

Conservation Rider & Tracker Accounting Summary For the Year Ended December 31, 2000

March 1, 2001

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Electric Rider Accounting Overview

2000 Recovery

Program costs for the 2000 electric DSM Programs have been debited to FERC account No. 182.3 "Other Regulatory Assets". The recovery of the conservation expenditure is through the rates set forth in the electric tariff rider, Schedule 120 which are designed to recover on a peak credit basis for each class, during the period April 1, 2000 through March 31, 2001. The worksheet on page 2 summarizes all of the DSM costs and the recovered amount through the electric rider filing. The Company will debit FERC account No. 908 "Customer Assistance Expense" based on actual recoveries and credit "Other Regulatory Assets". Allocations of common costs were based on various scenarios such as the numbers of customers served by electric and gas programs, or direct spending by electric and gas programs.

Proposed Recovery of New Rider

The Company proposes to account for the 2001 electric DSM program costs in the same manner as the 2000 rider program. The program costs will be debited to FERC account 182.3 "Other Regulatory Assets. The recovery is for the period April 1, 2001 through March 31, 2002. The Company will debit FERC account No. 908 "Customer Assistance Expense" based on actual recoveries and credit "Other Regulatory Assets." The Company also proposes to roll the actual over/under recovery of the 2000 rider into the 2001 rider.

Puget Sound Energy

Conservation Rider Report

January 1, 2000 through December 31, 2000

Order	Tariff		Jar	ı - Dec 2000
<u>Number</u>	Sch. No.	Description	Ex	penditures
<u>RESIDENTIAL</u>				
18230128 18230601/18230602/18230	150 160	Net Metering	\$	13,500
4	200	Residential Efficiency Services		267,863
18230611	201	Low Income Retrofit		448,011
18230621	202	In Concert with the Environment		297,778
18230631/18230633	203	Duct System Pilot		59,687
18230423	207	Duplex/Triplex Retrofit Pilot		411
Summary of Residential C	Conservation 1	Programs:	\$	1,087,249
<u>COMMERCIAL/IND</u>	<u>USTRIAL</u>			
18230711	250	C/I Energy Efficiency Services	\$	1,794,356
18230715	251	Non Residential Energy Code Program		30,869
18230719	252	Premium Efficiency Motors		14,199
18230150/18230723	253	Resource Conservation Manager		109,946
18230725/18230740	255	Small Businessn Energy Efficiency		56,981
Summary of Commercial	Industrial Co	onservation Programs:	\$	2,006,350
REGIONAL MARKE	T TRANSF	ORMATION SUPPORT		
18230641	205	CFL Conservation Pilot	\$	88,870
18230651/18230422	206	High Efficiency Clothes Washers Pilot		6,101
18230420	208	Bulk Refrigerator Pilot		48,463
18230421	254	NW Energy Efficiency Alliance		2,031,717
18230726	256	Building Commissioning		15,777
18230728	257	LED Traffic Lights		19,585
18230729	258	High Voltage Pilot		336,074
18230730	270	Local Infrastructure/Market Transformation		123,259
		rmation Support Programs:	\$	2,669,847
TOTAL 2000 RIDER EX	PENDITURE	S	\$	5,763,447
Centralia Transaction Cr				1,933,639
Conservation Costs Recov	_	h Rates as of 12/31/00		3,383,628 2,697,453
Over Collection Related t Under Collection/ (Over Collection)		of 12/31/00		1,616,004
Recoveries for January 20		U1 14/31/VV		433,605
Forecasted Recoveries for		01 Through March 2001		881,211
Estimated Under Colle			- \$	301,188

Conservation overhead costs are allocated to all programs on an activity to total spending ratio.

Gas Tracker Accounting Overview

Deferred Costs

The following sections present summaries of program costs subject to deferral. In accordance with the Commission's letter in Docket No. UG-950288, the Company may also defer lost margins and an allowance for funds used to conserve energy ("AFUCE"), including a 2% low income and elderly kicker.

Through December 31, 2000 Lost Margins were calculated based on price per therm included in Rate Schedules 23 & 24. The amount calculated for January through December, 2000 is \$78,289 Through December 31, 2000, AFUCE has been calculated at an annual rate of 7.77% of program costs respectively and deferred for each of the tracker programs as shown below. The equity kicker portion of AFUCE was calculated at an annual rate of .88% of program costs and deferred for the LIW DSM only.

C/I DSM - AFUCE	\$	8,682
Residential DSM - AFUCE		47,888
LIW DSM - AFUCE		16,192
LIW DSM - Equity Kicker		1,833
	. 9	74,595

Recovery

Program costs for the DSM programs and related AFUCE have been debited to FERC account No. 182.3 "Other Regulatory Assets" for consideration of annual recovery in rates. The attached schedule provides a summary of all deferred costs to be recovered in the twelve months beginning April 1, 2001, through the DSM tracker filing accompanying this report. An adjustment was made to the calculation to true-up the 1998 Tracker Recovery for the amount of \$109,476 and is presented on page 4. Based on costs determined to be appropriate at the time of filing the petition in Docket No. UG-950288, the annual tariff tracker was anticipated to be apportioned 85% and 15% to firm sales rate schedules and interruptible sales rate schedules, respectively.

Subsequent to implementation of the rate structure approved coincident with the Company's last general rate change, interruptible sales volumes now comprise a significantly smaller fraction of the total sales. Consequently, the distribution of current gas costs is much different than that expected when the application relevant to this filing was originally made. Gas costs are now 87.16% firm sales and 12.84% interruptible sales as shown in Exhibit B of this filing. Accordingly, it is appropriate and consistent with prior action under this docket, that the sixth year program recovery, excluding revenue related taxes and fees, be collected at .090 cents per therm for all firm sales customers and .086 cents per therm for all interruptible sales customers, as shown on lines 15 and 16 of Exhibit B. This methodology is consistent with the Commission's finding on conservation costs as outlined in the Seventh Supplemental Order in Docket No. UG-940814. The Company will debit FERC account No. 908 "Customer Assistance Expense" based on actual recoveries and credit Other Regulatory Assets.

Exhibits

Exhibit A on page 7 illustrates the forecast of 2001 therms as well as the development of the apportioned factors for the Firm and Interruptible Schedules. Exhibit B on page 8 provides the 2001Tracker Recovery allocation which includes the 1998 Tracker True-up.

PUGET SOUND ENERGY

Conservation Tracker Report

For Period January - December 31, 2000

Order/Account Ta Number Sch.		<u>Description</u>	Jan - Dec 2000 Expenditures			
<u>RESIDENTIAL</u>						
Order:						
18230661	203	Low Income Retrofit	\$	218,730		
18230681/18230682/18230683	204	Duct System Pilot		15,801		
18230652/18230653/18230654	206	Resident Efficiency Services		195,768		
18230671	207	In Concert with the Environment		220,785		
Summary of Residential Conserv	ation Prog	rams:	\$	651,083		
COMMERCIAL/INDUSTR	<u>IAL</u>					
Order:						
18230731	205	C/I Energy Efficiency Services	\$	139,441		
18230871	206	Energy Education Program-Gas		1,843		
18230424	206	Coin-Op Washer Pilot		3,784.90		
18230691	208	Resource Conservation Manager		11,419		
18230250	208	Utility Cost Manager-Gas		6,911		
18230692	255	Small Business Energy Efficiency		13,666		
Summary of Commercial/Industr	rial Conser	vation Programs:	\$	177,065		
<u>AFUCE</u>						
Account:		Communical Consequention Programs	\$	8,682		
18230372		Commercial Conservation Programs Energy Education Programs	J	47,888		
18230382 18230392		Low Income Weatherization Programs		16,192		
18230402		Equity Kicker on Low Income Weatherization		1,833		
•		Equity McKel on Down Income Weatherman	•			
Summary of AFUCE:			\$	74,595		
TOTAL			\$	902,743		
1998 Tracker Recovery True-up			\$	(109,476)		
Total Conservation Tracker Rec	overy		\$	793,267		

Exhibit A

PUGET SOUND ENERGY

DOCKET NO.		UG-950288
EXHIBIT NO.		2000 Annual Report Exhibit A
SCHEDULE NO.		
SHEET NO.		OF
	1	2

2001 Annual Forecast of Therms and Gas Cost Recoveries

	Fotal Forecast Gas Cost	Т	4/01 - 3/02 Forecast			es	y Ra	st Recovery	s Cos	Gas	Line
	Volumes Recoveries		Total		Demand		Commodity		Rate	No.	
	(f)		(e)	(d)		(c)		(b)		(a)	
			(in therms)								
	77,062	\$	132,315	0.58241	\$	0.08677	\$	0.49564	\$	11,16	1
	312,630,446		505,980,944	0.61787	\$	0.12223	\$	0.49564	\$	23,24	2
	163,537		219,548	0.74488	\$	0.02372	\$	0.72116	\$	53	3
	121,264,388		200,172,314	0.60580	\$	0.11016	\$	0.49564	\$	31,36,51	4
	31,660,164		56,807,874	0.55732	\$	0.06168	\$	0.49564	\$	41	5
	-		-	0.61112	\$	0.11548	\$	0.49564	\$	43	6
	201,828		377,094	0.53522	\$	0.03958	\$	0.49564	\$	50	7
	465,997,425	\$	763,690,089								8
	14,902,255	\$	25,670,528	0.58052	\$	0.08488	\$	0.49564	\$	85	9
	16,965,368		29,224,433	0.58052	\$	0.08488	\$	0.49564	\$	86	10
	36,773,248		67,264,035	0.54670	\$	0.05106	\$	0.49564	\$	87	11
	68,640,871	\$	122,158,996								12
		:	885,849,085	VOLUMES	es v	FAL SALI	то				13
86.2			763,690,089	LES	UI	M SCHEI	FIF				14
13.7			122,158,996	ES	ULI	SCHED	IN	•			15
	5 534,638,296	<u>\$</u>		ST RECOVERIES	со	FAL GAS	то				16
87.1	465,997,425	\$		LES	UI	M SCHEI	FIF				17
12.8	68,640,871			ES	ULI	. SCHED	IN				18

Exhibit B

PUGET SOUND ENERGY

DOCKET NO.		UG-9502	288	
EXHIBIT NO.		2000 An Exhib	nual Report it B	
SCHEDULE NO.				
SHEET NO.		OF		-(
	2	2		

2001 Annual Forecast of Therms and Gas Cost Recoveries **Tracker Recovery Calculation** Line No. (b) (c) 2001 Budget Therms 1 2 Firm 763,690,089 86.21% 3 Interruptible 122,158,996 13.79% **Total Sales Volumes** 885,849,085 100% 5 2000 Program Costs 902,743 6 1998 Tracker Recovery True-up 7 Firm (98,069) 89.58% 8 Interruptible (11,407)10.42% Total Required True-Up (109,476) 100.00% 10 Tracker Recovery Allocation - Including 1998 Recovery 11 Firm 688,773 87.16% Interruptible 104,494 12.84% 12 793,267 100% 13 Tracker Recovery Tracker Recovery Cents per Therm (Excluding Revenue Sensitive Items) 14 87.16% Firm (line 11 / line 2) \$ 0.00090 15 Interruptible (line 12 / line 3) 0.00086 12.84% 16 17 **Total Required Recovery** 100%



Energy Efficiency Services Program Results January – December, 2000

February 14, 2001

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Executive Summary

Program energy saving results continued their rapid upward trend through the third and fourth quarters of 2000 ending the year at 63,863,000 kWh (7.3 MWa) for all electric programs, and 1,785,874 Therms for all gas programs. These results exceeded the electric programs target by 9 percent, and more than doubled the gas programs target. Table 1 on page 10 shows individual targets and results for all programs. In addition to these energy savings, 155 commercial and industrial customer projects in progress representing prospective savings of 188,121,000 kWh per year (21.5 MWa) were "in the pipeline" at year end.

Concurrent with the ongoing ramp-up in savings results, adherence to the cost-effectiveness criteria outlined in electric conservation tariff Schedule 83 has helped maintain program spending levels below those projected in Appendix B of the 1999 conservation filing. Nonetheless, Puget Sound Energy (PSE) intends to satisfy all expectations set in that filing, and efforts have been underway since the second quarter of 2000 to assure that investment levels meet or exceed the total 3-year budget projection ending in March 2002.

Charts 1 through 4 on pages 11 through 14 illustrate program costs and energy savings compared to previous years, and to the 2000 target from Appendix B of the 1999 conservation filing.

In December an informal review of these earlier efforts showed that additional adjustments in program delivery and incentives for commercial and industrial program participants was needed. On December 14, 2000, PSE commercial and industrial program staff members met with commercial contractor and energy service company members of the Northwest Energy Efficiency Council (NEEC) to discuss PSE's funding criteria and program delivery methods. Appropriate adjustments were subsequently designed and implemented early in February 2001.

Additional program highlights through the third and fourth quarters of 2000 include:

- PSE commissioned the Northwest Energy Efficiency Council to develop a comprehensive list of energy efficiency operations & maintenance services for commercial facilities. The product was delivered to the Building Owners and Managers Association of Seattle and King County for distribution to members.
- Several changes to In Concert with the Environment have made it possible to reach more students and promise to reduce per student costs.
- Prior years' work with commercial and industrial customers is now bearing energy saving results as larger projects requiring long lead times are completed.
- Service to small business customers has significantly expanded with the addition of rebates and straightforward information about lighting improvements, occupancy sensors, LED exit signs, programmable thermostats, and vending machine controllers. The Hotline staff is now equipped to handle calls from small commercial customers.
- Conservation information has an increased presence on PSE's website, allowing residential
 and commercial customers to view and download information to assist reducing energy use
 and utility bills.
- Cooperative ventures such as development of the efficient lighting fixture website, www.elflist.com, with Seattle City Light, compliment regional efforts of the Northwest Energy Efficiency Alliance.

These summary items and more are described in further detail within the report.

Program Activities

Residential Energy Efficiency Services, Schedules 200/206

PSE's Energy Efficiency Services (EES) staff help residential customers use energy efficiently and reduce their energy costs by providing recommendations and detailed information through various Residential Energy Efficiency Services (REES) tools. Key elements of REES include a telephone hotline (1-800-562-1482), a home energy audit, known as Personal Energy Profile (PEP), and a number of brochures that answer a comprehensive range of questions about energy use in the home.

Customers request the Personal Energy Profile (PEP) and energy efficiency brochures over the phone, by mail, and through PSE's website: www.pugetsoundenergy.com. In addition to the useful information provided on the web and in printed materials, hotline staff members answer customer questions and offer guidance over the phone.

Notable highlights for Residential Energy Efficiency Services in 2000 include:

- Nearly 103,000 residential customer requests for energy efficiency information and recommendations
- More than 25,000 customer calls answered by the energy efficiency hotline.
- Nearly 27,500 customers utilizing the Personal Energy Profile. Requests for PEP through the website doubled during the last six months of 2000.
- Over 50,000 customers received other printed materials providing relevant energy saving information and tips. Customers requested these materials through the website, by returning bill inserts, or by calling the Hotline.
- A new version of PEP was implemented, providing a personalized report with easier-to-read graphs, displays that show energy costs by end-use, and recommendations for reducing energy consumption. Estimated savings, cost and payback for each improvement are also included.
- Nearly 3.3 million bill inserts were mailed to customers to inform them of available residential energy efficiency services. In addition, energy efficiency topics were included in the monthly Energy Wise Newsletter, delivered with customers' bills.
- PSE staff participated in the US Navy's Energy Awareness Fair at Bangor, in October, serving Navy personnel and civilian customers.
- Throughout the year, various organizations, including senior citizen groups,
 requested PSE staff to meet with them and provide energy efficiency presentations.
- Year 2000 energy savings for schedules E200 and G206 are estimated at more than 4,930,000 kWh of electricity and 218,700 Therms of natural gas.

Plans for 2001 include:

- A web-based PEP will be ready for customers in the spring of 2001. With this tool, customers may complete their home energy analysis online and will be able to revisit their account information and save report findings for later use.
- Increased ability to view or download information from the PSE website.
- Greater emphasis on time-of-use, in addition too traditional energy saving measures and practices.

Residential Low Income Programs, Schedules 201/203 and 209/209

The Washington State Office of Community Development (OCD), provides administrative oversight including funding distribution and data reporting for implementation of the home weatherization programs conducted under electric Schedule 201, gas Schedule 203 and electric and gas schedules 209. Program services are delivered to customers through 11 county and municipal low income assistance agencies operating in the PSE service area.

Notable program highlights in 2000 include:

- 799 low income homes weatherized, with estimated energy savings of more than 1,082,900 kWh of electricity and 46,980 Therms of natural gas per year.
- 705,400 bill inserts were targeted to low income single family gas and electric customers, to increase awareness of available home weatherization services. These contributed to over 3,400 calls to the Hotline for references to low income assistance agencies and information.
- Customers referred to low income weatherization agencies were also offered the brochure, *Weatherization Assistance for Low Income Customers*. In addition, they were eligible for PSE's other residential energy efficiency services.

Efficient Gas Water Heater Program, Schedule 201

The gas water heater rebate program grew in 2000 with 3,062 rebates, up from 2,581 in 1999. The increase is largely due to more contact with builders and rebate payments to builders for installing qualified tanks (.60 Energy Factor or higher). PSE plans to continue development of builder participation and increase installation of efficient tanks in the new construction market. Estimated natural gas savings for the tanks installed in 2000, was over 101,000 Therms.

In Concert with the Environment, Schedules 202/207

In Concert with the Environment (In Concert) is a curriculum–based educational program that teaches secondary school students and other members of their households about the efficient use of energy, water and other resources, responsible waste management and hazardous waste disposal. Licensed by Nexus Energy Software, PSE has used In Concert software and materials since 1992 to field this program

In Concert served 11,559 students in 2000, up from 8,855 in 1999. Estimated annual household energy savings are more than 642,900 kWh of electricity and 51,700 Therms of natural gas.

PSE made several changes in 2000 to reach more students and reduce PSE's per student program costs. The addition of a fourth classroom facilitator, association with a non-profit organization to facilitate funding from corporate contributors and alignment with Washington State Education Standards were key changes.

The Education Foundation of the Electric League, a 501 c-3 organization was formed through the Electric League of the Pacific Northwest to facilitate increased funding through corporate contributions. So far, the Foundation has written six grants, totaling more than \$250,000 for the benefit of In Concert. In partnership with King5, a website was developed (www.belointeractive.koz.com/bi/feel) to promote the Foundation and solicit further contributions for In Concert.

In response to school district needs to meet Washington State's Education Standards, PSE defined how In Concert activities correlate to the Essential Academic Learning Requirements. Teachers and schools responded positively and demand for the program has increased.

Residential Duct Systems, Schedules 203/204

Phase I of the Duct Sealing Pilot was completed in the fall of 1998, and project results were analyzed and formally reported in early February of 1999. Phase II is also now complete, marked by a final report covering field diagnostic testing results on 52 heat pump-equipped homes. The findings of Phase I (covering primarily gas furnaces) and Phase II (heat pumps) have been the basis for planning Phase III of the Pilot. Phase III will test the energy savings achievable when a trained heating contractor applies an advanced diagnostic process to systematically check heat pump operation and duct leakage. Data collection will also gather information on the impact of heat pump and auxiliary electric resistance load on the distribution system peak. Repairs conducted by the customers will be analyzed for contribution to load reduction.

Compact Fluorescent Lighting, Schedule 205

PSE offers a rebate of \$25 or 40% of cost (whichever is less) to builders, developers or owners of new construction and major rehab multi-family facilities for each qualified energy efficient compact fluorescent (CFL) lighting fixture installed. Schedule 205 has gained momentum in the second half of 2000 through increased promotion to targeted industry contact lists and electronic distribution of program information and rebate application forms.

PSE also seeks further opportunities to promote use of compact fluorescent lighting, such as a PSE influenced change in fixture procurement practices at Microsoft or a cooperative effort to develop a lighting website for residential customers. Schedule 205 is administered in coordination with Northwest Energy Efficiency Alliance lighting initiatives.

Key results during 2000 include:

- 1,261,800 kWh per year in electric energy savings and 2,072 fixtures installed.
- Over 600 builders, developers, and distributors contacted by mail, phone or inperson with program information and participation materials.
- Creation of an efficient lighting fixture website, developed jointly with Seattle City Light, to inform residential customers of pertinent features and applications for energy efficient lighting and refer them to King County retailers with these products.
- Developing, with the assistance of manufacturers, the ability to order fixtures in bulk (6 or more) by phone, fax or website, to increase availability and ease of obtaining energy-efficient fixtures. This feature should be available to customers in the first quarter of 2001.
- Participation in the Puget Sound, Northwest Energy Efficiency Alliance sponsored Torchiere Turn In, replacing over 700 halogen torchiere lamps with energy-efficient fluorescent torchiere lamps in April and October. The Torchiere Turn In was done in cooperation with Home Depot and Eagle Hardware stores.

High Efficiency Clothes Washers, Schedule 206

Schedule 206, offers a \$50 rebate for the purchase of efficient washing machines in multi-family laundry facilities and coin operated laundromats with electric water heat. As an electric program, there are few potential customers since most multi-family facilities and coin operated laundromats have gas water heat.

In November 2000, PSE began a pilot, offering a \$50 rebate for efficient washers in coin operated laundromats with gas water heat. During the entire year, the Company paid 34 rebates for efficient washers with electric water heat, and saved an estimated 27,200 kWh per year. Since November, 21 rebates were paid for efficient washing machines in coin operated laundromats with gas water heat for 9,660 Therms saved per year.

Duplex/Triplex Weatherization Pilot, Schedule 207 - Completed

The Duplex/Triplex pilot began in 1998, and with the concurrence of interested Technical Advisory Group supporters, ended early in 2000. PSE was unable to demonstrate cost-effective energy savings. After two mailings to a total of 100 eligible customers and a number of site visits, no units were qualified for weatherization. Customers did not qualify or decided not to participate for the following reasons:

- Existing insulation levels that exceeded the minimum criteria for the program
- Moisture and wood decay problems were present in a number of structures, where owners were not willing to spend additional money for corrective repairs or added venting in order to participate.

Owners and tenants of duplex and triplex structures remain eligible for residential energy efficiency services under Schedules 200/203.

Refrigerator Bulk Purchase Pilot, Schedule 208

The Refrigerator Bulk Purchase Pilot, also initiated in 1998 was intended to encourage the use of Energy Star qualified refrigerators in local housing authorities and other low income housing. It had partial success in its first year but became unsustainable in its original design. The available targeted agencies could not generate sufficient long-term demand for refrigerator replacements and were resistant to abandoning traditional procurement channels.

In 2000, PSE enlisted the Washington State University Energy Program to look for opportunities to develop a sustainable efficient refrigerator program, and verify estimated savings from the 1998 to 1999 demonstration pilot. Results of the study confirm that several housing authorities are now independently purchasing Energy Star qualified refrigerators, perhaps due to the influence of the pilot and regional Northwest Energy Efficiency Alliance efforts. However, use of Energy Star refrigerators to replace less efficient models is not universal. The study suggested that a regional approach to the replacement of old refrigerators, with local utility support, could have additional influence. PSE will look for opportunities to support regional efforts that are applicable to its customers.

Total estimated electricity energy savings from the pilot were 22,600 kWh per year from the 180 refrigerators replaced.

Commercial-Industrial Energy Efficiency Services, Schedules 250/205

Commercial and Industrial business customer participation in PSE's conservation programs has increased due to the momentum created in prior years. The larger projects requiring long lead times for customers to develop and implement are now beginning to show in program results. In addition, recent developments in the regional energy market have generated more interest among customers.

The most commonly funded, cost-effective measures for commercial facilities continue to be lighting retrofits, HVAC controls, and variable speed drives. PSE's Energy Management Engineers have also worked with a number of facilities to capture significant energy savings from improved operations and maintenance plans.

114 projects were completed in 2000 producing over 22,557,000 kWh per year (2.6 MWa) in electricity savings and 717,730 Therms of natural gas savings.

Examples of measures in recent large industrial projects include high efficiency air compressors and vacuum pumps in manufacturing facilities, replacement of hydraulic drives with regenerative DC drives at a sawmill, and a VOC emissions after-burner replaced with a high-efficiency catalytic type unit.

A rebate for a cold-drink vending machine controller with typical energy cost payback of about two years was added in August. In an agreement with the product vendor, PSE customers are invoiced \$120 per unit rather than the full cost, reflecting a \$40 grant. Rebate applications obtained from PSE are sent with the customer's product order, directly to the vendor.

Commercial-Industrial New Construction, Schedule 251

There continues to be significant commercial new construction in the Puget Sound region. Funding is available for cost-effective energy saving measures. Also, PSE assists developers and customers to assure understanding and compliance with Washington State's Non Residential Energy Code (NREC).

The recent release of ASHRAE 90.1-1999 is expected to promote new, higher efficiency products in the market and PSE is encouraged by the recent Building Code Council's adoption of efficiency improvements to NREC in the energy code's next cycle. The Northwest Energy Efficiency Alliance has recently launched a regional website and campaign to encourage high efficiency among other workplace attributes in new construction. This information resource can be found at www.betterbricks.com. Thirteen new construction projects were completed in 2000 with electricity savings of 4,881,000 kWh (0.6 MWa) per year. Measures include adjustable speed drives on HVAC supply and exhaust fans on high-rise commercial office buildings, and CO2 demand control ventilation systems.

Review of ASHRAE 90.1-1999 identified cost-effective measure opportunities beyond the 1997 NREC, including the following:

- Improved efficiency for unitary air conditioners and heat pumps
- Demand controlled ventilation for high occupancy areas
- Fan speed controls on heat rejection equipment
- LED exit signs
- Encouraging good lighting design to reduce lighting power allowances

Daylighting reviews, in conjunction with the Lighting Design Lab where appropriate.

Premium Efficiency Motors, Schedule 252

PSE works in coordination with the Northwest Efficiency Alliance (NEEA) motors program. Regional funding for NEEA's program has been extended to three years with a \$600,000 budget per year. Work continues to improve specifications and standardize practices with motor repair shops and motor load intensive industries. The Company is anticipating follow-on customer leads from the NEEA program. To date, PSE customers have benefited from the following workshops and seminars:

- Four seminars on motor reconditioning recently held in the Puget Sound area;
 attended by motor vendors, as well as some customers.
- An Adjustable Speed Drive workshop in May, hosted by PSE

Resource Conservation Manager, Schedules 253/208

The Resource Conservation Manager Program serves school districts, city governments and commercial customers with multiple facilities. Savings from several resources including energy, water, sewer, solid waste, and recycling are achieved through an on-site Resource Conservation Manager staff person (RCM).

Training and ongoing support is a key issue. PSE training activities focus on technical and analytical skills, accounting tools, and project management. PSE has also found that private sector consultants can provide additional support to compliment RCM skills, enhance productivity and increase cost effectiveness. In addition, some customer agreements include support from other utilities.

Program activities and results for January through December 2000 are summarized below:

- Twenty-five customers actively participated in the RCM program, including eight new customers in 2000.
- RCM customers reported electric savings of 16,056,000 kWh (1.8 MWa) and natural gas savings of 594,000 Therms in 2000.
- PSE hosted three networking/training meetings in February, June and November, with 20 to 30 RCM and RCM service providers in attendance. Topics included: "Sub-Metering Case Studies", "Capturing Savings That Are Not Readily Tracked by Utility Accounting Software", "Best Low-Cost/No-Cost Examples", and a tour of the award-winning recycling center at Whidbey Island Naval Air Station.

Northwest Energy Efficiency Alliance, Schedule 254

As a partner with the Northwest Energy Efficiency Alliance (NEEA), PSE contributes funding for regional programs, actively participates on the NEEA Board of Directors, and supports various related initiatives within the PSE service area. The Company believes that this effort will increase the availability and consumer acceptance of energy-efficient technologies and practices through NEEA's market transformation initiatives.

NEEA reports that it's efforts in 2000 produced 6,923,000 kWh (0.8 MWa) energy savings in the Company's service area per year.

PSE collected, in cooperation with Home Depot and Eagle Hardware, over 700 halogen torchiere lamps during the regional, NEEA sponsored, Torchiere Turn In; for an

estimated 206,000 kWh per year saved with energy-efficient fluorescent torchiere replacement lamps.

Other PSE programs that are directly related to regional NEEA activities include: Duct Systems Pilot, Schedules 203/204; Compact Fluorescent Lighting, Schedule 205; High Efficiency Clothes Washers, Schedule 206; Commercial-Industrial New Construction, Schedule 251; Premium Efficiency Motors, Schedule 252; Building Commissioning, Schedule 256; and Local Infrastructure/Market Transformation, Schedule 270.

Small Business Energy Efficiency, Schedules 255/255

PSE has significantly expanded service for small business customers, usually defined as electric service Schedule 24 (under 50 kW demand). In the first half of 2000, the Company added rebate forms and brochures for straightforward lighting improvements, occupancy sensors, LED exit signs, programmable thermostats and vending machine controllers. Hotline staff also received training on commercial energy use and commercial rates to expand their skills for these program enhancements. This also involved training to access commercial customer account information on PSE's new customer information system.

In 2000, 741 small commercial customers saved over 591,000 kWh and 4,232 Therms per year. Nearly 157,000 bill inserts were mailed to schedule 24 customers. The inserts were designed to alert customers to typical signs of energy and cost-saving opportunities, and to advise them of available PSE services through the Energy Efficiency Services Hotline at 1-800-562-1482.

Since May, the EES Hotline received 736 calls from small business customers, requesting assistance. Most of these customers received specific information, brochures and rebate applications, to address their specific questions and needs.

New brochures and rebate applications are summarized below. These can be ordered using the EES Hotline, and now can be downloaded from the website, www.pugetsoundenergy.com:

- Energy Saving Tips for Small Commercial Customers:
- Smart Lighting Options for Small Businesses, and Energy Efficiency Services for Commercial and Industrial Customers:
- Lighting Rebate Applications for a variety of common fluorescent lighting fixture retrofits, compact fluorescent fixtures, HID upgrades, LED exits signs and occupancy sensors for lighting control.
- Programmable Thermostats for Small Business
- Programmable Thermostat Rebate Applications for commercial HVAC using either electricity or natural gas for space heating

PSE is adding "Business Energy Profile", a tool for small to medium size commercial customers. Similar to the Personal Energy Profile audit for residential customers, it will be available in the first quarter of 2001 at www.pugetsoundenergy.com. The online audit will offer specific energy efficiency recommendations for low-cost improvements as well as investments in efficient equipment.

Building Commissioning, Schedule 256

EES energy management engineers have further developed working relationships with private sector building commissioning agents during the year and attended the Building Commissioning Association (BCA) conference held in Kansas City the first week of May. While most building commissioning initiatives are commonly large, new commercial construction projects, "retro-commissioning" of existing buildings also promise costeffective savings opportunities.

Customer commissioning projects facilitated by PSE may be "piggy-backed" with Schedule 250/205 or Schedule 251 funding for eligible measures. Schedule 256 program requirements include full documentation of results and recommendations, as well as training of in-house operations staff.

Three commissioning projects were completed in 2000, achieving energy savings of 684,800 kWh of electricity and 41,800 Therms of natural gas. These three projects project more estimated savings, 950,000 kWh per year, identified but not yet implemented. Three additional projects were underway at year-end.

Other activities included:

- Working in cooperation with Washington State GA on several new construction as well as retro-commissioning projects for public facilities, leveraging NEEA funding.
- Assisting Washington State GA in developing a list of pre-approved commissioning providers for public building projects.
- Serving as a member of the NW Building Commissioning Collaborative Group, which
 is presently focusing on incorporating commissioning into state building codes.

LED Traffic Lights, Schedule 257

All prospective cities and county jurisdictions in PSE's service area have been contacted to promote energy efficient LED traffic lights. In addition to energy savings, jurisdictions will benefit greatly from lower maintenance costs, improved safety, and reduced liability over time. Installation of LED traffic lights often requires adjustment of billing calculations for unmetered service under Schedule 57.

Three projects were completed in 2000 with 531 LED traffic lights installed and 378,400 kWh saved.

High Voltage/Optional Large Power Pilot, Schedule 258

With support from Industrial Customers of Northwest Utilities (ICNU), PSE has had good success in encouraging customer participation in the Schedule 258 program. A customer meeting hosted by ICNU and PSE was held in April to review the program, answer questions, solicit guidance, and share examples of projects underway. Customer recommendations at this meeting resulted in a 2-month advance of the timetable for notification of availability of outstanding funds for the competitive bid phase. This will allow more time for facilities to plan for projects to be completed by March 2002.

Ten projects were completed in 2000 with 4,287,000 kWh per year saved. At year-end, four additional projects were scheduled for completion in 2001 for 2,987,000 kWh annual energy savings. Seven projects have been identified for the competitive bid phase with estimated savings of 7,703,000 kWh per year.

Local Infrastructure/Market Transformation, Schedule 270

PSE participates with or utilizes the services of many organizations to support the local delivery, management, and promotion of a broad range of energy efficiency programs. Financial support for these organizations is provided through Schedule 270, with spending capped at 5% of overall program budgets. Expenditures in the first half of 2000 were about 2% of total electric program costs. Organizations currently supported by Schedule 270 include:

- E-Source
- Building Owners and Managers Association
- Puget Sound Chapter of ASHRAE
- Consortium for Energy Efficiency
- Lighting Design Lab
- Electric League
- Northwest Energy Efficiency Council

PSE, Seattle City Light and Tacoma Power jointly sponsored the second biannual Powerful Business Conference, through the Electric League. Held September 14 at the Valley Medical Center in Renton, this one-day conference hosted over 225 attendees; and was designed to inform and motivate commercial building interests about opportunities, products, and services that help make commercial buildings more energy and resource efficient. Facility managers, building operators, architects, engineers, developers, contractors, utilities, vendors, ESCOs, property managers, and corporate governmental affairs representatives attended the conference.

PSE commissioned the Northwest Energy Efficiency Council to develop a comprehensive list of energy efficiency operations & maintenance services for commercial facilities. The product was delivered to the Building Owners and Managers Association of Seattle and King County for distribution to members.

Net Metering, Schedule 150

Schedule 150, Net Metering for Renewable Energy Services, became effective February 11, 1999. Subsequently, Schedule 150 was revised on June 8, 2000 in response to legislative action¹, which modified certain aspects of the net metering program. As revised, the schedule applies to customers who operate fuel cells or hydroelectric, solar or wind generators of no more that 25 kW. Service under this schedule is limited to a total of 4.5 MW of cumulative nameplate generating capacity, of which no less than 2.25 MW of cumulative nameplate generating capacity shall be attributable to net metering systems that use either solar, wind, or hydroelectric power as its fuel. Customer generation can be used to offset part or all of the customer-generator's electricity use under Schedules 7, 24, 25 or 29 of Electric Tariff G.

Two micro hydro customer-generators were interconnected in 1999; and four solar photovoltaic systems were installed in 2000. The six systems interconnected as of the end of 2000 total 13.4 kW maximum capacity. Forty-one additional customers expressed an interest in net metering, and were provided with information regarding

¹ On March 27, 2000, Engrossed House Bill 2334 relating to the definition of net metering systems and amending RCW 80.60.010, 80.60.020 and 80.60.040 was signed into law. The revised law became effective June 8, 2000.

Schedule 150 and solar, wind, micro-hydro or fuel cell resources.

Table 1 Program Results, January-December 2000

Energy Efficiency Services Program Results, January – December 2000 & Targets from Appendix B 2000

			January - December 2000											Apper	idix B	_		
Elec Sch #	Gas Sch #	Service	Elec Units	Gas Units	Units	kWh Savings	Therm Savings		Electric Costs	G	as Costs		Utility Costs	Units	kWh Savings	Therm Savings		Utility Costs
150	na	Net Metering	4	-	4	-	ţ	\$	13,500		na	\$	13,500	na	na	na		na
200	206	Res. Energy Efficiency Services	62,332	40,613	102,945	4,936,055	218,705	\$	267,863	\$	201,396	\$	469,259	81,500	3,809,000	208,000	\$	450,000
201	203	Low-income Retrofit	637	162	799	1,082,900	46,980	\$	448,011	\$	218,730	\$	666,741	550	700,000	56,000	\$	452,000
202	207	In Concert w/Environment	6,628	4,931	11,559	642,916	51,776	\$	297,778	\$	220,785	\$	518,563	10,000	582,000	42,000	\$	416,000
203	204	Residential Duct Systems Pilot	8	-	8	7,200	-	\$	59,687	\$	15,801	\$	75,488	300	270,000	14,400	\$	200,000
na	201	Gas Water Heater Rebate *	-	3,062	3,062	-	101,046		na	\$	175,474	\$	175,474	2,500	na	82,500	\$	80,000
205	na	Compact Fluorescent Lighting	2,835	-	2,835	1,261,844	•	\$	88,870		na	\$	88,870	1,500	450,000	na	\$	130,000
206	na	HiEfficiency Clothes Washers	34	21	55	27,200	9,660	\$	6,101		na	\$	6,101	500	400,000	na	\$	37,000
207	na	Duplex/Triplex Retrofit Pilot	•	•	-	-	-	\$	411		na	\$	411	250	600,000	na	\$	200,000
208	na	Bulk Refrigerator Purchase Pilot	-	•	-	-	-	\$	18,026		na	\$	18,026	400	140,000	na	\$	20,000
209	209	Low Income Customers *	na	na	na	•	-	\$	661,764	\$	337,867	\$	999,631	1,000	na	na	\$	1,000,000
250	205	C/I Energy Efficiency Services	102	12	114	22,557,326	717,730	\$	1,794,356	\$	139,441	\$	1,933,797	300	16,800,000	62,500	\$	1,730,000
251	na	C/i New Construction	13	•	13	4,881,366	•	\$	30,869		na	\$	30,869	15	1,500,000	na	\$	500,000
252	na	Premium Efficiency Motors	-	-	-	-	:	\$	14,199		na	\$	14,199	8	640,000	na	\$	65,000
253	208	Resource Conservation Manager	25	6	25	16,056,273	593,945	\$	140,383	\$	18,330	\$	158,713	20	13,600,000	226,600	\$	233,000
254	na	NW Energy Efficiency Alliance	na	na	na	6,923,000	•	\$	2,031,717		na	\$:	2,031,717	na i	na	na	\$:	2,000,000
255	255	Small Business Energy Efficiency	557	184	741	591,073	4,232	\$	56,981	\$	13,666	\$	70,647	1,200	6,720,000	14,000	\$	270,000
256	па	Building Commissioning	3	-	3	684,820	41,800	\$	15,777		na	\$	15,777	7	420,000	na	\$	125,000
257	na	LEDTraffic Lights	3	•	3	378,440	-	\$	19,585		na	\$	19,585	5,000	2,000,000	na	\$	180,000
258	na	Hi Voltage/Opt Large Power Pilot	8	•	8	3,833,117	-	\$	336,074		na	\$	336,074	7	3,525,000	па	\$	1,175,000
270	na	Local Infrastructure&Mkt Trans	181	na	181	na	-	\$	123,259		na	\$	123,259	na	na	na	\$	150,000
		Total	73,370	48,991	122,355	63,863,530	1,785,874	\$	6,425,211	\$	1,341,490	\$7	,766,701	105,057	52,156,000	706,000	\$	9,413,000

^{*} Line items for gas Schedule 201, Gas Water Heater Rebate, and electric and gas schedules 209, Low Income Customers, are not included in Rider and Tracker expenditures.

Chart 1 Electric Programs, Savings and Costs

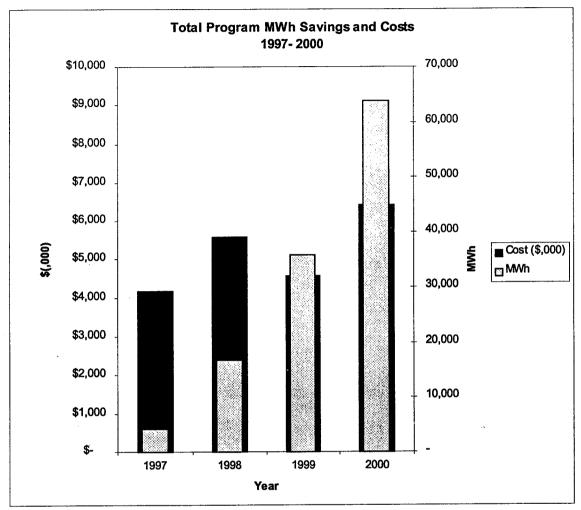


Chart 1 reflects PSE electric energy efficiency program savings and utility cost results for the years 1997 through 2000.

Chart 2 Natural Gas Programs, Savings and Costs

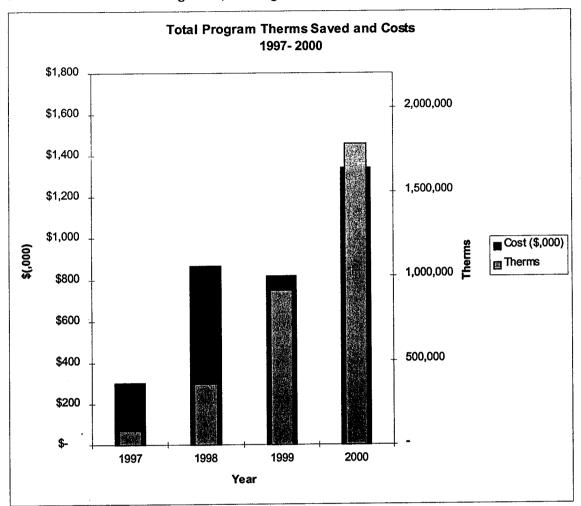


Chart 2 reflects PSE natural gas energy efficiency program savings and utility cost results for the years 1997 through 2000.

Chart 3 Electric Programs, Actual 2000 and Appendix B Target 2000

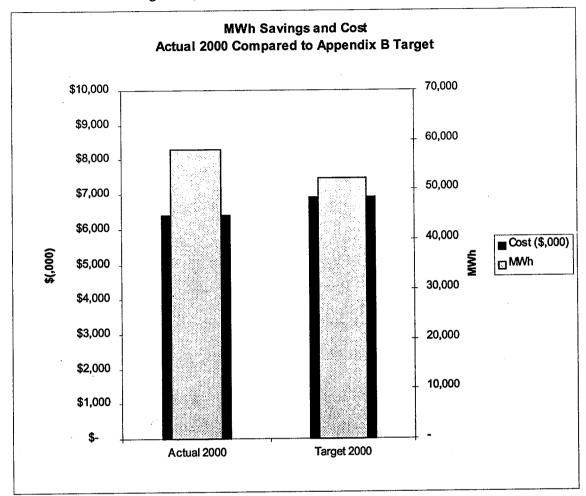


Chart 3 compares PSE electric energy savings and utility cost for 2000 with program targets identified in Appendix B of the 1999 conservation tariff work papers.

Chart 4 Natural Gas Programs, Actual 2000 and Appendix B Target 2000

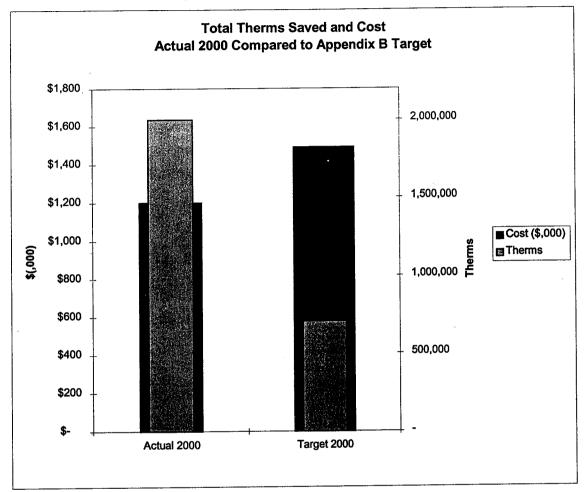


Chart 4 compares PSE natural gas energy savings and utility cost for 2000 to program targets identified in Appendix B of the 1999 conservation tariff work papers.