

DONALD L. HOWELL, II  
DEPUTY ATTORNEY GENERAL  
IDAHO PUBLIC UTILITIES COMMISSION  
PO BOX 83720  
BOISE, IDAHO 83720-0074  
(208) 334-0312  
IDAHO BAR NO. 3366

RECEIVED   
FILED   
2005 JAN 21 AM 10:51  
IDAHO PUBLIC  
UTILITIES COMMISSION

Street Address for Express Mail:  
472 W. WASHINGTON  
BOISE, IDAHO 83702-5983

Attorney for the Commission Staff

**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

**IN THE MATTER OF THE APPLICATION OF )**  
**IDAHO POWER COMPANY FOR AUTHORITY )** **CASE NO. IPC-E-04-27**  
**TO IMPLEMENT A RESIDENTIAL AIR )**  
**CONDITIONER CYCLING PROGRAM. )**  
**)**  
**)** **COMMENTS OF THE**  
**)** **COMMISSION STAFF**  
**)**

---

**COMES NOW** the Staff of the Idaho Public Utilities Commission, by and through its Attorney of Record, Donald L. Howell II, Deputy Attorney General, and submits the following comments in response to Order No. 29663 issued on December 20, 2004.

**BACKGROUND**

On November 15, 2004, Idaho Power Company filed an Application for authority to implement an expanded 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 a formal hearing is necessary and requests that its Application be processed under Modified Procedure. In Order No. 29663 the Commission solicited public comments regarding the proposed AC Program.

## STAFF ANALYSIS AND COMMENTS

The purpose of the AC Program is to reduce Idaho Power's peak loads during June, July and August at less cost than the alternative of building another gas-fueled peak generation plant. After two years of operating a pilot version of the proposed AC Program, Idaho Power has determined that changes are warranted to increase the potential benefit/cost ratio of an expanded program while retaining sufficient value to participants.

During the pilot program, both programmable thermostats and direct air conditioner switches were tested. Based upon its pilot experience the Company has determined that the AC Program should use only the direct switches to maximize the benefit/cost ratio. During the pilot program, participants' electricity bills were credited \$10 per month for three months. In the present Application the Company has recommended that a \$7 per month credit is both necessary for program cost effectiveness and sufficient to attract participation by customers.

During the pilot program, cycling events 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 per month. The new Program contains the same 40-hour per month 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 participants' air conditioners for two hours per day for 20 days in a month or four times for one hour each time in a single day. The amount of time that an air conditioner is switched off in a cycling event is not specified. The Company's evaluation of the pilot suggests that cycling events in which AC units are off 67% of the time and on 33% of the time result in a greater benefit/cost ratio for the utility. The evaluation also showed that AC cycling results in an average of less than 2° Fahrenheit temperature increase inside participants' homes during the last hour of a cycling event and that most participants' total electricity usage per month stayed the same or declined very slightly.

Under the new Program, the Company reserves the right to limit participation based upon the availability of equipment, funding or selection criteria the Company "considers necessary to ensure the effective operation of the Program." Such selection criteria may include energy usage, location of house, size of house or other factors. Participants will be permitted to "opt out" of the program one day each month upon providing advance notice to Idaho Power.

Staff appreciates that the proposed program will allow Idaho Power considerable flexibilities in selecting participants and in dispatching this resource. We trust that the Company will use these flexibilities reasonably in the course of maximizing system benefits.

Idaho Power proposes to limit the Program's costs to an average of about \$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. Of those costs, 54% are expected to be incentive payments to participants, 30% for capital equipment, and 16% for program administration. The Company estimates that participation in the Program will increase from 2,000 customers in 2005 to 40,000 by 2009. Based on an average load reduction of 1.11 kilowatts per participant when the outside temperature is at least 95° Fahrenheit, 40,000 participants equates to 44.4 MW of peak load reduction.

It is Staff's understanding that the Company has a sufficient balance in its Energy Efficiency tariff rider account to begin implementation of this Program. Additional Energy Efficiency funding has been sought by the Company in Case No. IPC-E-04-29 and is currently under consideration.

The Company estimates that, based on the costs of a simple-cycle combustion turbine, the utility benefit/cost ratio of the Program will be 1.07 by the tenth year of operation and 1.42 over 30 years.

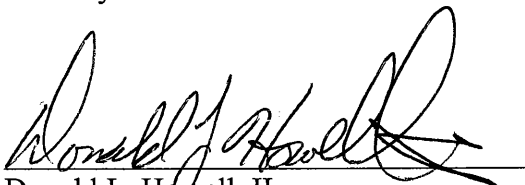
## CONCLUSIONS

The costs and benefits (and to an extent even the participation) in this program will largely be under the direct control of Idaho Power. Assuming the Company's estimates of costs, benefits and participation are reasonably accurate and that the Program is effectively implemented, this demand-side Program offers a better alternative for meeting customer load than purchasing a similar amount of supply-side generation and transmission resources.

## RECOMMENDATIONS

Staff recommends that Idaho Power's Application to Implement a Residential Air Conditioner Cycling Program be approved as filed.

Respectively submitted this 21<sup>st</sup> day of January 2005.

  
Donald L. Howell, II  
Deputy Attorney General

Technical Staff: Lynn Anderson  
i:umisc/comments/ipc04.27dhla comments

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY THAT I HAVE THIS 21<sup>ST</sup> DAY OF JANUARY 2005, SERVED THE FOREGOING COMMENTS OF THE COMMISSION STAFF, IN CASE NO. IPC-E-04-27, BY MAILING A COPY THEREOF, POSTAGE PREPAID, TO THE FOLLOWING:

MONICA MOEN  
IDAHO POWER COMPANY  
PO BOX 70  
BOISE ID 83707-0070

TIMOTHY TATUM  
IDAHO POWER COMPANY  
PO BOX 70  
BOISE ID 83707-0070

  
\_\_\_\_\_  
SECRETARY