

## ATTACHMENT

### Avista Demand Side Management Program Cost Recovery

#### Finding of Staff On-Site Audit

On June 17, 2016, staff traveled to Spokane to perform an on-site audit of Avista's conservation incentive and non-incentive expenditures between April 2015 and March 2016. Prior to the on-site audit, staff reviewed monthly details in all program expenditure categories, from which staff selected line items to comprehensively review on site. Because the company did not provide non-incentive expenditure breakdown prior to the site visit, staff requested supporting details after the site visit. The audit consisted of review and verification of:

- Invoice dollar match to line-item expenditures.
- Existence of proper supporting documentation for expenditures.
- Appropriate Washington allocation of expenditures.
- Overall appropriateness of expenditure.
- Presence of proper internal control mechanisms.

All of the materials requested were available for review and well organized. Avista's staff were available for questions throughout the on-site audit, and Avista responded in a timely manner to follow-up data requests from staff. In general, all line item expenditures were supported by invoice, and supporting documentation was provided for all invoices. Reviewed expenditures were found to be reasonable, appropriately allocated to Washington, and reviewed and authorized by the appropriate Avista staff person.

Over the course of this audit, staff found the following minor issues associated with record keeping and some small program adjustments.

#### I. Record Keeping and Information Linkage

Avista staff made great efforts to provide staff with requested supporting documents. However, the information request and collection took multiple rounds of communication. Avista switched to the new Customer Care and Billing (CC&B) System in February 2015, which contains a DSM module. However, the DSM module does not contain all information related to residential and low-income DSM incentives. For example, once residential DSM rebates are approved in CC&B, they are batch processed by the Financial Department and accounts payables are created. However, the payment and rebate redemption status does not flow back to CC&B. To track a particular rebate, company staff had to go through a manual query process. When staff requested support documents for a particular batch of rebates, the process to find out the corresponding rebate details in CC&B would have been prohibitively time-consuming. As a result, staff only sampled a few rebate items for residential and low-income customers.

Though staff recognizes the company's system limitation, staff encourages the company, particularly its DSM group, to explore ways for better record keeping and linkage. Ideally, all details of a residential rebate, from its creation to redemption (item description, customer information, approval status, payment method and rebate redemption), should be stored in one system and readily available upon inquiry.

## II. Avista Boiler Project

In 2015, Avista provided a \$26,156 site-specific natural gas incentive for its own boiler replacement. The project has a simple payback period of 53.1 years after incentives, whereas the estimated measurement life for the boiler is 16 years. This is similar to staff's finding of one non-residential site-specific incentive offered in 2014, a 20-year life project with a 44.5-year payback period. Staff believes such offers are pure free riders in the DSM program. They do very little to contribute to active conservation efforts and are not a good use of rate payers' dollars. Effective January 7, 2016, Avista revised its natural gas DSM tariff language to limit incentives to projects with a simple payback period of 15 years or less. Staff believes the program change, albeit quite late, will address this issue going forward.

## III. Variable Frequency Drives

Avista's third-party DSM impact evaluation reveals a problem related to HVAC variable frequency drives (VFD):<sup>1</sup>

The evaluation sample included four prescriptive HVAC Motor Control projects. Of these, a project for two VFDs was found to have a 50% project-level realization rate because the two VFDs were found to be serving a pair of motors operating in "Duty / Standby" configuration where only one of the two operates at a time. A second project for a single VFD was found to be installed in a non-typical VFD application (workshop dust collection system) and only being used as a soft-starter, with the motor continuing to operate at 100% speed during occupied hours and then switched off at night. Thus, this project was found to have zero energy savings.

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To improve the realization rate, Avista should consider adding additional review processes to the program to check motor eligibility more stringently. More emphasis should be placed on verifying each motor's application, confirming the VFD is controlling the speed of the motor in a variable manner relative to load conditions, and checking that VFDs are not serving standby motors.

Company DSM staff promised process changes after the evaluator's recommendation. For the prescriptive VFDs, the company will:

1. Change the form to add two more check boxes:

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<sup>1</sup> Docket UE-132045, 2015 Annual Conservation Report, Appendix B Impact Evaluation of Washington Electric 2014-2015 Energy Efficiency Programs (filed June 1, 2016), p.58.

- a. Verbiage to indicate the VFD is for control and not for a soft-start.
- b. Verbiage to indicate no two VFDs are on the same fluid flow system.
2. Educate the account executives and engineers on the controls and uses of VFD's so they are sure what they see in the field matches the customer's documentation.
3. Continue to perform the installation verification checking the above specifications prior to handing out the check.

Staff believes these future actions will sufficiently prevent similar problems with regard to VFDs.

#### IV. Electric System Quote for All Natural Gas New Apartment Complex

Under its Market Transformation program, Avista offered an electric DSM incentive of \$52,500 to a newly constructed apartment complex for installing a system using all natural gas. In determining the incremental cost of the measure,<sup>2</sup> Avista compares the cost of installing a natural gas system to an electric system. The company obtained a quote for an electric system for \$4,337 that consists of only prices for wall cadets. Staff believes the estimate is low because it does not include the cost for range vent, dryer vent and incremental cost of electric wiring. However, staff recognizes that even if all these additional items are included, the initial cost of an electric system is still much less than that of a natural gas system, which is invoiced at \$77,123. Because the incentive payment is capped at \$3,500 per apartment unit, a fine-tuned electric quote will not likely change the incentive amount. In the future, staff would like the company to pay more attention to detail in calculating incremental cost and make sure the quote for the alternative system/product is comparable in scope.

#### V. Failure to Update Technical Review Top Sheet

For site-specific non-residential DSM projects, Avista's protocol requires its DSM engineers to fill out a Technical Review Top Sheet. It is a project check list to ensure all elements are covered in an engineer review. Staff found the top sheet was incomplete for one project. The company explained that the project went through three iterations. The first iteration did not have an incentive associated, so only the first page of the top sheet was required. The customer later updated the cost information. The engineer reviewed and approved the incentive, but did not update the top sheet. Staff believes the company engineers should endeavor to follow Avista's internal review protocol and update the top sheet as project information changes. Otherwise, the top sheet will not serve its intended purpose.

Overall, staff's audit uncovered no serious issues with the company's DSM expenditures. Staff believes that none of these issues warrant a disallowance of expenditures presented for recovery in this filing.

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<sup>2</sup> Incremental cost is the basis to calculate simple payback period, which is a criterion whether a project can receive DSM incentives.