC information relating to the commercial DSM program. Staff has organized the commercial program into a cooking equipment section, a dishwasher section, and a weatherization section purely for ease of the reader. As can be seen in the table, multiple measures pass the TRC test as is. Staff believes that measures that pass the TRC test should be offered as prescriptive. Staff recommends that the furnace measure be continued by incentives offered on a site-specific basis if analysis shows it is cost effective. Staff takes the position that in order to maintain a comprehensive DSM program, to keep a certain level of market capacity, and to avoid lost opportunities, the best route would be to seek exceptions for the cost-ineffective measures under Order 94-590.

In the cooking equipment subset, Staff proposes exceptions for gas fryers, gas griddles, convection ovens, and single-rack ovens under Order 94-590 Exception Criteria B, D,

¹⁰ Prescriptive measures are predetermined measures and incentives for the installation of various energy efficient improvements versus site-specific incentives that are determined on a case-by-case basis.

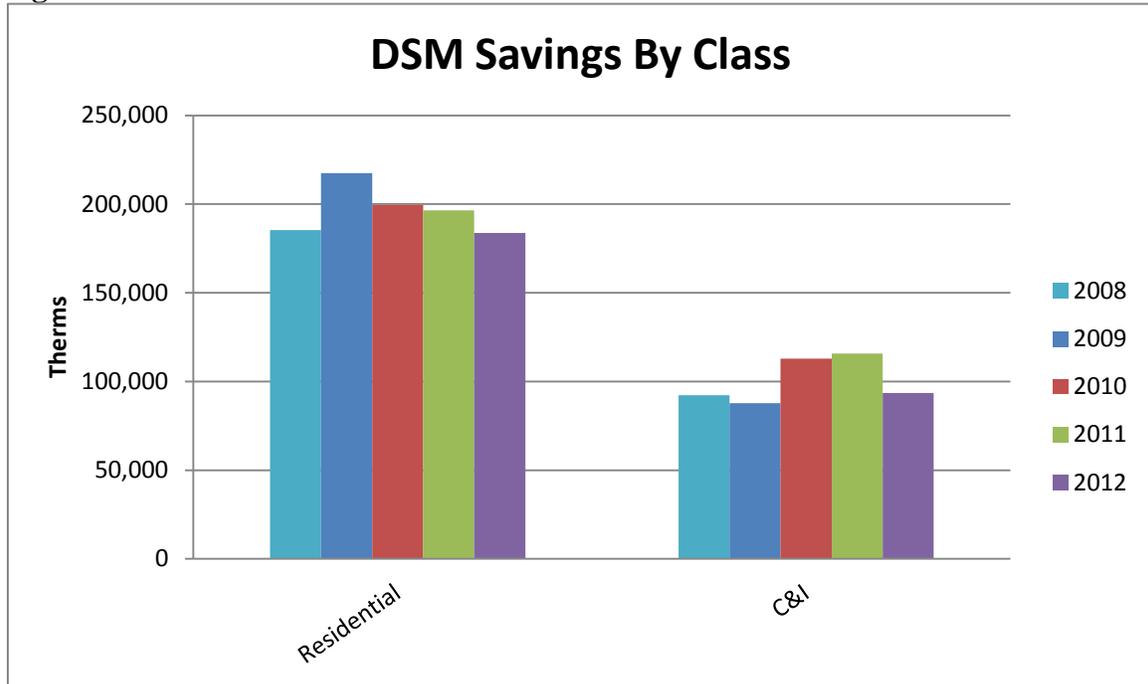
and E. In each case there is lost opportunity if not installed as part of a larger remodel, continuance of programs may lead to reduced costs, and the measures cannot be changed frequently and may become cost effective within the measure life. In the dishwasher subset, Staff proposes exceptions for all of the measures under Order 94-590 Exception Criteria B, D, and E for the same reasons as cooking equipment. In the weatherization subset, Staff proposes exceptions for R0 and R11 attic insulation under Order 94-590 Exception Criterion D. Staff recommends discontinuing incentives for attic insulation where the current conditions are R19 or better. All other commercial measures are cost effective and should continue.

Staff encourages Avista to perform further research and data collection, from both internal and external sources, regarding commercial attic insulation. Attic insulation in the regular-income residential program has a TRC of 1.79 and in the low-income residential program a TRC 0.97. The commercial program attic insulation measures have a TRC of 0.73, and 0.84 for R0-R10 existing, R11-R18 existing, respectively. This difference does not make sense to Staff. It is Staff's position that there is a strong potential for attic insulation in commercial installations to be cost-effective, especially at the R0-R10 level, and encourages the company to further investigate this.

Figure 1 below shows Avista's DSM program historical annual savings by class. As Figure 1 shows, historically residential DSM savings did not drop below 180,000 therms per year. Commercial savings have not dropped below about 80,000 therms per year. This is a total historic floor of 260,000 therms per year.

Avista's third-party consultant, Global Energy Partners, and modeling completed by Avista showed a cost-effective and achievable DSM potential of 289,000 therms in 2013. Global Energy Partners estimated 715,000 therms available in 2014 and Avista's model showed 426,000 therms in 2014. Staff expects with the recent suspension and recommended suspension of measures that the overall 2013 therm savings of Avista's DSM program will be less than in past years. However, Staff believes that it is reasonable to set a therm savings goal floor of 225,000 therms for 2013 and 250,000 therms for 2014. Staff views this goal as conservative and as an incentive for Avista to research ways for increasing the delivery efficiency of its DSM programs, potentially adding new low-cost or no-cost measures and attracting customers.

Figure 1



The following is a summary of the DSM Action Items being proposed by Staff:

2013-2014 ACTION PLAN

The Company will extend the energy efficiency measures identified in Tables 2, 3 and 4, the residential regular income program at the program level, and the residential low-income program at the program level.

Continue DSM programs in Oregon and achieve a minimum savings of 225,000 therms in 2013 and 250,000 therms in 2014.

Two years from the date of acknowledgement of this IRP, Avista will provide the results of the following:

- Savings and cost effectiveness of the DSM program.
- Actions taken to reduce delivery costs, including administration costs and audit costs.
- Actions taken to increase the number of cost effective efficiency measures in the portfolio.
- An analysis of non-natural gas benefits of existing and proposed DSM measures.

- An analysis of measure lives for all measures.

Within six months of the date of acknowledgement of this IRP, Avista will develop a potential mechanism for allocating funding for a separate low-income energy efficiency program, and will submit a report to Staff outlining the mechanism.

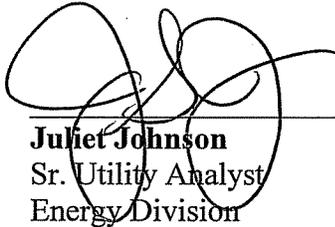
Staff appreciates Avista's willingness to work collaboratively with the parties to prepare and submit its 2012 IRP with the goal of seeking the most reasonable resource plan for Avista customers and Oregon as a whole.

This concludes staff's final comments.

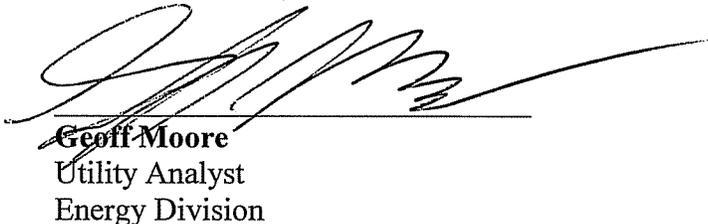
Dated at Salem, Oregon, the 15 day of March, 2013.



Lisa Gorsuch
Sr. Utility Analyst
Energy Division



Juliet Johnson
Sr. Utility Analyst
Energy Division



Geoff Moore
Utility Analyst
Energy Division

Table 2

Class	Measure	Status	Annual Savings (Therms/Customer)	Measure Life	Measure TRC	Measure UCT	Program TRC (no windows)	Program TRC (w/ windows)
Regular Income Residential	Attic Insulation 0-18	Prescriptive	87	30	1.79	1.29	0.97	0.76
	Attic Insulation 19-30	Recommend Suspension	39	30	0.48	1.20		
	Wall Insulation	Prescriptive	113	30	1.02	1.31		
	Floor Insulation	UM 551 Exception B, C, D	137	30	0.88	1.24		
	Windows	UM 551 Exception D	132	25	0.29	2.80		
	Ducts	Prescriptive	86	30	1.00	1.32		
	Water Pipes	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A		
	Weather-strip	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A		
	Caulking	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A		
	Furnace	Recommend Suspension	70.56	25	0.86	1.87		
	Thermostats	Recommend Suspension	27	15	0.89	2.01		
	Chimney Dampers	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A		
	Tank Water Heater	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A		
	Tankless Water Heater	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A		
	Direct Vent Space Heat	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A		

*Note: Program TRCs exclude mandated, suspended, and recommended suspended measures. Measure TRC and UCT exclude audit costs. Program TRCs include audit costs.

Table 3

Class	Measure	Status	Annual Savings (Therms/Customer)	Measure Life	Measure TRC	Measure UCT	Program TRC
Low Income Residential	Attic Insulation 0-18	UM 551 Exception D	87	30	0.97	1.12	0.73
	Wall Insulation	UM 551 Exception D	113	30	0.88	1.14	
	Floor Insulation	UM 551 Exception D	137	30	0.49	1.15	
	Windows	UM 551 Exception D	132	25	0.26	2.67	
	Ducts	UM 551 Exception D	86	30	0.76	1.31	
	Water Pipes	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A	
	Weather-strip	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A	
	Caulking	Mandated OAR 860-030-0010	N/A	N/A	N/A	N/A	
	Furnace	UM 551 Exception D	70.56	25	0.86	1.87	
	Thermostats	Recommend Suspension	27	15	0.89	2.01	
	Chimney Dampers	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A	
	Tank Water Heater	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A	
	Tankless Water Heater	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A	
Direct Vent Space Heater	Suspended (Advice 12-03-G)	N/A	N/A	N/A	N/A		

*Note: Program TRCs exclude mandated, suspended, and recommended suspended measures. Measure TRC and UCT exclude audit costs. Program TRCs include audit costs.

Table 4

Class	Measure	Status	Annual Savings (Therms/Customer)	Measure Life	Measure TRC	Measure UCT	Program TRC
Commercial/Industrial	Gas Fryer	UM 551 Exceptions B, D, and E	505	12	0.71	1.40	1.99
	Gas Griddle	UM 551 Exceptions B, D, and E	88	12	0.51	0.94	
	Double Rack Oven	Prescriptive	2113	12	1.48	2.98	
	Convection Oven	UM 551 Exceptions B, D, and E	323	12	0.59	1.27	
	Combination Oven	Prescriptive	403	12	1.14	1.31	
	Single Rack Oven	UM 551 Exceptions B, D, and E	1034	12	0.76	2.34	
	3 Pan Steamer	Prescriptive	1042	12	4.32	3.39	
	4 Pan Steamer	Prescriptive	1389	12	5.79	3.85	
	5 Pan Steamer	Prescriptive	1737	12	4.45	3.93	
	6 Pan Steamer	Prescriptive	2084	12	4.48	3.99	
	10 Pan Steamer	Prescriptive	3473	12	4.53	4.08	
	DW Door Hi Temp	UM 551 Exceptions B, D, and E	405	10	0.57	1.12	
	DW Door Low Temp	UM 551 Exceptions B, D, and E	554	10	0.82	1.53	
	DW Single Tank Conv. High Temp	UM 551 Exceptions B, D, and E	508	10	0.51	1.11	
	DW Single Tank Conv. Low Temp	UM 551 Exceptions B, D, and E	520	10	0.52	1.14	
	DW Multi Tank Conv. High Temp	UM 551 Exceptions B, D, and E	993	10	0.76	1.46	
	DW Multi Tank Conv. Low Temp	UM 551 Exceptions B, D, and E	798	10	0.61	1.18	
	DW Under Counter High Temp	UM 551 Exceptions B, D, and E	217	10	0.60	1.06	
	Furnace	Site Specific	70.56	25	**	**	
	Attic Insulation R0 (per Sq/Ft)	UM 551 Exception D	0.12	30	0.73	1.23	
Attic Insulation R11 (per Sq/Ft)	UM 551 Exception D	0.1	30	0.84	1.24		
Attic Insulation R19 (per Sq/Ft)	UM 551 Exception D	0.08	30	0.94	1.26		
Wall Insulation (per sq ft)	Prescriptive	0.29	30	1.17	2.01		
Floor Insulation (per sq ft)	Prescriptive	0.33	30	1.55	2.59		
Display Case Night Curtains (per Ft)	Prescriptive	8	10	2.35	1.19		
Coffin Freezer Night Curtains (per Ft)	Prescriptive	2.03	10	1.28	1.22		

*Note: Program TRCs exclude mandated, suspended, and recommended suspended measures. Measure TRC and UCT exclude audit costs. Program TRCs include audit costs.

**Furnace TRC will be calculated on a site-specific basis based on installation site characteristics. Furnace costs and benefits not included in Program TRC

ORDER NO.

ENTERED

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

LC 55

In the Matter of

AVISTA UTILITIES

2012 Integrated Resource Plan

DRAFT PROPOSED ORDER

DISPOSITION: PLAN ACKNOWLEDGED WITH MODIFICATION

INTRODUCTION

On August 31, 2012, Avista Utilities (Avista or Company) filed its 2012 Natural Gas Integrated Resource Plan (IRP or Plan).

Jurisdiction

On April 20, 1989, pursuant to its authority under ORS 756.515, the Public Utility Commission of Oregon (Commission) issued Order No. 89-507 in Docket UM 180 adopting least-cost planning for all energy utilities in Oregon. On January 8, 2007, the Commission updated its resource planning guidelines in Order No. 07-002 (Docket UM 1056). This order was corrected in Order No. 07-047, entered February 9, 2007. Avista is a public utility in Oregon, as defined by ORS 757.005, providing natural gas service to or for the public. Avista filed its 2012 IRP in accordance with the Commission's integrated resource planning requirements adopted in Order Nos. 07-002 and 07-047.

Requirements for Integrated Resource Planning

The Commission requires regulated energy utilities to prepare integrated resource plans within two years of acknowledgment of the last plan. Utilities must involve the Commission and the public in their planning process and prior to resource decision-making. Substantively, the Commission requires that energy utilities: (1) evaluate resources on a consistent and comparable basis; (2) consider risk and uncertainty; (3) make selecting a portfolio of resources with the best combination of expected costs

and associated risks and uncertainties for the utility and its customers the primary goal of the process; and (4) create a plan that is consistent with the long-run public interest as expressed in Oregon and federal energy policies. *See* Order No. 07-002.

The Commission “acknowledges” resource plans that satisfy the procedural and substantive requirements and that seem reasonable at the time acknowledgment is given.

OVERVIEW OF AVISTA’S INTEGRATED RESOURCE PLAN

Avista’s 2012 IRP describes the components of the Company’s planning process. The plan includes forecasts of future customer demand and identification of resource needs over the 20-year planning period; assessments of demand-side and supply-side resource options and distribution system enhancements; consideration of planning risks and uncertainties; analysis and selection of resource options for meeting future needs; and identification of actions to be accomplished over 2013 and 2014 to carry out Avista’s resource strategy and to complete additional planning activities. A summary of the plan is provided below:

- Demand Forecast. Avista’s demand forecasts were produced using the Company’s SENDOUT® resource optimization model. Daily demand forecasts were developed for residential, commercial, and firm industrial customers (core market) in four demand areas in Avista’s South Operating Division (Oregon) and North Operating Division (Washington and Idaho). Starting with a baseline Reference Case, the Company developed five alternate demand scenarios: Average Demand, Expected Demand - Peak, High Growth/Low Price, Low Growth/High Price, and Alternate Weather Standard. These scenarios included combinations of growth projections, price forecasts, alternative weather-planning, carbon adders, exported liquefied natural gas, and compressed natural gas (CNG) – natural gas vehicle (NGV) growth.

Avista selected the Expected Case as the most likely scenario for its planning activities. The selected case reflects the effect of the change in the economic conditions since the last IRP. It represents moderate growth rates and price projections. For the Expected Case, Avista projects average core market demand will grow at an annual average rate of 1.1 percent over the 20-year planning horizon. Peak day core market demand for the Expected Case is projected to grow at an annual rate of 1.3 percent over the period.

The Company indicated in the Action Plan section that it will closely monitor actual demand for indications or signs of higher-than-expected growth rates to adequately and timely address resource deficiencies as necessary.

- Demand-Side Resources. For the 2012 IRP, Avista’s Demand Side Management (DSM) Business Plan forecasted non-cost-effective natural gas using the avoided

costs from the 2009 IRP. A subsequent study¹ completed in February 2012 projected that, with substantial modifications, the natural gas DSM portfolio could potentially be marginally cost-effective using a presumed 25 percent reduction in avoided cost. This originally anticipated assumption of 25 percent lower natural gas avoided costs was replaced with current IRP avoided costs, which is a decrease of approximately 50 percent. Avista filed to suspend its natural gas DSM. The Company acknowledges the importance of DSM and remains committed to the continued analysis and the pursuit of potentially cost-effective programs as the natural gas market changes.

- Supply-Side Resources. Avista's existing supply-side resources are divided into three categories: supply, transportation, and storage. The Company described the specific existing resources under each category. Avista's gas supplies are from the two largest natural gas producing regions in North America: The Western Canadian Sedimentary Basin and the Rocky Mountain basins. The major supply points, i.e. hubs, for Avista are AECO, Sumas, Rockies, and Malin. Gas procurement is typically done via contracts. For modeling purposes, SENDOUT[®] assumes that all of Avista's supply contracts are firm, physical, and fixed-price contracts. In reality, the Company may enter into other types of contracts such as financial hedging, non-firm, or non-fixed price contracts. The Company's gas costs are reviewed during the annual Purchased Gas Adjustment (PGA) filing.

Avista has contracted with the interstate pipelines serving the region for firm deliveries and sufficient capacity to meet peak day demand. Interstate pipelines also offer interruptible services, which Avista does not rely on to meet design day core demand requirements. The 2012 IRP provides information on the Company's current available firm transportation by pipeline, time of year, and daily volume (Dtherms/day).

Avista's storage resources consist of the Jackson Prairie facility where it is one-third owner, and the underground Mist Storage, where it has rights to 500,000 therms of capacity. This resource allows Avista to recall gas from storage to meet demand requirements.

Avista has no immediate need to acquire incremental supply side resources to meet peak day demands. The Company indicates, in the Action Plan section, that it will continue to monitor supply resource trends including the availability and price of natural gas to the regions, exporting LNG, Canadian natural gas imports, regional plans for gas fired generation and its affect on pipeline availability, as well as future regional pipeline and storage infrastructure plans.

Avista developed three alternate supply scenarios utilizing the different types of supply resources described above. These scenarios were characterized as: existing resources, existing plus expected available resources, and GTN fully

¹ The study completed was the Review of Prospects and Strategies for the 2012 Avista Regular Income Natural Gas DSM Portfolio.

subscribed. The supply scenarios were developed so that they address the deficiencies exhibited by the different demand scenarios.

- Resources Integration Strategies. Avista's IRP indicates resource shortages occur well into the future. In the Expected Demand Case, the first unserved year in Medford/Roseburg is in 2029 and is followed by the first unserved year in Klamath Falls occurring in 2030. No additional resources are needed for La Grande within the 20-year planning period. The Company's analyses in this Plan demonstrate that the surplus resource situation provides adequate time to monitor, plan, and act on potential resource additions.

Avista identified a risk in its previous IRP associated with its aggregated methodology for supply and demand forecasting. The identified risk had the potential to mask deficiencies at individual gate stations. A gate-by-gate analysis was developed outside of SENDOUT[®] to address this concern.

- Two-Year Action Plan. Avista's 2013-2014 Action Plan describes the near-term actions the Company will take to implement its optimal resource strategy and to support and improve IRP planning. Avista's key action items are:
 - Monitor actual demand for indications of growth exceeding forecast to aggressively address accelerated resources deficiencies arising from the risk of "flat-demand" in the current forecast.
 - Pursue the possibility of a regional elasticity study through the Northwest Gas Association or possibly the American Gas Association.
 - Assess potential demand impact from NGV/CNG vehicles and other new uses of natural gas.
 - Continue to monitor supply resource trends, including the availability and price of natural gas to the regions, exporting LNG, Canadian natural gas imports and interprovincial consumption, regional plans for gas-fired generation and its effect on pipeline availability, as well as regional pipeline and storage infrastructure plans.
 - Monitor new resources lead time requirements relative to when resources are needed to preserve resource option flexibility.
 - Regularly meet with Commission Staff members to provide information on market activities and significant changes in assumptions and/or status of Avista activities related to the IRP or natural gas procurement practices.

Comments of the Parties

Avista solicited initial comments from parties through its Technical Advisory Group (TAG) meetings prior to distributing its 2012 IRP for external review on August 31, 2012. On December 12, 2012, a workshop was held to discuss areas of the Plan requiring further explanation, including the suspension of its energy efficiency programs, and the Action Plan. Staff and Citizens' Utility Board (CUB) provided comments on Avista's Plan on January 25, 2013. Avista provided reply comments on February 25, 2013. Staff

distributed its draft recommendation and draft proposed order on the Plan to the company and interested parties on March 15, 2013.

CUB's Comments. CUB's comments on Avista's 2012 IRP focused on Energy Efficiency, Hedging, and Distribution. CUB recommends the continuation of Avista's energy efficiency programs, giving consideration to the cost effectiveness at not just a point in time, but over the lifetime of the investment of the programs, the hedge value of energy efficiency, and the impact on climate change, among other points. CUB recommends Avista further investigate long-term hedges during its next planning cycle. CUB recommends that Avista provide more detail with regard to possible investments in its distribution system in its next IRP.

Avista's Comments. Avista explains that its IRP is a starting point for a comprehensive evaluation of a natural gas DSM portfolio. The Company further states that it does not include measure-by-measure evaluation or program implementation and management; rather it provides an end use portfolio analysis inclusive of all available resources. Avista remains committed to the ongoing evaluation of its DSM programs. Avista states that it is awaiting Staff's guidance and recommendations on the future of its DSM programs.

Staff Comments. Based on its review of Avista's 2012 IRP and participation in the planning process, Staff determined that the Plan meets the Commission's guidelines in Order Nos. 07-002 and 07-047. Procedural requirements were met as described above. Substantive IRP requirements were addressed throughout the Plan, with supporting data in an appendix to the Plan. Staff agrees that Avista's IRP meets the Commission's substantive IRP requirements. Staff also concluded the demand-side and supply-side resources identified to fill the deficiencies expected in Cascade's Oregon service territory beginning in 2013 are appropriate. To ensure that the Company's next IRP Update and next IRP will contain sufficient analyses regarding the actions undertaken pursuant to the Company's Action Plan, Staff recommends the Commission acknowledge the 2012 IRP, subject to replacement of the Action Plan found in Chapter 9 of Avista's 2012 IRP, with the following:

2013-2014 ACTION PLAN

The Company will extend the energy efficiency measures identified in Tables 2, 3 and 4, the residential regular income program at the program level, and the residential low-income program at the program level.

Continue DSM programs in Oregon and achieve a minimum savings of 225,000 therms in 2013 and 250,000 therms in 2014.

Two years from the date of acknowledgement of this IRP, Avista will provide the results of the following:

- Savings and cost effectiveness of the DSM program.

- Actions taken to reduce delivery costs, including administration costs and audit costs.
- Actions taken to increase the number of cost effective efficiency measures in the portfolio.
- An analysis of non-natural gas benefits of existing and proposed DSM measures.
- An analysis of measure lives for all measures.

Within six months of the date of acknowledgement of this IRP, Avista will develop a potential mechanism for allocating funding for a separate low-income energy efficiency program, and will submit a report to Staff outlining the mechanism.

OPINION

After review of Avista's IRP and consideration of Staff's and CUB's comments on Avista's Plan, we agree with Staff's recommendations. Consequently, we acknowledge Avista's 2012 IRP, with the proposed replacement Action Plan proposed by Staff and regarding analyses Avista should incorporate in its next IRP Update and in its next IRP.

EFFECT OF THE PLAN ON FUTURE RATE-MAKING ACTIONS

Order No. 89-507 sets forth the Commission's role in reviewing and acknowledging a utility's least-cost plan as follows:

Consistency of resource investments with least-cost planning principles will be an additional factor that the Commission will consider in judging prudence. When a plan is acknowledged by the Commission, it will become a working document for use by the utility, the Commission, and any other interested party in a rate case or other proceeding before the Commission[.] Consistency with the plan may be evidence in support of favorable rate-making treatment of the action, although it is not a guarantee of favorable treatment. Similarly, inconsistency with the plan will not necessarily lead to unfavorable rate-making treatment, although the utility will need to explain and justify why it took an action inconsistent with the plan.

Order No. 89-507 at 7.

ORDER NO.

The Commission affirmed this principle in Docket UM 1056. *See* Order No. 07-002 at 24.

This order does not constitute a determination on the rate-making treatment of any resource acquisitions or other expenditures undertaken pursuant to Avista's 2012 IRP. As a legal matter, the Commission must reserve judgment on all rate-making issues. Notwithstanding these legal requirements, we consider the integrated resource planning process to complement the rate-making process. In rate-making proceedings in which the reasonableness of resource acquisitions is considered, the Commission will give considerable weight to utility actions which are consistent with acknowledged integrated resource plans. Utilities will also be expected to explain actions they take that may be inconsistent with Commission-acknowledged plans.

CONCLUSIONS

1. Avista is a public utility subject to the jurisdiction of the Commission.
2. Avista's 2012 Integrated Resource Plan, as modified in this order, reasonably adheres to the principles of integrated resource planning set forth in Order Nos. 89-507, 07-002, and 07-047 and should be acknowledged.

ORDER

IT IS ORDERED that the 2012 Natural Gas Integrated Resource Plan filed by Avista Utilities on August 31, 2012, as modified herein, is acknowledged in accordance with the terms of this order and Order Nos. 89-507, 07-002, and 07-047

Made, entered, and effective _____.

Susan K. Ackerman
Chair

John Savage
Commissioner

Stephen M. Bloom
Commissioner

CERTIFICATE OF SERVICE

LC 55

I certify that I have, this day, served the foregoing document upon all parties of record in this proceeding by delivering a copy in person or by mailing a copy properly addressed with first class postage prepaid, or by electronic mail pursuant to OAR 860-001-0180, to the following parties or attorneys of parties.

Dated this 15th day of March, 2013 at Salem, Oregon

Kay Barnes

Kay Barnes

Public Utility Commission
550 Capitol St NE Ste 215
Salem, Oregon 97301-2551
Telephone: (503) 378-5763

LC 55
SERVICE LIST

AVISTA UTILITIES	
LINDA GERVAIS (W) SR REGULATORY ANALYST	PO BOX 3727 SPOKANE WA 99220-3727 linda.gervais@avistacorp.com
CITIZENS' UTILITY BOARD OF OREGON	
OPUC DOCKETS (W)	610 SW BROADWAY, STE 400 PORTLAND OR 97205 dockets@oregoncub.org
ROBERT JENKS (W)	610 SW BROADWAY, STE 400 PORTLAND OR 97205 bob@oregoncub.org
G. CATRIONA MCCRACKEN (W)	610 SW BROADWAY, STE 400 PORTLAND OR 97205 catriona@oregoncub.org
PUBLIC UTILITY COMMISSION	
LISA GORSUCH (W)	PO BOX 2148 SALEM OR 97308-2148 lisa.gorsuch@state.or.us
PUC STAFF--DEPARTMENT OF JUSTICE	
MICHAEL T WEIRICH (W)	BUSINESS ACTIVITIES SECTION 1162 COURT ST NE SALEM OR 97301-4096 michael.weirich@state.or.us