# DECISION MEMORANDUM

**TO:** **COMMISSIONER KJELLANDER**
**COMMISSIONER SMITH**
**COMMISSIONER HANSEN**
**COMMISSION SECRETARY**

**FROM:** **DON HOWELL**

**DATE:** **DECEMBER 10, 2004**

**RE:** **IDAHO POWER'S APPLICATION FOR AUTHORITY TO IMPLEMENT A RESIDENTIAL AIR CONDITIONER CYCLING PROGRAM, CASE NO. IPC-E-04-27**

On November 15, 2004, Idaho Power Company filed an Application for authority to implement an expanded voluntary Residential Air Conditioner Cycling Program ("AC Program" or "Program"). In essence, Idaho Power seeks authority to modify and expand its two-year "Pilot" AC Cycling Program that expired October 24, 2004. The Company states that it does not believe that an evidentiary proceeding is necessary and requests that its Application be processed under Modified Procedure.

**History of the Residential Air Conditioning Cycling Program**

As previously approved by the Commission, Idaho Power operated a Pilot AC Program in the cities of Boise and Meridian during the summers of 2002 and 2003. The Pilot Program was open to a maximum of 200 residential volunteers in 2002 and 500 volunteers in 2003. A mixture of programmable thermostats and direct load control switches were used to control customers' air conditions for up to four hours per day between the hours of 1 p.m. and 9 p.m., ten weekdays per month, during the months of June, July and August. Participating customers received an incentive payment of $10 per month.

Idaho Power encountered and overcame some problems during the two years of the Pilot Program. Overall the Company determined that an expanded and revised Program would be a cost-effective resource in meeting its customers' growing summer peak demands for electricity. The purpose of the Program is to reduce summer peak demand in June, July and August.

**Expanded and Revised and Program Application**

Moving from the pilot stage to a permanent program, the Company requests revisions to the Program that:

1. Expand program potential eligibility to all residential customers with central air conditioning who reside in Ada or Canyon counties and in the Emmett area.

2. Expand but limit program costs to an average of approximately $2.2 million per year for the first five years and to an average of about $1.5 million per year over the lifetime of the Program.

3. Eliminate the programmable thermostat as one of the means of controlling air conditioners. Instead, only direct load control switches will be used to cycle the air conditioners.

4. Pay customers who volunteer to participate and who are accepted by the Company $7.00 per month for the three months, instead of the Pilot Program's $10 per month.

5. Limit participation to customers whom the Company believes will help ensure the effectiveness of the Program. Selection criteria include, but are not limited to: energy usage, residential location, size of home and the presence of fully functional air conditioners that are in compliance with the National Electric Code.

6. AC Cycling Events, under the Pilot Program, were defined as lasting "up to four hours" per day and up to ten events could occur in a single month for a total of up to 40 hours. The new Program contains the same 40-hour per month limit and 4-hour per day limits, but does not limit the number of cycling events per month that may occur. For example, the new Program allows the Company to cycle customers' air conditioners for one hour, four times in a single day.

**Program Benefits and Costs**

Idaho Power contracted with an outside consulting firm for evaluation of the Pilot program. The Application says that the average load reduction per participating customer is 1.11 kW on days when the ambient air temperature reaches at least 95 degrees Fahrenheit and that Treasure Valley experiences an average of more than 20 such days each summer. The evaluation confirmed the Company's hypothesis that the Program, while reducing peak load, does not reduce overall energy consumption.

Idaho Power's Energy Efficiency Advisory Group (EEAG) reviewed the AC Program design and the Company intends to use its energy efficiency tariff rider (Schedule 91) funds to finance the Program.

As previously mentioned, the Application estimates the Program will cost an average of $2.2 million per year for the first five years and average $1.5 million per year over the lifetime of the Program. Of those costs, 54% are expected to be incentive payments to participating customers, 30% for capital equipment and labor, and 16% for program administration.

The Application says that benefit-cost ratios of the program, based on avoided supply cost of a simple-cycle combustion turbine, are estimated to be 1.07 by the 10th year of operation and 1.42 over 30 years.

**STAFF RECOMMENDATION**

Staff recommends that this Application be processed under modified procedure with a 60-day public comment period and a 14-day reply comment period for Idaho Power.

**COMMISSION DECISION**

Does the Commission concur with the Company's proposal and the Staff's recommendation that this case should be processed under Modified Procedure?

Don Howell

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