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JASON B. WILLIAMS
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April 1, 2011

VIA HAND DELIVERY

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

Re: Case No. IPC-E-03-13, Order No. 29505 – Compliance Filing
2010 Annual Report of Weatherization Assistance for Qualified Customers Program

Dear Ms. Jewell:

Enclosed please find eight (8) copies of Idaho Power Company's report on the 2010 activity for the Weatherization Assistance for Qualified Customers program filed in compliance with the above-referenced Order. If you have any questions regarding the content of the report, please direct them to Pete Pengilly at 388-2281 or Darlene Nemnich at 388-2505.

Very truly yours,

Jason B. Williams

JBW:csb
Enclosures
cc: Pete Pengilly (w/o encls.)
Darlene Nemnich (w/o encls.)

1221 W. Idaho St. (83702)
P.O. Box 70
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Weatherization Assistance
for Qualified Customers

2010 Annual Report
April 1, 2011

Printed on recycled paper

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DESCRIPTION

The Weatherization Assistance for Qualified Customers (WAQC) program provides financial assistance to regional Community Action Partnership (CAP) agencies in the Idaho Power service area. This assistance helps cover weatherization costs of electrically heated homes occupied by qualified customers with limited income. The WAQC program also provides a limited pool of funds for weatherization of buildings occupied by non-profit organizations serving primarily special-needs populations, regardless of heating source, with priority given to buildings with electric heat. Weatherization improvements enable residents to maintain a more comfortable, safe, and energy-efficient home while reducing their monthly electricity consumption. Improvements are available at no cost to qualifying applicants who own or rent their homes. These customers also receive educational materials and efficiency ideas for further reducing energy use in their homes. Local CAP agencies determine program eligibility according to federal and state guidelines.

BACKGROUND

In 1989, Idaho Power began offering weatherization assistance in conjunction with the State of Idaho Weatherization Assistance Program. Through the WAQC program, Idaho Power provides supplementary funding to state-designated CAP agencies for the weatherization of electrically heated homes occupied by qualified customers and buildings occupied by non-profit organizations that serve special-needs populations.

Idaho Power has a WAQC agreement with each CAP agency. The agreement specifies the funding allotment, billing requirements, and program guidelines. Currently, Idaho Power oversees the program in Idaho through five regional CAP agencies, including the Canyon County

Organization on Aging, Weatherization, and Human Services (CCOA); Eastern Idaho Community Action Partnership (EICAP); El-Ada Community Action Partnership (El-Ada); South Central Community Action Partnership (SCCAP); and Southeastern Idaho Community Action Agency (SEICAA). In Baker County, Oregon, Community Connection of Northeast Oregon, Inc. (CCNO) serves Idaho Power customers. Community in Action (CinA) provides weatherization services for qualified customers in Malheur and Harney Counties.

The *Weatherization Assistance for Qualified Customers 2010 Annual Report* satisfies the reporting requirements set out in the Idaho Public Utilities Commission's (IPUC) Order No. 29505 with the inclusion of the following topics:

- Review of Weatherized Homes and Non-Profit Buildings by County
- Review of Measures Installed
- Overall Cost-Effectiveness
- Customer Education, Advocacy, and Satisfaction
- Plans for 2011

REVIEW OF WEATHERIZED HOMES AND NON-PROFIT BUILDINGS BY COUNTY

In 2010, Idaho Power provided a total of $1,162,534 to Idaho CAP agencies with $1,056,849 directly funding audits, energy-efficient measures, and health and safety measures for qualified customers' homes (production costs), and another $105,685 funding the administration costs incurred by the Idaho CAP agencies. The total number of Idaho homes weatherized during 2010 was 373. In Oregon, Idaho Power provided a total of $113,427 to CAP agencies, including

$103,115 in production costs for 27 homes and $10,312 funding administrative costs. Table 1 shows the number of homes weatherized, production costs, average cost-per-home, administration payments, and total payments per county made by Idaho Power.

Table 1
2010 WAQC weatherization activities and Idaho Power expenditures by agency and county

Agency	County	Number of Jobs	Production Costs	Average Cost	Administration Payment to Agency	Total Payment
Idaho						
CCOA						
	Adams	2	$3,982	$1,991	$398	$4,380
	Boise	2	$6,090	$3,045	$609	$6,699
	Canyon	88	$210,341	$2,390	$21,034	$231,375
	Gem	5	$9,921	$1,984	$992	$10,913
	Payette	8	$44,447	$5,556	$4,445	$48,892
EICAP						
	Lemhi	4	$11,625	$2,906	$1,163	$12,788
El-Ada						
	Ada	98	$374,814	$3,825	$37,481	$412,295
	Elmore	26	$117,093	$4,504	$11,709	$128,802
	Owyhee	5	$24,892	$4,978	$2,489	$27,382
SCCAP						
	Cassia	1	$1,020	$1,020	$102	$1,122
	Gooding	16	$35,738	$2,234	$3,574	$39,312
	Jerome	10	$19,279	$1,928	$1,928	$21,207
	Lincoln	3	$9,518	$3,173	$952	$10,470
	Minidoka	1	$1,134	$1,134	$113	$1,248
	Twin Falls	41	$85,497	$2,085	$8,550	$94,046
SEICCA						
	Bannock	40	$70,466	$1,762	$7,047	$77,513
	Bingham	17	$24,789	$1,458	$2,479	$27,268
	Power	6	$6,202	$1,034	$620	$6,822
Oregon						
CCNO	Baker	3	$11,800	$3,933	$1,180	$12,980
CinA	Malheur	24	$91,315	$3,805	$9,132	$100,447

All amounts are rounded to the nearest dollar.

In an effort to help CAP agencies provide funding to as many customers as possible under WAQC, Idaho Power's agreements with agencies includes a provision allowing a maximum annual average cost-per-home up to a dollar amount specified in the agreement between the agency and Idaho Power. The average cost-per-home served is calculated by dividing the total annual Idaho Power production cost of homes weatherized per agency by the total number of homes weatherized that the CAP agency billed to Idaho Power during the year. The maximum annual average cost-per-home the CAP agency allowed under the 2010 agreement was $4,500. Overall in 2010, Idaho CAP agencies had a combined average cost-per-home served of $2,833. Oregon CAP agencies averaged $3,819. A CAP agency may have an average by county of over $4,500; however, the maximum annual average is for the agency's entire service area.

Administration fees are based on 10 percent of Idaho Power's per-home production costs. The average administration cost-per-Idaho-home weatherized in 2010 was $283, and the average administration cost-per-Oregon-home weatherized during the same period was $382. Additionally, Idaho Power staff labor, marketing, and support costs for the WAQC program totaled $45,171 for the year. These expenses were paid in addition to the WAQC program funding requirements of $1,212,534 contained in IPUC Order No. 29505.

In compliance with Order No. 29505, WAQC program funds are tracked, with unspent funds carried over and made available to CAP agencies in the following year. In Idaho in 2010, $0.11 was carried forward from 2009. In Oregon, $80,365.61 was carried forward from 2009 to 2010. Table 2 details the funding base amount, carryover funding, and the total amount of annual funding.

Table 2
2010 WAQC base and carryover funding

	Base	Carryover From 2009	Total 2010 Allotment	2010 Spending
Idaho Agency				
CCOA	$302,259.00	$0.00	$302,259.00	$302,259.00
EICAP	$12,788.00	$0.00	$12,788.00	$12,788.00
El-Ada	$568,479.00	$0.00	$568,479.00	$568,479.00
SCCAP	$167,405.00	$0.00	$167,405.00	$167,405.00
SEICAA	$111,603.00	$0.00	$111,603.00	$111,603.00
Non-Profit Buildings	$50,000.00	$0.11	$50,000.11	$0.00
Idaho Total	**$1,212,534.00**	**$0.11**	**$1,212,534.11**	**$1,162,534.00**
Oregon Agency				
CCNO	$6,450.00	$6,530.20	$12,980.20	$12,980.20
CinA	$36,550.00	$65,835.41	$102,385.41	$100,446.79
Non-Profit Buildings	$2,000.00	$8,000.00	$10,000.00	$0.00
Oregon Total	**$45,000.00**	**$80,365.61**	**$125,365.61**	**$113,426.99**

REVIEW OF MEASURES INSTALLED

The WAQC program realized 3,741,652-kilowatt-hour (kWh) savings from weatherizing homes in Idaho and Oregon. There were no buildings housing non-profit agencies weatherized in either Idaho or Oregon during 2010.

Table 3 details home counts in which Idaho Power paid a portion of measure costs, and recognizes the corresponding kWh savings by individual measure during 2010. The table also shows the life of each measure as defined in the EA4 energy audit—the software program approved for use by the State of Idaho Weatherization Assistance Program. The home counts column represents the number of times any percentage of that measure was billed to Idaho Power during the year. In reality, measure counts are higher when considering each home because in some homes, the measure was actually installed and billed at 100 percent to the state weatherization program and not to Idaho Power. In this case, Idaho Power would claim no

savings for that measure. Consistent with the State of Idaho Weatherization Assistance Program, Idaho Power offers several measures that have costs, but do not necessarily save energy or the savings cannot be measured. Included in this category are elements, such as health and safety, vents, furnace repair, and home energy audits. Health and safety measures are necessary to ensure weatherization activities do not cause unsafe situations in a customer's home or compromise a household's existing indoor air quality. Other non-energy-saving measures are allowed under this program because of the interaction between the non-energy-saving measures and the energy saving measures. Examples of items included in the "other" measure category are solid metal crossover duct with spray-foam sealant, fire retardant, and tie wire. This example includes material costs, labor costs for installation, and agency support costs.

Table 3
2010 WAQC review of measures installed

	Idaho Power Portion				Levelized
	Home Counts	Production Costs	Annual kWh Savings	Measure Life: Years	Costs[1] ($/kWh)
Idaho Home Measures					
Windows	292	$445,726	1,551,874	15	$0.028
Doors	196	$123,530	522,162	15	$0.023
Wall insulation	12	$4,580	21,777	20	$0.018
Ceiling insulation	148	$76,508	206,810	20	$0.031
Vents	2	$623	n/a	n/a	n/a
Floor insulation	129	$83,452	174,037	20	$0.041
Infiltration	196	$56,961	189,470	15	$0.030
Ducts	63	$17,910	78,357	20	$0.019
Health & Safety	5	$852	n/a	n/a	n/a
Other	1	$1,700	n/a	n/a	n/a
Water heater	44	$1,167	11,327	10	$0.013
Pipes	7	$349	318	15	$0.109
Refrigerator replace	1	$754	1,750	20	$0.037
Furnace modify	1	$1,183	3,464	3	$0.117
Furnace repair	2	$3,169	n/a	15	n/a

Table 3 (Continued)
2010 WAQC review of measures installed

	Idaho Power Portion				
	Home Counts	Production Costs	Annual kWh Savings	Measure Life: Years	Levelized Costs[1] ($/kWh)
Idaho Home Measures (continued)					
Furnace replace	110	$221,214	642,064	20	$0.029
Compact Florescent Light (CFL) bulbs	324	$5,442	48,616	3	$0.038
Audit investment	172	$11,729	n/a	7	n/a
Oregon Home Measures					
Windows	10	$19,338	32,215	15	$0.059
Doors	9	$3,940	11,449	15	$0.034
Wall insulation	4	$5,480	33,844	20	$0.014
Ceiling insulation	19	$24,960	81,944	20	$0.026
Floor insulation	21	$28,756	74,311	20	$0.033
Infiltration	24	$9,142	28,814	15	$0.031
Ducts	12	$5,244	17,121	20	$0.026
Water heater	1	$275	370	10	$0.095
Furnace tune	1	$85	807	3	$0.036
Furnace replace	2	$5,895	8,752	20	$0.057

[1] Levelized Costs are calculated using the 2009 IRP after-tax weighted average cost-of-capital discount factor of 6.98% and include line loss adjusted energy savings.

OVERALL COST-EFFECTIVENESS

Idaho Power monitors overall cost-effectiveness by requiring each CAP agency to ensure that each project has a savings-to-investment ratio (SIR) equal to or greater than 1.0. The total project's SIR reflects all the measure costs associated with the project, including measure costs that have no kWh savings, and compares that total cost to the benefit of the total kWh savings of the project. There are many factors incorporated into the SIR cost-effectiveness calculation in the EA4 criteria. Heating degree days, audit and labor hours, material costs, support hours, and energy costs are built into the formula. Square footage, housing age and type, and exposure

factors are all considered in the program as well. Under this standard, projects with an SIR greater than 1.0 are considered to be cost-effective by the EA4 energy audit criteria.

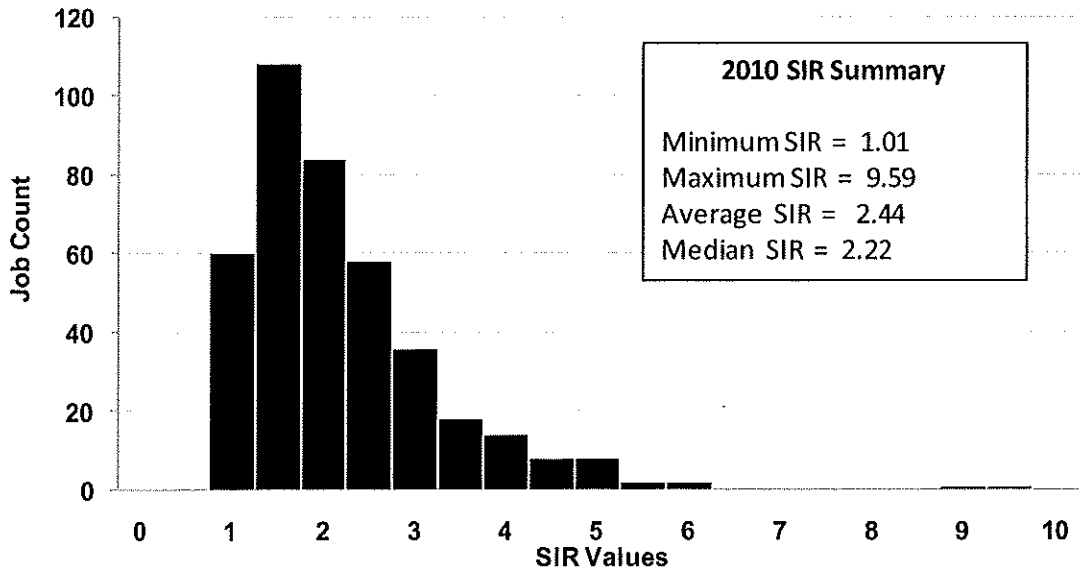

Figure 1
SIR frequency distribution

Figure 1 shows the SIR frequency distribution of the 2010 projects funded through WAQC. During 2010, SIR values ranged between 1.01 and a high project value of 9.59, with a mean SIR of 2.44. The levelized cost of saved energy in 2010 for the WAQC program is $0.027/kWh from a utility cost perspective and $0.035/kWh from a total resource cost perspective.

Annually, Idaho Power participates in the audits of 5 percent of the homes weatherized under the WAQC program. This includes Idaho Power personnel's participation in the Idaho state peer review process that reviews weatherized homes. The review involves representatives from CAP agencies, Community Action Partnership Association of Idaho, Inc. (CAPAI), and the Idaho State Department of Health and Welfare (IDHW) reviewing homes weatherized by each of the other CAP agencies. Results show that all CAP agency weatherization departments are weatherizing in accordance with federal guidelines. In addition to the peer-review process,

Idaho Power personnel visits weatherized homes with qualified customers as needed or requested by customers. The US Department of Energy (DOE) also audits state agencies each year. The DOE audits include fieldwork, as well as paperwork and billing audits.

CUSTOMER EDUCATION, ADVOCACY, AND SATISFACTION

Idaho Power provides materials to each CAP agency to help educate qualified customers who receive weatherization assistance. Included in the materials are copies of the Idaho Power brochures *Practical Ways to Manage Your Electricity Bill* and *Energy Saving Tips* that describe energy conservation tips appropriate for both the heating and cooling seasons, and a two-sided card that describes the energy-saving benefits of using compact fluorescent light (CFL) bulbs and helpful information about using the bulbs. In addition, Idaho Power provides each CAP agency copies of the book *30 Simple Things You Can Do To Save Energy*. Idaho Power also actively informs customers about weatherization assistance through energy, resource, and senior fairs.

To stay current with new programs and services, the Idaho Power program specialist overseeing WAQC attends state and federal energy assistance/weatherization meetings and other weatherization-specific conferences, such as the National Energy and Utility Affordability Conference. Idaho Power is also active in the Policy Advisory Council, helping advise and direct Idaho's state weatherization application to the DOE.

PLANS FOR 2011

Idaho Power will continue working in partnership with the IDHW, Oregon Housing and Community Services (OHCS), CAPAI, and individual CAP agency personnel to maintain the

targets, guidelines, and cost-effectiveness of the WAQC program. In so doing, Idaho Power will provide a valuable service to its qualified customers throughout the company's service area.

A new energy audit developed for the Idaho State Weatherization Assistance Program is Web-based and has mechanical and architectural measure interaction functionality. This functionality will prioritize measures according to the interacted SIR. This new energy audit, called EA5, has interim approval from the DOE. Starting April 1, 2011, the new EA5 is scheduled to be used by weatherization managers.

Based on the required funding and the contracted annual average-per-home cost of $5,525, Idaho Power estimates 200 homes and eight non-profit buildings will be weatherized in Idaho in 2011. In Oregon, an estimate of eight homes and one non-profit building will be weatherized. In 2011, Idaho Power expects to fund $1,262,534 in weatherization measures and agency administration fees in Idaho, of which $100,000 will be used to weatherize buildings housing non-profit agencies that primarily serve qualified customers. Through the WAQC program, Oregon CAP agencies have an allotment of $56,939 to manage weatherization services for Idaho Power customers. Overall, Idaho Power will provide the WAQC program with over $1,319,473 in funding for weatherization of homes and buildings of housing agencies serving qualified customers. This amount includes unused funds carried over from the prior year.

Idaho Power plans to continually evaluate the need for additional program changes. The company will continue to participate in the Idaho state peer review process, the review of weatherized homes, and the auditing of a minimum of 5 percent of the homes weatherized under the WAQC program for quality assurance.

Idaho Power plans to review the evaluations being conducted by Avista, Rocky Mountain Power, and Oak Ridge National Laboratory in 2011. As stated by the Oak Ridge National Laboratory, *Weatherization Assistance Program Technical Memorandum Background Data and Statistics*, March 2010[1]:

> Statistically valid answers to many of the questions surrounding Weatherization and its performance require comprehensive evaluation of the program. DOE is undertaking precisely this kind of independent evaluation in order to ascertain program effectiveness and to improve its performance. Results of this evaluation effort will begin to emerge in late 2010 and 2011, but they require substantial time and effort.

The review of these evaluations, when they are completed, will help guide Idaho Power in assessing the type and extent of the evaluations needed for the WAQC program as planned for 2012.

[1] http://weatherization.ornl.gov/pdfs/ORNL_TM-2010-66.pdf

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