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BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF AVISTA CORPORATION'S APPLICATION TO RESUME NATURAL GAS EFFICIENCY PROGRAMS AND INCREASE THE RIDER SURCHARGE IN SCHEDULES 190 AND 191.	**CASE NO. AVU-G-15-03** **COMMENTS OF THE COMMISSION STAFF**

COMES NOW the Staff of the Idaho Public Utilities Commission, by and through its Attorney of record, Brandon Karpen, Deputy Attorney General, and in response to the Notice of Application and Notice of Modified Procedure issued in Order No. 33422 on November 20, 2015, in Case No. AVU-G-15-03, submits the following comments.

BACKGROUND

On October 28, 2015, Avista Corporation dba Avista Utilities filed an Application to resume its gas demand-side management (DSM) programs. This includes authority to: (1) resume natural gas energy efficiency programs and projects to residential (including low-income), commercial and industrial natural gas customers under Schedule 190 (Natural Gas Efficiency Programs); and (2) fund these programs by increasing its "Energy Efficiency Rider" surcharge rates in tariff Schedule 191. Application at 1. Avista proposes that the DSM programs "be offered through prescriptive rebates to customer segments for eligible weatherization and high efficiency equipment measures as well as custom incentives for 27 non-residential

projects." *Id.* Avista asks that the case be processed by Modified Procedure, and that new Schedule 191 Rider rates take effect on January 1, 2016.

In 2012, Avista filed and the Commission approved, an application to suspend Avista's natural gas DSM programs. In that application, Avista advised the Commission that new natural gas costs were about 50% lower than existing avoided costs and that these lower gas costs render the "natural gas energy efficiency portfolio cost-ineffective going forward." Order No. 32650 at 1. After evaluating a number of cost-effectiveness tests, Avista now seeks to re-establish those programs. Application at 2.

Avista claims that its historic method of measuring cost-effectiveness, the Total Resource Cost test (TRC) metric, has a potential for bias against conservation programs. *Id.* In its Application, the Company instead utilizes the Utility Cost Test (UCT) metric as a measurement of cost-effectiveness.[1] Avista explains that it prefers to emphasize the UCT over the TRC test when evaluating its DSM programs because the TRC "typically includes the full costs, but not the full benefits to customers because the risk reduction value of conservation and many non-energy benefits are difficult to quantify." *Id.*

Avista has proposed three changes to its historic avoided cost methodology for natural gas:

1. Total Cost of Delivery: Avista claims that "the demand portion of Schedule 150 is a more accurate representation of the total costs to deliver natural gas from the wellhead to the customer meter, and therefore, that should be a component of the natural gas avoided cost calculation." *Id.* at 4-5.

2. Future Carbon Cost Assumptions: Avista states it is unable to come up with an accurate future carbon cost assumption and there are a range of legitimate projections from $0/metric ton to over $240/metric ton. Facing this uncertainty, the Company proposes using an estimate of $10/metric ton starting in 2020 with a 3% annual escalation.

3. Discount Rate: Avista argues that the most appropriate method of measuring the cost-effectiveness of its conservation programs is its Weighted Average Cost of Capital (WACC). However, the Company also claims that the tax benefits of debt financing and inflation adjustment should be included in any

[1] The Company uses analytical tests such as the TRC and UCT to measure the cost-effectiveness of its various DSM programs. The TRC compares program administrator costs and customer costs to utility resource savings, and assesses whether the total resource cost of energy in a utility's service territory will decrease. The UCT compares program administrator costs to supply-side resource costs, and assesses whether utility bills will increase. Under these tests, a program or measure is deemed to be cost-effective if it has a benefit/cost ratio above 1.0.

discount rate. Accordingly, Avista has proposed to move from a nominal WACC to a real WACC.

Regarding funding, Avista requests a revision to Schedule 190 to "provide customers with a levelized incentive of $3.00 per first year therm savings for any project with a simple payback less than 15 years and capped at 70% of the project cost." *Id.* at 8.

Avista further requests authority to resume collecting an Energy Efficiency Rider surcharge (Schedule 191). Avista says this will generate approximately $1.25 million in revenue, resulting in an increase in overall billed natural gas rates by 1.7%. *Id.* at 1-2. If approved, the proposed Rider increase will increase the monthly bill of the average residential natural gas customer using 61 therms by about $1.11 per month.

Avista says for 2016, its natural gas energy efficiency portfolio is estimated to result in first year savings of 233,000 therms in Idaho. *Id.*

STAFF REVIEW

Staff has thoroughly reviewed the Company's Application, workpapers, and discovery responses and found an improved cost-effectiveness methodology has made the programs and overall portfolio cost-effective going forward. Staff also considered public comments that were filed in this matter. Although Staff has recommendations that it believes will strengthen the Company's cost-effectiveness calculations, Staff recommends the Commission approve the Company's request with or without those changes.

Avoided Cost Calculation

In 2012, a 50 percent decrease in avoided costs was revealed during Avista's 2012 IRP process. Staff and the Company explored several cost-effectiveness calculation refinements, but none were sufficient to justify continuation of the program. Accordingly, Avista requested and was granted, approval to suspend its natural gas DSM programs.

In this Application, the Company now includes the demand portion of Schedule 150 (Purchase Gas Cost Adjustment) in its avoided cost to reflect the costs of transporting natural gas on interstate pipelines to the Company's local distribution system. Staff believes this is a reasonable input because these costs can be offset by the sale of excess transportation capacity. Furthermore, this is consistent with the deferred transmission value included by Avista and many other utilities in electric avoided cost calculations, although deferred distribution is usually

included as well. Staff also believes that location-specific natural gas efficiency efforts could provide additional capacity benefits, and supports Avista's intent to analyze the value efficiency could provide in deferring future projects.

Avista also includes a carbon adder of $10/metric ton beginning in 2020 with a 3 percent annual escalation to account for the uncertainty of future carbon regulation. Avista maintains $10/metric ton is a conservative estimate since carbon cost assumptions range from $0/metric ton to $220/metric ton. For comparison purposes, the Northwest Power Planning and Conservation Council's 7th Plan includes a $47/metric ton carbon cost. Staff believes an estimate of direct costs to utilities from future carbon regulation is currently too speculative to be included in cost-effectiveness calculations. Consequently, Staff asked the Company to analyze cost-effectiveness without the carbon adder and found the affect was minimal—it did not significantly change the cost-effectiveness for any program or the portfolio.

Table 1 shows the effect on TRC and UCT cost-effectiveness when the carbon adder is removed:

Table 1. Carbon Adder Effects on Cost-Effectiveness[2]

Program	TRC	TRC w/o carbon	UCT	UCT w/o carbon
Low Income	1.49	1.40	0.82	0.76
Web Thermostat	0.46	0.43	1.40	1.30
Prescriptive Residential	0.87	0.81	2.24	2.08
Simple Steps Smart Savings	1.02	0.95	3.82	3.55
Total Residential Portfolio	0.86	0.80	2.24	2.08
Non Residential HVAC	2.12	1.97	3.36	3.12
Non Residential Shell	1.02	0.95	1.54	1.43
Food Service Equipment	1.72	1.61	1.94	1.81
Site Specific	0.74	0.69	1.55	1.44
Small Medium Business	2.32	2.17	2.03	1.89
Total C&I Portfolio	0.88	0.82	1.69	1.58
Total Portfolio	0.87	0.81	1.98	1.84
Total Portfolio w/ Low Income	0.90	0.83	1.84	1.71

[2] The UCT excludes the 10 percent Northwest Power Planning and Conservation adder.

Another development since 2012 that enables Staff to recommend resuming natural gas DSM is an increase in avoided costs[3] over the long term. The Washington/Idaho expected case for winter avoided costs in the 2012 IRP was $2.83/dekatherm in the first year and increased to $5.22/dekatherm in the last year of the planning period. *See* Avista response to Staff PR #7, AVU-G-12-03. The current Washington/Idaho winter avoided costs produced by the Company begin at $3.70/dekatherm and increase to $5.72/dekatherm over the planning period, an increase of approximately 31 percent in the first year and 10 percent in the last year. Staff believes these adjustments are reasonable and supports the Company's position.

Cost-Effectiveness Tests and Assumptions

Avista has historically relied almost exclusively on the TRC as the threshold for natural gas cost-effectiveness. This Application proposes to shift that emphasis to the UCT. The Company believes that the TRC has a "disconnect in that the benefits are primarily based off the utilities' avoided costs, which do benefit customers, but the costs are primarily driven by the cost the customers pay for the individual conservation measure." Application at 6. Staff agrees that the most accurate analysis of system cost-effectiveness compares utility benefits to utility costs, rather than comparing utility benefits to a combination of utility and customer costs.

The Company continues using the Weighted Average Cost of Capital (WACC) as the discount rate for its cost-effectiveness tests, but replaces the nominal value with the real WACC. Avista believes applying the real WACC more accurately account for tax benefits and effects of inflation in the Net Present Value calculation. While this is broadly consistent with the discounting method used by other utilities, Staff recommends that Avista apply the discount rate to the mid-year estimate of benefits rather than the beginning of the year to more closely reflect the timing of benefits realized each year.

The Company's workpapers also show it is using gross rather than net savings estimates in its cost-effectiveness calculations. Staff acknowledges a range of opinions on the best application of net savings and believes it is important as a program management tool for modifying or discontinuing incented measures with high freeridership.

This approach is consistent with the approach accepted by Staff and adopted by Idaho Power in its 2014 DSM Annual Report:

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[3] Avista's forecasted IRP avoided costs consist almost entirely of the commodity price.

> Capturing the effects of Idaho Power's energy efficiency efforts on free-ridership and spillover is difficult. Due to the uncertainty surrounding NTG percentages, Idaho Power used the NTG of 100 percent for all the measure cost-effectiveness analysis. For the program cost-effectiveness analysis, the B/C ratios shown are based on a 100 percent NTG. A sensitivity analysis was conducted to show what the minimum NTG percentage needs to be for the program to remain (or become) cost-effective.

Idaho Power 2014 Annual DSM Report, page 5

In order to assure that a net-savings approach would not unduly affect cost-effectiveness, Staff analyzed the effect of freeriders on portfolio cost-effectiveness. This sensitivity analysis found that the portfolio remained UCT cost-effective even when a 60 percent NTG ratio was applied (i.e. 40 percent freeridership). Staff believes these changes are reasonable and supports the Company's position.

Allocation of Portfolio Administration Costs

Discussions with Avista revealed changes in the allocation of overhead expenses between the electric and gas DSM portfolios that could significantly impact cost-effectiveness. Historically, the Company assigned those costs on a Btu basis. However, the Company believes a kWh is more costly to produce on a Btu basis. Thus, Avista now bases the cost allocation on the ratio of present value benefits between the two portfolios rather than assuming an avoided electric Btu is equivalent to an avoided gas Btu. Shifting to this methodology reduces the portion of overhead costs assigned to the gas portfolio from 24 percent to 8 percent. The expansion of Avista's electric-to-gas fuel conversion since the suspension of the natural gas DSM portfolio has also helped absorb overhead costs. Staff believes this new allocation of overhead expenses are reasonable and supports the Company's position.

Customer Classes Equity

Staff is concerned that residential customers will provide the majority of the tariff rider funds while the commercial and industrial classes will receive most of the direct benefits in the form of incentive payments and offset costs. This issue could be more pronounced for natural gas than electric DSM programs because electric efficiency programs defer generation investment and dispatch resources through a resource stack as costs increase, whereas gas does not. However, Staff notes that Avista's proposed commercial and industrial natural gas

measures almost exclusively reduce space heating requirements, which reduces future investments for all customer classes.

The Commission has addressed the disparity between tariff rider funding and benefits in previous orders. Order No. 32113 reads, "An exact matching of costs and benefits for an individual DSM program is a worthy, albeit unrealistic goal. There will always be some level of cross-subsidization of DSM program occurring amongst and between a utility's various customer classes." Order No. 29065 directs the Company to "implement a balanced portfolio of DSM programs for all customer classes over the long term.... The energy savings generated by such an approach will indirectly benefit all ratepayers as more class-specific DSM programs are implemented over time." While Staff believes that incenting space heat measures lowers future costs for all customers, Staff also urges Avista to manage inter-class and intra-class inequity by continuing to explore and expand residential natural gas DSM programs.

CONCLUSION AND RECOMMENDATIONS

Staff believes that resuming cost-effective natural gas DSM programs will lower costs. Likewise, Staff recommends approval of the Application. However, Staff's support of the Company's Application does not constitute an advance recommendation of prudency. Rather, Staff will carefully review program implementation, actual expenses and savings used in cost-effectiveness calculations, and third party evaluations when the Company files for cost-recovery of expenses incurred in its natural gas DSM programs.

Staff recommends that the Commission allow Avista to revise Schedule 190 to provide customers with a levelized incentive of $3.00 per first year therm savings for any project with a simple payback less than 15 years and capped at 70% of the project cost. Staff also recommends that the Commission allow Avista to resume collecting an Energy Efficiency Rider surcharge (Schedule 191) to generate approximately $1.25 million in revenue by applying $0.01818 per Therm to Schedule 101, $0.00978 per Therm to Schedule 111 and 112, and $0.00978 per Therm to Schedule 131 and 132.

Staff also recommends that the Commission direct Avista to:

1. analyze the benefits of natural gas DSM programs deferring distribution costs;
2. apply a mid-year discount rate to program benefits; and
3. strike "from a Total Resource Cost perspective" under "5. Budget & Reporting" in Schedule 190, which Staff has confirmed is acceptable with the Company.

Respectfully submitted this 10th day of December 2015.

Brandon Karpen
Deputy Attorney General

Technical Staff: Stacey Donohue
Donn English
Kevin Keyt

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 10TH DAY OF DECEMBER 2015, SERVED THE FOREGOING **COMMENTS OF THE COMMISSION STAFF,** IN CASE NO. AVU-G-15-03, BY E-MAILING AND MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

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