



February 13, 2004

Washington Utilities & Transportation Commission  
1300 S. Evergreen Park Drive SW  
Mail Stop: FY-11/7250  
Olympia, WA. 98504-7250

Attention: Carole Washburn  
Executive Secretary

RE: Docket No. UE-001457 – System Benefits Charge Reporting

Enclosed is PacifiCorp's Annual report on the System Benefit Charge collection and energy efficiency expenditures for the period January through December 2003. This report is in accordance with accounting order in Docket UE-001457.

If you have any questions or comments regarding this report, please contact me at (503) 813-6092.

Sincerely,

A handwritten signature in cursive script that reads "Christy Omohundro".

Christy Omohundro  
Vice-President, Regulatory Policy  
PacifiCorp  
825 NE Multnomah Street, Suite 800  
Portland, Oregon 97232

Enclosure



36 USC 210506

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**PACIFICORP'S**

**Annual Review**

**of**

**2003 Energy Efficiency Programs**

**in**

**State of Washington**

**February 13, 2003**

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## SUMMARY

### **PacifiCorp's 2003 Annual Review of Energy Efficiency Programs**

As requested, the Company is providing data on 2003 energy efficiency program performance in the State of Washington by sector and program.

#### Achievements

In 2003, PacifiCorp (Pacific Power) achieved a total of **27,700,483 kWh/year or 3.16 MWa** in the State of Washington (at generation).

#### Advisory Group:

In the stipulation in UE-991832 the Company agreed to file for approval of a System Benefits Charge (SBC). As part of the stipulation, the Company convened an advisory group of interested stakeholders in July 2000. The Company met with the advisory group in 2000 for input on the initial suite of programs and the initial SBC collection rate. An initial suite of programs and SBC tariff were filed and approved in late 2000. The Company began collecting revenue through Schedule 191, the System Benefits Charge tariff, in January 2001. Expenditures for the initial suite of programs were expected to ramp up to an annual level of approximately \$4.1 million. The SBC collection level for 2001 was set at \$2.8 million to allow for first year ramp-up and uncertainties about market response to the programs. Actual expenditures in 2001 were \$3.7 million due to the increased interest in energy efficiency by customers in response to the volatility in the energy market and increased effort on the Company's part to respond to the regional call to action.

Working with input from the advisory group, the Company filed to increase the SBC from an annual collection rate of \$2.8 million to \$6.5 million to recover the higher expenditures in late 2001 and provide for ongoing expenditures in 2002. The 2002 collection rate was approved in February of 2002. The intent was to collect \$6 million over the 11-month period from February to December 2002 and bring the SBC account into balance by the end of 2002.

As anticipated, the 2002 SBC collection rate was sufficient to bring the SBC account into balance by the end of 2002. The Company met and worked with the advisory group, then filed in November 2002 to decrease the collection rate to \$4.5 million annually and remove the sunset date on the tariff. These changes were approved and became effective in January 2003.

The Company met with its advisory group in December 2003 to provide an update and a preview of program enhancements planned for 2004. As of the end of 2003, expenditures and collections are in balance and the Company has no plans in the immediate future to make any changes to the System Benefits Charge (Schedule 191).

**PROGRAM OVERVIEW**

In 2003, PacifiCorp achieved a total of **27,700,483 kWh/year or 3.16 MWa** in the State of Washington (at generation). Table 1 below shows program-by-program achievements.

Table 1: 2003 PacifiCorp Program Achievements

Program	Units	kWh/yr		\$'s
		@generation	aMW @gen	
<b>Low Income Weatherization (114)</b>	402	831,726	0.09	\$899,431.79
<b>On-Line Audit (111)</b>	2,987	1,241,455	0.14	\$175,958.91
<b>School Energy Education (113)</b>	2,370	497,862	0.06	\$116,815.85
<b>Total Residential*</b>	5,759	2,571,043	0.29	\$ 1,192,206.55
<b>Small Retrofit Incentive (115)</b>	26	982,448	0.11	\$184,250.78
<b>Retrofit Incentive (116)</b>	20	1,354,885	0.15	\$213,090.49
<b>Energy FinAnswer (125)</b>	6	1,642,429	0.19	\$390,985.88
<b>Total Commercial</b>	52	3,979,762	0.45	\$788,327.15
<b>Energy FinAnswer (125)</b>	31	21,149,679	2.41	\$1,966,120.11
<b>Small Retrofit Incentive (115)</b>	0	0	0.00	\$1,297.53
<b>Retrofit Incentive (116)</b>	0	0	0.00	\$9,477.37
<b>Total Industrial</b>	31	21,149,679	2.41	\$1,976,895.01
<b>Total Company DSM**</b>	<b>5,842</b>	<b>27,700,483</b>	<b>3.16</b>	<b>\$3,957,428.71</b>

\*There were additional residential expenses related to  
Administration costs related to prior programs \$141,007.84  
Program development costs for refrigerator recycling \$4,597.45  
\*\*NEEA expenditures for 2003 total \$ 559,268.78

## **RESIDENTIAL PROGRAMS**

The Company's residential programs in 2003 included the Low Income Weatherization program, the On-Line Audit program and the School Energy Education program. The On-Line Audit was new to the Washington residential mix in June of 2002. This was introduced as a pilot in 2002, and continues as a residential offering. An evaluation was completed and presented to the Advisory group in December 2003. The School Energy Education program began as a three year pilot in 2000 with expenditures covered through shareholder funds. Based on pilot results, the WUTC approved the continuation of the program as a DSM offering in the spring of 2003.

### **Residential Weatherization (Schedule 114)**

PacifiCorp partners with three local non-profit agencies (Blue Mountain Action Council in Walla Walla, Northwest Community Action Center in Toppenish and Opportunities Industrialization Center of Washington in Yakima) to provide weatherization services to households throughout our service area. The leveraging of PacifiCorp funding along with Washington Matchmaker Program funds allows the agencies to provide the weatherization services at no-cost to income qualifying homeowners and renters residing in single-family homes, manufactured homes and apartments. Over 5,500 homes have been completed since the program began in the mid-1980s with 402 homes completions in 2003.

### **Residential On-Line Audit (Schedule 111)**

The residential On-Line Audit program was approved as a pilot May 28, 2002. The purpose of the program is to offer customers an on-line home energy analysis. An audit report provides customers with personalized recommendations on saving energy and costs. After the customer completes the audit, they receive a DSM kit of instant energy savings measures including an emergency night light, showerhead, kitchen sink aerator and a water heater temperature gauge. The program is being continued and is no longer considered a pilot. An evaluation of the pilot was completed and the draft results were presented to the Advisory Group in December 2003. Quantec, the consultant that performed the evaluation, is incorporating advisory group input into a final evaluation report. The Company is currently looking at additional outreach mechanisms to increase program participation.

2,987 households participated in the On-Line Audit program in 2003 and Table 1 includes 368 kWh/yr savings per participant (at customer site).

### **School energy education program (Schedule 113)**

The school energy education program began as a three year pilot funded by PacifiCorp outside the System Benefits Charge. The curriculum was developed and offered to local schools throughout our service territory through local non-profit agencies including Blue Mountain Action Council in Walla Walla, Northwest Community Action Center in Toppenish and Opportunities Industrialization Center of Washington in Yakima. The agencies employ certified teachers to work with school administrators and classroom teachers to provide a minimum of 3 one-hour energy education sessions on topics such as electricity generation, conservation, meter reading and efficiency tips. Students are given measures such as showerheads and faucet aerators they can install with parent assistance in their homes. Students also track their past and present kWh usage through their monthly bills. 2,370 students completed the course in the 2002-2003 school year with savings for measure installation of 186 kWh/student and savings from behavioral changes of 199 kWh/student. Table 1 includes savings of 186 kWh/yr per student (at customer site).

It is estimated that 3,100 students will complete the course during the 2003-2004 school year with a projected per student average deemed savings of 719 kWh (620 kWh for measures and 99 kWh for behavioral changes). A program evaluation will be completed covering activities over the current school year from September 2003 through June 2004.

## **COMMERCIAL AND INDUSTRIAL**

### **(Schedule 125) Energy FinAnswer**

### **(Schedule 115 and 116) Retrofit Incentive**

The Company offers two programs for commercial, industrial and irrigation customers:

- Energy FinAnswer – for comprehensive retrofits and new construction. The program includes a vendor neutral investment grade energy analysis and cash incentives equal to \$0.12/kWh annual energy savings plus \$50/KW average monthly on-peak demand savings (up to 50% of energy efficiency measure costs). Also included is commissioning support and post-installation verification services. Measures with paybacks less than one year are not eligible for incentives. This program is an existing program enhanced with incentives as of October 2000.
- Retrofit Incentive – for typical lighting and HVAC equipment retrofits, and premium efficiency motor upgrades. The program includes an expedited energy analysis, incentives based on the equipment installed (\$/fixture, \$/horsepower, etc.), and post-installation follow-up. The program also includes refrigerated beverage vending machine occupancy sensors (Vending Miser) and LED traffic lights. Incentives for this program are also capped at 50% of energy efficiency measure costs (except for the Vending Miser measure). This program was new as of November 2000.

Energy FinAnswer is available for all new construction, all industrial retrofits, and commercial retrofits at facilities greater than 20,000 square feet. There is a 50% cap for lighting energy savings per project since lighting-only projects are included in the

Retrofit Incentive program. It is marketed primarily via Pacific Power account managers, trade allies, Energy FinAnswer consultants and project staff. Other leads come via word-of-mouth, past participants returning for additional projects and a combination of other Company outreach efforts.

The Retrofit Incentive (Schedules 115 and 116) is available to any size existing facility. The Company serves facilities under 20,000 square feet with the Small Retrofit Incentive program (Schedule 115) and larger facilities with the Retrofit Incentive program (Schedule 116) and further separates them into the commercial or industrial sectors. The Retrofit Incentive includes refrigerated beverage vending machine occupancy sensors (Vending Miser) installations and LED traffic signals under Schedule 115 for any size facility/location. The program is marketed primarily via trade allies and Pacific Power staff. As part of the program launch, the Company sent program information by direct mail to about 2,500 mid-market size facilities in March and October of 2001.

Both programs operate with a small internal staff and rely on a network of energy engineering consulting firms and trade allies for site-specific work. The Company focuses on bringing in new project leads and managing projects and contracts with specialized consultants on a project-by-project basis for energy analysis and other site work. There is a Quality Control review of energy analysis work before the report is presented to the customer. Customers interested in lighting retrofits are given the option to have the energy analysis work completed by an independent consultant or a lighting contractor who is a member of the Company's trade ally network. As a result, trade allies perform some of the site-specific work under the Retrofit Incentive program (not including pre- and post-installation inspections). There is also focus on maintaining and developing the infrastructure of consultants and trade allies. The Company maintains and develops a network of contractors and suppliers specific to industrial refrigeration and compressed air.

Table 1 includes savings documented in post-installation inspections for each project installed in 2003. Savings for Vending Miser and traffic light installations are based on deemed values. Total savings from the commercial/industrial programs increased by 14% in 2003 compared to 2002.

In 2003, the Company reviewed program performance and conducted market research to identify potential program enhancements. The program enhancements will be filed in 2004.

### **Industrial**

Energy efficiency efforts in the industrial sector have focused on variable frequency drives (VFDs), process and motor control upgrades, process refrigeration improvements, compressed air improvements, pneumatic material handling, pumping improvements and lighting upgrades.

The mix of energy efficiency measures installed varies from year to year. The industrial mix for 2003 installations included VFD control upgrades for pumps, fans, and



refrigeration compressors; improved controls for pumping, refrigeration and compressed air systems; enhanced refrigeration equipment including evaporators and condensers; enhanced compressed air equipment including VFD compressors and dryers; and improved lighting. Vertical market segments for 2003 installations included the tree fruit industry, packaging manufacturers, pulp and paper, dairies and other food processing, and irrigation. In 2003, the Company provided energy analysis services to additional vertical market segments for these and other measures. Energy efficiency measure installations resulting from these activities are expected in 2004 and beyond in some cases.

### **Commercial**

Energy efficiency efforts in the commercial sector have focused on lighting retrofits and controls, HVAC equipment retrofits and controls, grocery refrigeration, Vending Miser, and building shell improvements. The lighting retrofits in the commercial sector are primarily linear and compact fluorescent upgrades with some pulse start metal halide upgrades.

The commercial energy efficiency measure mix for 2003 installations included linear and compact fluorescent lighting retrofits and controls, pulse-start metal halide lighting, grocery refrigeration and lighting controls, high efficiency chillers, pump VFDs, and Vending Miser. Vertical market segments for 2003 installations included office buildings, financial institutions, grocery stores, churches, restaurants, schools and colleges, government facilities, hospitality, retail, medical, and athletic facilities. In 2003 the Company provided energy analysis services to additional vertical market segments for these and other energy efficiency measures. Energy efficiency measure installations resulting from these activities are expected in 2004 and beyond in some cases.

### **Other Company energy efficiency efforts**

In addition to its energy efficiency incentive programs, the Company co-sponsors energy efficiency seminars for commercial/industrial customers and the industries that serve them. In 2003, the Company assisted with promotion of Northwest Energy Efficiency Alliance seminars: Compressed Air Challenge, Motor Management, Energy Effective Lighting for the High Performance Environment (offered by the Lighting Design Lab), Building Operator Certification, Energy Management Certification, and Pump System Assessment Training.

**SYSTEM BENEFITS CHARGE ACCOUNT**

Table 2 below is the System Benefits charge monthly total of expenditures and revenue for Schedule 191.

Table 2: System Benefits Charge Report

	Deferred Expenditures	Schedule 191 Revenue Collected	Carrying Charge	Accumulative Balance
Beg. bal.	229,434.49			229,434.49
Jan-01	94,512.61	(131,901.00)	0.00	192,046.10
Feb-01	145,609.60	(261,924.00)	0.00	75,731.70
Mar-01	185,773.07	(232,666.00)	0.00	28,838.77
Apr-01	262,216.76	(213,921.00)	0.00	77,134.53
May-01	196,167.37	(201,911.00)	0.00	71,390.90
Jun-01	255,679.10	(204,215.00)	0.00	122,855.00
Jul-01	173,977.38	(228,934.00)	0.00	67,898.38
Aug-01	251,623.71	(230,780.00)	0.00	88,742.09
Sep-01	184,045.32	(314,688.00)	0.00	(41,900.59)
Oct-01	306,501.36	(136,208.00)	313.16	128,705.93
Nov-01	692,377.05	(221,720.00)	0.00	599,362.98
Dec-01	999,697.28	(263,766.00)	0.00	1,335,294.26
Jan-02	592,469.69	(358,527.00)	0.00	1,569,236.95
Feb-02	222,243.13	(416,922.91)	0.00	1,374,557.17
Mar-02	237,587.65	(540,079.00)	0.00	1,072,065.82
Apr-02	389,471.05	(509,876.09)	0.00	951,660.78
May-02	897,347.89	(465,370.00)	0.00	1,383,638.67
Jun-02	376,587.65	(475,695.00)	0.00	1,284,531.32
Jul-02	538,875.47	(542,502.00)	0.00	1,280,904.79
Aug-02	213,945.84	(544,157.00)	0.00	950,693.63
Sep-02	226,248.14	(559,828.00)	0.00	617,113.77
Oct-02	340,504.31	(497,450.00)	0.00	460,168.08
Nov-02	416,007.52	(592,025.00)	0.00	284,150.60
Dec-02	358,424.72	(617,662.00)	0.00	24,913.32
Jan-03	498,242.81	(533,044.00)	0.00	(9,887.87)
Feb-03	350,514.73	(404,901.00)	73.90	(64,200.23)
Mar-03	638,175.60	(373,519.00)	479.83	200,936.20
Apr-03	202,744.63	(350,314.00)	0.00	53,366.83
May-03	110,955.15	(298,036.00)	0.00	(133,714.02)
Jun-03	517,033.47	(353,697.00)	999.37	30,621.82
Jul-03	130,424.20	(382,888.00)	0.00	(221,841.98)
Aug-03	669,766.40	(427,226.00)	1,658.04	22,356.46
Sep-03	253,710.51	(416,436.00)	0.00	(140,369.03)
Oct-03	199,373.83	(341,638.00)	1,049.11	(281,584.08)
Nov-03	343,214.23	(389,210.00)	2,104.55	(325,475.30)
Dec-03	748,147.22	(462,279.00)	2,432.59	(37,174.49)
2003 total	4,662,302.78	(4,733,188.00)	8,797.41	
Total	13,449,630.94	(13,495,916.00)	9,110.57	