USE OF AUTOMATIC RATE TRUE-UPS TO REMOVE DISINCENTIVES TO UTILITY INVESTMENTS IN ENERGY EFFICIENCY:
A CASE STUDY
HEPG, March 3, 2005
Submitted by Ralph Cavanagh, NRDC [rcavanagh@nrdc.org]
ILLUSTRATING THE PROBLEM

Like most utilities, Idaho Power (IP) recovers most of its fixed costs through the rates it charges per kilowatt-hour. In other words, a part of the cost of every kWh represents the system’s fixed charges for existing plant and equipment; the rest collects the variable cost of producing that kilowatt-hour. After approving a fixed-cost revenue requirement, the Idaho PUC sets rates based on assumptions about annual kilowatt-hour sales. If sales lag below those assumptions, IP will not recover its approved fixed-cost revenue requirement. By contrast, if IP were successful in promoting higher consumption than regulators expected, its shareholders would earn a windfall in the form of cost recovery that exceeded the approved revenue requirement. And whether consumption ends up above or below regulators’ expectations, every reduction in sales from efficiency improvements yields a corresponding reduction in fixed-cost recovery, to the detriment of shareholders.
MORE SPECIFICALLY

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTHORIZED IP FIXED-COST REVENUE REQUIREMENT (FCRR):</td>
<td>$300 million</td>
</tr>
<tr>
<td>FCRR ALLOCATED TO VARIABLE ENERGY CHARGES:</td>
<td>$235 million</td>
</tr>
<tr>
<td>FCRR ALLOCATED TO VARIABLE DEMAND CHARGES</td>
<td>$55 million</td>
</tr>
<tr>
<td>FCRR ALLOCATED TO FIXED CHARGES:</td>
<td>$10 million</td>
</tr>
<tr>
<td>INITIAL COST-RECOVERY IMPACT OF 1% REDUCTION IN SALES:</td>
<td>-$2.9 million</td>
</tr>
<tr>
<td>FIVE YEAR IMPACT OF ENERGY-EFFICIENCY PROGRAMS SAVING 1% OF SYSTEM USE/YR:</td>
<td>-$43.5 million</td>
</tr>
</tbody>
</table>
PROPOSED SOLUTION

Introduce regular true-ups in IP’s rates to break the link between retail sales and recovery of authorized fixed costs. If, after initial year, changes in retail electricity use lead to under- or over-recovery of fixed cost revenue requirement, a rate true-up would occur in the following year. Until reestablished in the next rate case, the last approved fixed cost revenue requirement would be automatically adjusted annually to reflect percentage increases or decreases in the number of customers served by the company. True ups would occur annually, and rate reductions or increases should not exceed 1.5% (based on analysis of recent consumption trends on IP system).
U.S. Refrigerator Energy Use v. Time with Real Price

Average Energy Use Per Unit (kWh/yr.) and Price (2002 US$)

Year Manufactured or Priced

- 1978 CA Standard
- 1980 CA Standard
- 1987 CA Standard
- 1990 NAECA Standard
- 1993 DOE Standard
- 2001 DOE Standard

U.S. Sales

Weighted Average Energy Use

Adj. Volume (ft³)

Real Price