

DECISION MEMORANDUM

**TO: COMMISSIONER KJELLANDER
COMMISSIONER SMITH
COMMISSIONER REDFORD
COMMISSION SECRETARY
COMMISSION STAFF
LEGAL**

FROM: SCOTT WOODBURY

DATE: JUNE 28, 2007

**SUBJECT: CASE NO. AVU-E-07-04 (Avista)
LOAD MANAGEMENT PILOT PROGRAM**

On June 1, 2007, Avista Corporation dba Avista Utilities (Avista; Company) filed an Application in Case No. AVU-E-07-04 requesting authority to offer residential and commercial demand response programs in portions of Sandpoint and Moscow for a two-year period. Internet protocol thermostats, direct control units and related technology will be installed to reduce energy usage at peak times of the year and gain experience with customer acceptance, program design, operational components and cost effectiveness. The costs of this pilot are anticipated to be approximately \$123,000. Based on the assumed incremental costs of power during callable events of \$150,000, this program is expected to be cost effective.

As reflected in its Application, the Company would call a minimum of four "events" during the year to test the technology, impacts on load and customer acceptance. These events will be performed at times of critical peak demand periods. Duration of the events will typically be four hours but can be extended to a six-hour time frame depending on power price market conditions. This pilot includes presentation of information to selected customers through the use of a web portal. Other customer features will be examined to test customer responsiveness.

Customers who are on Schedules 1, 11 and 21 are eligible for participation. Qualifying participants must be homeowners or business owners occupying the premises for at least one year on a full-time basis. This will allow a comparison of energy consumption with previous summer/winter usage. The targeted participants are all electric load. Customers can

have an alternate non-electric back-up heat source. An alternate heat source will be required if demand response units are to be installed on baseboard electric load.

Participating customers will be assessed no incremental costs. The “incentive” for a customer to participate is to receive upgraded equipment and the associated features. Customers opting in for a programmable controllable thermostat (PCT) will receive a thorough inspection of their HVAC system and a state of the art PCT. Participating customers with demand response switches will also receive an audit on all equipment controlled via the switch plus a \$10 a month credit for the months July, August, December, January and February.

This program will examine some of the following directly controllable appliances:

- Air conditioning
- Complete HVAC system (electric heat pump with air conditioning)
- Water heater
- Pool pump
- Electric forced air heating system
- Electric baseboard heating system
- Irrigation pump (if any)

Due to Avista system capacity issues and seasonal spot power prices, air conditioning load will be given priority in customer selection. However, the Company intends to explore the effects of demand responses on both winter and summer peaks. Therefore, customers with a HVAC system (for heating and air conditioning) will be given equal priority. Additionally, in order to gain knowledge and experience with a variety of demand response technologies, the Company will install demand response equipment in the above listed applications.

Measurement & evaluation (M&E) is integral to defining benefits of a pilot program and identifying areas for improvement or modification. Avista’s M&E will examine four components: (1) kilowatt savings, (2) technology, (3) customer acceptance, and (4) interactions of peak demand on the Company’s distribution system.

Avista requests that the Commission approve the proposed Schedule 96 tariff and related tariff changes for an effective date of July 15, 2007.

On June 6, 2007, the Commission issued Notices of Application and Modified Procedure in Case No. AVU-E-07-04. The deadline for filing written comments was June 27, 2007. Comments were filed by Commission Staff and two of the Company’s residential customers. Both customers support the Company’s Application. Commission Staff recommends

that the Application be approved with a requirement of periodic updates to the Company's External Energy Efficiency (EEE) Advisory Board and a final report to the Commission following the end of the pilot.

The proposed pilot effort, Staff contends, is limited in scope, yet is designed to obtain considerable information for a relatively modest investment. The proposal, Staff states, appears to have been designed to minimize the duplication of efforts previously conducted by other utilities, focusing on verifying the results of other utility programs and their applicability to Avista's service area and system, and examining new issues and technologies. The Application identifies a broad range of objectives for the measurement and evaluation of this pilot program. In addition to measuring peak kilowatt reductions, Staff encourages the Company to measure kilowatt hours (kWh) as well to examine whether energy use is reduced or shifted to other times.

Staff notes that on June 21, 2007, Avista filed additional comments clarifying that as a pilot program, "the program includes flexibility to allow for modifications based upon market conditions and/or findings." The comments include the example of expanding the program beyond two feeders initially identified by the Company for the program, should it be necessary to achieve the desired level of participation or to reduce interactive effects of similar equipment. Staff agrees that such flexibility should be included in the implementation of pilot programs. Staff believes that failure to adjust a change in market conditions or program findings during the pilot period would be unreasonable.

In conversations with the Company, Staff notes that Avista indicates it plans to book the expenditures for load management devices used in the pilot as expenses to be funded by Schedule 91, the Company's DSM tariff rider rather than capitalization and amortization of its investment. Staff finds funding through the DSM tariff rider to be a reasonable approach for a pilot program of this duration and for the limited number and types of devices to be purchased for use in the proposed pilot.

COMMISSION DECISION

Avista Corporation requests Commission authority to implement load management pilot programs in the Sandpoint and Moscow areas. The duration of the pilot program is two years. The cost of the pilot is anticipated to be \$123,000. The commenting customers recommend that the Application be approved. Staff recommends approval with notification and reporting requirements. Does the Commission find it reasonable to approve the proposed

demand response pilot program and to require periodic updates to the Company's EEE Advisory Board and a final Staff report to the Commission following conclusion of the pilot?

Scott Woodbury

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