IDAHO POWER®
An IDACORP Company

RECEIVED
2009 MAR 13 PM 4:09
IDAHO PUBLIC
UTILITIES COMMISSION

LISA D. NORDSTROM
Senior Counsel

March 13, 2009

IPC-E-03-19

VIA HAND DELIVERY

Jean D. Jewell, Secretary
Idaho Public Utilities Commission
472 West Washington Street
P.O. Box 83720
Boise, Idaho 83720-0074

Re: 2008 Demand-Side Management Annual Report

Dear Ms. Jewell:

Enclosed please find eight (8) copies of Idaho Power Company's 2008 Demand-Side Management Annual Report filed in compliance with Order No. 29419. If you have any questions regarding the content of the Report, please direct them to Pete Pengilly at 388-2881 or Darlene Nemnich at 388-2505.

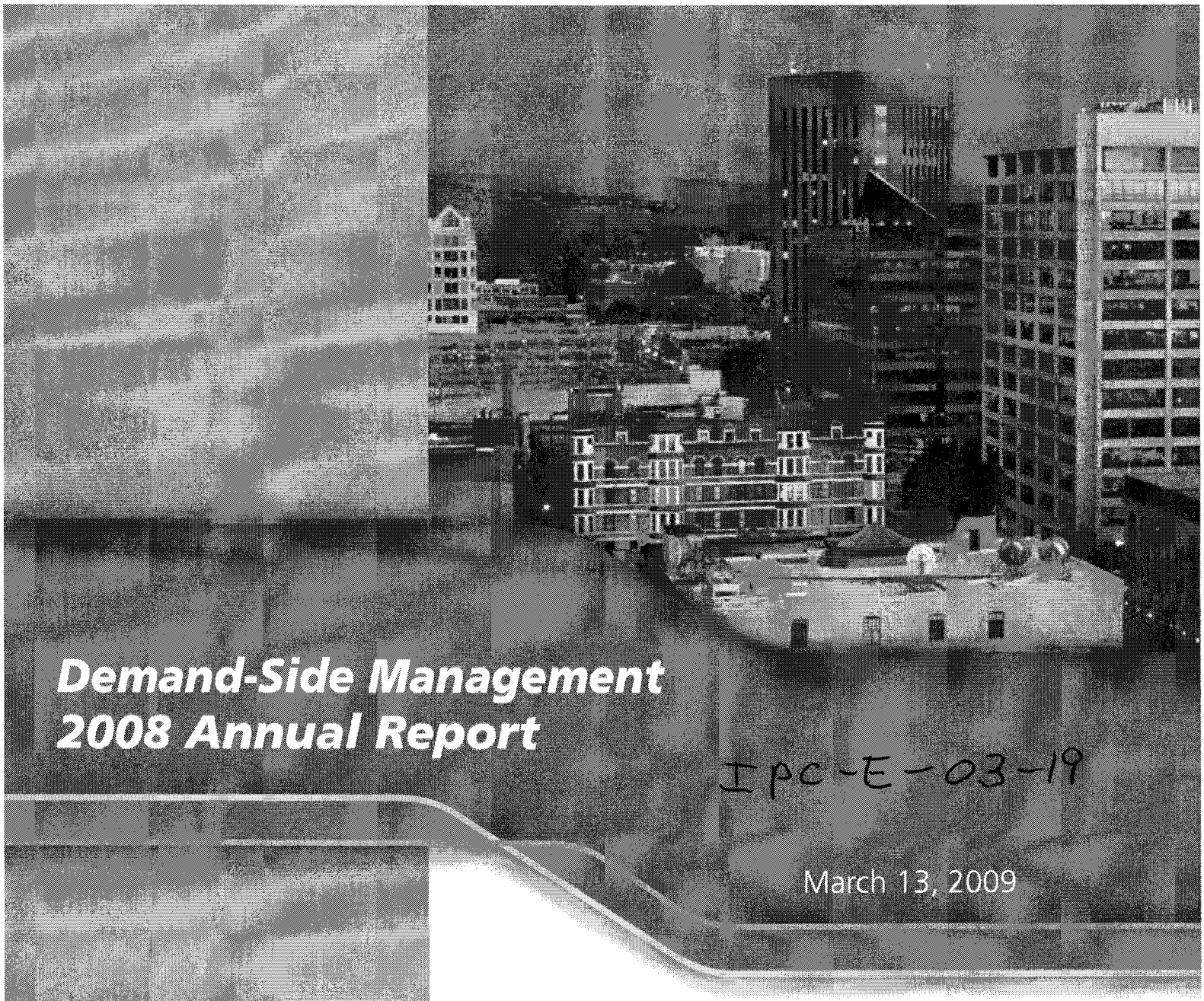
Very truly yours,

Lisa D. Nordstrom

Lisa D. Nordstrom

LDN:csb
Enclosures
cc: Ric Gale
Mike Youngblood
Pete Pengilly
Theresa Drake
P&RS Files
Legal Files

P.O. Box 70 (83707)
1221 W. Idaho St.
Boise, ID 83702



Demand-Side Management 2008 Annual Report

IPC-E-03-19

March 13, 2009

Idaho Public Utilities Commission
Office of the Secretary
RECEIVED
MAR 13 2009
Boise, Idaho

IDAHO POWER®
An IDACORP Company

TABLE OF CONTENTS

Table of Contents i
List of Tables iii
List of Figures iii
Glossary of Acronyms iv
Executive Summary 1
Introduction 3
DSM Program Portfolio Structure 5
Program Performance 6
Regulatory Initiatives 8
DSM Expenditures and Funding 8
Future Plans 9
Customer Satisfaction 9
Cost-Effectiveness 11
DSM Annual Report Structure 12
Residential Sector Overview 13
Description 13
Programs 13
A/C Cool Credit 15
Attic Insulation Pilot 18
Energy Efficient Lighting 19
Energy House Calls 21
ENERGY STAR® Homes Northwest 23
Heating & Cooling Efficiency Program 26
Home Products Program 29
Home Weatherization Pilot 31
Oregon Residential Weatherization 33
Rebate Advantage 35
Weatherization Assistance for Qualified Customers 37
Commercial/Industrial Sector Overview 39
Description 39
Programs 39
Building Efficiency 41

Custom Efficiency 43
Easy Upgrades 46
Holiday Lighting Program 49
Oregon Commercial Audits 51
Irrigation Sector Overview 53
Description 53
Programs 53
Irrigation Peak Rewards 54
Irrigation Efficiency Rewards 56
Market Transformation 59
Northwest Energy Efficiency Alliance (NEEA) 59
NEEA Activities 59
NEEA Funding 61
Energy Efficiency Advisory Group (EEAG) 63
EEAG Program Recommendations 63
Residential Programs 63
Commercial and Industrial Programs 65
Irrigation Programs 67
Additional Topics Covered 67
Other Programs and Activities 69
Residential Energy Efficiency Education Initiative 69
Commercial Education Initiative 70
Local Energy Efficiency Funds (LEEF) 70
Regulatory Initiatives 71
Fixed-Cost Adjustment Pilot 71
Performance-Based DSM Incentive Pilot 71
Enhanced Commitment 73
Building Code Improvement Activity 74
Pursuit of Appliance Code Standards 74
Continued Expansion of DSM Programs Beyond Peak-Shaving/Load-Shifting Programs 74
Third-Party Verification 75
Promotion of Energy Efficiency through Electricity Rate Design 76
Idaho Power's Internal Energy Efficiency Commitment 76
Appendices 79

Appendix 1. Idaho Rider, Oregon Rider, BPA, and NEEA Funding Balances 80
Appendix 2. 2008 DSM Expenses by Funding Source (Dollars) 81
Appendix 3. 2008 DSM Program Activity 82
Appendix 4. DSM Expense and Performance 85

LIST OF TABLES

Table 1. 2008 DSM Programs, Sectors, and Operational Type 6
Table 2. 2008 Program Sector Summary and Energy Usage 8
Table 3. 2008 Funding Source and Energy Impact 9
Table 4. 2008 Residential Program Summary 13
Table 5. Energy Efficient Lighting Energy Savings 20
Table 6. 2008 Commercial/Industrial Program Summary 39
Table 7. Custom Efficiency Annual Energy Savings by Measure 44
Table 8. 2008 Irrigation Program Summary 53

LIST OF FIGURES

Figure 1. DSM Incremental Expense History 2002–2008 (Millions of dollars) 4
Figure 2. DSM Incremental Energy Savings 2002–2008 (Gigawatt-hour [GWh]) 4
Figure 3. Percent of Customers Whose Needs are Met or Exceeded by Idaho Power's Conservation Efforts 10

GLOSSARY OF ACRONYMS

aMW—Average Megawatt

akW—Average Kilowatt

A/C—Air Conditioning

ACEEE—American Council for an Energy-Efficient Economy

ASHRAE—American Society of Heating, Refrigerating, and Air-Conditioning Engineers

AMI—Advanced Metering Infrastructure

B/C—Benefit Cost

BCA—Building Contractors Association

BEEP—Building Owners and Managers Association's Energy Efficiency Program

BETC—Business Energy Tax Credit

BLC—Basic Load Capacity

BOC—Boise Operations Center

BOMA—Building Owners and Managers Association

BPA—Bonneville Power Administration

BSU—Boise State University

CAC—Central Air Conditioning/Conditioners

CAP—Community Action Partnership

CAPAI—Community Action Partnership Association of Idaho, Inc.

CCOA—Canyon County Organization on Aging and Community Services

CCNO—Community Connection of Northeast Oregon, Inc.

CEE—Consortium for Energy Efficiency Inc.

CFL—Compact Fluorescent Lighting

CHQ—Corporate Headquarters (Idaho Power)

CR—Customer Representative

CSR—Customer Service Representatives

DEI—Distribution Efficiency Initiative

DOE—U.S. Department of Energy

DSM—Demand Side Management

EEAG—Energy Efficiency Advisory Group

El-Ada—El-Ada Community Action Partnership

EEBA—Energy and Environmental Building Association

EICAP—Eastern Idaho Community Action Partnership

ETO—Energy Trust of Oregon

FCA—Fixed-Cost Adjustment

GWh—Gigawatt-hour

H&CE—Heating and Cooling Efficiency Program

HCSCS—Harney County Senior and Community Services Center

HMCAA—Harney–Malheur Community Action Agency

HVAC—Heating, Ventilation, and Air Conditioning

HVR—Home Voltage Regulator

IDL—Integrated Design Lab

IEA—Industrial Efficiency Alliance

IECC—International Energy Conservation Code

IESBP—Idaho ENERGY STAR® Builders Partnership

IPUC—Idaho Public Utilities Commission

IRP—Integrated Resource Plan

kvar—Kilovolt ampere reactive

kW—Kilowatt

kWh—Kilowatt-hour

LDL—Lighting Design Lab

LED—Light-Emitting Diode

LEED—Leadership in Energy and Environmental Design

LEEF—Local Energy Efficiency Funds

LIHEAP—Low Income Home Energy Assistance Programs

MCOA—Malheur Council on Aging

MHAFB—Mountain Home Air Force Base

MW—Megawatt

MWh—Megawatt-hour

NEEM—Northwest Energy Efficient Manufactured Housing Program

NEEA—Northwest Energy Efficiency Alliance

NWPCC—Northwest Power and Conservation Council

OER—Office of Energy Resources (formerly the Idaho Energy Division)

ODOE—Oregon Department of Energy

OPUC—Public Utility Commission of Oregon

PECI—Portland Energy Conservation, Inc.

PLC—Power Line Carrier

PTCS—Performance Tested Comfort System

RFP—Request for Proposal

RTF—Regional Technical Forum

Rider—Idaho Energy Efficiency Rider and Oregon Energy Efficiency Rider

SCCAP—South Central Community Action Partnership

SEER—Seasonal Energy Efficiency Ratio

SEICAA—Southeastern Idaho Community Action Agency

SIR—Savings Investment Ratio

TAG—Technical Assessment Guide

TRC—Total Resource Cost

UC—Utility Cost

USB—Utility Sounding Board

WAQC—Weatherization Assistance for Qualified Customers

EXECUTIVE SUMMARY

Idaho Power's *Demand-Side Management (DSM) 2008 Annual Report* provides a review of its DSM activities and finances throughout 2008, expresses its future plans for DSM activities, and satisfies the reporting requirements set out in the Idaho Public Utilities Commission's (IPUC) Order No. 29419 and the Public Utility Commission of Oregon's (OPUC) Order No. 89–507.

Idaho Power considers energy efficiency and demand response to be an important and necessary part of a balanced approach to meeting the electricity needs of its customers. Energy efficiency is recognized by Idaho Power and its customers as providing economic, operational, and environmental benefits. Therefore, the pursuit of all cost-effective demand-side resources is a primary objective for Idaho Power. Idaho Power accomplishes this objective with input and consultation with its Energy Efficiency Advisory Group (EEAG).

Idaho Power achieves energy and demand savings through four types of programs, 1) Energy Efficiency, 2) Demand Response, 3) Market Transformation, and 4) Other Programs and Activities. Idaho Power's annual energy savings from 2002 through 2008 increased more than eight-fold. This increase was the result of customers' participation in Idaho Power's energy efficiency and demand response programs. In 2008, these efficiency efforts saved 140,156 megawatt-hours (MWh) of electricity, or 16 average megawatts (aMW), enough energy to serve about 11,000 average homes for one year. The 2008 energy savings was a 54% increase over the 91,145 MWh energy savings in 2007.

The demand reduction for Idaho Power's demand response programs increased by 20% from 48 MW in 2007 to 58 MW in 2008. By year-end 2008, participation in the A/C Cool Credit program increased by 72%. Total DSM expenses were slightly over $21 million in 2008, which is a 35% increase over 2007 expenditures of $15.7 million.

In 2008, Idaho Power's energy efficiency and demand response programs continue to increase in number and customer participation. Idaho Power offered 16 energy efficiency programs, two demand response programs, and added three new programs, the Home Products program, the Home Weatherization pilot, and the Attic Insulation pilot. Additional significant energy savings continue to be realized through market transformation partnership activities with the Northwest Energy Efficiency Alliance (NEEA).

Idaho Power was successful in providing customers with accurate and timely information to assist them in making wise energy choices and participating in energy efficiency programs. In 2008, the results of Idaho Power's quarterly customer satisfaction survey showed steady improvement over recent years, as the percent of customers who have a positive perception of Idaho Power's energy efficiency efforts has continued to rise.

The American Council for an Energy-Efficient Economy (ACEEE) annually publishes a scorecard that ranks individual states in terms of commitment to energy efficiency. In 2008, the ACEEE identified Idaho as the "most improved" state in the nation, having moved up 12 spots, compared to the 2007 scorecard. The following annual report provides detailed information on activities and programs resulting from Idaho Power's support of DSM initiatives.

This page left intentionally blank.

INTRODUCTION

Idaho Power's *Demand-Side Management (DSM) 2008 Annual Report* provides a review of the financial and operational performance of Idaho Power's DSM activities and initiatives for the 2008 calendar year. These programs provide a wide range of opportunities for all customer classes to balance their energy needs and reduce their energy consumption.

Idaho Power considers energy efficiency to be an important and necessary part of a balanced approach to meeting the growing demand for electricity. Consistent with this view, energy efficiency is one of the cornerstones supporting Idaho Power's resource acquisition strategy. Energy efficiency is recognized by Idaho Power and its customers as providing economic, operational, and environmental benefits. Therefore, the pursuit of all cost-effective demand-side resources is a primary objective for Idaho Power.

This *DSM Annual Report* is produced to convey Idaho Power's DSM activities and finances throughout 2008, to express Idaho Power's future plans for DSM activities, and to conform to the IPUC Order No. 29419 and the OPUC Order No. 89–507.

During 2008, Idaho Power continued to expand the programs that began with the *2004 Integrated Resource Plan* (IRP). Idaho Power's 2006 IRP included the addition of three new DSM programs and the expansion of one program. In addition to the DSM programs identified in the IRP, Idaho Power continued to offer other energy efficiency programs that began prior to the 2004 IRP. Also in 2008, Idaho Power continued to use its field staff in building customer awareness of, and participation in, energy efficiency, demand response, and educational programs.

In 2008, the energy savings from Idaho Power's DSM activities increased by 54%, and the expenditures for DSM-related activities increased by 35%, compared to 2007. This increase in spending included increased participation in programs and the development of new programs that will result in future savings. DSM activities throughout 2008 were focused predominantly on increasing program participation, customer education, and the planning and implementation of new programs.

Idaho Power's two main objectives for DSM programs are to acquire all cost-effective demand-side resources in order to meet the electrical system's energy and demand needs and to provide all Idaho Power customers with programs and information to help them manage their energy usage. Idaho Power achieves these objectives through the development and implementation of programs with specific energy, economic, and customer satisfaction objectives. When possible, Idaho Power implements identical programs in its Idaho and Oregon service areas.

Figures 1 and 2 show the historical growth in expenditures and resource acquisition from 2002 to the present.

Figure 1. DSM Incremental Expense History 2002–2008 (Millions of dollars)

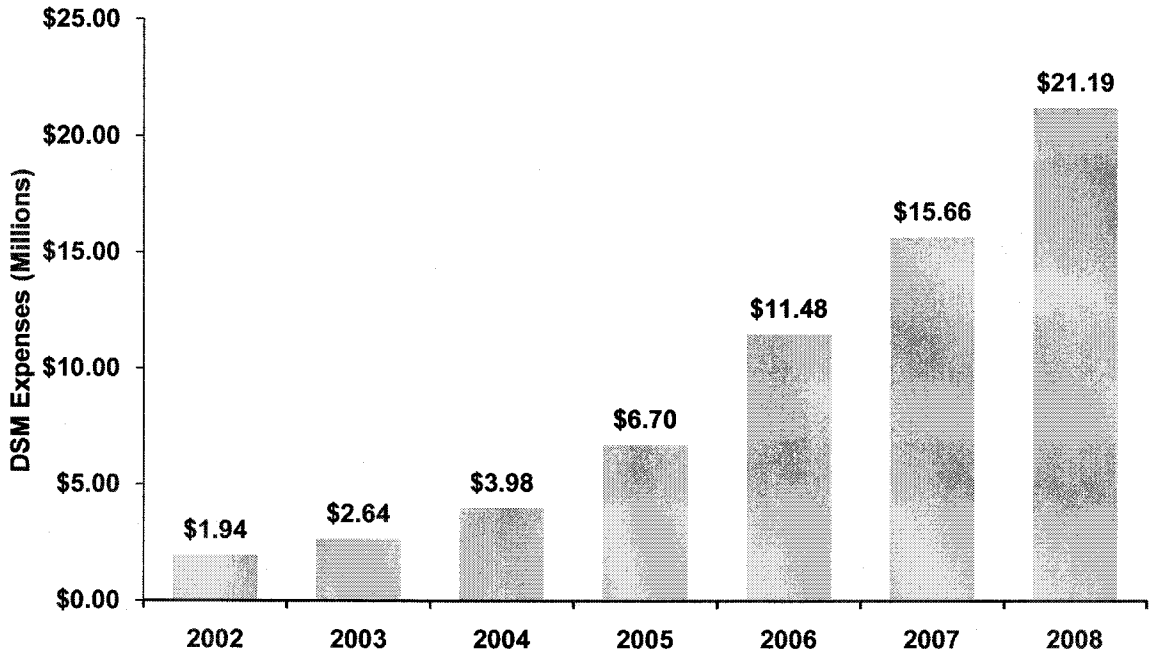
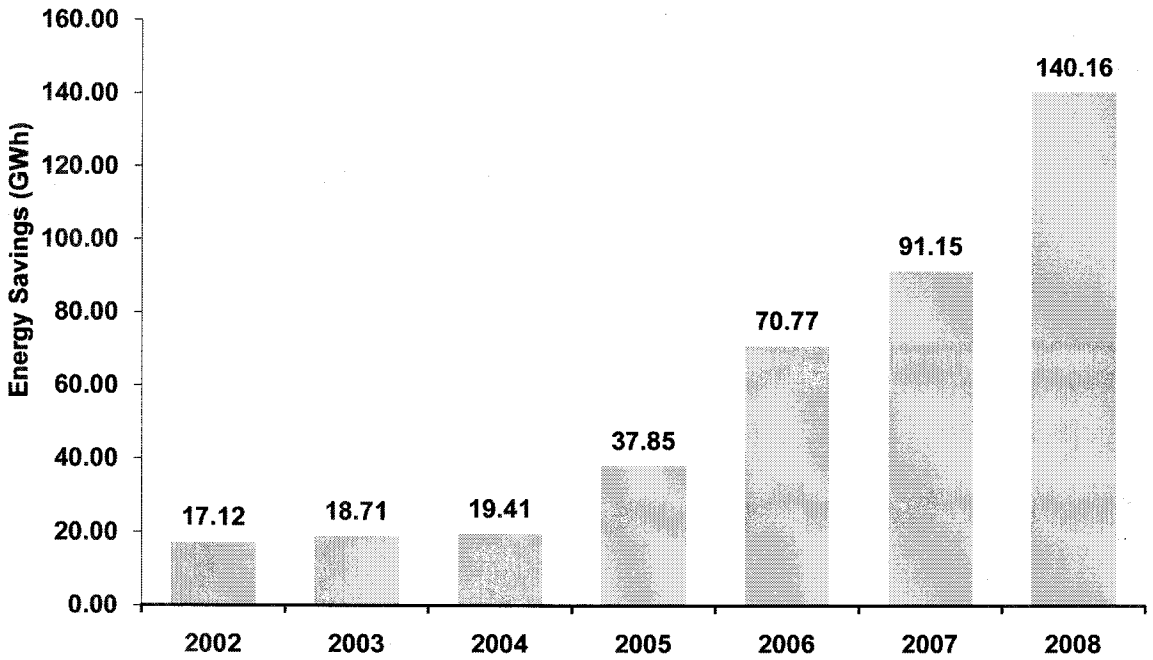


Figure 2. DSM Incremental Energy Savings 2002–2008 (Gigawatt-hour [GWh])



Idaho Power relies on input from the Energy Efficiency Advisory Group (EEAG) to provide customer and public interest review of DSM programs and expenses. In addition to the EEAG, Idaho Power solicits further customer input through stakeholder groups in the residential, commercial, industrial, and irrigation customer sectors. Idaho Power also has enhanced relationships with trade allies,

trade organizations, and regional groups committed to increasing the use of energy efficiency programs and measures to reduce electricity load.

During 2008, Idaho Power continued its contractual participation in, and funding of, the Northwest Energy Efficiency Alliance (NEEA). NEEA's efforts in the northwest impact Idaho Power's customers by providing regional market transformation.

DSM Program Portfolio Structure

The programs within the DSM portfolio are offered to four major customer sectors: residential, commercial, industrial, and irrigation. Beginning in 2007, the commercial and industrial energy efficiency programs were made available to customers in either sector, expanding the availability of these programs. Because of this change, the sector is now often referred to as the commercial/industrial sector. Idaho Power achieved energy and demand savings through four types of programs. These programs include Demand Response, Energy Efficiency, Market Transformation, and Other Programs and Activities. A brief description of each of these operational categories follows.

Demand Response Programs

Demand response programs are designed to reduce participant electricity loads at specific times of the day and year when electricity is normally in short supply. The need for these programs continues to increase. Idaho Power set a new system peak of 3,214 megawatts (MW) on Monday, June 30, 2008, at 3:00 p.m. The goal of demand response programs within Idaho Power's DSM portfolio is to reduce the system summer peak demand, thus minimizing the need for acquiring higher-cost, supply-side alternatives, such as gas turbine generation. Demand reduction through demand response programs is usually achieved through the use of load control devices installed on customer equipment. The measure of program performance is the number of megawatts (MW) of reduced demand for electricity during peak periods. In 2008, Idaho Power offered two demand response programs, one for residential customers and one for irrigation customers.

Energy Efficiency Programs

Energy efficiency programs focus on reducing energy usage through identifying buildings, equipment, or components where energy-efficient design, replacement, or repair can yield significant energy savings. These programs are applicable to all customer sectors. Typical project measures range from entire building construction to simple light bulb replacement. Savings from these programs are measured in terms of reduced kilowatt-hour (kWh) usage, or megawatt-hour (MWh) usage for larger projects. These programs usually supply energy benefits throughout the year. Idaho Power's energy efficiency offerings include programs in residential and commercial new construction, residential and commercial retrofit applications, and irrigation and industrial systems improvement or replacement.

Market Transformation

Market transformation is a method of achieving energy savings through engaging and influencing large national and regional organizations. These organizations are in a position to impact the design of energy usage in products, services, and methods that affect electrical power consumption. Idaho Power primarily achieves market transformation savings through its participation in NEEA. Idaho Power also

supports market transformation accomplished by appliance or building code modifications or enforcement.

Other Programs and Activities

Other Programs and Activities represent a range of small projects that are typically research, development, and education oriented. This category includes the Local Energy Efficiency Funds (LEEF), the Residential Energy Efficiency Education initiative, and the Commercial Educational Initiative. These programs enable Idaho Power to offer support for projects and educational opportunities not normally covered under existing programs.

Table 1 provides a summary of the DSM programs and their respective sectors, as well as operational category and the state in which each was available in 2008.

Table 1. 2008 DSM Programs, Sectors, and Operational Type

Program	Sector	Operational Type	State
A/C Cool Credit	Residential	Demand Response	ID
Attic Insulation Pilot	Residential	Energy Efficiency	ID
Building Efficiency	Commercial/Industrial	Energy Efficiency	ID/OR
Commercial Education Initiative	Commercial/Industrial	Other Programs and Activities	ID/OR
Custom Efficiency	Commercial/Industrial	Energy Efficiency	ID/OR
Easy Upgrades	Commercial/Industrial	Energy Efficiency	ID/OR
Energy Efficient Lighting	Residential	Energy Efficiency	ID/OR
Energy House Calls	Residential	Energy Efficiency	ID/OR
ENERGY STAR® Homes Northwest	Residential	Energy Efficiency	ID/OR
Heating & Cooling Efficiency Program	Residential	Energy Efficiency	ID/OR
Holiday Lighting Program	Commercial/Industrial	Energy Efficiency	ID/OR
Home Products Program	Residential	Energy Efficiency	ID/OR
Home Weatherization Pilot	Residential	Energy Efficiency	ID
Irrigation Efficiency Rewards	Irrigation	Energy Efficiency	ID/OR
Irrigation Peak Rewards	Irrigation	Demand Response	ID/OR
Local Energy Efficiency Funds	All	Other Programs and Activities	ID/OR
Northwest Energy Efficiency Alliance	All	Market Transformation	ID/OR
Oregon Commercial Audits	Commercial/Industrial	Energy Efficiency	OR
Oregon Residential Weatherization	Residential	Energy Efficiency	OR
Rebate Advantage	Residential	Energy Efficiency	ID/OR
Residential Education Initiative	Residential	Other Programs and Activities	ID/OR
Weatherization Assistance for Qualified Customers	Residential	Energy Efficiency	ID/OR

Program Performance

Participation in DSM programs at Idaho Power continues to increase, as does the energy impact in the form of energy savings and demand reduction. The energy savings for Idaho Power's energy efficiency programs in 2008 was 107,484 MWh, a 72% increase over the 62,544 MWh energy savings in 2007. Demand reduction for the demand response programs also increased in 2008. Combined,

the Irrigation Peak Rewards and A/C Cool Credit programs resulted in estimated summer peak reduction of 58 MW, which represented a 20% increase over 48 MW in 2007.

In 2008, energy savings increased, as compared to 2007, for the residential, commercial, and industrial sectors by 75%, 310%, and 38% respectively. The residential sector savings increased to 21,778 MWh, the commercial sector savings increased to 32,786 MWh, and the industrial sector increased to 41,059 MWh. The 2008 irrigation sector energy savings decreased slightly to 11,746 MWh, from 12,304 MWh in 2007. Additional energy savings continue to be realized through market transformation partnership activities with NEEA.

Customer participation increased in nearly every existing program from 2007 to 2008. The number of projects completed under the Easy Upgrades program increased from 104 projects in 2007 to 685 projects in 2008. Projects completed under the Building Efficiency program increased from 22 to 60. While the energy savings decreased slightly from the Irrigation Efficiency Rewards program, participation increased from 816 to 961 projects. As a result of the downturn in the housing market in 2008, the number of homes incented under the ENERGY STAR® Homes Northwest and the Rebate Advantage programs both decreased. Participation in the A/C Cool Credit program increased by 72% to approximately 24,000 customers by year's end.

A few individual programs were big contributors to the overall energy savings. The Custom Efficiency program, the only energy efficiency program in the industrial sector, accounted for 38% of Idaho Power's energy savings from programs, resulting in 41,059 MWh of savings. The Easy Upgrades program in the commercial sector provided 24%, or 25,928 MWh, energy savings. In the residential sector, the Energy Efficient Lighting program saved 14,309 MWh, accounting for 13% of the overall energy savings.

ACEEE publishes an annual scorecard ranking individual states in terms of commitment to energy efficiency. In 2008, Idaho was identified as the "most improved" state in the nation, having moved up 12 spots, as compared to the 2007 scorecard. As the largest utility company in the state, Idaho Power is proud to contribute to this recognition.

Table 2 shows the 2008 annual energy savings, summer peak demand reduction, and average megawatt (aMW) savings associated with each of the DSM program categories. The table also provides a comparison of the 2008 contribution of each sector in terms of weather-adjusted energy usage and its respective size in number of customers. Unless otherwise noted, all energy savings presented in this report are measured or estimated at the customer's meter, excluding line losses.

Table 2. 2008 Program Sector Summary and Energy Usage

	Energy Efficiency Program Impacts[a]				Idaho Power System Sales		
	Direct Expenses	MWh Energy Savings	aMW Load Reduction	Peak Load Reduction[b]	MWh Sector Total	% of Energy Usage	Number of Customers
Energy Efficiency							
Residential	$7,192,562	21,778	2	23	5,282,337	36%	404,373
Commercial	$4,076,109	32,786	4	5	3,979,113	27%	64,125
Industrial	$4,045,671	41,059	5	5	3,365,761	23%	122
Irrigation	$3,535,542	11,746	1	39	1,921,608	13%	18,542
Market Transformation	$942,014	32,671	4	n/a	n/a	n/a	n/a
Other Programs and Activities	$421,317	116	0	n/a	n/a	n/a	n/a
Total	**$20,213,215**	**140,156**	**16**	**72**	**14,548,819**	**100%**	**487,162**

[a] Energy, demand, and expense data have been rounded to the nearest whole unit, which may result in minor rounding differences.

[b] Includes peak load reduction from both demand response and energy efficiency programs.

Regulatory Initiatives

Idaho Power has aligned itself with the IPUC and the members of the environmental community to work toward creating a financial and regulatory environment supportive of utility DSM resource acquisition. Resulting from this collaborative effort are two financial mechanisms designed to 1) remove the financial disincentives to utility DSM resource acquisition and 2) provide a financial incentive to shareowners when DSM programs perform above baseline goals. Idaho Power is optimistic that this effort will lead to a sustained environment supportive of its plans to pursue all cost-effective DSM opportunities while balancing its shareowner's financial objectives.

In response to these regulatory mechanisms, Idaho Power has committed to enhancing its efforts toward promoting DSM and energy efficiency in several key areas, including a broad availability of efficiency and load-management programs, building code improvement activity, pursuit of appliance code standards, expansion of DSM programs beyond peak shaving/load shifting programs, and third-party verification.

DSM Expenditures and Funding

Funding for DSM programs in 2008 came from several sources. The Idaho Energy Efficiency Rider and Oregon Energy Efficiency Rider funds are collected directly from customers on their monthly bills. In June 2008, the Idaho Rider was increased from a rate of 1.5% of base rate revenues to 2.5%. The monthly caps on residential and irrigation customer contributions formerly in place were removed. The Oregon Rider remains at 1.5% of base rate revenues. DSM-related expenses not funded through the Rider funds, including costs for administration and overhead, are included as part of Idaho Power's ongoing operation and maintenance costs. Total DSM expenses funded from these sources were slightly over $21 million in 2008.

Table 3 provides a summary of the 2008 expenses and energy savings by each funding category.

Table 3. 2008 Funding Source and Energy Impact

Funding Source	Expenses	MWh Savings
Idaho Rider.....	$18,880,276	131,662
Oregon Rider.....	$625,000	4,277
BPA.....	$6,950	0
Idaho Power.....	$1,681,294	4,217
Total	**$21,193,520**	**140,156**

Future Plans

Many of Idaho Power's DSM programs are selected for implementation through its biennial IRP. The IRP is a public document that details Idaho Power's strategy for economically maintaining the adequacy of its power system into the future. The IRP process balances risk, environmental, economic, and other considerations in developing a preferred portfolio of future resources that meet the specific energy needs of Idaho Power and its customers. The IRP is normally updated every two years to reflect changes in supply costs, demand for electricity, and other factors. However, with its acceptance of the 2006 IRP, the IPUC requested that Idaho Power align the submittal of its next IRP with those submitted by other utilities. To comply with this request, Idaho Power provided an update on the status of the 2006 IRP to both the IPUC and OPUC in June 2008, and will file a new IRP in June 2009. Idaho Power DSM staff has participated on the collaborative team compiling both the 2006 IRP Update and the 2009 IRP.

In 2009, Idaho Power plans to continue to increase participation and energy savings from existing programs and continue to implement new energy efficiency and demand response programs. In 2009, Idaho Power plans to expand its efforts in energy efficiency by continuing the Attic Insulation Pilot under the new name Home Improvement Program, continuing the Home Weatherization Pilot under the new name Weatherization Solutions for Eligible Customers program, and implementing a refrigerator recycling program. Idaho Power will expand the Irrigation Peak Rewards program to add an option of a dispatchable demand response program, which will greatly increase the demand reduction potential from this program. Also in 2009, Idaho Power plans to offer a demand response program to its commercial and industrial customers through a third-party demand response aggregator.

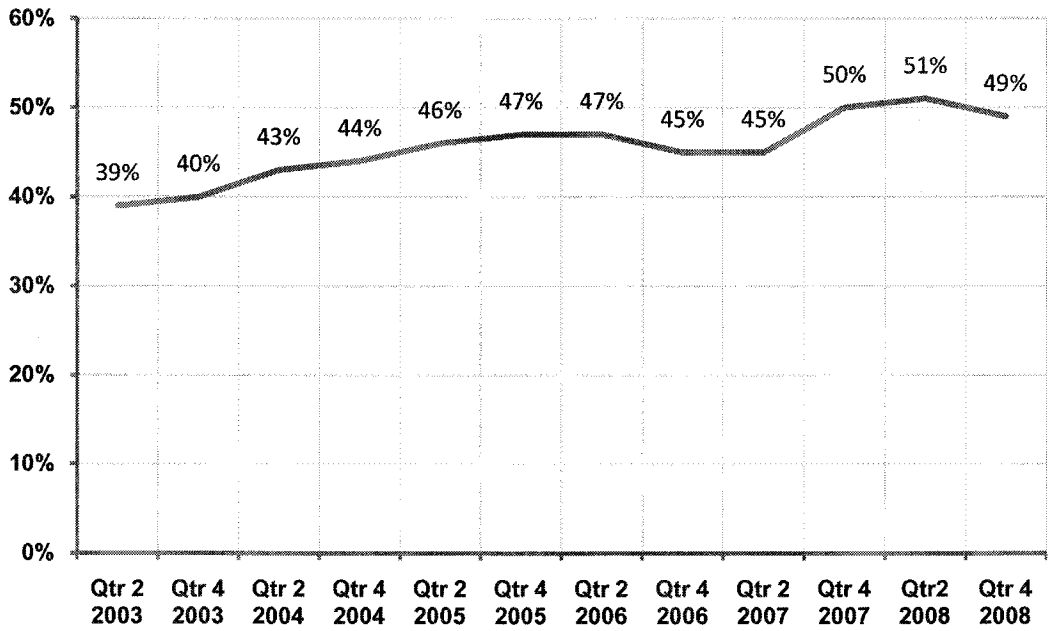
Idaho Power will participate in the development of the Northwest Power and Conservation Council's (NWPCC) Sixth Power Plan, continue and enhance consumer education on energy efficiency, and complete various research and development projects.

Customer Satisfaction

Customer satisfaction is a key consideration in Idaho Power's program design, operations, and management. Idaho Power uses surveys, focus groups, stakeholder input, and input from the EEAG and Idaho Power field personnel to assess and monitor customer satisfaction. This information and input aids in the design and modification of programs and assists in program marketing and management throughout the life of each program.

In 2008, the results of Idaho Power's quarterly customer satisfaction survey showed steady improvement over recent years as the percentage of customers who have a positive perception of Idaho Power's energy efficiency efforts has continued to increase. Customers' positive perception of Idaho Power's energy efficiency efforts increased from 39% in early 2003 to 49% in late 2008. This represents a 26% increase in positive customer perception. Idaho Power continues to expand its customer satisfaction measurement activities, which enable Idaho Power to identify actionable areas for improvement. Figure 3 depicts biannual growth in the number of customers who indicated Idaho Power met or exceeded their needs concerning energy conservation efforts encouraged by Idaho Power.

Figure 3. Percent of Customers Whose Needs are Met or Exceeded by Idaho Power's Conservation Efforts



Several surveys measured customer satisfaction with programs in 2008. The surveys also provide guidance for program modification, marketing, and evaluation. Survey results are presented in the following program sections of this report: A/C Cool Credit, Energy House Calls, Rebate Advantage, Residential Energy Efficiency Education, Heating & Cooling Efficiency Program, Weatherization Assistance for Qualified Customers (WAQC), and Easy Upgrades.

An important measure of customer satisfaction is the retention rate of participants in ongoing programs. A review of utility service agreement end dates indicates less than 1% of A/C Cool Credit participants cancel enrollment due to dissatisfaction with the program. Both irrigation sector programs, the Irrigation Peak Rewards and the Irrigation Efficiency Rewards programs, have continued with a high level of participation. Idaho Power programs have on-going customer satisfaction measurements as a follow-up to the application process. For example, Easy Upgrades provides an ongoing Web-based customer survey for its participants. Results of these surveys indicate general satisfaction and help guide program improvement and marketing efforts. Idaho Power energy efficiency program staff is preparing surveys for future use in determining customer satisfaction. Building Efficiency developed a customer satisfaction survey in 2008 and plans to implement it in 2009. Custom Efficiency plans to develop a customer satisfaction survey in 2009. The WAQC program collected customer satisfaction surveys from participating customers. The results of these surveys showed that customers thought the program helped

them learn about saving electricity in their homes and helped them try some of the ways to save energy in their homes.

Cost-Effectiveness

Idaho Power considers cost-effectiveness the primary screening tool prior to DSM program implementation. Most of Idaho Power's energy efficiency programs are preliminarily identified through the IRP planning process. In this process, specific programs or potential energy savings are screened by sector to determine if the levelized cost of these programs is less than supply-side resource alternatives. If they are shown to be less costly than supply-side resources from a levelized cost perspective, the hourly shaped energy savings is subsequently included in the IRP.

Prior to the actual implementation of energy efficiency or demand response programs, Idaho Power analytical staff creates cost-effectiveness models to assess whether a specific potential program design will be cost effective from the perspective of Idaho Power and its customers. Incorporated into these models are inputs from various sources in order to use the most current and reliable information available. When possible, Idaho Power staff leverages the experiences of other companies in the region, or throughout the country, to help identify specific program parameters. This is typically accomplished through discussions with other utilities' program managers and research staff. Idaho Power also uses electric industry research organizations, such as E Source, Edison Electrical Institute (EEI), Consortium for Energy Efficiency (CEE), American Council for an Energy Efficient Economy (ACEEE), Advanced Load Control Alliance (ALCA), Association of Energy Service Professionals (AESP), Energy Insights, and others, to identify similar programs and their results.

For other assumptions, including estimated costs, savings, and net-to-gross ratio estimates, Idaho Power relies on sources such as the Northwest Power and Conservation Council, the Regional Technical Forum (RTF), NEEA, E Source, the Database for Energy Efficiency Resources (DEER), the Energy Trust of Oregon (ETO), Bonneville Power Administration (BPA), third-party consultants, and other regional utilities. Idaho Power uses a cost-effectiveness model to perform sensitivity analyses in order to determine optimal program designs. The remaining inputs used in the cost-effectiveness models are obtained from the IRP process. The Technical Appendix of Idaho Power's most recent IRP is the source for the financial assumptions, including the discount rate and inflation rate. The IRP is also the source of the DSM alternative costs, which is the value of energy savings and demand reduction resulting from the DSM programs. These DSM alternative costs vary by season and time-of-day. The DSM alternative energy costs are based on either projected fuel costs of a peaking unit or forward market prices as determined by Idaho Power's power supply model, AURORAxmp® Electric Market Model. The avoided capital cost is based on a gas-fired simple-cycle turbine.

For its cost-effectiveness methodology, Idaho Power relies on the Electric Power Research Institute End Use Technical Assessment Guide (TAG) and the California Standard Practice Manual. Idaho Power primarily uses the Total Resource Cost (TRC) test and the Utility Cost (UC) test to develop benefit cost (B/C) ratios to determine the cost-effectiveness of DSM programs. As defined in the TAG and California Standard Practice Manual, the TRC and UC tests are most similar to supply-side tests and provide a useful basis to compare demand-side and supply-side resources. Idaho Power determines cost-effectiveness on a measure-by-measure basis and a program basis. To be consistent with the IRP, program life B/C ratios for A/C Cool Credit and Irrigation Peak Rewards are calculated over a 20-year period. In order for a measure or a program to be considered cost-effective, it must have B/C ratios greater than one for both the TRC and UC tests.

Idaho Power may choose to launch a pilot or a program to evaluate estimates or assumptions in the cost-effectiveness model. Following implementation of a program, cost-effectiveness models are reviewed as new inputs from actual program activity become available, such as actual program expenses, savings, or participation. If measures or programs are determined to not be cost-effective after implementation, the program or measures are reexamined.

A new addition to the 2008 DSM report is the presentation in Appendix 4 of the UC and TRC B/C ratios using actual cost information over the life of the program through 2008. These B/C ratios are provided as a measure of cost-effectiveness for all Idaho Power energy efficiency or demand response programs currently being offered where energy savings and demand reduction is realized.

Program Evaluation

Program evaluation is an important facet of Idaho Power's DSM operational activities. Idaho Power relies on evaluation by third-party contractors, internal analyses, and regional studies to ensure the ongoing cost-effectiveness of programs through validation of energy savings and demand reduction. The results of Idaho Power's evaluation efforts are used to enhance or initiate program changes when warranted. In 2008, Idaho Power developed a comprehensive evaluation plan for its energy efficiency programs and commenced evaluations for several programs and measures, including Building Efficiency, ENERGY STAR® Homes Northwest, Rebate Advantage, Energy House Calls, and the Attic Insulation pilot.

As part of its evaluation efforts, Idaho Power is actively participating in several regional studies to identify and promote emerging technologies that may further enhance opportunities for new program deployment. Some examples include 1) the Distribution Efficiency Initiative, which is a study managed by NEEA to determine efficient ways to design and operate distribution feeders through voltage regulators, 2) a regional study to evaluate the energy-savings potential of ductless heat pumps, and 3) efforts to measure the impacts of light-emitting diode (LED) lighting. Other regional analyses in which Idaho Power actively participated include the Commercial Building Stock Assessment and market progress evaluations.

DSM Annual Report Structure

The structure of the remaining portion of this report is based on customer sectors (categorized by residential, commercial/industrial, and irrigation). The description of each sector is followed by information about each program in that sector. Each program section includes a general program description, annual activities, and future plans. A chart at the beginning of each program section contains 2008 and 2007 program metrics in tabular format. Following the sector and program sections of the report are descriptions of Idaho Power's activities in Market Transformation, Other Programs and Activities, and Idaho Power's Regulatory Initiatives. The appendices follow the written sections and contain tabular information on the 2008 expenses and savings, as well as historic information for all energy efficiency and demand response activities at Idaho Power.

RESIDENTIAL SECTOR OVERVIEW

Description

With over 404,000 service points serving a population of approximately one million people, residential customers represent Idaho Power's largest customer segment. Growth within this segment slowed considerably in 2008, largely in response to regional and national economic conditions. During 2008, Idaho Power added about 4,000 customers, equaling a growth rate of 1%. Idaho Power experienced the smallest residential customer growth rate since 1989. The residential segment represents 36% of Idaho Power's total electricity usage.

Programs

Table 4. 2008 Residential Program Summary

			Total Costs		Savings	
	Participants		Utility	Resource	Annual Energy	Summer Peak Demand
Program	*(Number)*	*(Units)*	*(Dollars)*	*(Dollars)*	*(kWh)*	*(MW)*
Demand Response						
A/C Cool Credit	20,195	homes	$2,969,377	$2,616,072	n/a	23
Total			**$2,969,377**	**$2,616,072**	**n/a**	23
Energy Efficiency						
Attic Insulation Pilot	282	homes	$123,454	$157,866	317,814	
Energy Efficient Lighting	436,264	CFL bulbs	$1,018,292	$793,265	14,309,444	
Energy House Calls	1,099	homes	$484,379	$484,379	883,038	
ENERGY STAR® Homes Northwest	254	homes	$302,061	$375,007	468,958	1
Heating & Cooling Efficiency Program	359	homes	$473,551	$599,771	561,441	
Home Products Program	3,034	appliances/fixtures	$250,860	$468,056	541,615	
Home Weatherization Pilot	16	homes	$52,807	$48,162	71,680	
Oregon Residential Weatherization	3	homes	$7,417	$28,752	22,196	
Rebate Advantage	107	homes	$90,888	$179,868	463,401	
Weatherization Assistance for Qualified Customers—Idaho	439	homes/non-profits	$1,375,632	$1,755,749	4,064,301	
Weatherization Assistance for Qualified Customers—Oregon	13	homes/non-profits	$43,843	$74,048	73,841	
Total			**$4,223,185**	**$4,964,924**	**21,777,729**	**24**

Note: See Appendix 3 for notes on methodology and column definitions.

Programs available to residential customers include one demand response program, nine energy efficiency programs, and the energy educational program. The demand response program offering is the A/C Cool Credit program, with approximately 24,000 customers enrolled. During 2008, this program expanded into Idaho Power's Payette and Twin Falls service areas. The residential efficiency programs include Energy House Calls, Rebate Advantage, ENERGY STAR® Homes

Northwest, Oregon Residential Weatherization, Energy Efficient Lighting, WAQC, and Heating & Cooling Efficiency Program. The new ENERGY STAR Home Products Program was operational in 2008, with strong residential customer participation.

Additionally, two new pilots were implemented in 2008. One was the Attic Insulation Pilot and the other was the Home Weatherization Pilot. Analysis was conducted about the viability of the attic retrofit pilot program. Plans are underway for implementation in June 2009 under the name Home Improvement Program. The Home Weatherization Pilot will launch as a program in the Twin Falls area in 2009 under the name Weatherization Solutions for Eligible Customers.

Idaho Power continued significantly increasing its outreach activities by participating in numerous retail and community events during 2008. These partnerships and outreach activities created specific opportunities for the company to share the importance of energy efficiency and give customers information and options about participating.

Many of these events were partnerships with community retailers, including Home Depot, Lowe's, Albertson's, Wal-Mart, and small, locally owned retailers. Idaho Power also participated in home and garden shows, Parade of Homes, library education series, and other community events across Idaho Power's service area. A sample of the new community events Idaho Power participated in during the course of 2008 include the Susan G. Komen Race for a Cure, the St. Luke's Women's Challenge, and the Idaho Green Expo, where Idaho Power released the new booklet *30 Simple Things You Can Do To Save Energy*. These events drew large crowds, providing Idaho Power an opportunity to share energy efficiency information.

Presentations to community groups and businesses were another emphasis during the year. Idaho Power customer representatives made approximately 100 presentations to civic and community groups, including chambers of commerce, school boards, service organizations, and businesses. Idaho Power also developed a new energy efficiency presentation, targeting fourth-grade through sixth-grade students.

A/C Cool Credit

	2008	2007
Participation and Savings		
Participants (homes)[a]	20,195	13,692
Energy Savings (kWh)	n/a	n/a
Demand Reduction (MW)[a]	23	11
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$2,922,985	$2,421,461
Oregon Energy Efficiency Rider	$45,404	$0
Idaho Power Funds	$988	$4,692
Total Program Costs—All Sources	$2,969,377	$2,426,154
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	n/a	n/a
Total Resource Levelized Cost ($/kWh)	n/a	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	1.38	
Total Resource Benefit/Cost Ratio	1.38	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

[a] Program participation and demand reduction reflect enrollment as of July 15th. Year end enrollment in the program was 23,505 homes.

Description

A/C Cool Credit is a voluntary dispatchable demand response program for residential customers. Using communication hardware and software, Idaho Power cycles participants' central air conditioners on and off via a direct load-control device installed on the air conditioning unit. Participants receive a monthly, monetary incentive for participating in the program during the summer season. This program enables Idaho Power to reduce system peaking requirements during times when summer peak load is high.

Individual radio-controlled or power line carrier (PLC) switches are installed on customers' air conditioning units. These switches allow Idaho Power to cycle customers' air conditioners during a cycling event. Under this program, Idaho Power may cycle participants' air conditioners for up to 40 hours each month in the months of June, July, and August.

2008 Activities

In 2008, the program expanded beyond Ada County, Canyon County, and the Emmett valley to the Payette and Twin Falls area. Mountain Home Air Force Base (MHAFB) housing residents also joined the program in 2008. Cycling event hours changed from four-hour cycles to three-hour cycles, pinpointing the peak time with less potential impact on participants. There were 15 cycling events in 2008, one in June, seven in July, and seven in August. The 2008 target was 16,000 new participants. There were approximately 13,222 new participants in 2008.

Marketing approaches during 2008 covered a range of methods. A/C Cool Credit pooled resources with the City of Boise Recycling department and with United Water on a joint bill-stuffer campaign. Idaho Power specialists visited large businesses, providing program information to the businesses' employees. Idaho Power in-house A/C Cool Credit promotions attracted further program signups.

A cause-related marketing approach involved partnering with both The Idaho Foodbank and Southeast Oregon Regional Food Bank. During a "limited time offer," a $20 donation went to the food bank in the participant's location for enrolling in the A/C Cool Credit program. As of December 2008, this approach yielded 489 new signups and a total of $9,780 to the two food banks.

During 2008, a call center customer service representative (CSR) pilot was conducted. The CSRs received training in signing up new A/C Cool Credit participants at the point of contact when an Idaho Power customer initiates or transfers his/her account by phone. The project was successful. During the first five months after the training was completed, five trained CSRs signed up 140 new participants.

An outreach project included an Idaho Power specialist and a heating, ventilating, and air conditioning (HVAC) journeyman providing A/C Cool Credit switch training for field technicians of HVAC companies. Technicians learned about the direct load-control device installed on participating Idaho Power customers' air conditioning units. Increasing the HVAC technician's knowledge of switch boxes contributes to positive customer relations between the customer and the technician servicing the A/C Cool Credit program participant's air conditioning unit.

Customer Satisfaction

The A/C Cool Credit program conducted a customer satisfaction survey between September and October 2008. Of the 3,958 surveys sent out, 1,671 completed responses were returned, resulting in a 42% response rate. A portion of the participants received the survey by e-mail, while the others received the survey through postal mail. Results showed a high level of satisfaction with the program, with high ratings in program application process, comfort, frequency of cycling, overall satisfaction with the program, and amount of information received. Most respondents indicated they chose to participate in the program "to help reduce electrical usage on hot summer days," to "receive the bill credit," or both. An overwhelming majority of respondents indicated they would recommend the program to friends or family.

2009 Strategies

The A/C Cool Credit program is expanding into the Pocatello area this spring, with marketing starting in February. The program will expand to areas where the paging signal does not reach, as meters are installed in those areas as part of the Advanced Metering Infrastructure (AMI) project. The 2009 A/C Cool Credit target is to add 12,000 new participants. An evaluation of the results of this demand response program will be implemented in Pocatello, Twin Falls, and MHAFB. Data loggers will be installed on a random sample of participating customer's air conditioning units to collect data on run time. Once the information is collected, analysis will commence in autumn 2009 to estimate demand reduction.

Idaho Power plans to distribute A/C Cool Credit program information by using the technicians installing the new AMI meters in the upcoming year. The technicians will leave a door hanger with A/C Cool Credit program information on the customers' doorknob after completing their installation work.

Attic Insulation Pilot

	2008	2007
Participation and Savings		
Participants (homes)	282	n/a
Energy Savings (kWh)	317,814	n/a
Demand Reduction (MW)	.03	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$123,454	n/a
Oregon Energy Efficiency Rider	$0	n/a
Idaho Power Funds	$0	n/a
Total Program Costs—All Sources	$123,454	n/a
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.029	n/a
Total Resource Levelized Cost ($/kWh)	$0.037	n/a
Program Life Benefit/Cost Ratios		
Utility Cost Benefit/Cost Ratio	2.48	
Total Resource Benefit/Cost Ratio	1.94	
Program Characteristics		
Program Jurisdiction	Idaho	
Program Inception	2008	

Description

The Attic Insulation Pilot, conducted in Idaho during 2008, consisted of paying an incentive to residential customers in the Idaho Power service area for installing additional attic insulation. This program specifically targets the reduction of summer peak demand.

2008 Activities

The pilot was conducted in Boise, Twin Falls, and Pocatello. Installations began May 2008 and were completed by the first week of July. The attic insulation program paid a $0.15 per square foot incentive for professionally installed attic insulation. Analysis of the information obtained from the attic insulation pilot indicates that this is an opportunity for Idaho Power to provide a cost-effective program beginning in 2009.

2009 Strategies

The Attic Insulation Pilot will become a program in Idaho and Oregon in June 2009 under the name Home Improvement Program. Plans include creating program information brochures to market the program and incentive application forms for customers. In July, a bill stuffer explaining the new program will be included in all residential customers' bills. Marketing will include a direct mail campaign after the program launch, followed by a print campaign later in 2009.

Energy Efficient Lighting

	2008	2007
Participation and Savings		
Participants (CFL bulbs)	436,234	219,739
Energy Savings (kWh)	14,309,444	7,207,439
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$1,011,850	$519,818
Oregon Energy Efficiency Rider	$6,242	$11,787
Idaho Power Funds	$200	$10,445
Total Program Costs—All Sources	$1,018,292	$557,646
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.011	$0.012
Total Resource Levelized Cost ($/kWh)	$0.009	$0.015
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	4.56	
Total Resource Benefit/Cost Ratio	4.31	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2002	

Description

The Energy Efficient Lighting program, called the ENERGY STAR® Lighting program in 2007, strives for residential energy savings through the replacement of less efficient lighting with more efficient technology. The average existing home has 38 light bulbs. New homes have an average of 77 light bulbs. Changing these bulbs to more efficient bulbs represents a low-cost, easy way for all customers to achieve energy savings.

ENERGY STAR qualified compact fluorescent lights (CFLs) are an efficient alternative to standard incandescent light bulbs and save money and energy. Bulbs come in a variety of wattages, colors, and applications, including bulbs for three-way and dimmable fixtures. ENERGY STAR qualified bulbs use 75% less energy and last up to 10 times longer than incandescent bulbs.

2008 Activities

In 2008, the majority of energy savings were achieved through Idaho Power's participation in two regional Change a Light promotions sponsored by the BPA and one sponsored by Idaho Power. The 2007 BPA Change a Light promotion (spiral bulbs) carried over until February 2008. The BPA promotion focusing on specialty bulbs extended through December 2008. Additionally, Idaho Power initiated its own spiral-bulb promotion during autumn 2008. This spiral promotion ran independent of the BPA promotion, focusing on smaller retailers and covering a greater Idaho Power service area than the BPA program.

Table 5 describes the energy savings and the number of CFL bulbs contributed by each segment of the program.

Table 5. Energy Efficient Lighting Energy Savings

Promotion	Description	Contractor	Timeframe	Bulbs Sold	Estimated kWh Savings
2007 Change a Light Spiral.....	99¢ spiral single pack spiral bulbs	BPA/Fluid	2007 carryover	60,987	2,000,357
2007 Change a Light Specialty ..	Specialty bulbs in "big-box" stores	BPA/PECI	2007 carryover	31,880	1,045,664
2008 Change a Light Spiral.....	99¢ single pack spiral bulbs	BPA/Fluid	Spring 2008	41,660	1,366,448
2008 Change a Light Specialty ..	Specialty bulbs in "big-box" stores	BPA/PECI	2008	228,169	7,483,943
Change a Light Spiral.....	99¢ single pack spiral bulbs	Fluid	Fall 2008	71,935	2,359,470
Direct Install	Bulbs given directly to customers	n/a	2008	1,633	53,562
			Total	**436,234**	**14,309,444**

Marketing during 2008 focused on education and outreach by educating customers about the benefits of CFLs and selecting the appropriate bulb for a specific application. Idaho Power also marketed the program through point-of-purchase materials and signs, in-store events and energy efficiency events, the Idaho Power *Customer Connection* monthly newsletter, and the Idaho Power Web site.

In 2008, Idaho Power conducted 13 special events at national retail stores in Ontario, Nampa, Boise, Twin Falls, Pocatello, and Chubbuck. Special events served as opportunities for Idaho Power staff to talk directly with customers at the point-of-purchase, answer questions, and promote all Idaho Power energy efficiency programs as well as energy efficient lighting. Idaho Power held staff training events on energy efficient lighting and proper disposal of mercury-containing light bulbs.

2009 Strategies

Idaho Power will continue advocating the Energy Efficient Lighting program in 2009 through participation in regional lighting promotions. To ensure geographic coverage and bulb types that are not included in BPA promotions, Idaho Power will also continue its independent promotion. Additionally, Idaho Power will research purchasing habits and market segments of program participants using coupon-based marketing promotions. The information will be used to enhance program marketing and increase program participation.

Energy House Calls

	2008	2007
Participation and Savings		
Participants (homes)	1,099	700
Energy Savings (kWh)	883,038	699,899
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$448,992	$251,743
Oregon Energy Efficiency Rider	$35,388	$3,349
Idaho Power Funds	$0	$450
Total Program Costs—All Sources	$484,379	$336,372
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.045	$0.039
Total Resource Levelized Cost ($/kWh)	$0.045	$0.039
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	2.20	
Total Resource Benefit/Cost Ratio	2.20	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2002	

Description

The Energy House Calls program helps manufactured and mobile home owners with electric heat save on their energy bills by improving the home's efficiency. This energy efficiency program provides free duct sealing and additional efficiency measures to Idaho Power customers living in Idaho or Oregon in a manufactured or mobile home using an electric furnace or heat pump.

Leaking duct systems can lose as much as 70% of the air intended for heating or cooling in a home. Ducts operate under pressure, making a one-square-inch hole in a system similar to a 20-square-inch hole in a wall. Previous studies show typical losses from ducts are about 30%.

Services and products offered through the Energy House Calls program include duct testing and sealing according to Performance Tested Comfort System (PTCS) specifications, installation of five CFL bulbs, provision of two furnace filters along with replacement instructions, water heater temperature test for proper setting, and distribution of energy efficiency educational materials for manufactured home occupants. The value of the service to the customer is dependent on the complexity of the repair. The typical range of the average Idaho Power cost of a service call is from $300 to $350. Idaho Power provides the customer with the contractor contact information. Customers access the service by directly calling one of the recognized, certified contractors specially trained to provide these services in their region.

Program management is under contract with Ecos Consulting, a company with experience managing and supplying duct-sealing service programs. Ecos Consulting coordinates the contractors performing local

weatherization and energy efficiency services. To monitor quality assurance, third-party audits are conducted in 5% of the homes served.

2008 Activities

Idaho Power renegotiated the contract with Ecos Consulting for continuation of administrative management of the Energy House Calls program. Idaho Power continued its direct mail campaign. Recipients were targeted using a database of electrically heated manufactured homes in the Idaho Power service area in Idaho and Oregon.

After reviewing the locations of program activity and market saturation, it was determined that marketing efforts should focus primarily in the Treasure Valley area. In 2008, an updated cost-effectiveness analysis was conducted representing the focused regional marketing efforts, and was determined to be cost-effective through 2009.

During 2008, Energy House Calls serviced 1,099 manufactured homes, resulting in approximately 883,038 kWh savings. The program conducted quality assurance on 5% of the homes serviced in the Energy House Calls program. Idaho Power's third-party contractors inspected 57 homes, with 43 homes passing and 13 homes failing the inspection. Contractors are required to revisit failed homes and correct identified problems. The majority of failed homes occurred during a specific period and was the result of one contractor's activity. Once Ecos Consulting, who manages the three contractors, was aware of the issue, the contractor sent a quality-assurance person out with the technician for a few weeks of observation and released one employee from their duties. The inspection failures were from jobs completed in early 2008, while subsequent quality inspections were positive. All contractors sufficiently addressed and corrected issues that were identified.

Customer Satisfaction

Idaho Power conducted a customer satisfaction survey evaluating past experience with the service. A total of 243 Energy House Calls program participants completed the survey. The majority of these customers indicated both an improved comfort level in their home as a result of participating in the program and a high level of satisfaction with the program. Over 90% of the respondents indicated they would recommend the program to friends or family. Additionally, all 57 Energy House Calls customers who participated in the quality assurance check on 5% of the homes serviced reported having a positive experience with the Energy House Calls program.

2009 Strategies

Plans for the upcoming year include continuing the direct mail campaign to all areas to improve limited participation in some areas. Because of turnover in manufactured homes, some of the customers are not being reached. Idaho Power plans to update its database to enable targeting new customers who were not contacted previously. To determine other possible avenues of recruitment and adjustments to direct mail campaign, Idaho Power is conducting a survey of non-participants, defined as those who have received direct mail letters but have elected to not participate.

ENERGY STAR® Homes Northwest

	2008	2007
Participation and Savings		
Participants (homes)	254	303
Energy Savings (kWh)	468,958	629,634
Demand Reduction (MW)	1	1
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$294,579	$451,775
Oregon Energy Efficiency Rider	$6,388	$12,249
Idaho Power Funds	$1,094	$11,020
Total Program Costs—All Sources	$302,061	$475,044
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.048	$0.056
Total Resource Levelized Cost ($/kWh)	$0.059	$0.067
Program Life Benefit/Cost Ratios		
Utility Benefit/cost Ratio	1.76	
Total Resource Benefit/Cost Ratio	1.43	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

Description

ENERGY STAR Homes Northwest is a regionally coordinated initiative supported by a partnership of Idaho Power, NEEA, and the State of Idaho Office of Energy Resources (OER) to improve energy efficient construction practices for new, single-family homes. Although this program results in summer peak reduction, the program specifically targets the reduction in energy usage accomplished by increasing the efficiency of residential building envelope and air delivery system.

The ENERGY STAR Homes Northwest residential construction program builds homes that are at least 20% more energy efficient than those built to standard Idaho code. The program specifications for ENERGY STAR Homes are verified by independent third-party home performance specialists and are certified by the Idaho OER and the United States Environmental Protection Agency. The homes are more efficient, comfortable, and durable than standard homes constructed according to local building codes.

Homes that earn the ENERGY STAR label include six "must-have" specifications. The specifications found in all ENERGY STAR qualified homes are 1) effective insulation, 2) high-performance windows, 3) tight construction and sealed ductwork, 4) energy efficient lighting, 5) ENERGY STAR qualified appliances, and 6) efficient heating and cooling equipment.

Builders involved in ENERGY STAR Homes Northwest receive up to a $400 incentive per home built to the Northwest Builder Option Package standards in Idaho Power's service area. Builders who enter their homes in a Parade of Homes receive a $1,000 incentive.

The Idaho Power program collaborates with many local entities for program management, such as ENERGY STAR Homes Northwest and builders. A large part of the program's role in 2008 was conducting education and training activities for residential, new construction industry partners.

The 2006 International Energy Conservation Code (IECC), which the State of Idaho adopted as its standard building code, took effect January 1, 2008. This new code meets ENERGY STAR Homes Northwest program standards in several key areas, which decreases the energy savings of each ENERGY STAR Home. As a direct result of the change in Idaho code and the resulting reduction of energy savings, Idaho Power reduced the participating builder incentive to $400 per qualifying home in 2008, down from the $750 incentive previously offered. Incentives for Parade of Homes entries remain unchanged.

2008 Activities

Although new housing starts were down throughout the Idaho Power service area, the ENERGY STAR Homes Northwest program achieved a market share of 6.2% of new housing starts through 2008. This is up from 2007 market share of 5%.

Idaho Power conducted numerous ENERGY STAR promotional activities during 2008. Idaho Power sponsored the energy efficiency awards for the Building Contractor's Association of Southwest Idaho (BCASWI) and the Snake River Valley Building Contractor's Association (SRVBCA) Parade of Homes. Idaho Power presented energy efficiency awards at both the BCASWI Parade of Homes awards banquet and the SRVBCA Parade of Home awards banquet. Idaho Power maintained a presence in the building industry by participating in and supporting the SRVBCA Builder's Expo, the Magic Valley Builder's Association Builders Expo, the Idaho Building Efficiency Conference, the Home Depot Contractor's show, and the Idaho Building Contractors Association Convention.

Media campaigns heightened awareness of the ENERGY STAR Homes program. Using radio and billboard advertising, Idaho Power conducted a cooperative media campaign in conjunction with ENERGY STAR Homes Northwest and the Environmental Protection Agency. Idaho Power also co-sponsored, and participated in, activities such as the Cedar Crossing 100% ENERGY STAR community kick-off event in Caldwell. Cedar Crossing is Caldwell's first 100% ENERGY STAR community.

Training is a major function of Idaho Power's ENERGY STAR Homes program. To that end, numerous realtor trainings were conducted in Caldwell, Nampa, and Boise. A builder training was held in Pocatello.

Other marketing projects involved adding a message about this program to residential customers' electric bill. These bill messages encouraged Idaho Power customers to visit ENERGY STAR qualified homes in their local Parade of Homes events. An ENERGY STAR Homes program bill stuffer sent information to all residential customers in the Idaho Power service area. Additionally, Idaho Power continued to support the activities of the Idaho ENERGY STAR Builder's Partnership (IESBP) 100% Builders group. Idaho Power was instrumental in the formation of this group in 2007. Currently Idaho Power assists the group with marketing activities by funding and offering marketing services.

2009 Strategies

A key promotional strategy is participation in industry conferences and home shows. During 2009, Idaho Power will continue providing realtor trainings; supporting Parade of Homes events, the Building Contractors Association (BCA), and realtor associations; improving marketing material distributions; and supporting the IESBP group and its activities.

Marketing plans include using print advertising to assist existing builders with moving unsold ENERGY STAR qualified homes inventory. The Idaho Power program staff will explore new and innovative ways to educate consumers, realtors, and appraisers about the benefits and features of ENERGY STAR Homes.

Heating & Cooling Efficiency Program

	2008	2007
Participation and Savings		
Participants (homes)	359	4
Energy Savings (kWh)	561,440	1,595
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$466,094	$482,051
Oregon Energy Efficiency Rider	$6,959	$3,289
Idaho Power Funds	$498	$2,871
Total Program Costs—All Sources	$473,551	$488,211
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.073	n/a
Total Resource Levelized Cost ($/kWh)	$0.092	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	0.53	
Total Resource Benefit/Cost Ratio	0.28	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2007	

Description

The residential Heating & Cooling Efficiency (H&CE) Program provides incentives for the purchase and proper installation of qualified high-efficiency heating and cooling equipment and services to Idaho Power residential customers. This program has been available to Idaho customers since September 2007 and to Oregon customers since August 2008.

Objectives of the H&CE program are acquiring kWh savings through the implementation of energy-saving HVAC measures in the existing and new residential sector. Cash incentives are provided to residential customers and HVAC contractors who install eligible central air conditioners (CAC), heat pumps, and evaporative coolers. Incentives are also awarded for qualifying heat pump tune-ups and CAC tune-ups meeting Idaho Power's program specifications. A participating HVAC company must perform all services, except for installation on evaporative coolers. Evaporative coolers are self-installed pieces of equipment. There is no need for a contractor to be involved and no specific installation requirements as there are for CACs and heat pumps.

In keeping with quality installation principles, the H&CE Program requires contractors to become "participating" companies. To do this, contractors in the program must sign an agreement with Idaho Power. The participating companies must ensure their service technicians and installers attend required training on the proper installation of air conditioners and heat pumps. These companies must purchase and use TrueFlow® Meters to measure air flow and adhere to program specifications.

2008 Activities

New in 2008 was the addition of the open-loop water source heat pump measure. Idaho Power expanded the program into Oregon upon approval, in August 2008, of Schedule 72 by the OPUC. In 2008, the H&CE Program processed 359 incentive applications and paid $72,900 in incentives, resulting in a total energy savings of 561,440 kWh. During 2008, Idaho Power conducted 22 contractor training sessions on the proper sizing and installation of heat pumps and air conditioners, simplified duct design, and program refresher classes, reaching 201 attendees.

Marketing tactics began in March, using bill inserts, radio ads, newspaper articles, home and garden shows, and exhibitor booths at various community events.

Customer Satisfaction

Idaho Power conducted a customer satisfaction survey during 2008. The majority of respondents heard about the H&CE Program from their heating and cooling contractor. Almost 75% of respondents indicated their heating and cooling contractor was "very knowledgeable" about the program. Eight out of ten respondents said they "definitely would recommend" the contractor they used to a friend or relative. Almost 80% of the respondents said participation in the program was "very easy." The majority of respondents pursued additional program information from the H&CE Program equipment page on Idaho Power's Web site. Of those who did go to the Web site, most said it was "easy to use" and the information they gained from the Web site was "useful." Most of the respondents said they were "very satisfied" with the program and would recommend it to a friend or family member. When asked what it was they liked best about the program, most responded that it was the incentive or the energy savings that they liked best.

During 2008, an H&CE Program contractor survey was conducted. Eighteen contractors responded to the survey. Responses reflected contractors from all regions of Idaho Power's operations. The majority of the respondents said they heard about the program through a "notification letter from Idaho Power" At the time of the survey, in September, most contractors had submitted somewhere between one and five incentive applications, but there were three contractors who had submitted more than 20 applications. Two contractors indicated they had not submitted any incentive applications, and one of those said it was because he/she was too busy. Most of the contractors indicated they have a good understanding of the technical requirements of the programs and had opportunities for training in the program. The majority of the respondents indicated they had promoted the H&CE Program by encouraging customers to participate. Satisfaction with the program was varied with one-third of the contractor respondents being satisfied, one-third being neutral, and one-third being dissatisfied. Results for willingness to recommend the program were similar to satisfaction ratings. Most of the contractors' dissatisfaction with the program was centered around the paperwork and program design. In response, Idaho Power modified the paperwork to reduce the duplication of information, and also consolidated forms. Several of the contractors requested removing airflow and sizing requirements. Idaho Power considers the quality installation requirements of this program essential to maintaining the program's integrity. In 2009, Idaho Power will continue to require quality installation of qualifying heats pumps and increase the contractor incentives.

2009 Strategies

The first-year cost-effectiveness review identified measures that were not cost-effective. Plans for the upcoming year include removing air conditioner and tune-up incentives, effective second quarter 2009. The program enhanced its criteria for contractors to remain on the participating Idaho Power list.

Contractor training and marketing the program through bill stuffers and community events will continue throughout 2009. Idaho Power is investigating cross-promoting the evaporative coolers with the Home Products Program and determining the feasibility of adding duct sealing as a measure.

Idaho Power joined the Northwest Ductless Heat Pump Project and will implement the Idaho Power pilot in its service area beginning March 2009. The goals of this pilot are to promote the ductless heat pump technology as an energy-saving alternative for customers with electrically heated homes, to determine how much electricity this technology saves in order to validate a deemed-savings number, and to obtain customer satisfaction and behavior patterns regarding the technology. Idaho Power will offer customers incentives for participating in the pilot. Pilot results will be available in 2011.

Home Products Program

	2008	2007
Participation and Savings		
Participants (appliances)	3,034	n/a
Energy Savings (kWh)	541,615	n/a
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$245,219	$8,746
Oregon Energy Efficiency Rider	$5,541	$460
Idaho Power Funds	$100	$69
Total Program Costs—All Sources	$250,860	$9,275
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.044	n/a
Total Resource Levelized Cost ($/kWh)	$0.082	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	1.42	
Total Resource Benefit/Cost Ratio	0.77	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2008	

Description

The Home Products Program, formerly the ENERGY STAR® Appliance Program, provides an incentive payment to Idaho Power residential customers for purchasing ENERGY STAR qualified appliances, lighting, or other products. ENERGY STAR is a government-backed program designating products as energy efficient. Appliances and products with ENERGY STAR must meet higher, stricter efficiency criteria than federal standards. Washers must have a Modified Energy Factor of 1.72 or greater and a Water Factor of 8.0 or lower, the minimum qualifications for an ENERGY STAR qualified clothes washer. To qualify, the washer must have been purchased after April 1, 2008 for customers in Idaho and after May 21, 2008 for customers in Oregon.

The ENERGY STAR Appliance Program rolled out on April 1, 2008 for Idaho Power Idaho customers and on May 21, 2008 for Idaho Power Oregon customers. With the addition of ENERGY STAR qualified refrigerators, ceiling fans with light kits, light kits, and light fixtures, the ENERGY STAR Appliance Program was renamed and launched on August 1, 2008.

Initially, the clothes washer incentive was the only product offered under the original program. Current offerings and related incentives include clothes washers ($50), refrigerators ($30), light fixtures (up to $15 per fixture), ceiling fans with light kits, or ceiling fan light kit attachments (up to $20 per fixture). Only products purchased after August 1, 2008 are eligible. Program participation is a simple process for customers. The customer completes the brief incentive application, submits it with a copy of the sales receipt, and then receives an incentive check in the mail if the purchase qualifies.

2008 Activities

Marketing of the Home Product Program to customers occurs primarily through retail outlets. Idaho Power provides information to store managers and employees through training sessions at store staff meetings and through periodic visits by Idaho Power representatives. Collateral materials, such as program brochures with application tear-off forms, were developed and distributed to nearly 100 retail stores. In addition, program modifications are delivered via letters sent directly to store managers.

Retail salespeople also assisted in promoting the program to their customers. Information gathered from a series of marketing questions on the incentive application form indicated salespeople are a proven, effective avenue for marketing the program. One question pertains to how the customer learned about the program. The most common answer was the salesperson.

Idaho Power promotes the program directly to residential customers via bill stuffers, community promotions, Idaho Power field staff, and other outreach activities. During summer 2008, bill stuffers detailing the program were mailed to all Idaho Power residential customers.

The Home Products Program exceeded the goals for 2008. Idaho Power paid the first Home Products Program incentive in May 2008, and paid 3,034 incentives during 2008, resulting in 541,615 kWh of savings. Incentives were issued for 2,451 clothes washers, 480 refrigerators, 98 light fixtures, three ceiling fans, and two light kits.

2009 Strategies

Based on the current success, the marketing strategy for 2009 will remain similar with only minimal adjustments and updates as needed. The current strategy enhances Idaho Power's ability to meet the 2009 program goals. The Home Products Program will cross-promote with other Idaho Power programs, evaluate success, and develop promotional materials. Idaho Power will continue to evaluate potential products for addition to the program during 2009 and beyond.

Home Weatherization Pilot

	2008	2007
Participation and Savings		
Participants (homes)	16	n/a
Energy Savings (kWh)	71,680	n/a
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$51,670	n/a
Oregon Energy Efficiency Rider	$0	n/a
Idaho Power Funds	$1,138	n/a
Total Program Costs—All Sources	$52,807	n/a
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.055	n/a
Total Resource Levelized Cost ($/kWh)	$0.050	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	1.31	
Total Resource Benefit/Cost Ratio	1.43	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2008	

Description

Idaho Power introduced a new weatherization pilot in the Twin Falls area. This program is modeled after the Weatherization Assistance for Qualified Customers (WAQC) program. The pilot targeted customers who applied, but were deemed financially ineligible, for participation in Low Income Home Energy Assistance Programs (LIHEAP), and who are not likely to participate in other programs. The difference between the existing WAQC program and the pilot are the pilot's higher income eligibility criteria of 151% to 250% of the state poverty level, and federal government dollars are not used in the pilot. In all other aspects, the pilot resembled WAQC.

Idaho Power contracted with Home Energy Management, LLC, with a goal of weatherizing 20 homes in 2008 at no cost for the customer. After the weatherization measures were installed, Idaho Power completed the verification and analysis process, comparing the current Savings Investment Ratio (SIR) with Idaho Power cost-effectiveness model.

2008 Activities

The pilot was launched during the last quarter of 2008 in the Twin Falls area. Home Energy Management, LLC, weatherized 16 electrically heated homes of eligible Idaho Power customers. Energy savings achieved was 71,680 kWh/year with an average home saving 4,480 kWh/year. Total costs were $52,807 with an average job cost of $3,300.

2009 Strategies

Based on the pilot results, Idaho Power plans to expand the pilot into a program offered in the Twin Falls area in 2009. Home Energy Management, LLC, will weatherize 45 homes in Idaho Power's southern region service area under the newly named program, Weatherization Solutions for Eligible Customers Program. Eligible customers will include Idaho Power customers that heat their homes electrically and earn an income between 161% and 250% of the federal poverty level. Customers who are either purchasing or renting their homes may be eligible.

Identification of potential participants is done through the Community Action Partnership Association of Idaho (CAPAI), who serves as administrator for LIHEAP for the Idaho Department of Health and Welfare. Customers deemed financially ineligible for federal LIHEAP assistance are sent denial letters by CAPAI. For the 2009 program, eligible candidates with electrically heated homes are selected from the list of denial letter recipients within the Twin Falls service area.

Idaho Power plans to save an average of 6,000 kWh per weatherized home per year, for a total energy savings of 270,000 kWh annually. The Idaho Power program and field staff plans to complete an evaluation of measures installed in weatherized homes in 2009 and the participants' knowledge gained regarding energy efficiency.

Oregon Residential Weatherization

	2008	2007
Participation and Savings		
Participants (homes)	3	1
Energy Savings (kWh)	22,196	9,971
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$0	$0
Oregon Energy Efficiency Rider	$1,908	$0
Idaho Power Funds	$5,509	$3,781
Total Program Costs—All Sources	$7,417	$3,781
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.025	$0.028
Total Resource Levelized Cost ($/kWh)	$0.096	$0.042
Program Life Benefit/Costs Ratios		
Utility Benefit/Cost Ratio	n/a	
Total Resource Benefit/Cost Ratio	n/a	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	1980	

Description

Idaho Power offers free energy audits for electrically heated homes of customers within the Oregon service area. This is a statutory program offered under Oregon Rate Schedule No. 78. Upon a customer's request, an Idaho Power representative visits the home to analyze it for energy efficiency. An estimate of costs and savings for specific measures is given to the customer. Idaho Power offers financial assistance for a portion of the costs for weatherization measures, either as a cash incentive or with a 6.5% interest loan.

2008 Activities

During the month of July, Idaho Power sent every Oregon residential customer an informational brochure about energy audits and home weatherization financing. A total of 37 Oregon customers responded. Each of the 37 customers returned a card from the brochure indicating they were interested in a home energy audit, weatherization loan, or incentive payment. Twenty-three audits and responses to customer inquiries to the program were completed.

Idaho Power issued three rebates totaling $1,908.22 for 22,196 kWh savings. The rebates and related savings were for ceiling insulation, window replacement, and a wall insulation project. There were no loans made through this program during 2008. Five customer responses were directed to Cascade Natural Gas.

2009 Strategies

Plans for the upcoming year include notifying customers in their May bill about the program.
Idaho Power will complete requested audits and fulfill all cost-effective rebate and loan applications.

Rebate Advantage

	2008	2007
Participation and Savings		
Participants (homes)	107	123
Energy Savings (kWh)	463,401	554,018
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$79,547	$58,854
Oregon Energy Efficiency Rider	$11,341	$4,609
Idaho Power Funds	$0	$733
Total Program Costs—All Sources	$90,888	$89,269
Program Levelized Costs Ratios		
Utility Levelized Cost ($/kWh)	$0.012	$0.010
Total Resource Levelized Cost ($/kWh)	$0.025	$0.021
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	7.19	
Total Resource Benefit/Cost Ratio	2.80	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

Description

Idaho Power customers who purchase a new all-electric, ENERGY STAR® qualified manufactured home and site it in Idaho Power's service area are eligible for a $500 rebate through the Rebate Advantage program. Salespersons receive a $100 incentive for each qualified home that they sell.

In addition to offering financial incentives, the Rebate Advantage program promotes and educates buyers and retailers of manufactured homes about the benefits of owning energy efficient models. Quality control and energy efficiency specifications for qualified homes are established by the Northwest Energy Efficient Manufactured Housing (NEEM) program. NEEM is a consortium of manufacturers and state energy offices in the Northwest. In addition to specifications and quality, NEEM tracks the production and on-site performance of ENERGY STAR qualified manufactured homes.

The Rebate Advantage program helps Idaho Power customers with the initial costs associated with purchasing a new energy efficient ENERGY STAR qualified manufactured home. This enables the homebuyer to enjoy the long-term benefit of lower electric bills and greater comfort provided by these homes. In addition, Idaho Power encourages sales consultants to discuss energy efficiency with their customers during the sales process.

2008 Activities

During 2008, Idaho Power paid 107 incentives on new manufactured homes. The customer target for 2008 on the number of homes purchased was 150 homes. The slow economy had a dramatic effect on all types of housing and contributed to the lower number of incentives. New Rebate Advantage marketing materials were developed during the year, including a program brochure and new display posters for placement at dealership sales offices and in ENERGY STAR qualified model homes. Idaho Power customer representatives (CR) visited each of the approximately 19 dealerships at least three times during 2008, answering questions and distributing materials.

Customer Satisfaction

Idaho Power conducted two different surveys in 2008 for the Rebate Advantage program. The first survey covered manufactured home dealers who participated in the Rebate Advantage program. Seventeen dealer program participants completed the survey. Results indicated strong awareness and understanding of the Rebate Advantage program. One hundred percent of the respondents indicated they "always use" or "occasionally use" the program materials provided by Idaho Power. Almost 94% of the respondents "strongly agreed" and "somewhat agreed" the materials were useful in promoting ENERGY STAR qualified manufactured homes.

The second Rebate Advantage program survey conducted was with customers who purchased an ENERGY STAR qualified manufactured home and received an incentive from Idaho Power. Ninety-four program participants responded to this survey, with almost 87% using their new home as a primary residence. Close to 68% of the respondents reported they were "very knowledgeable" or "somewhat knowledgeable" about ENERGY STAR qualified homes before entering the dealership, and almost 95% of the respondents were "very knowledgeable" or "somewhat knowledgeable" about ENERGY STAR qualified homes after leaving the dealership.

2009 Strategies

Idaho Power plans to continue the Rebate Advantage program in 2009, explore new marketing methods, and promote the program. CRs will enhance relationships with dealerships by visiting each dealership quarterly, offering program support, answering questions, and distributing materials. The involvement of local Idaho Power personnel interacting with the local dealers reemphasizes the importance of promoting the benefits of ENERGY STAR qualified homes and products.

Weatherization Assistance for Qualified Customers

	2008	2007
Participation and Savings		
Participants (homes/non-profits)	452	408
Energy Savings (KWh)	4,138,142	3,338,126
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$0	$0
Oregon Energy Efficiency Rider	$0	$0
Idaho Power Funds	$1,419,475	$1,323,624
Total Program Costs—All Sources	$1,419,475	$1,323,624
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.026	$0.030
Total Resource Levelized Cost ($/kWh)	$0.033	$0.040
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	2.17	
Total Resource Benefit/Cost Ratio	1.50	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	1989	

Description

The WAQC program provides funding for the installation of cost-effective weatherization measures in qualified owner-occupied and rental homes that are electrically heated. Enhancements enable qualified families to maintain a comfortable home environment, while saving energy and money otherwise spent on heating, cooling, and lighting. Participants receive energy efficiency education to help save energy in their home.

WAQC is modeled after the United States Department of Energy (DOE) Weatherization Program. The DOE program is managed through Health and Human Services offices in Idaho and by the Oregon Housing and Community Services in Oregon. Idaho Power, in conjunction with Community Action Partnership (CAP) agencies in the Idaho Power service area, serves as the administrator of WAQC. Federal funds are allocated to the Idaho Department of Health and Welfare and Oregon Housing and Community Services, then to CAP agencies based upon United States Census data of qualifying household income within each CAP agency's geographic area. The CAP agencies oversee local weatherization crews and contractors providing implementations that improve energy efficiency of the homes. WAQC allows these state agencies to leverage their federal weatherization dollars and serve more residents by attaining nonfederal supplemental funding and other resources to supplement federal LIHEAP and weatherization funds.

2008 Activities

During 2008, Idaho CAP agencies weatherized 434 electrically heated homes in Idaho and 13 in Oregon, totaling 452 weatherized homes. Annual energy savings were 4,064 MWh for Idaho and

74 MWh for Oregon. WAQC funded the weatherization of five buildings housing nonprofit organizations that serve special needs populations in their Idaho communities. The annual energy savings from the nonprofit weatherization was 130 MWh.

Customer Satisfaction

Surveys are sent to program participants after completion of the weatherization process in order to measure satisfaction, education efforts, and behavior changes. Idaho Power mailed a WAQC participant survey during June and December 2008 to customers who received WAQC services in the previous six months. Twenty-nine percent, or 104 of 360, of all customers surveyed responded to the survey about WAQC. Of those customers who responded, nearly 87% said they learned "some" or "a lot" about saving electricity in their home. Additionally, 101 of those same customers, or over 97%, said that they had tried "some" or "a lot" of ways to save energy in their homes.

Additionally, Idaho Power program specialists participated in the Idaho state peer review process, which involved peer agency weatherization crews within the state reviewing homes weatherized by each of the agencies. Results show all CAP agency weatherization departments are weatherizing in accordance to federal guidelines.

2009 Strategies

Idaho Power is involved with the Policy Advisory Council, which serves as an oversight committee for weatherization activities in Idaho. Through this forum, Idaho Power participates in the weatherization policy for the State of Idaho.

The customer satisfaction weatherization survey used during 2008 will be used again in 2009. Additionally, in response to a request from regional CAP agencies, Idaho Power employees plan to participate in National Weatherization Day on October 30.

COMMERCIAL/INDUSTRIAL SECTOR OVERVIEW

Description

The commercial and industrial sector consists of over 64,000 customers. During 2008, new commercial customers increased by 1,360, for an increase of about 2% over 2007. Individual customer energy usage within this segment varies from a few kWh each month to several hundred thousand kWh each month. The commercial segment of this sector represents approximately 27% of total electricity usage, while the industrial segment of this sector represents about 30% of Idaho Power's total electricity usage. Industrial customers and special contract customers in this sector are Idaho Power's largest individual energy consumers. This group consists of approximately 122 customers.

Programs

Table 6. 2008 Commercial/Industrial Program Summary

			Total Costs		Savings	
	Participants		Utility	Resource	Annual Energy	Summer Peak Demand
Program	*(Number)*	*(Units)*	*(Dollars)*	*(Dollars)*	*(kWh)*	*MW*
Energy Efficiency						
Building Efficiency	60	projects	$1,055,009	$1,671,375	6,598,123	1
Easy Upgrades	685	projects	$2,992,261	$10,096,627	25,928,391	4
Holiday Lighting Program	14	businesses	$28,782	$73,108	259,092	
Oregon Commercial Audit	0	audits	$58	$58		
Custom Efficiency	100	projects	$4,045,671	$16,312,379	41,058,639	5
Total			**$8,121,779**	**$28,153,548**	**73,844,245**	**10**

Note: See Appendix 3 for notes on methodology and column definitions.

Three major programs targeting different energy efficiency market segments are offered to commercial/industrial customers in Idaho Power's Idaho and Oregon service areas. Easy Upgrades offers a menu of typical commercial retrofit measures with prescriptive incentive amounts for lighting, HVAC, motors, building shell, plug loads, and grocery refrigeration. The Building Efficiency program for new construction projects achieves energy savings that are cost-effective at the time of construction, enabling Idaho Power customers to apply energy efficient design features and technologies that would otherwise be lost opportunities for savings to their projects. This program encourages incorporation of qualified energy-saving improvements for lighting, cooling, building shell, and energy control options. Participants in the Building Efficiency and Easy Upgrades programs can receive incentives for any projects completed up to $100,000 per site per year. The Custom Efficiency program offers financial incentives for large commercial and industrial energy users undertaking custom projects to improve the efficiency of their electrical systems or processes. Idaho Power continues to offer the Oregon Commercial Audits program to medium and small commercial customers.

In 2009, Idaho Power plans to launch a commercial demand response program. Idaho Power has contracted with a third-party aggregator to reduce peak demand at critical times. The aggregator contracts directly with Idaho Power commercial and industrial customers to achieve the demand reduction.

In 2008, Idaho Power contracted with the Integrated Design Lab (IDL) in Boise to accomplish specific tasks to be completed in 2009. IDL will create an Energy Use Index database from Idaho Power customers and analyze the quality of commissioning services in the Treasure Valley. IDL will provide educational sessions for the local design community and organize a building simulation users group to help promote and enhance the local simulation skills. Other IDL tasks are to conduct a post-occupancy survey to study customer satisfaction with technology incentives through the commercial energy efficiency programs and to evaluate and report on the current market conditions for system sizing of package rooftop HVAC units. Lastly, IDL will identify and summarize key energy efficiency resources, events, news items, and technologies useful to Idaho Power for evaluating current incentives and future incentive opportunities for the commercial and industrial sector customers.

Building Efficiency

	2008	2007
Participation and Savings		
Participants (projects)	60	22
Energy Savings (kWh)	6,598,123	2,817,248
Demand Reduction (MW)	1	<1
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$1,006,025	$661,485
Oregon Energy Efficiency Rider	$47,550	$5,766
Idaho Power Funds	$1,434	$1,781
Total Program Costs—All Sources	$1,055,009	$669,032
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.017	$0.026
Total Resource Levelized Cost ($/kWh)	$0.028	$0.032
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	2.14	
Total Resource Benefit/Cost Ratio	1.55	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2004	

Description

The Building Efficiency program enables customers in Idaho Power's service area in Idaho and Oregon to apply energy efficient design features and technologies that would otherwise be lost opportunities for savings to their projects. The Building Efficiency program offers a menu of measures and incentives for lighting, cooling, building shell, and control-efficiency options. Program incentives also include funding for custom projects, as well as additional incentives for commissioning that ensures the systems perform as designed.

The Building Efficiency program is offered to commercial and industrial customers involved in the construction of new buildings or construction projects with significant additions, remodels, or expansions. The program offers incentives up to $100,000. Commercial and industrial customers taking service under, or who will take service under, Schedule 7 (Small General Service), Schedule 9 (Large General Service), Schedule 19 (Large Power Service), or special contract customers are eligible to participate.

Program marketing is targeted at architects, engineers, and other local design professionals. Monthly e-mail program updates are sent to building developers, design professionals, contractors, building owners, Idaho Power field personnel, and other interested parties.

Through the Building Efficiency program, Idaho Power is a primary sponsor of the Boise Integrated Design Lab (IDL), which provides technical assistance and training seminars to local architects and

designers. Much of this activity is coordinated and supported through NEEA's BetterBricks® program. The Building Efficiency program sponsors the annual BetterBricks awards held in October in Boise.

2008 Activities

In 2008, Idaho Power made minor modifications to accommodate Idaho's adoption of the 2006 IECC, effective January 1, 2008. Eligibility requirements for three of the 14 measures changed in 2008. The Building Efficiency program completed 60 new construction, major renovations, and major additions projects in 2008, resulting in 6,598,123 kWh in energy savings. Idaho Power paid $846,931 in incentives for completed projects in 2008.

The IDL began a measurement and verification study on four of the 14 measures offered under the Building Efficiency program. Through the contract with IDL, additional measurement and verification activities for the program are expected to continue through 2009. The results of the first four measures evaluated will be available in 2009.

2009 Strategies

Two incentive measures used through 2008 have been altered for 2009. Idaho Power made minor modifications to the menu of 14 measures, effective January 1, 2009. One under-used measure, premium windows, was replaced with a more popular option, exterior window shading. On another measure, demand-control ventilation, the incentive level was adjusted down. The incentive payment is now based on the outside airflow, not the unit-rated airflow, resulting in a lesser incentive amount.

Measurement and verification of selected measures offered through the Building Efficiency program will continue through the IDL. IDL will install monitoring equipment on selected Building Efficiency participant facilities and report the results in 2009. Idaho Power has designed a survey to measure participant satisfaction in the Building Efficiency program. The program plans to implement this survey in 2009.

Custom Efficiency

	2008	2007
Participation and Savings		
Participants (projects)	101	49
Energy Savings (kWh)	41,058,639	29,789,304
Demand Reduction (MW)	5	4
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$3,948,617	$3,032,047
Oregon Energy Efficiency Rider	$86,858	$110,634
Idaho Power Funds	$10,196	$19,185
Total Program Costs—All Sources	$4,045,671	$3,161,866
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.011	$0.012
Total Resource Levelized Cost ($/kWh)	$0.043	$0.026
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	4.83	
Total Resource Benefit/Cost Ratio	1.55	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

Description

The Custom Efficiency program targets energy savings through the implementation of customized energy efficiency projects at customers' sites. The program is an opportunity for large- and mid-sized commercial and industrial customers in Idaho and Oregon to lower their electrical bills and receive a financial incentive by completing energy efficient projects. Incentives enable companies to do projects that might not be completed otherwise. Program offerings include training and education on energy efficiency, energy auditing services for project identification and evaluation, and financial incentives for project implementation.

Interested customers submit applications to Idaho Power for potential projects that have been identified by a third-party consultant, Idaho Power staff, or by the customer as applicable to their facility. The applications must provide sufficient information to support the energy-savings calculations.

Project implementation begins after Idaho Power reviews and approves an application, followed by the finalization of the terms and conditions of the applicant's and Idaho Power's obligations. When possible, Idaho Power conducts on-site power monitoring and data collection, before and after project implementation. The measurement and verification process ensures achievement of projected energy savings. Verifying applicants' information confirms that demand reduction and energy savings are obtained and within program guidelines.

If changes in scope take place in a project, a recalculation of energy savings and incentive amounts occurs, based on the actual installed equipment. Large, complex projects may take as long as two years to complete.

2008 Activities

In 2008, the minimum project size requirement increased from an annual 20,000 kWh to 100,000 kWh. This change is expected to result in customers with smaller projects participating in other Idaho Power energy efficiency programs, allowing greater Idaho Power resources to be focused on larger projects. For smaller projects, or those with less complex retrofits, the Easy Upgrades or Building Efficiency programs may be applicable. If a smaller project cannot be accommodated through other Idaho Power energy efficiency programs, the project may be completed under the Custom Efficiency program, subject to cost-effectiveness analysis. Incentive levels for the Custom Efficiency program remain at 70% of the project cost, or $0.12/kWh, whichever is less.

Key components in facilitating customer implementation of energy efficiency projects are energy auditing, customer training, and education services. The link between energy audits and the completion of projects is historically significant; thus, Idaho Power continued expanding the number of contractors available for customer scoping audits from four companies in 2007 to five companies in 2008. Selection of engineering firms was based on the firm's expertise in all major equipment areas and their ability to provide resources for customers throughout Idaho Power's service area.

The Custom Efficiency program achieved a high service area penetration rate. Through 2008, approximately 50% of the large power service customers had submitted an application for a project. Idaho Power reviewed and approved 135 applications for incentive projects in 2008. A total of 101 projects were completed in 2008 for 59 companies, including four Oregon projects.

Program energy savings increased in 2008 by 37% over the prior year, from 29,789 MWh to 41,059 MWh. Additionally, completed projects increased by 106% and approved incentive applications increased by 55%.

Table 7. Custom Efficiency Annual Energy Savings by Measure

Project Breakdowns	# of projects	kWh saved
Lighting	57	15,300,158
Fan	12	11,399,810
Compressed Air	11	6,612,292
Pump	4	717,068
Refrigeration	6	3,554,444
Other	11	3,474,867
Total	**101**	**41,058,639**

2009 Strategies

Eleven more Oregon projects are scheduled for completion in 2009. In 2009, Idaho Power is expanding the Custom Efficiency program through a number of activities. These activities will include direct marketing of the Custom Efficiency program by Idaho Power field staff to inform the customers of

the Idaho Power energy efficiency programs available and ways the customer can reduce energy costs. Also, Idaho Power will continue to provide site visits and energy audits for project identification, technical training for customers, detailed energy audits for larger, complex projects, and delivery of Industrial Efficiency Alliance (IEA)-sponsored continuous energy improvement practices to customers.

Easy Upgrades

	2008	2007
Participation and Savings		
Participants (projects)	685	104
Energy Savings (kWh)	25,928,391	5,183,640
Demand Reduction (MW)	5	1
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$2,922,340	$680,376
Oregon Energy Efficiency Rider	$52,566	$28,014
Idaho Power Funds	$17,364	$3,105
Total Program Costs—All Sources	$2,992,261	$711,494
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.013	$0.015
Total Resource Levelized Cost ($/kWh)	$0.043	$0.040
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	3.88	
Total Resource Benefit/Cost Ratio	1.21	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2006	

Description

Available in the Idaho and Oregon Idaho Power service areas, the objective of the Easy Upgrades program is to encourage commercial and industrial customers to implement energy efficiency retrofits by offering incentives up to $100,000 per site. Eligible measures cover a variety of energy-saving opportunities in lighting, HVAC, motors, building shell, plug loads, and grocery refrigeration.

Idaho Power commercial or industrial customers on Schedule 7 (Small General Service), Schedule 9 (Large General Service), Schedule 19 (Large Power Service), and special contracts are eligible. Potential participants first assess their energy-saving opportunities by talking with their equipment supplier, contractor, or Idaho Power service representative. For projects with expected incentive payments of more than $1,000, applicants must submit a pre-app prior to initiating the project. In that case, the customer completes the preliminary application (pre-app) form and submits it with relevant worksheet(s), describing the location and planned scope of their project. Upon Idaho Power's review and acceptance, the pre-app allows a customer to collect an incentive for up to 90 days for project completion. For smaller projects with expected incentive payments of less than $1,000, customers may elect to skip the pre-app and just submit their final application for payment. These projects must have been completed no more than six months prior to submitting their application for payment.

2008 Activities

In July, a special lighting incentive promotion was offered under Easy Upgrades. This promotion, limited to Idaho customers, offered higher incentives for many lighting measures. A review of prior

lighting projects' actual operating hours justified the higher promotional incentive levels for the lighting measures. An increased number of lighting project applications occurred after the promotion. In Oregon, an expanded state tax credit pass-through was offered in July for lighting projects. No apparent additional activity was generated from the offer.

The special offer for VendingMiser™ installations, initiated in November 2007, concluded in October 2008, with more than 3,600 units installed. An assessment of the VendingMiser installations was conducted to determine if the units remained in place. After revisiting a sampling of the installations, and correcting problems in some cases, the results showed that over 90% of the VendingMisers were still in place and functioning within the year after installation.

Additionally, the Lighting Savings/Incentive Calculator became available on the Idaho Power Web site in April 2008. The calculator helps customers determine the costs and benefits of their potential lighting projects. Due to the lighting promotion and the online savings/incentive calculator, there was an increase in applications received and projects completed.

Marketing activities included publishing "Success Stories" on the Idaho Power Web site, providing workshops, and sponsoring events. Trade ally workshops continued through the spring and autumn. Idaho Power sponsored events, including the Commercial Real Estate Symposium, an American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) technical conference, the second annual Building Owners and Managers Association (BOMA) Energy Efficiency Workshop, and the annual Idaho Energy and Green Building Conference. Additionally, Idaho Power presented payments at incentive check ceremonies when requested by customers.

Idaho Power continued to sponsor the Lighting Design Lab (LDL) in Seattle through the Easy Upgrades program. The LDL provides technical assistance and periodic local training seminars encouraging energy saving lighting. Additionally, Idaho Power is a sponsor of NEEA's BetterBricks® program, disseminating general energy efficiency information to commercial customers.

Customer Satisfaction

Easy Upgrades conducts a regular follow-up regarding customer satisfaction. As of December 2008, 81% of the program participants surveyed "strongly agree" they received excellent value through Easy Upgrades, while 11% of the respondents "somewhat agree." Additionally, 86% of the survey respondents "strongly agree" that they received excellent service while 87% "strongly agree" their experience when dealing with Idaho Power employees was positive.

2009 Strategies

The fall series workshops focused on stakeholder input regarding program change implementation for 2009. Based on input from stakeholders, plans for the upcoming year include significant program changes. New measures eligible for incentives are being added, while others are being dropped. Idaho Power customers will have 143 eligible measures in 2009, in contrast to the 129 offered in 2008.

Certain incentive levels and a few application requirements are scheduled to change in 2009. Additionally, an electronic application form will go online during the upcoming year. To encourage customers to use the electronic application, an additional incentive is being considered for each

electronic application submitted within a limited period. Details on program changes for 2009 and additional "Success Stories" will be available on the Idaho Power Web site in the spring of 2009.

Generally, major program changes occur approximately every two years. A program evaluation is planned for 2009. Results will be available in early 2010, allowing incorporation of the results of this evaluation into the program planning for 2011.

Holiday Lighting Program

	2008	2007
Participation and Savings		
Participants (projects)	14	n/a
Energy Savings (kWh)	259,092	n/a
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$28,782	n/a
Oregon Energy Efficiency Rider	$0	n/a
Idaho Power Funds	$0	n/a
Total Program Costs—All Sources	$28,782	n/a
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.014	n/a
Total Resource Levelized Cost ($/kWh)	$0.035	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	2.85	
Total Resource Benefit/Cost Ratio	1.12	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2008	

Description

The overall goal of the Holiday Lighting Program is to encourage customers to purchase more efficient light emitting diode (LED) holiday lights. Although the incentive is available only to commercial customers, the program is useful as a means of introducing all Idaho Power customers to the advantages of LED lighting. In doing this, Idaho Power is rapidly helping make LED lighting the preferred choice when it comes to replacing existing holiday lights. In time, the exposure to commercial LED lighting should filter into the residential market. Along with spreading the message of LED lighting's energy efficiency, Idaho Power also informs customers about the safety benefits of using LED lights.

2008 Activities

For the second year, Idaho Power offered an incentive for commercial customers to replace holiday lighting with higher-efficiency LED lighting. There was over a 700% increase in participation compared to 2007, resulting in greatly increased savings. With its revitalization of the downtown and train depot areas, the largest participant in 2008's program was the City of Caldwell. The city's holiday lighting served as an excellent exposure to LED holiday lighting for a large number of viewers. In Boise, the Idaho Botanical Gardens enlarged their Winter Garden Aglow holiday display, replacing nearly 53,000 incandescent lights with LED lights. Posted at the entrance to the Botanical Garden were signs promoting energy and safety benefits of LED lights. It is estimated that over 29,000 visitors attended the event.

2009 Strategies

Many of the same marketing approaches will be used in 2009 to increase customer participation. These promotional methods include providing materials in advance to chambers of commerce, business and professional organizations, and participating trade allies. Idaho Power plans to coordinate with municipalities and the Idaho Botanical Garden to support their LED-display efforts. A Holiday Lighting bill stuffer will be sent in autumn 2009 to promote the program.

Oregon Commercial Audits

	2008	2007
Participation and Savings		
Participants (audits)	0	8
Energy Savings (kWh)	n/a	n/a
Demand Reduction (MW)	n/a	n/a
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$0	$0
Oregon Energy Efficiency Rider	$0	$1,800
Idaho Power Funds	$58	$181
Total Program Costs—All Sources	$58	$1,981
Program Levelized Costs Ratios		
Utility Levelized Cost ($/kWh)	n/a	n/a
Total Resource Levelized Cost ($/kWh)	n/a	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	n/a	
Total Resource Benefit/Cost Ratio	n/a	
Program Characteristics		
Program Jurisdiction	Oregon	
Program Inception	1983	

Description

The Oregon Commercial Audits program identifies opportunities for commercial building owners to achieve energy savings. This is a statutory program offered under Oregon Schedule No. 82. Through this program, free energy audits offer evaluations and educational services to customers. Annual mailings to each customer in the commercial sector communicate program benefits and offerings.

2008 Activities

The third-party energy auditing contract was renewed in 2008, with EnerTech Services providing services through 2011. Idaho Power sent out its annual mailing to all Oregon commercial customers in December 2008. Customers were notified of the availability of no-cost energy audits and the Idaho Power publication *Saving Energy Dollars*. Three customers requested this publication in 2008. There were no energy audits conducted in 2008. However, ten customers requested an energy audit, which will be completed in 2009.

2009 Strategies

In 2009, as a method for introducing participants to additional energy efficiency resources and practices, the audit process will be maximized by providing Idaho Power incentive information targeting specific areas for improvement found in the audits. Idaho Power will help customers turn their maintenance requirements into energy saving opportunities by providing energy efficiency information to the customers.

This page left blank intentionally.

IRRIGATION SECTOR OVERVIEW

Description

The irrigation sector is comprised of agricultural customers operating a water-pumping or water-delivery system to irrigate agricultural crops or pasturage. The end-use equipment primarily includes irrigation pumps, pivots, fertilizer pumps, and drainage pumps. This customer group does not include water pumping for non-agricultural purposes, such as irrigation of lawns, parks, cemeteries, golf courses, or domestic water supply.

The maximum number of active customers in 2008 was 17,428. In 2008, irrigation customers accounted for 1,921,608 MWh of energy usage and 772 MW of peak demand. This sector represented about 13% of Idaho Power's total electricity usage and about 23% of peak demand.

Programs

Table 8. 2008 Irrigation Program Summary

			Total Costs		Savings	
	Participants		Utility	Resource	Annual Energy	Summer Peak Demand
Program	*(Number)*	*(Units)*	*(Dollars)*	*(Dollars)*	*(kWh)*	*MW*
Demand Response						
Irrigation Peak Rewards	897	service points	$1,431,840	$189,492	n/a	35
Total			**$1,431,840**	**$189,492**	**n/a**	**35**
Energy Efficiency						
Irrigation Efficiency Rewards	961	projects	$2,103,702	$5,850,778	11,746,395	3
Total			**$2,103,702**	**$5,850,778**	**11,746,395**	**38**

Note: See Appendix 3 for notes on methodology and column definitions.

Idaho Power currently offers two programs to the irrigation sector, 1) Irrigation Peak Rewards, a demand response program designed to decrease peak demand, and 2) the Irrigation Efficiency Rewards, an energy efficiency program designed to encourage replacement or improvement of inefficient systems and components. Energy usage for this sector has not grown significantly in many years; however, there is substantial yearly variation in demand due primarily to the impact of weather on irrigation needs. There are about 200 new service locations added each year. The new locations are typically smaller systems that are only pressurizing water. New for the Irrigation Peak Rewards program in 2009 is a dispatchable demand response option approved by the IPUC on January 14, 2009.

Irrigation Peak Rewards

	2008	2007
Participation and Savings		
Participants (service points)	897	947
Energy Savings (kWh)	n/a	n/a
Demand Reduction (MW)	35	37
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$1,373,855	$1,520,106
Oregon Energy Efficiency Rider	$17,570	$54,747
Idaho Power Funds	$40,415	$41,028
Total Program Costs—All Sources	$1,431,840	$1,615,881
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	n/a	n/a
Total Resource Levelized Cost ($/kWh)	n/a	n/a
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	1.15	
Total Resource Benefit/Cost Ratio	1.15	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

Description

Available to Idaho Power's Idaho and Oregon customers, the 2008 Irrigation Peak Rewards program was a voluntary program targeted toward agricultural irrigation customers with pumps of 75 horsepower (Hp) or greater. The program objective is reduction of peak electrical load during summer, weekday afternoons. In exchange for a financial incentive, preprogrammed electronic time activated switches turn off the pumps of participating irrigation customers during intervals predetermined by Idaho Power.

Participants select one of three different options for the months of June, July, and August. A monthly demand credit is associated with each of the one-, two-, or three-day options and is paid based on the participating customer's monthly billing demand. Electronic timers are programmed to turn irrigation pumps off during preprogrammed times associated with the selected option. The following three options and associated demand credit incentives were available to customers from 4:00 to 8:00 p.m. on weekdays: 1) one day per week, $2.01 per kW demand, 2) two days per week, $3.36 per kW demand, or 3) three days per week, $4.36 per kW demand. Incentive amounts are credited to the monthly billing demand at each customer's metered service point. Customers with pumps of 75–99 Hp pay a one-time $250 installation fee to help offset the cost of the switches and maintain the program's cost effectiveness.

2008 Activities

Idaho Power provided five workshops promoting the Irrigation Peak Rewards program across the service area. Additionally, a list of each customer's pumps, information for estimating potential incentives on each pump, and a program application was mailed to every eligible irrigation customer.

Other marketing efforts included providing an Idaho Power exhibitor booth at regional agricultural trade shows, such as the Eastern and Western Idaho Agriculture Expos, the United Dairymen of Idaho Expo, the Agri-Action Ag show, the Idaho Farm Bureau convention, and the Idaho Irrigation Equipment Association show and convention. In 2008, several meetings occurred with the Idaho Irrigation Pumpers Association, IPUC staff, and customers regarding proposed changes to the program for 2009, which include a dispatchable demand response option. In December 2008, the Irrigation Peak Rewards Program Report was submitted to the IPUC. The report describes program results, costs, and savings for 2008.

2009 Strategies

A dispatchable demand response option was approved by the IPUC on January 14, 2009, and the OPUC on February 25, 2009. The proposal included modifications to the Irrigation Peak Rewards program for 2009. A shorter program operating time throughout the summer, from June 15 to August 15, was proposed. Idaho Power plans to make the program available to all agricultural customers receiving service under Irrigation Rate Schedule 24 in 2009, potentially leading to greater energy demand and increased customer participation.

The program marketing strategy includes sponsoring 7 to 10 program update workshops across Idaho Power's service area, covering new program offerings and demonstrating the new technology operating the dispatchable demand response option. Simultaneously, customer mailings to all eligible customers will provide a detailed explanation of the program offerings and increase awareness of the significant changes to the program. Additionally, one-on-one training with Idaho Power agriculture representatives will familiarize customers with the new technology and program details. Results of the program will be reported in the 2009 Irrigation Peak Rewards Report.

Irrigation Efficiency Rewards

	2008	2007
Participation and Savings		
Participants (projects)	961	819
Energy Savings (kWh)	11,746,395	12,304,073
Demand Reduction (MW)	3	3
Program Costs by Funding Source		
Idaho Energy Efficiency Rider	$1,878,960	$1,881,116
Oregon Energy Efficiency Rider	$193,276	$93,924
Idaho Power Funds	$31,466	$26,922
Total Program Costs—All Sources	$2,103,702	$2,001,961
Program Levelized Costs		
Utility Levelized Cost ($/kWh)	$0.026	$0.024
Total Resource Levelized Cost ($/kWh)	$0.073	$0.103
Program Life Benefit/Cost Ratios		
Utility Benefit/Cost Ratio	5.49	
Total Resource Benefit/Cost Ratio	1.64	
Program Characteristics		
Program Jurisdiction	Idaho/Oregon	
Program Inception	2003	

Description

The Irrigation Efficiency Rewards program encourages energy efficient equipment and design in irrigation systems. Irrigators in Idaho Power's Idaho and Oregon service area can receive financial incentives and reduce their electric bills. Idaho Power helps qualified irrigators pay for energy efficiency features in their irrigation system and helps them use electricity efficiently. Incentives for the Irrigation Efficiency Rewards program helps the customer recover the costs of installation of a new, more efficient irrigation system and energy efficient improvements to an existing irrigation system.

Two separate reward options help meet the needs for major or minor changes on new or existing systems. The Custom Incentive Option addresses extensive retrofits of existing systems or new irrigation systems, providing component upgrades and large-scale improvements. For new systems, the incentive is $0.25 per kWh saved above standard installation methods, not to exceed 10% of total project cost. For existing system upgrades, the incentive is $0.25 per kWh saved or $450 per kW, whichever is greater, not to exceed 75% of the total project cost. Idaho Power reviews, analyzes, and makes recommendations on each application. On each completed project, before final payment, all project information is re-evaluated. Prior usage history, actual invoices, and, in many situations, post-usage demand data, are used to calculate savings and incentives.

The Menu Incentive Option covers a significant portion of the costs of repairing and replacing specific components that help the irrigation system use less energy. This option is designed for systems in which small maintenance upgrades provide energy savings. Incentives vary based on specific component replacement.

Payments are calculated on predetermined average kWh savings per component. Idaho Power reviews and analyzes each proposal for a system or component modification, determining and verifying the energy savings.

In addition to incentives, the program offers customer education, training, and irrigation-system assessments. Idaho Power agricultural representatives sponsor, coordinate, conduct, and present educational workshops for irrigation customers, providing expert information and training across Idaho Power's service area. Energy audits, conducted by Idaho Power agricultural representatives, evaluate prospective customers' potential savings. Agricultural representatives from Idaho Power also engage agricultural irrigation equipment dealers in training sessions, increasing awareness of the program and promoting it through the irrigation equipment distribution channels. Marketing efforts include direct mailings, advertisements in agricultural publications, and agricultural trade show participation.

2008 Activities

Idaho Power provided five workshops promoting the Irrigation Efficiency Reward program across the service area. The program had an Idaho Power exhibitor booth at regional agricultural trade shows, including the Eastern and Western Idaho Agriculture Expos, the United Dairymen of Idaho Expo, Agri-Action Ag show, the Idaho Farm Bureau convention, and the Idaho Irrigation Equipment Association show and convention.

2009 Strategies

Marketing plans for 2009 include conducting seven to 10 irrigation workshops. These workshops enable discussions between Idaho Power representatives and customers, while continually educating customers about the program and ways to participate.

All agricultural customers in Idaho Power's service area are eligible for the Irrigation Efficiency Reward program. The Irrigation Efficiency Reward program has little room for expansion within the customer class, though additional energy-saving measures may expand as technology becomes available. The market is becoming saturated to some extent, though there is still potential in this large market.

This page left blank intentionally.

MARKET TRANSFORMATION

Northwest Energy Efficiency Alliance (NEEA)

NEEA encourages and supports cost-effective market transformation efforts in Idaho, Oregon, Washington, and Montana. Through partnerships with local utilities, NEEA motivates marketplace adoption of energy-saving services and technologies and encourages regional education and marketing platforms. NEEA provides training and marketing resources across residential, commercial, and industrial sectors. Idaho Power accomplishes market transformation in its service area through membership and coordinated activities with NEEA.

NEEA Activities

Industrial Efficiency Alliance (IEA) Activities in Idaho

The IEA is a multi-year strategic effort designed to improve energy efficiency in two regional industries considered heavy energy users, 1) the food processing and 2) the pulp and paper industries. Although Idaho Power does not have any pulp and paper customers, because of the large number of food processing customers, Idaho Power considers participation in IEA valuable. The IEA also works with companies that produce equipment and provide services for these industries and with the utilities that serve them.

Participants achieve cost savings through the adoption of energy-efficient business practices. The IEA provides expert support, resources, and services, providing companies with the training and tools for making energy efficiency a core business value. Participants are asked for a commitment to a Continuous Energy Improvement Program, which potentially increases production capacity, improves equipment reliability, and reduces operating costs and energy use by 5% to 20%. This effort is supported by providing technical knowledge for individuals, organizations, and manufacturing companies collaborating on energy efficiency implementation. IEA members include the BPA, regional utilities, the Energy Trust of Oregon (ETO), the Oregon Department of Energy (ODOE), and the Idaho Office of Energy Resources (OER).

Training activity in 2008 increased over 2007 and included eight industrial workshops co-sponsored by the IEA, Idaho Power, and others. Topics focused on pumps, compressed air, motors, and industrial refrigeration. A market progress evaluation of the IEA was completed in May 2008.

Commercial Alliance Activities in Idaho

NEEA continued to provide support for commercial energy efficient activities in Idaho in 2008. NEEA continued funding the Boise Integrated Design Lab (IDL) and local BetterBricks® trainings and workshops. NEEA sponsored Idaho's Fourth Annual BetterBricks Awards, issued in October in conjunction with the Idaho Energy & Green Building Conference. Idaho Power's commercial programs, Building Efficiency and Easy Upgrades, are designed to leverage NEEA, BetterBricks, and Boise IDL activities.

Distribution Efficiency Initiative

In 2008, Idaho Power continued to participate with other northwest utilities in NEEA's Distribution Efficiency Initiative (DEI) project study.

Phase I Projects Completed

NEEA conducted a DEI project study, which included a Load Research project and Pilot Demonstration projects. The Load Research project was designed to establish the relationship between applied voltage and energy, in addition to how applied voltage affects demand for different end-use load types, such as electric heating, electric water heating, and air conditioning. The Pilot Demonstration projects controlled the voltage at the substation in order to determine the performance of different efficiency methods.

Phase I Concluded in 2007

The NEEA study's final report shows that operating a utility distribution system in the lower half of the acceptable voltage range of 120 through 114 volts saves energy (kWh), reduces demand (kW), and reduces reactive power (i.e., kilovolt ampere reactive [kvar]) requirements without negatively impacting the customer. The energy-savings results are within the expected values of 1% to 3% total energy reduction, 2% to 4% reduction in kW demand, and a 4% to 10% reduction in kvar demand. As part of the completion of this project, the 66 Home Voltage Regulators (HVRs) operating in southern Idaho since March 2006 were removed during the summer of 2007. The purpose of the HVR was to adjust service entrance voltage at the residence.

Project for 2007

A new pilot was implemented during the second quarter of 2007 to demonstrate remote end-of-feeder control of the station transformer load-tap changer. The project used wireless communication between the end-of-feeder and the substation to adjust the substation voltage based on the measured end-of-feeder voltage. Application of technology allows better control of the end-of-feeder voltage.

In December 2007, R. W. Beck, Inc., a contractor for NEEA, published the Northwest Energy Efficiency Alliance Distribution Efficiency Initiative Project Final Report. This report and additional information about DEI is available at http://rwbeck.com/neea. The estimated, annual project savings were reported to be 8,563 MWh.

Project for 2008

In 2008, the remote end-of-feeder control of the station transformer load-tap changer project was changed from a pilot project to a permanent installation. In addition, studies began to identify additional locations to implement the techniques identified in the pilot study. The initial phase will include locations that can be converted with minimal or no capital expenditures. Future phases will be those locations that require more extensive resources to implement.

In 2008, DEI Calculators, which are Excel-based tools, were completed and presented to the RTF. These calculators include a manager's tool that provides high-level results and an engineer's tool that allows users to develop multiple scenarios and compare results. These tools were developed to be used primarily by smaller utilities that may or may not have the resources to do the analysis necessary to implement a DEI-based project.

Residential NEEA Activities in Idaho

NEEA continues to provide support for the ENERGY STAR® Homes Northwest program offered by Idaho Power. NEEA offers technical assistance, funding for certifications, and builder and marketing support.

Other NEEA Activities in Idaho

In 2008, Idaho Power participated in two major studies in Idaho Power's service area. The ENERGY STAR Homes Northwest impact evaluation continued throughout 2008 with final results available in 2009. Idaho Power assisted NEEA in developing the sample plan for this study and provided data necessary to assess the program. The impact evaluation required that ENERGY STAR certified homes were audited and had measurement and verification equipment installed.

Idaho Power participated with NEEA to conduct a Commercial Building Stock Assessment (CBSA). The purpose of this study was to update the original CBSA completed in 2003. Idaho Power contracted with the Cadmus Group to over-sample buildings in Idaho Power's service area to gather more detailed information to enhance program planning in the commercial sector. Idaho Power provided data and assisted the contractor in reviewing the commercial-building characteristics in Idaho Power's service area.

Each year, NEEA underwrites the Idaho Energy Conference through a contract with the Association of Idaho Cities. NEEA continues to provide general information support to the region by funding the EnergyIdeas Clearinghouse® and ConWeb®.

NEEA funded a variety of research projects that were reported on in 2008. These reports are valuable to Idaho Power in that they provide information for creating and evaluating Idaho Power's programs. These research projects included Baseline Characteristics of the 2002–2004 Nonresidential Sector of Idaho, Montana, Oregon, and Washington. They also included Market Research Reports for ENERGY STAR Homes Northwest Focus Groups, Residential Ductless Heat Pump Market Research and Analysis, Residential New Construction Billing Analysis, Analysis of Window Energy Savings in Commercial Buildings in the Northwest, ENERGY STAR Consumer Products Lighting Project, 80 PLUS Personal Computer Power Supplies, and seven reports on the BetterBricks initiative in the commercial sector.

NEEA Funding

In 2005, Idaho Power began the first year of the 2005–2009 contract and funding agreement with NEEA. Per this agreement, Idaho Power committed to fund $1.3 million annually in support of NEEA's implementation of market transformation programs in Idaho Power's service area. Of this amount in 2008, 72% was funded through the Idaho and Oregon Riders, and 28% was funded by a credit accumulated during the previous contract period.

In 2008, Idaho Power paid $942,014 to NEEA. The Idaho jurisdictional share of the payments was $894,913.31, while $47,100.69 was paid for the Oregon jurisdiction. Other expenses associated with NEEA activities, such as administration and travel, were paid by Idaho Power.

Preliminary estimates reported by NEEA indicate that Idaho Power's share of regional market transformation MWh savings for 2008 is 32,672 MWh, or 3.7 aMW. Idaho Power relies on NEEA to report the energy savings and other benefits of NEEA's regional portfolio of initiatives. For further information about NEEA, visit their Web site at www.nwalliance.org.

This page left blank intentionally.

ENERGY EFFICIENCY ADVISORY GROUP (EEAG)

Formed in May 2002, the EEAG provides input on formulating and implementing energy efficiency and demand-reduction programs funded by the Rider. Currently, the EEAG consists of 12 members from across Idaho Power's service area and the Pacific Northwest. Members represent a cross-section of customers, including individuals from the residential, industrial, commercial, and irrigation sectors, as well as representatives for the elderly, low-income, environmental organizations, state agencies, public utility commissions, and Idaho Power.

In 2008, the EEAG met three times: February 7, May 13, and October 2. During the meetings, Idaho Power requested recommendations on new program proposals, provided a status of the Rider funding and expenses, updated ongoing programs and projects, and supplied information on DSM issues.

EEAG Program Recommendations

The following section provides an overview of topics addressed during the meetings and a review of the input provided to Idaho Power by the EEAG regarding major program implementation and operational issues in 2008. Various operational DSM programs were reviewed by EEAG during the 2008 meetings. Only substantial changes or modifications associated with EEAG input and new programs and pilots are presented in the following.

Residential Programs

Residential programs reviewed in 2008 included the Home Products Program, Heating & Cooling Efficiency Program, ENERGY STAR® Homes Northwest, and A/C Cool Credit. Progress updates were provided on the Holiday Lighting Program, Idaho Green Expo, and Energy Efficient Lighting program. Pilots started in 2008, and new programs for 2009, including the Attic Insulation Pilot and the Home Weatherization Pilot, and the 2009 Refrigerator Recycling Program, were also discussed.

Home Products Program

The Home Products Program targets changing consumer purchases from regular appliances to ENERGY STAR qualified appliances. Initially Idaho Power considered three types of appliances to include in this program. Ultimately, clothes washers were the only appliance that met the cost-effectiveness tests. The Consortium for Energy Efficiency, Inc. (CEE) rates the energy efficiency of home appliances, including residential clothes washers. CEE rates clothes washers as tier 1, tier 2, or tier 3, with tier 3 being the most efficient. However, the CEE tier ratings are not readily apparent to customers. Due to this difficulty of letting the public know about the difference in the tier levels of washers, Idaho Power was considering one incentive amount regardless of the ENERGY STAR qualified washer purchased.

Recommendations

Members discussed reasonable incentive amounts and recommended an incentive of $50 for either Tier I or Tier II clothes washers be offered. Idaho Power was advised to consider joining with water suppliers or wastewater companies to add an educational piece to the incentive.

Action

Effective April 2008, the $50 clothes washer incentive was offered for either tier clothes washers. Washer purchases made after April 2008 qualified for Idaho customers, and washer purchases made after May 21, 2008 qualified for Oregon customers. The ENERGY STAR Appliance program was renamed the Home Products Program in August 2008 and expanded to include ENERGY STAR qualified refrigerators, ceiling fans with light kits, or ceiling fan light kit attachments.

Idaho Power staff met with the Idaho Department of Environmental Quality (DEQ) to discuss how to educate water-system operators regarding Idaho Power energy efficiency programs. Many of the water systems use pump configurations similar to irrigation. There might be opportunities for the users to participate in Idaho Power Commercial energy efficiency programs and receive incentives for upgrading pumps or, for larger systems, performing facility upgrades. Discussions included the possibility of putting information in the state drinking and wastewater newsletters.

Refrigerator Recycling Program

Idaho Power proposed to the EEAG two program management options for conducting the Refrigerator Recycling program. The first option was through an internal program managed and operated completely by Idaho Power, while the second option was through a contract with a third-party for management and operation of the program. Pros and cons of the two options were discussed. Under the Idaho Power-operated program, participating customers would be responsible for removal and disposal of the old refrigerator. Some members felt that might be challenging and prohibitive for customers, especially the elderly. The EEAG group favored the third-party management option, where the third-party contractor handles the removal and disposal of the old unit. The third-party contractor could also conduct the verification of the condition of the old unit. Though an internally managed program was the more cost-effective option, EEAG thought that the third-party management option might attract higher participation levels.

Recommendations

The EEAG recommended that Idaho Power pursue a third-party contractor for program implementation and offer the program in Oregon.

Action

Idaho Power plans to issue a request for proposal (RFP) for a third-party contractor to operate the program. After the RFP is received and reviewed, a potential successful contractor will be selected and a contract negotiated. Program implementation is planned for May 2009. Idaho Power plans to offer a $30 refrigerator incentive to customers recycling working refrigerators.

Attic Insulation Pilot

Idaho Power presented to the EEAG a potential program structure for the Attic Insulation Pilot. Potential energy savings, incentives, data collection, and timelines were discussed.

Recommendations

Data collection suggestions included taking spot measures from the air handler and measuring attic temperatures and compressor run-time for air conditioners. Other suggestions included checking the ductwork prior to insulation.

Action

The Attic Insulation Pilot program was launched. It offered customers a $0.15 per square foot incentive for the professional installation of additional attic insulation. The pilot was conducted in Boise, Twin Falls, and Pocatello. Installations began in May 2008 and were completed by mid-July. Idaho Power collected indoor and outdoor temperatures and compressor runtimes. Also collected was information on the physical characteristics of the participants' homes, including the pre- and post-installed insulation R-values.

Information from the pilot was used to evaluate the cost-effectiveness of the potential program. It was determined that this was a cost-effective program opportunity. As a result of the Attic Insulation Pilot, Idaho Power will proceed in 2009 with the pilot, renamed the Home Improvement Program.

Home Weatherization Pilot

Introduced in 2008 was a new Home Weatherization Pilot concept, which targeted customers who applied for, but were deemed ineligible for participation in, WAQC and who are probably not likely to participate in other programs. Idaho Power collaborated with Home Energy Management, LLC, to complete 20 homes in 2008 in the Twin Falls area. Like the WAQC program, there is no cost to the customer. After the weatherization projects are completed, Idaho Power will complete the verification and analysis process, comparing the current SIR with Idaho Power cost-effectiveness models. The differences between the existing WAQC program and the pilot are the pilot's higher income eligibility criteria and that federal dollars cannot be leveraged in the pilot. The guidelines for the pilot resemble WAQC guidelines in all other aspects. Using the pilot structure allows Idaho Power to proceed and evaluate the results to determine utility costs.

Recommendations

Members expressed support of the pilot.

Action

The pilot was launched during the last quarter of 2008. Energy Management, LLC, weatherized 16 homes for the pilot. Energy savings achieved were 71,680 kWh/year. The average home saved 4,480 kWh/year. Total costs were $52,807. Average individual project cost was $3,300. Based on the pilot, Idaho Power plans to expand in 2009 and weatherize 60 homes in Idaho Power's southern region service area under the newly named Weatherization Solutions for Eligible Customers program.

Commercial and Industrial Programs

At the October EEAG meeting, Idaho Power presented the Commercial Demand Response program and the Small Commercial A/C Cycling Pilot program. Updates were also provided on the Easy Upgrades program changes.

Commercial Demand Response Program

Idaho Power proposed the Commercial Demand Response program where Idaho Power would contract with a third-party demand response aggregator for provision of peak load reduction. The third-party would recruit customers and guarantee Idaho Power a determined amount of peak load reduction at a contracted price.

Recommendations

The third-party contractor selected for the program should tailor their program to Idaho Power's service area commercial customers.

Action

Idaho Power issued an RFP in August for a demand response aggregator. Four proposals were received and reviewed. Idaho Power selected EnerNOC as the contractor. EnerNOC provides demand response services for numerous other utility companies throughout the United States, has established relationships with the many businesses in Idaho Power's service area, and understands the unique characteristics of Idaho Power's customers. Idaho Power and EnerNOC have negotiated a contract to reduce peak demand at critical times. The aggregator will negotiate contracts directly with Idaho Power commercial and industrial customers to achieve the contracted demand reduction. Analysis has shown that this program will be cost-effective. Pending IPUC approval, Idaho Power expects to launch the commercial demand response program in 2009.

Small Commercial A/C Cycling Pilot

Idaho Power introduced a proposed demand response program for small commercial users. Demand reduction would be achieved by controlling customers' use of air conditioners using programmable thermostats. It is similar to the residential A/C Cool Credit program, except it is designed for small commercial customers using less than 2,000 kWh per month. Under this proposed program, there would not be a customer bill credit, as there is in the residential program, and the customer's benefit would be the provided programmable thermostat and installation.

Recommendations

Given the high cost of serving the summer peak hours, it was requested that Idaho Power consider aggressively launching the program and, if possible, incorporate a lighting retrofit along with the programmable thermostat.

Action

The cost-effectiveness analysis of a small commercial A/C Cycling program is under review.
The proposed implementation and administrative costs are higher than initially expected. The potential for cost-effective peak load reduction in the market is uncertain. Idaho Power believes a pilot program to study the energy impacts is needed. Idaho Power is renegotiating with vendors, exploring additional program offerings, and considering including the small commercial program in the current residential A/C Cool Credit program. Through these efforts, Idaho Power is attempting to design a cost-effective program.

Irrigation Programs

The redesigned Irrigation Peak Rewards program was introduced at the October 2, 2008, EEAG meeting. Idaho Power proposed the Irrigation Peak Rewards program include a dispatchable demand response option.

This program would be offered to Idaho Power customers in Idaho and Oregon. Three options would be available for customers to choose between: 1) the currently offered timer option, 2) a dispatchable option that allows Idaho Power to remotely turn participants' pumps on or off, or 2) a large service location option that allows participating customers, after being notified by Idaho Power, to turn large horsepower pumps off during summer peak hours. High savings and benefits are expected from this new program.

Recommendations

Based on the success of the current Irrigation Peak Rewards program and the potential for substantially increased cost-effective peak-demand reduction, the EEAG recommended that Idaho Power expand the program. A dispatchable irrigation demand response option could be implemented for irrigation customers in 2009.

Actions

Expanding on the current Irrigation Peak Rewards program, Idaho Power developed a new program that offers three options for eligible service locations in Idaho and Oregon. The first option will continue with a timer option. The second, new dispatchable option allows Idaho Power to remotely turn on and off participating customers' pumps. Under the third option, for large service locations of 1,000 or greater, participants would manually turn their pumps on and off. The combination of these three options enables Idaho Power to substantially decrease demand during peak load hours.

On January 14, 2009, the IPUC approved the program proposal. In February 2009, Idaho Power began sending mailings to irrigation customers and holding workshops to educate irrigation customers and market the new program offering.

Additional Topics Covered

In the EEAG meetings, Idaho Power presented additional topics, including an overview of the *Demand-Side Management 2007 Annual Report*, the report's structure, and 2007 programs documented in the report. EEAG was updated throughout the year regarding the Rider balance and energy efficiency program performance.

In 2008, as the result of an RFP process, Idaho Power hired a consultant company, Nexant, for a DSM potential study regarding creating or expanding programs. Preliminary findings from this report indicated that, within the residential sector, there was a limited amount of additional energy savings potential beyond what Idaho Power is currently offering.

Recommendations

A peer review of the results of the Nexant report 2008 market potential study was recommended.

Action

A peer review was initiated and results are due in the spring of 2009.

Other Programs and Activities

Residential Energy Efficiency Education Initiative

Idaho Power recognizes the value of general energy efficiency awareness and education in creating behavior change and customer demand for, and satisfaction with, its programs. The Residential Energy Efficiency Education initiative's goal is promoting energy efficiency to the residential community sector. This goal is achieved by creating and delivering educational programs that result in energy-efficient and conservation-oriented behaviors and choices.

Activities

The Residential Energy Efficiency Education initiative distributed energy efficiency messages through a variety of communication methods during 2008. Increased customer awareness of energy-saving ideas was accomplished via distribution of over 8,000 copies of the 96-page book *30 Simple Things You Can Do To Save Energy*, a joint publishing project between Idaho Power and The Earthworks Group. In June, an Energy Efficiency Guide outlining the residential programs and monthly tips was published in area newspapers. Energy Awareness month, held in October, included a jointly sponsored energy efficiency exhibit at the Discovery Center, a newspaper campaign, and the Fall Energy Efficiency & Green Livings Series. Held at the Boise Public Library, this five-class series promoting energy efficiency was initiated in 2007. This year's topics included an open dialogue with energy leaders; simple no- and low-cost ways to save energy; easy ways to re-think, reduce, reuse, and recycle; how to landscape for energy savings; and how to remodel existing homes and build new homes consistent with the Leadership in Energy and Environmental Design (LEED) and Northwest ENERGY STAR® Homes Northwest standards. The five sessions combined attracted 147 participants.

The Residential Energy Efficiency Education initiative collected participant evaluations at the end of each of the five classes focusing on energy efficiency held at the Boise Public Library during 2008. Combined, the five sessions had 147 participants and a survey return rate of 51%. The majority of respondents indicated they "strongly agreed" that the information was useful and met their expectations. The majority of respondents indicated they "definitely would" recommend the class to family and friends.

During the fourth quarter of 2008, Idaho Power provided weekly energy efficiency messages on The HomeFix Show with Joe Prin on 580 KIDO AM. Another media campaign around energy-efficient gift purchases rounded out the year.

In addition to these activities, Idaho Power sponsored the Energy Conservation and Recycling track at the first annual Idaho Green Expo. Specialists from Idaho Power presented three workshops and addressed attendees' questions at the Idaho Power's exhibitor booth. During 2008, Idaho Power developed a new educational program for fourth- to sixth-grade students. "Simple Ways to Save Energy" is a 45–60 minute presentation focusing on energy-efficient actions within each child's ability. Idaho Power further increased its energy efficiency presence in the community by providing program information at events such as Teachers' Night Out, Idaho Smart Growth, and the St. Luke's Women's Show.

Plans for 2009 include expanding the Energy Efficiency & Green Livings Series to other customers outside the Treasure Valley. Adult energy efficiency presentations for corporate and community settings are being developed for use by Idaho Power staff. Energy efficiency displays such as three-dimensional demonstration devices, brochures, and other educational materials will be developed in 2009. Placing stand-alone energy efficiency displays in high-traffic public venues, such as libraries and corporate lobbies, is another method Idaho Power intends to use to reach large numbers of customers with energy efficiency messages.

Commercial Education Initiative

Idaho Power launched its Commercial Education initiative in the spring of 2008. The main objectives of this initiative are to educate commercial customers about energy efficiency, increase participation in existing commercial energy efficiency and demand-reduction programs, enhance customer satisfaction, and reduce energy use. In 2008, Idaho Power identified methods for educating customers about energy efficiency and addressed ways of changing customer practices and behaviors.

The initiative made progress in helping commercial customers, trade allies, field staff, professional organizations, and community organizations indentify common problems or energy efficiency opportunities. Potential solutions and ideas were addressed through networking with energy information sources, such as E Source, Idaho Power staff, trade allies, and customers. For example, many customers have been very successful in reducing their energy usage by utilizing Idaho Power incentive programs. Subsequently, customers have invited Idaho Power field staff and other customers with similar facilities to visit their projects and see, firsthand, successful energy efficiency projects.

In 2009, the initiative will continue its efforts in commercial customer education. Plans are to increase the focus on providing commercial customers with information pertinent to their facilities and operational constraints and to identify resources for achievement of their energy efficiency objectives.

Local Energy Efficiency Funds (LEEF)

The purpose of LEEF, formerly called the Small Projects and Education Fund, is to provide modest funding for short-term projects and activities that do not fit within other categories of energy efficiency programs, but that still provide a defined benefit to furthering DSM targets.

Two projects were paid for from this fund in 2008. In spring 2007, MHAFB applied for funds to remove incandescent lighting from an outdoor running track and replace them with solar lighting. A cost-effective analysis was completed for the project in 2007 and permission was provided by Idaho Power for the AFB to move forward. The actual lighting was installed in the summer of 2008, and LEEF funds paid $13,764 for 114,700 kWh savings per year.

Another completed project in 2008 was in a Marsing home. The owner created a "Living Wall" consisting of hundreds of plants blanketing a wall and floor. The plants serve as an air conditioner, decreasing the air temperature around the "Living Wall" and reducing energy use by up to 20% per month. LEEF funds paid $450 for 1,231 kWh savings per year.

REGULATORY INITIATIVES

Idaho Power is testing the effects of a Fixed Cost Adjustment (FCA) and a Performance-Based DSM Incentive as part of a three-year, two-pilot initiative. The two pilots are being operated on a limited basis to allow for a thorough evaluation to be conducted prior to a broader application of the financial mechanisms. 2007 was the first year of the pilots. Actual performance and usage data from 2007 was evaluated during the spring of 2008, and Idaho Power made the following filings in response to the first-year results.

Fixed-Cost Adjustment Pilot

Under the FCA, rates are annually adjusted up or down to recover or refund the difference between the fixed costs authorized by the IPUC in the most recent rate case and the fixed costs that Idaho Power actually received the previous year through energy sales. This decoupling mechanism removes the financial disincentive that exists when Idaho Power invests in DSM resources. The FCA pilot is limited to the residential and small commercial classes in recognition of the fact that, for these customers, a high percentage of fixed costs are recovered through energy charges. Confining the pilot to the residential and small commercial classes also allows the true-up mechanism to be tested on a limited basis to minimize any unintended consequences. On March 12, 2007, the IPUC authorized a three-year pilot of the FCA under Order No. 30267.

On March 14, 2008, Idaho Power filed an application to implement FCA rates reflecting 2007 actual data. According to the application, during 2007, the average energy use per residential customer increased. Idaho Power collected approximately $3.5 million more for its fixed costs than was established in the agreed-upon residential FCA formula. The application also indicated that the small commercial class saw a decrease in per-customer energy use during 2007. This means Idaho Power under-collected approximately $1.1 million of its fixed costs for this customer class. On May 30, 2008, the IPUC issued Order No. 30556 directing Idaho Power to collect the net fixed cost adjustment of $2.4 million and to distribute the rate adjustment across both residential and small commercial customers. This action resulted in a rate reduction of 0.045676 cents/kWh, effective June 1, 2008, through May 31, 2009, for all residential and small commercial customers. On March 13, 2009, Idaho Power will file an application to implement FCA rates reflecting 2008 actual data.

Performance-Based DSM Incentive Pilot

To complement the FCA pilot, Idaho Power is testing the effects of a Performance-Based DSM Incentive mechanism. On March 12, 2007, the IPUC issued Order No. 30268 authorizing the implementation of a Performance-Based DSM Incentive pilot that allows Idaho Power to retain a portion of the financial benefits resulting from DSM activities when energy savings targets are exceeded. Should it fail to meet energy savings levels previously achieved, Idaho Power is subject to a penalty under the incentive pilot. During the pilot period, the incentive mechanism is being applied only to the ENERGY STAR Homes Northwest Program. By applying this mechanism on a limited basis, Idaho Power is able to gain a better understanding of the effects of a performance incentive while minimizing the potential impact to customers. Idaho Power ultimately intends to use the information gained during the pilot period to develop a performance-based incentive mechanism that can be applied to the entire portfolio of DSM programs.

On March 14, 2008, Idaho Power filed the actual 2007 data in the *Performance-Based Demand-Side Management Incentive Pilot Performance Update*. According to the final ENERGY STAR Homes Northwest program results for 2007, Idaho Power has estimated the program achieved a market share of 5%. This value is within the market share dead-band established for 2007 at 5.0% to 7.0%, and, therefore, Idaho Power is not eligible for a performance incentive nor is Idaho Power subject to a penalty.

ENHANCED COMMITMENT

As part of the FCA implementation process, Idaho Power is committed to enhancing its efforts toward promoting energy efficiency. Idaho Power's overall DSM performance last year is an indication of this commitment. In 2008, the energy savings from Idaho Power's DSM in-house programs increased 54% over 2007 levels while expenditures increased only 35%. In several other key areas, Idaho Power actively pursued numerous, additional opportunities to promote energy efficiency, including, but not limited to:

- Broad availability of efficiency and load management programs
- Building code improvement activity
- Pursuit of appliance code standards
- Continued expansion of DSM programs beyond peak-shaving/load-shifting programs
- Third-party verification
- Promotion of energy efficiency through electricity rate design
- Idaho Power's internal energy efficiency commitment

Through its DSM portfolio, Idaho Power now offers programs in virtually every major market segment in its service area. For residential customers, there are programs for new homes, existing homes, and lower-income buildings. In the commercial and industrial sectors, there are programs in both the new and existing building market segments. In the irrigation sector, Idaho Power offers incentives for existing systems and new irrigation systems. Furthermore, Idaho Power has implemented demand response programs in the residential and irrigation sectors and plans to implement a new demand response program in the commercial and industrial sector in 2009. The specific programs added, modified, or expanded in 2008 include:

- A new Home Weatherization Pilot launched in the Twin Falls area in the fourth quarter of 2008. Based on the pilot results, Idaho Power plans to expand the pilot into a full-scale program, titled Weatherization Solutions for Eligible Customers, offered in the Twin Falls area in 2009.
- A new Attic Insulation Pilot was launched in 2008. This successful pilot will expand to a full-scale program in 2009 under the name Home Improvement.
- A new ENERGY STAR® Appliance Program began in 2008 and will continue into 2009 under the name Home Products Program.
- The A/C Cool Credit program expanded into the new service areas of Payette and Twin Falls. Additionally in 2008, Idaho Power applied this program to the housing at Mountain Home Air Force Base.

- The Easy Upgrades program sponsored a special summer lighting product promotion.
- Easy Upgrades concluded a special offer of VendingMiser™ units that ran from November 2007 through October 2008, with more than 3,600 units installed.
- In 2008, Idaho Power filed with the IPUC to expand the Irrigation Peak Rewards program to provide a dispatchable demand response option.
- The Custom Efficiency program was modified to increase the minimum project size from 20,000 kWh to 100,000 kWh in order to allow resources to be focused on larger projects.
- For Oregon customers, Idaho Power filed three new programs and modified three more. The new programs are A/C Cool Credit, Home Products Program, and Heating & Cooling Efficiency Program. The programs modified are Change a Light Program, Easy Upgrades, and Manufactured Housing Energy Efficiency Program.

Building Code Improvement Activity

Through Idaho Power's funding of the NEEA and codes-related efforts, Idaho Power has assisted in increasing energy efficiency requirements in Idaho's building codes, including the adoption of a new commercial and residential code (2006 IECC) effective January 1, 2008. Idaho Power has two key roles once the codes are adopted: 1) informing the design community of code changes and 2) modifying Idaho Power energy efficiency programs to reflect the new codes. In 2008, Idaho Power modified the Building Efficiency program to reflect the adoption of the new 2006 IECC. Furthermore, the new residential code in 2008 resulted in code coming closer to the requirements in the ENERGY STAR Homes Northwest Builder Option Package, which directly led to a decrease in the Idaho Power ENERGY STAR Homes Northwest program incentive amount.

Pursuit of Appliance Code Standards

Idaho Power contracted with Quantec, LLC, to conduct a study of potential savings and costs associated with enacting appliance efficiency standards in Idaho similar to those recently enacted in Oregon. The final report, *Idaho Power Appliance Standards Assessment*, was completed January 9, 2008. The 2009 IRP will include an evaluation of the findings from this study.

Continued Expansion of DSM Programs Beyond Peak-Shaving/Load-Shifting Programs

Idaho Power has focused additional resources toward energy efficiency education, marketing, and promotion. Increased customer awareness of energy-saving ideas was accomplished via distribution of over 8,000 copies of the 96-page book *30 Simple Things You Can Do To Save Energy*. The five-class Fall Energy Efficiency & Green Living Series were held for a second year at the Boise Public Library, with 147 participants attending in 2008. Incremental educational programs for 2008 included weekly energy efficiency messages on The HomeFix Show with Joe Prin on 580 KIDO AM radio, provision of energy efficient gift purchase tips during the holidays, sponsorship of the Energy Conservation and Recycling track at the first annual Idaho Green Expo, and development of a new presentation for fourth- and sixth-grade students titled "Simple Ways to Save Energy."

For industrial and commercial customers, Idaho Power continues to promote the offerings of the IEA through NEEA to food processing customers. In 2008, there were six facilities in the Idaho Power service area committed to implementing Continuous Energy Improvement practices at their facilities. In 2008, there were nine offered classes covering motors, pump systems, compressed air, and ammonia refrigeration. This technical training is a key element of customer education, which helps drive energy efficiency projects at customer facilities. Idaho Power strengthened the working relationship with the Boise chapter of the Building Owners and Managers Association (BOMA). Also, Idaho Power worked closely with Bonneville Power and other utilities on research into the effectiveness of replacing damaged door gaskets in refrigerated walk-ins and reach-in display cases. In 2008, Idaho Power became a member of the Utility IT Energy Efficiency Coalition, which is charged with supporting development of energy efficient instructional technology and data center operations. Idaho Power also became an associate member of the Climate Savers Computing Initiative.

In 2008, Idaho Power continued to increase energy efficiency awareness among its customers through a variety of media outlets. Idaho Power distributed energy efficiency information via 28 *Update* articles, 22 *News Scans* articles, 5 *E-News* videos, 15 articles in *Consumer Connection*, 10 bill inserts, 13 radio interviews, 1 television article, and 2 press releases. In March, Idaho Power celebrated its first company-wide Energy Efficiency Month for employees, encouraging their participation in programs.

Third-Party Verification

Idaho Power uses third-party consultants to verify that program specifications are met, to verify the amount of energy savings achieved, and to obtain data on energy efficiency, demand response measures, and programs.

Idaho Power provides funding and participation in the RTF. The RTF is an advisory committee that was established in 1999 to develop standards for verifying and evaluating savings from energy efficiency programs and measures. Idaho Power uses the RTF as a source for information on programs and measures, and uses the RTF databases to provide deemed savings for some energy efficiency measures.

In 2008, Idaho Power contracted with Nexant, Inc., to assess the market potential for DSM activities in Idaho Power's service area. For this study, Nexant developed spreadsheet models estimating DSM potential as economic conditions and end-use measure assumptions change. Nexant will provide a final document in 2009. The information provided by the potential study will be included in the 2009 IRP.

In spring 2008, Idaho Power contracted with Ecotope, Inc., to provide energy savings estimates for the Attic Insulation Pilot. At the conclusion of the pilot, Idaho Power sought Ecotope's expertise to update the estimated energy savings impacts of the program based on revised assumptions from the pilot. With these updated energy-savings estimates, the cost-effective program will continue under the name Home Improvement Program.

Idaho Power contracted with the Boise Integrated Design Laboratory (IDL) to provide evaluation functions, including measurement and verification. Under this contract, an evaluation has been initiated on certain measures in the Building Efficiency program. Idaho Power expects to work closely with IDL to study other commercial sector programs in the future.

In the commercial sector, Idaho Power participated in the NEEA Commercial Building Stock Assessment (CBSA), updating the original study from 2003, which is used for identifying and verifying commercial building stock characteristics in the Pacific Northwest. Idaho Power contracted with the Cadmus Group for this study, requesting an over-sample of Idaho Power's service area to obtain a statistically valid building sample for program planning purposes.

Since 2005, the A/C Cool Credit program contracted with a third-party installation contractor, Honeywell, Inc., for installation of radio-pager controlled switches on participants' A/C units. To ensure customer satisfaction, this contractor performs quality-assurance inspections on installations and makes follow-up phone calls to recent switch recipients. Honeywell submits weekly reports to Idaho Power program staff on inspections, follow-ups, and results.

Idaho Power participated with NEEA throughout 2008 to evaluate the impacts of the ENERGY STAR Homes Northwest program. Results of this study will be finalized in 2009. The ENERGY STAR Homes program regularly uses certified Home Performance Specialists for third-party verification, ensuring that each ENERGY STAR qualified home is built to ENERGY STAR standards. The Idaho Office of Energy Resources then certifies each of these homes as an ENERGY STAR home.

The Energy House Calls program contracts with third-party experts to perform quality assurance on 5% of homes serviced by the program. These contractors visit the site within approximately one month of the energy house call and verify that the energy efficiency measures were performed to program specifications.

The Heating & Cooling Efficiency Program has a third-party quality assurance contractor. Honeywell, Inc., performs on-site verifications on approximately 5–7% of completed jobs.

Promotion of Energy Efficiency through Electricity Rate Design

In June, Idaho Power filed the 2008 General Rate Case with proposals for significant changes in rate design for most customer classes. These rate-change proposals were driven by the explicit Idaho Power objective of providing customers with cost-based price signals, which encourage the wise and efficient use of energy. Rate design proposals for the residential and small commercial customers included inclining block rates for both summer and non-summer seasons. These block rates encourage customers to use fewer kWh each month and thereby save a larger increment on their electricity bills than if they did not have block rates. Rate design proposals for the larger commercial and industrial customers included time-of-use rates, which encourage customers to reduce or shift electricity usage from peak times of the day. The rate design proposal for the irrigation customer centered around encouraging energy efficiency through load-factor pricing.

Idaho Power's Internal Energy Efficiency Commitment

Idaho Power's continued commitment toward promoting energy efficiency extends beyond encouraging, incenting, and educating its customers. In 2008, Idaho Power constructed a new operations facility in Lake Fork, Idaho. Almost 99% complete as of December 2008, it is the first facility built by Idaho Power to use an integrated approach to maximize expertise and coordination throughout the process. Many companies, including Idaho Power, are concentrating their efforts towards LEED certification.

The Long Valley Operations Center is certain to qualify for Silver LEED certification, and will most likely have enough points for the Gold level.

In 2008, Idaho Power successfully retrofitted the entire fifth floor of the Corporate Headquarters (CHQ). Included in this retrofit was the use of low volatile organic compounds (VOC) paint, recycled carpet tile, and low VOC glue to adhere them. The new window shading and the use of T5 lighting and ballasts are projected to save approximately 40% of the energy expended by the old lighting packages. Additionally, shorter, 53" wall panels are used for cubical partitions, allowing more daylight and reducing lighting costs. The plan is to use the fifth floor as the standard for office space in the CHQ and other office areas as budget dollars are approved. Lighting and HVAC upgrades were also made at the Mini-Cassia Operations Center.

This page left blank intentionally.

APPENDICES

This report includes four appendices. Appendix 1 contains financial information for 2008, showing the beginning balance, ending balance, and the expenditures for the Idaho Energy Efficiency Rider, the Oregon Energy Efficiency Rider, BPA funding, and NEEA payments and credits. Appendix 2 also contains financial information. This second appendix shows expenses by funding source for each of Idaho Power's energy efficiency programs or activities. Appendix 3 shows participation, utility cost, total resource cost, energy and demand savings, measure life, and levelized costs for Idaho Power's current energy efficiency programs and activities for 2008. Appendix 4 shows similar data as Appendix 3, but also includes data for past years' program performance, benefit-cost ratios from the utility perspective, and from the total resource cost perspectives for active programs.

Appendix 1. Idaho Rider, Oregon Rider, BPA, and NEEA Funding Balances

Idaho Energy Efficiency Rider		
2008 Beginning Balance	$	1,483,074.58
2008 Funding plus Accrued Interest		13,454,883.09
Total 2008 Funds		14,937,957.67
2008 Expenses		(18,880,275.73)
2008 Year-End Balance	$	**(3,942,318.06)**

Oregon Energy Efficiency Rider		
2008 Beginning Balance	$	410,225.46
2008 Funding plus Accrued Interest		411,602.13
Total 2008 Funds		821,827.59
2008 Expenses		(625,000.31)
2008 Year-End Balance	**$**	**196,827.28**

BPA Funding		
Total Funding and Accrued Interest October 2001–December 2007	$	3,156,889.59
2008 Accrued Interest		2,152.12
Total Funds May 2002–December 2008		3,159,041.71
Total Expenses—Inception through December 2007		(3,109,843.04)
2008 Expenses		(6,950.35)
Total BPA Funded Expenses		(3,116,793.39)
2008 Year-End Balance [a]	**$**	**42,248.32**

NEEA Payments and Escrow Credit Funds Balance		
2008 IPC Contractual Obligation	$	1,300,000.00
Credit Applied to 2008 Contractual Obligation		(325,588.00)
Interest Credit Applied to 2008 Contract Obligation (b)		(27,337.00)
Interest Credit Applied to 2009 Contract Obligation (c)		(5,061.00)
Total 2008 Cash Payments by IPC		942,014.00
Credit Balance		
Beginning Balance Funds Held by NEEA		(2,115,153.00)
2005-2007 Credit Applied to Contract Obligation		1,463,970.00
2008 Credit Applied to Contract Obligation		325,588.00
2008 Year-End Credit Balance	$	**(325,595.00)**

[a] The 2008 balance of BPA funds was committed to two Solar 4R Schools projects prior to the suspension of BPA funding in 2007. These projects were scheduled for completion in 2008 but have been delayed to 2009.

[b] The first quarter invoice for the Idaho Power 2008 contractual obligation to NEEA was processed in December 2007 with the amount scheduled to be amortized over the first quarter. Interest credit of $14,781 was immediately recognized in 2007.

[c] The first quarter invoice for the Idaho Power 2009 contractual obligation to NEEA was processed in December 2008 with the amount scheduled to be amortized over the first quarter. Interest credit of $5,061 was immediately recognized in 2008.

Appendix 2. 2008 DSM Expenses by Funding Source (Dollars)

Sector/Program	Rider Idaho	Rider Oregon	BPA	IPC	Total Program
Energy Efficiency/Demand Response					
Residential					
A/C Cool Credit	$ 2,922,985	$ 45,404	$ 0	$ 988	**$ 2,969,377**
Attic Insulation Pilot	123,454	0	0	0	**$ 123,454**
Energy Efficient Lighting	1,011,850	6,242	0	200	**$ 1,018,292**
Energy House Calls	448,992	35,388	0	0	**$ 484,379**
ENERGY STAR® Homes Northwest	294,579	6,388	0	1,094	**$ 302,061**
Heating & Cooling Efficiency Program	466,094	6,959	0	498	**$ 473,551**
Home Products Program	245,219	5,541	0	100	**$ 250,860**
Home Weatherization Pilot	51,670	0	0	1,138	**$ 52,807**
Oregon Residential Weatherization	0	1,908	0	5,509	**$ 7,417**
Rebate Advantage	79,547	11,341	0	0	**$ 90,888**
Weatherization Assistance for Qualified Customers	0	0	0	1,419,475	**$ 1,419,475**
Commercial/Industrial					
Building Efficiency	1,006,025	47,550	0	1,434	**$ 1,055,009**
Easy Upgrades	2,922,340	52,556	0	17,364	**$ 2,992,261**
Holiday Lighting Program	28,782	0	0	0	**$ 28,782**
Oregon Commercial Audit	0	0	0	58	**$ 58**
Custom Efficiency	3,948,617	86,858	0	10,196	**$ 4,045,671**
Irrigation					
Irrigation Efficiency Rewards	1,878,960	193,276	0	31,466	**$ 2,103,702**
Irrigation Peak Rewards	1,373,855	17,570	0	40,415	**$ 1,431,840**
Energy Efficiency Total	**16,802,969**	**516,981**	**0**	**1,529,934**	**$ 18,849,884**
Market Transformation					
Northwest Energy Efficiency Alliance	894,913	47,101	0	0	**$ 942,014**
Market Transformation Total	**894,913**	**47,101**	**0**	**0**	**$ 942,014**
Other Programs and Activities					
Residential					
Residential Education Initiative	142,969	7,818	0	130	**$ 150,917**
Commercial					
Commercial Education Initiative	69,059	3,632	0	46	**$ 72,738**
Other					
CRC Renewables	0	0	6,950	0	**$ 6,950**
Distribution Efficiency Initiative[a]	0	0	0	-1,913	**$ -1,913**
DSM Direct Program Overhead	135,788	6,945	0	27,178	**$ 169,911**
Local Energy Efficiency Funds	22,714	0	0	0	**$ 22,714**
Other Programs and Activities Total	**370,530**	**18,396**	**6,950**	**25,441**	**$ 421,317**
Indirect Program Expenses					
DSM Accounting and Analysis	792,478	41,483	0	123,942	**$ 957,904**
Energy Efficiency Advisory Group	2,148	63	0	0	**$ 2,211**
Special Accounting Entries	17,236	977	0	1,977	**$ 20,191**
Indirect Program Expenses Total	**811,863**	**42,523**	**0**	**125,919**	**$ 980,305**
Totals	**$18,880,276**	**$ 625,000**	**$ 6,950**	**$ 1,681,294**	**$ 21,193,520**

[a] 2007 Expenses reversed in 2008.

Appendix 3. 2008 DSM Program Activity

Program	Participants (Number)	Participants (Units)	Total Costs: Utility[b] (Dollars)	Total Costs: Resource[c] (Dollars)	Savings: Annual Energy (kWh)	Savings: Summer Peak Demand[d] (MW)	Measure Life (Years)	Nominal Levelized Costs[a]: Utility ($/kWh)	Nominal Levelized Costs[a]: Total Resource ($/kWh)
Demand Response									
A/C Cool Credit	20,195	homes	$2,969,377	$2,616,072	n/a	22.60	n/a	n/a	n/a
Irrigation Peak Rewards	897	service points	$1,431,840	$189,492	n/a	35.10	n/a	n/a	n/a
Total			**$4,401,217**	**$2,805,563**	**n/a**	**57.70**			
Energy Efficiency									
Residential									
Attic Insulation Pilot	282	homes	$123,454	$157,866	317,814	0.03	25	$0.029	$0.037
Energy Efficient Lighting	436,234	CFL bulbs	$1,018,292	$793,265	14,309,444		7	$0.011	$0.009
Energy House Calls	1,099	homes	$484,379	$484,379	883,038		20	$0.045	$0.045
ENERGY STAR® Homes Northwest	254	homes	$302,061	$375,007	468,958	0.61	25	$0.048	$0.059
Heating & Cooling Efficiency Program	359	homes	$473,551	$599,771	561,441		18	$0.073	$0.092
Home Products Program	3,034	appliances/fixtures	$250,860	$468,056	541,615		15	$0.044	$0.082
Home Weatherization Pilot	16	homes	$52,807	$48,162	71,680		25	$0.055	$0.050
Oregon Residential Weatherization	3	homes	$7,417	$28,752	22,196		25	$0.025	$0.096
Rebate Advantage	107	homes	$90,888	$179,868	463,401		45	$0.012	$0.025
Weatherization Assistance for Qualified Customers—Idaho	439	homes/non-profits	$1,375,632	$1,755,749	4,064,301		25	$0.025	$0.032
Weatherization Assistance for Qualified Customers—Oregon	13	homes/non-profits	$43,843	$74,048	73,841		25	$0.040	$0.068
Sector Total			**$4,223,185**	**$4,964,924**	**21,777,729**	**0.64**			

a. Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.
b. The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.
c. The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.
d. Summer Peak Demand is reported where program MW reduction is documented.

Appendix 3. 2008 DSM Program Activity (continued)

Program	Participants (Number)	Participants (Units)	Total Costs: Utility[b] (Dollars)	Total Costs: Resource[c] (Dollars)	Savings: Annual Energy (kWh)	Savings: Summer Peak Demand[d] (MW)	Measure Life (Years)	Nominal Levelized Costs[a]: Utility ($/kWh)	Nominal Levelized Costs[a]: Total Resource ($/kWh)
Commercial									
Building Efficiency	60	projects	$1,055,009	$1,673,268	6,598,123	0.96	12	$0.017	$0.028
Easy Upgrades	685	projects	$2,992,261	$10,096,627	25,928,391	4.49	12	$0.013	$0.043
Holiday Lighting Program	14	projects	$28,782	$73,108	259,092		10	$0.014	$0.035
Oregon Commercial Audit	0	audits	$58	$58			n/a	n/a	n/a
Sector Total			**$4,076,109**	**$11,843,061**	**32,785,606**	**5.45**			
Industrial									
Custom Efficiency	101	projects	$4,045,671	$16,312,379	41,058,639	4.77	12	$0.011	$0.044
Sector Total			**$4,045,671**	**$16,312,379**	**41,058,639**	**4.77**			
Irrigation									
Irrigation Efficiency Rewards	961	projects	$2,103,702	$5,850,778	11,746,395	3.47	8	$0.026	$0.073
Sector Total			**$2,103,702**	**$5,850,778**	**11,746,395**	**3.47**			
Market Transformation									
Northwest Energy Efficiency Alliance[1]			$942,014	$942,014	32,671,465				
Other Programs and Activities									
Residential									
Residential Education Initative			$150,917	$150,917					
Commercial									
Commercial Education Initiative			$72,738	$72,738					

a. Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.
b. The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.
c. The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.
d. Summer Peak Demand is reported where program MW reduction is documented.
1. Savings are preliminary estimates provided by the NEEA.

Appendix 3. 2008 DSM Program Activity (continued)

Program	Participants (Number)	Participants (Units)	Total Costs: Utility[b] (Dollars)	Total Costs: Resource[c] (Dollars)	Savings: Annual Energy (kWh)	Savings: Summer Peak Demand[d] (MW)	Measure Life (Years)	Nominal Levelized Costs[a]: Utility ($/kWh)	Nominal Levelized Costs[a]: Total Resource ($/kWh)
Other									
CRC Renewables			$6,950	$6,950					
Distribution Efficiency Initiative [2]			-$1,913	-$1,913					
DSM Direct Program Overhead			$169,911	$169,911					
Local Energy Efficiency Funds	2	projects	$22,714	$60,100	115,931		15	$0.019	$0.049
Total Program Direct Expense			**$20,213,215**	**$43,177,423**	**140,155,765**	**72.03**			
Indirect Program Expense			**$980,305**						
Total DSM Expense			**$21,193,520**						

a. Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.
b. The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.
c. The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.
d. Summer Peak Demand is reported where program MW reduction is documented.
2. 2007 expenses reversed in 2008.

Appendix 4. DSM Expense and Performance 2002–2008

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Demand Response													
A/C Cool Credit													
	2003	204	$275,645	$269,680			0.00						
	2004	420	$287,253	$274,686			0.40						
	2005	2,369	$754,062	$717,902			2.70						
	2006	5,369	$1,235,476	$1,131,439			5.60						
	2007	13,692	$2,426,154	$2,199,486			10.80						
	2008	20,195	$2,969,377	$2,616,072			22.60						
	Total		**$7,947,966**	**$7,209,266**							**1.38**	**1.38**	
Irrigation Peak Rewards													
	2004	58	$344,714	$185,006			5.60						(1)
	2005	894	$1,468,282	$479,484			40.30						(2)
	2006	906	$1,324,418	$239,977			31.80						(3)
	2007	947	$1,615,881	$239,855			37.40						(3)
	2008	897	$1,431,840	$189,492			35.10						(3)
	Total		**$6,185,135**	**$1,333,814**							**1.15**	**1.15**	
Residential Efficiency													
Attic Insulation Pilot													
	2008	282	$123,454	$157,866	317,814	0.04	0.03	25	$0.029	$0.037			
	Total	**282**	**$123,454**	**$157,866**	**317,814**			**25**	**$0.029**	**$0.037**	**2.48**	**1.94**	
Energy Efficiency Packets													
	2002	2,925	$755	$755	155,757	0.02		7	$0.001	$0.001			(4)
	Total	**2,925**	**$755**	**$755**	**155,757**			**7**	**$0.001**	**$0.001**			

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(1) Utility cost restated from $320,309 in prior historical reporting to reflect all funding sources.

(2) Peak MW achieved based on mid-week load reduction schedule.

(3) Peak MW achieved based on equally distributed weekly load reduction schedule.

(4) Utility Cost restated from previously reported $4,910.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Energy Efficient Lighting													
	2002	11,619	$243,033	$310,643	3,299,654	0.38		7	$0.012	$0.015			
	2003	12,663	$314,641	$464,059	3,596,150	0.41		7	$0.014	$0.021			
	2004	0											
	2005	43,760	$73,152	$107,810	1,734,646	0.20		7	$0.007	$0.010			
	2006	178,514	$298,754	$539,877	6,302,794	0.72		7	$0.008	$0.014			
	2007	219,739	$557,646	$433,626	7,207,439	0.82		7	$0.012	$0.010			
	2008	436,234	$1,018,292	$793,265	14,309,444	1.63		7	$0.011	$0.009			
	Total	**902,528**	**$2,505,518**	**$2,649,280**	**36,450,127**			**7**	**$0.011**	**$0.012**	**4.56**	**4.31**	
Energy House Calls													
	2002	17	$26,053	$26,053	25,989	0.00		20	$0.082	$0.082			
	2003	420	$167,076	$167,076	602,723	0.07		20	$0.023	$0.023			(5)
	2004	1,708	$725,981	$725,981	2,349,783	0.27		20	$0.025	$0.025			(6)
	2005	891	$375,610	$375,610	1,775,770	0.20		20	$0.017	$0.017			
	2006	819	$336,701	$336,701	777,244	0.09		20	$0.035	$0.035			
	2007	700	$336,372	$67,616	699,899	0.08		20	$0.039	$0.039			
	2008	1,099	$484,379	$484,379	883,038	0.10		20	$0.045	$0.045			
	Total	**5,654**	**$2,452,172**	**$2,183,416**	**7,088,457**			**20**	**$0.028**	**$0.025**	**2.20**	**2.20**	

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(5) Utility costs restated from $183,653 for historical reporting prior to the 2006 DSM Annual Report.

(6) Utility costs restated from $725,732 for historical reporting prior to the 2006 DSM Annual Report.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
ENERGY STAR® Homes Northwest													
	2003	0	$13,597	$13,597									
	2004	44	$140,165	$335,437	101,200	0.01	0.09	25	$0.103	$0.246			(7)
	2005	200	$253,105	$315,311	415,600	0.05	0.40	25	$0.045	$0.056			
	2006	439	$469,609	$602,651	912,242	0.10	0.88	25	$0.038	$0.049			
	2007	303	$475,044	$400,637	629,634	0.07	0.61	25	$0.056	$0.047			
	2008	254	$302,061	$375,007	468,958	0.05	0.61	25	$0.048	$0.059			
	Total	**1,240**	**$1,653,581**	**$2,042,641**	**2,527,634**			**25**	**$0.049**	**$0.060**	**1.76**	**1.43**	
Heating & Cooling Efficiency Program													
	2006	0	$17,444	$17,444									
	2007	4	$488,211	$494,989	1,595	0.00		18	$27.344	$27.710			
	2008	359	$473,551	$599,771	561,441	0.06		18	$0.073	$0.092			
	Total	**363**	**$979,207**	**$1,112,204**	**563,036**			**18**	**$0.150**	**$0.170**	**0.53**	**0.28**	
Home Products Program													
	2007	0	$9,275	$9,275									
	2008	3,034	$250,860	$468,056	541,615	0.06		15	$0.044	$0.082			
	Total	**3,034**	**$260,135**	**$477,331**	**541,615**			**15**	**$0.044**	**$0.082**	**1.42**	**0.77**	
Home Weatherization Pilot													
	2008	16	$52,807	$48,162	71,680	0.01		25	$0.055	$0.050			
	Total	**16**	**$52,807**	**$48,162**	**71,680**			**25**	**$0.055**	**$0.050**	**1.31**	**1.43**	

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(7) Energy savings based on NEEA standardized per home kWh savings estimates.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Oregon Residential Weatherization													
	2002	24	-$662	$23,971	4,580	0.00		25	$0.010	$0.389			(8)
	2003	0	-$943										(9)
	2004	4	$1,057	$1,057									
	2005	4	$612	$3,608	7,927	0.00		25	$0.006	$0.034			
	2006	0	$4,126	$4,126									(10)
	2007	1	$3,781	$5,589	9,971	0.00		25	$0.028	$0.042			
	2008	3	$7,417	$28,752	22,196	0.00		25	$0.025	$0.096			
	Total	**36**	**$15,389**	**$67,103**	**44,674**			**25**	**$0.026**	**$0.112**			(11)
Rebate Advantage													
	2003	73	$27,372	$79,399	227,434	0.03		45	$0.008	$0.022			(12)
	2004	105	$52,187	$178,712	332,587	0.04		45	$0.010	$0.034			
	2005	98	$46,173	$158,462	312,311	0.04		45	$0.009	$0.032			
	2006	102	$52,673	$140,289	333,494	0.04		45	$0.010	$0.027			
	2007	123	$89,269	$182,152	554,018	0.06		45	$0.010	$0.021			
	2008	107	$90,888	$179,868	463,401	0.05		45	$0.012	$0.025			
	Total	**608**	**$358,563**	**$918,882**	**2,223,245**			**45**	**$0.010**	**$0.026**	**7.19**	**2.80**	
Window A/C Trade Up Pilot													
	2003	99	$6,687	$10,492	14,454	0.00		12	$0.051	$0.079			
	Total	**99**	**$6,687**	**$10,492**	**14,454**			**12**	**$0.051**	**$0.079**			

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(8) Utility Cost reports reversal of $2778 asset from 2001 expense, this amount is included in levelized cost calculation.
In addition, Utility Cost also reports funds subsequently collected on bad loan writeoff expense. These funds are excluded from the annual levelized cost calculation.

(9) Utility Cost reflects collected funds on previous bad loan writeoffs.

(10) Utility Cost reflects only audit and administration costs; there was no further activity in 2006.

(11) Levelized cost calculation includes bad loan write-off expense and funds collected from previously written-off loans.

(12) Utility Cost restated in 2006 from $37,319 to reflect total expense.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Residential - Weatherization Assistance for Qualified Customers (WAQC)													
WAQC—Idaho													
	2002	197	$235,048	$492,139									
	2003	208	$228,134	$483,369									(13)
	2004	269	$516,882	$859,482	1,271,677	0.15		25	$0.029	$0.050			
	2005	570	$1,402,487	$1,927,424	3,179,311	0.36		25	$0.033	$0.045			
	2006	540	$1,449,807	$2,231,086	2,958,024	0.34		25	$0.037	$0.056			
	2007	397	$1,290,017	$1,757,105	3,296,019	0.38		25	$0.029	$0.040			
	2008	439	$1,376,543	$1,755,749	4,064,301	0.46		25	$0.025	$0.032			
	Total	**2,620**	**$6,498,918**	**$9,506,354**	**14,769,332**			**25**	**$0.033**	**$0.048**	**2.17**	**1.50**	
WAQC—Oregon													
	2002	31	$24,773	$47,221	68,323	0.01		25	$0.027	$0.051			
	2003	29	$22,255	$42,335	102,643	0.01		25	$0.016	$0.031			
	2004	17	$14,586	$25,452	28,436	0.00		25	$0.035	$0.067			
	2005	28	$44,348	$59,443	94,279	0.01		25	$0.035	$0.047			
	2006	0	$5,566										
	2007	11	$33,607	$41,700	42,108	0.00		25	$0.054	$0.074			
	2008	13	$42,932	$74,048	73,841	0.01		25	$0.040	$0.068			
	Total	**130**	**$188,067**	**$290,199**	**409,630**			**25**	**$0.033**	**$0.053**	**2.02**	**1.26**	
WAQC—BPA Supplemental													
	2002	75	$55,966	$118,255	311,347	0.04		25	$0.013	$0.028			(14)
	2003	57	$49,895	$106,915	223,591	0.03		25	$0.017	$0.036			
	2004	40	$49,885	$105,021	125,919	0.01		25	$0.041	$0.062			
	Total	**172**	**$155,746**	**$330,191**	**660,857**			**25**	**$0.020**	**$0.037**			

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(13) Total Resource Cost restated in 2005 to include federal funding administered by CAP agencies. 2002–2003 savings not reported due to integration of fuel types.

(14) Beginning in 2005, BPA funds were no longer applied to CAP agency payments; BPA expense in subsequent years is reflected in the respective state expenses.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio
Commercial												
Air Care Plus Pilot												
	2003	4	$5,764	$9,061	33,976	0.00		10	$0.021	$0.033		
	2004	0	$344	$344								
	Total	**4**	**$6,108**	**$9,405**	**33,976**			**10**	**$0.022**	**$0.034**		
Building Efficiency												
	2004	0	$28,821	$28,821								
	2005	12	$194,066	$233,149	494,239	0.06	0.16	12	$0.043	$0.052		
	2006	40	$374,008	$463,770	704,541	0.08	0.34	12	$0.058	$0.072		
	2007	22	$669,032	$829,600	2,817,248	0.32	0.45	12	$0.015	$0.040		
	2008	60	$1,055,009	$1,673,268	6,598,123	0.75	0.96	12	$0.017	$0.028		
	Total	**134**	**$2,320,937**	**$3,228,609**	**10,614,151**			**12**	**$0.024**	**$0.026**	**2.14**	**1.55**
Easy Upgrades												
	2006	0	$31,819	$31,819								
	2007	104	$711,494	$1,882,035	5,183,640	0.59	0.78	12	$0.015	$0.040		
	2008	685	$2,992,261	$10,096,627	25,928,391	2.96	4.49	12	$0.013	$0.043		
	Total	**789**	**$3,735,574**	**$12,010,481**	**31,112,031**			**12**	**$0.013**	**$0.042**	**3.88**	**1.21**
Holiday Lighting Program												
	2008	14	$28,782	$73,108	259,092	0.03		10	$0.014	$0.035		
	Total	**14**	**$28,782**	**$73,108**	**259,092**			**10**	**$0.014**	**$0.035**	**2.85**	**1.12**

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Oregon Commercial Audits													
	2002	24	$5,200	$5,200									
	2003	21	$0	$4,000									
	2004	7	$0	$0									
	2005	7	$5,450	$5,450									
	2006	6											
	2007	8	$1,981	$1,981									
	2008	0	$58	$58									
	Total	**73**	**$12,689**	**$16,689**									(15)
Oregon School Efficiency													
	2005	0	$86	$86									
	2006	6	$24,379	$89,771	223,368	0.03		12	$0.012	$0.044			
	Total	**6**	**$24,465**	**$89,858**	**223,368**			**12**	**$0.012**	**$0.044**			
Industrial													
Custom Efficiency													
	2003	0	$1,303	$1,303									
	2004	1	$112,311	$133,441	211,295	0.02		12	$0.058	$0.069			
	2005	24	$1,128,076	$3,653,152	12,016,678	1.37		12	$0.010	$0.033			
	2006	40	$1,625,216	$4,273,885	19,211,605	2.19		12	$0.009	$0.024			
	2007	49	$3,161,866	$7,012,686	29,789,304	3.40	3.62	12	$0.012	$0.026			
	2008	100	$4,045,671	$16,312,379	41,058,639	4.68	4.77	12	$0.011	$0.044			
	Total	**214**	**$10,074,442**	**$31,386,846**	**102,287,521**			**12**	**$0.018**	**$0.056**	**4.83**	**1.55**	

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(15) Oregon statutory program. The company does not monitor customer implementation of audit recommendations and thus does not estimate savings for this program. Audit expense not involving outside contractor services are booked to general customer service.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Irrigation													
Irrigation Efficiency Rewards													
	2003	2	$41,089	$54,609	36,792	0.00	0.02	15	$0.106	$0.141			(16)
	2004	33	$120,808	$402,978	802,812	0.09	0.45	15	$0.014	$0.048			(17)
	2005	38	$150,577	$657,460	1,012,883	0.12	0.40	15	$0.014	$0.062			
	2006	559	$2,779,620	$8,514,231	16,986,008	1.94	5.10	8	$0.024	$0.073			
	2007	816	$2,001,961	$8,694,772	12,304,073	1.40	3.41	8	$0.024	$0.103			
	2008	961	$2,103,702	$5,850,778	11,746,395	1.34	3.47	8	$0.026	$0.073			
	Total	**2,409**	**$7,197,758**	**$24,174,827**	**42,888,963**			**8**	**$0.024**	**$0.082**	**5.49**	**1.64**	(18)
Other Programs													
Building Operator Training													
	2003	71	$48,853	$48,853	1,825,000	0.21		5	$0.006	$0.006			(19)
	2004	26	$43,969	$43,969	650,000	0.07		5	$0.014	$0.014			
	2005	7	$1,750	$4,480	434,167	0.05		5	$0.001	$0.002			
	Total	**104**	**$94,572**	**$97,302**	**2,909,167**			**5**	**$0.007**	**$0.007**			
Other Programs													
Commercial Education Initiative													
	2005		$3,497	$3,497									
	2006		$4,663	$4,663									
	2007		$26,823	$26,823									
	2008		$72,738	$72,738									
	Total		**$107,721**	**$107,721**									

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(16) Restated from $11,190 in prior reports.

(17) Originally reported expense and energy included accrued amounts, restated here to align with accounting records.

(18) Measure life is weighted life (based on energy savings) of custom option (15 years) and menu options (5 years).

(19) Originally reported expense and energy included accrued amounts: 2003 restated from $36,084, 2004 restated from $48,853.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio
Distribution Efficiency Initiative												
	2005		$21,552	$43,969								
	2006		$24,306	$24,306								
	2007		$8,987									
	2008		-$1,913	-$1,913								
	Total		**$52,932**	**$66,362**								
DSM Direct Program Overhead												
	2007		$56,909	$56,909								
	2008		$169,911	$169,911								
	Total		**$226,820**	**$226,820**								
Other C&RD and CRC BPA												
	2002		$55,722	$55,722								
	2003		$67,012	$67,012								
	2004		$108,191	$108,191								
	2005		$101,177	$101,177								
	2006		$124,956	$124,956								
	2007		$31,645	$31,645								
	2008		$6,950	$6,950								
	Total		**$495,654**	**$495,654**								
Residential Education Initiative												
	2005		$7,498	$7,498								
	2006		$56,727	$56,727								
	2007		$0	$0								
	2008		$150,917	$150,917								
	Total		**$215,142**	**$215,142**								

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

Program/Year		Participants (Number)	Total Costs: Utility Cost[c] (dollars)	Total Costs: Resource Cost[d] (dollars)	Savings and Demand Reduction: Annual Energy (kWh)	Savings and Demand Reduction: Average Demand[e] (aMW)	Savings and Demand Reduction: Peak Demand[f] (MW)	Measure Life (Years)	Levelized Costs[a]: Total Utility ($/kWh)	Levelized Costs[a]: Total Resource ($/kWh)	Program Life Benefit/Cost Ratios[b]: Utility Benefit/Cost Ratio	Program Life Benefit/Cost Ratios[b]: Total Resource Benefit/Cost Ratio	
Local Energy Efficiency Funds													
	2003	56	$5,100	$5,100									
	2004	0	$23,449	$23,449									
	2005	2	$14,896	$26,756	78,000	0.01		10	$0.024	$0.042			
	2006	480	$3,459	$3,459	19,027	0.00		7	$0.009	$0.009			
	2007	1	$7,520	$7,520	9,000	0.00		7	$0.135	$0.135			
	2008	2	$22,714	$60,100	115,931	0.01		15	$0.019	$0.049			
	Total	**541**	**$77,138**	**$126,384**	**221,958**			**10**	**$0.043**	**$0.070**			
Market Transformation													
NEEA													
	2002		$1,286,632	$1,286,632	13,251,644	1.51							
	2003		$1,292,748	$1,292,748	12,050,157	1.38							
	2004		$1,256,611	$1,256,611	13,545,896	1.55							
	2005		$476,891	$476,891	16,297,235	1.86							
	2006		$930,455	$930,455	22,337,477	2.55							
	2007		$893,340	$893,340	28,601,410	3.27							
	2008		$942,014	$942,014	32,671,465	3.73							(20)
	Total		**$7,078,690**	**$7,078,690**	**138,755,283**								

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(20) Savings are preliminary estimates provided by the Northwest Energy Efficiency Alliance.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

		Total Costs		Savings and Demand Reduction				Levelized Costs[a]		Program Life Benefit/Cost Ratios[b]		
Program/Year	Participants (Number)	Utility Cost[c] (dollars)	Resource Cost[d] (dollars)	Annual Energy (kWh)	Average Demand[e] (aMW)	Peak Demand[f] (MW)	Measure Life (Years)	Total Utility ($/kWh)	Total Resource ($/kWh)	Utility Benefit/Cost Ratio	Total Resource Benefit/Cost Ratio	
Annual Totals												
2002		**$1,932,520**	**$2,366,591**	**17,117,294**	**1.95**	**0.00**						
2003		**$2,566,229**	**$3,119,609**	**18,712,919**	**2.14**	**0.02**						
2004		**$3,827,213**	**$4,688,637**	**19,419,605**	**2.22**	**6.54**						
2005		**$6,523,348**	**$9,358,620**	**37,853,046**	**4.32**	**43.96**						
2006		**$11,174,181**	**$19,761,633**	**70,765,825**	**8.08**	**43.72**						
2007		**$14,896,816**	**$25,269,343**	**91,145,357**	**10.40**	**57.07**						
2008		**$20,213,215**	**$43,177,423**	**140,155,765**	**15.99**	**72.03**						
Total Direct Program		**$61,133,523**	**$107,741,856**	**395,169,810**								
Indirect Program Expense												
DSM Overhead and Other Indirect												
2002		$128,855										(21)
2003		-$41,543										(21)
2004		$142,337										
2005		$177,624										
2006		$309,832										
2007		$765,561										
2008		$980,305										
Total		**$2,462,971**										

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.

(21) Analysis and indirect expense were not separated in the accounting for this reporting period.

Appendix 4. DSM Expense and Performance 2002–2008 (continued)

		Total Costs		Savings and Demand Reduction				Levelized Costs[a]		Program Life Benefit/Cost Ratios[b]	
Program/Year	Participants (Number)	Utility Cost[c] (dollars)	Resource Cost[d] (dollars)	Annual Energy (kWh)	Average Demand[e] (aMW)	Peak Demand[f] (MW)	Measure Life (Years)	Total Utility ($/kWh)	Total Resource ($/kWh)	Utility Benefit/Cost Ratio	Total Resource Benefit/Cost Ratio
Total Expense											
2002		$2,061,375									
2003		$2,524,686									
2004		$3,969,550									
2005		$6,700,972									
2006		$11,484,013									
2007		$15,662,377									
2008		$21,193,520									
Total 2002–2008	Total	$63,596,494									

(a) Levelized Costs are based on financial inputs from Idaho Power's 2006 Integrated Resource Plan and calculations include line loss adjusted energy savings.

(b) Program Life Benefit/Cost Ratios are provided for active, non-statutory programs only.

(c) The Total Utility Cost is all costs incurred by Idaho Power to implement and manage a DSM program.

(d) The Total Resource Cost is the total expenditures for a DSM program from the point of view of Idaho Power and its customers as a whole.

(e) Average Demand = Annual Energy / 8,760 annual hours.

(f) Summer Peak Demand is reported for programs that directly reduce load or measure demand reductions during summer peak season.