PUGET SOUND ENERGY

March 1, 2000

Ms. Carole J. Washburn
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive S.W.
P.O. Box 47250
Olympia, Washington 98504-7250

Docket: UE-970686 and UG950288

RE: Annual Report of Demand Side Management (DSM) Programs Recovered Through the Electric Rider and Gas Tracker in Calendar Year 1999

Dear Ms. Washburn:

Enclosed is an original and nine copies of Puget Sound Energy's annual report covering its 1999 DSM programs recovered through its electric rider and gas tracker in 1999. This filing contains a progress report on the results of the 1999 DSM rider and tracker programs through December 31, 1999, and a summary of accounting for each of the DSM programs for the same period. Tariffs associated with the rate for the 2000 DSM rider and tracker programs year have been submitted separately.

This report is prepared in accordance with the accounting treatment and annual electric rider and gas tracker recovery mechanisms approved by the Commission in Dockets numbered UE-970686 and UG-950288 respectively.

The Company spent $4,579,710. during calendar year 1999 on DSM programs which were recovered through its electric rider. The revenue collected through January 2000 and the estimated amounts to be collected during February and March 2000 is $5,680,429. The over collection variance between actual expenditures and revenue collected is expected to be $(2,310,590.) As proposed, the over collected amount will be absorbed and offset by the 2000 DSM expenditures.

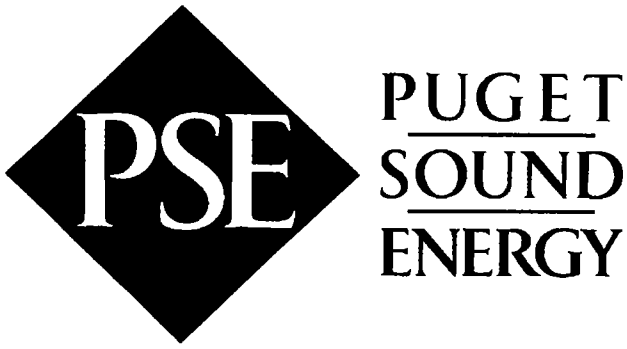
In accordance with the accounting treatment and annual gas tracker recovery mechanism approved in the Commission's letter dated May 11, 1995, Ref. No. 6-0599, the Company is filing tariffs coincident with this filing, to recover the $763,641 fifth year gas DSM program costs through its tracker. Recovery is being apportioned 87.5% to firm rate schedules and 12.5% to interruptible rate schedules proportionate to total gas cost recoveries. This is consistent with the Commission's findings on conservation costs as outlined in the Seventh Supplemental Order in Docket No. UG-940814 and prior action under this docket.

Please direct any inquiry related to the accounting issues in this annual report to me at (425) 456-2797 and any inquiry related to the technical aspects of the conservation programs to George Pohndorf at (425) 462-3272.

Sincerely,

Karl R. Karzmar
Manager, Revenue Requirements

enclosures
cc: Simon J. ffitch



Annual Report of DSM Program Costs Recovered Through Electric Rider and Gas Tracker Mechanisms in Calendar Year 1999

Dockets No. UE-970686 & No. UG-950288

March 1, 2000

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Introduction

This annual report of Puget Sound Energy's DSM gas tracker and electric rider programs is filed in conjunction with Dockets No. UE-970686 and No. UG-950288 authorizing approval and accounting treatment in 1999. This document reports results of the Company's programs for the year 1999 and includes a summary of accounting. Several of these programs are offered to both gas and electric service customers. In such cases, text will refer to both gas and electric conservation services. The Accounting Summary will show gas tracker and electric rider expenditures separately.

Executive Summary

Energy efficiency program activities at Puget Sound Energy (PSE) during 1999 were highlighted with the initiation of new and enhanced customer conservation services at the beginning of the second quarter. These programs are set forth in 20 electric and natural gas tariffs approved by the Washington Utilities and Transportation Commission (WUTC) on March 31, 1999. The Commission's approval was a result of over six months of review, research and program development work undertaken by PSE Staff and an independent consultant, with input and advice solicited from the Technical Advisory Group (TAG). These programs are the foundation of a new three-year conservation plan offering services tailored to customer energy efficiency needs and opportunities in all sectors, including Residential, Commercial, Industrial and Low Income.

The 1999 package features a three-year program projection with significantly increased energy savings targets and program budgets, nearly 50% above 1998 investment levels. Energy Efficiency Services (EES) staff are working hard to adjust programs toward increased volumes in order to achieve the higher targets. Energy savings in 1999 amounted to nearly double the results delivered in 1998, although several of the programs did not begin until April or later, following approval of the tariffs.

In addition to tariff related new programs and existing program design changes, substantial staff work has been required to focus on all implementation software and tracking/reporting database tools. Program improvements, including both service quality and delivery efficiency, are expected to increase through 2000 as software and hardware upgrades go into production. Seven major EES software applications were reconfigured for compliance with Y2K standards as well.

Great strides were made early in the year in residential energy services through completion of a 150 page Quick Reference Manual (QRM) used by Hotline staff taking incoming customer calls. This new QRM, covering all EES services and comprehensive information and references for end-use energy related customer inquiries, has improved the Hotline's service quality through better consistency and timeliness in customer response.

As a follow-on activity to the March 31 tariff implementation, a new agreement finalizing eligible Low Income Program measures and funding for inclusion in the new conservation tariffs was developed with low income customer advocates, PSE and commission staff during the second and third quarters of 1999. Incentives expenditures will be increased an estimated $200,000 per year through March 2002. Low Income conservation programs funded using the Schedule 120 rider and tracker to support energy savings are conducted concurrently with Low Income Programs supported by shareholder contributions (of up to $1 million per year) toward other energy-related improvements for low income households throughout a similar three year time period.

The Resource Conservation Manager (RCM) program focuses on school districts and municipalities, and continues to be well-received by participating customers. A key feature of this

offering is quarterly training and networking opportunities provided to participating customers' RCM staff. RCM program managers are currently working on the challenge of the rigorous commitment to energy accounting required by the RCM concept, and the mix of technical and management skills required of the individuals serving in the RCM position.

A new offering this year, LED Traffic Light Rebates targets municipalities and traffic jurisdictions. PSE is also continuing to promote Compact Fluorescent Lighting and Hi-Efficiency Clothes Washer Rebates for new construction multi-family developers and builders.

C/I New Construction, Building Commissioning, Small Commercial Businesses, and Motor System Efficiency tariffs represent four of the newest C/I programs with unique features this year. While development and enhancement work has progressed well on these services throughout 1999, work on them will increase in 2000 as other program development and Y2K requirements decline.

Since post-merger conservation programs were first initiated in 1997, Commercial/Industrial (C/I) energy management engineers have faced a greater challenge in attracting cost-effective C/I projects. This has been due to a combination of impacts on programs, including: relatively low electricity avoided costs with associated lower utility value; increasingly routine enforcement of Washington's Non-Residential Energy Code, which makes facility baseline energy use low and thus lowers the potential for additional cost-effective energy savings; previous "market transformation" effects resulting from code adoption and earlier conservation programs in the region; and a larger, more developed set of private sector energy service companies, including those involved in performance contracting on energy saving projects. These challenges make it more critical for PSE program offerings to be flexible and provide a high degree of customer service value in order to attract qualified participants into energy efficiency projects.

To address energy efficiency needs unique to High Voltage and Optional Large Power Sales Customers, an RFP was mailed on July 1, 1999. This pilot program was developed to allow the companies to self-direct their conservation investments.

Infrastructure and market transformation activities with the Northwest Energy Efficiency Alliance (NEEA) are proceeding in line with regional expectations and with PSE's continuing support. 1999 was the third year of NEEA's original 3-year plan and work was completed early in 2000. NEEA has conditionally secured new funding for an additional 5 years from BPA and all investor owned utilities in the region. Activity in the Local Infrastructure and Market, electric Schedule 270, includes a combination of conservation cost-sharing for annual dues and staff participation to promote and leverage energy efficiency activities in and by organizations such as E-Source, ASHRAE, BOMA, IES and the Electric League of the Pacific Northwest. Recognizing potential for energy efficiency gains in improved building operations, PSE also supports Building Operator Certification classes in the service area.

The Bulk Refrigerator Purchase Pilot struggled in 1999 due to the availability of efficient refrigerators through other manufacturers at comparable prices, a low number of refrigerator change-outs among smaller county agencies, and resistance to changes in purchasing procedures. PSE worked diligently to develop a least cost Duplex/Triplex program; however results show that a prescriptively-administered program will not be cost-effective, due to the challenge of recruiting qualified participants.

Throughout 2000 and the following year, EES staff will remain focused on implementation activities and tools in all customer sectors to meet program targets reflected in the three-year goals.

Program Activities

Residential Energy Efficiency Services, Schedules 200/206

Residential Energy Efficiency Services (REES) is a portfolio of conservation offerings to residential energy customers. It includes an Energy Efficiency Hotline for customers to call; a mail-in home energy audit known as Personal Energy Profile; and the distribution of a variety of printed materials regarding energy efficiency. These offerings are packaged together in order to deliver the most benefit to customers through: 1) Access to a package of tools to serve varied individual customer needs and 2) Operational efficiencies for program implementation.

Energy Efficiency Hotline

Hotline staff members are available to provide customers with energy–efficiency information and recommendations regarding alternatives for energy improvements. A primary connection with customers seeking assistance, the Hotline is an essential element of REES. In addition to providing customers with energy efficiency information over the phone, Hotline calls may result in a Personal Energy Profile or delivery of additional printed information. Calls are routed to the Hotline on the toll–free number 800–562–1482, from PSE's toll–free customer service number (888–225–5773, option #7) or transferred from PSE's Customer Access Center. Customer bill inserts and numerous PSE publications provide customers with the phone numbers to call..

In 1999, the Hotline answered 23,207 energy efficiency calls, down from 24,660 calls in 1998. The relocation of PSE's Customer Access Center earlier in 1999, and new system training of Access Center staff, resulted in a temporary reduction of calls transferred to the Energy Efficiency Hotline. Results from an ongoing customer feedback follow-up survey of energy efficiency callers reflect a 98% satisfaction level. Though generally very positive, survey results have been used throughout the year to improve training and customer service.

A 150 page Quick Reference Manual (QRM) used by Hotline staff taking incoming customer calls on the EES-dedicated line was completed early in the year. This new QRM, covering all PSE Energy Efficiency Services and extensive information and references for end-use energy related customer inquiries, has improved the Hotline's service quality through better consistency and timeliness in customer response. It has also been a vital tool for training new employees.

A new bill insert, "What's the First Step in Saving Money on Your Energy Bills?", was introduced in August, 1999, and distributed to 370,000 residential customers. Customers were encouraged to call the Energy Efficiency Hotline or return the insert to request additional informational regarding ways to reduce energy use and cut their energy bills.

Personal Energy Profile

The Personal Energy Profile (PEP) includes a self–service home energy survey that walks a customer through the home and helps identify ways to conserve energy and reduce bills. Based on the customer's answers and, in most cases, analysis of the customer's energy use history, PEP produces a report with a month–by–month illustration of energy usage and costs, annual estimates of energy consumption by "energy uses" in the home, as well as recommendations for how to reduce energy costs.

PEP is made available to customers through bill inserts, the Hotline and the Customer Access Center. Over 17,400 customers participated in 1999. Bill inserts designed to make customers aware of PEP were mailed to nearly 632,500 customers throughout the year.

Y2K considerations, pending implementation of a company-wide customer accounting system, and the availability of new and enhanced PEP software, led to development of a new PEP process to be implemented in the 1st quarter of 2000.

Printed Materials and Other Activities

PSE customers requested a variety of informational brochures and guides promoting energy–efficient practices, appliances, equipment and building shell measures. Calls to the Hotline, responses to bill inserts, and requests expressed through PEP resulted in the delivery of these printed materials. Brochures were also distributed to local business offices, corporate sights, seminars and trade shows. In total, about 107,000 pieces of printed energy efficiency information were delivered to 53,000 customers in 1999.

By the end of 1999, several brochures were redesigned to be more uniform with other PSE publications, and more inviting visually. Where appropriate, gas and electric information was combined. Information from the gas Saving By Degrees guide for example, was consolidated into the "Know Your Costs" and "No cost/low cost" brochure series. Bill inserts specifically promoting Saving by Degrees were mailed to 260,000 gas customers. As the stock of Saving by Degrees runs out, the redesigned guides will replace it.

In October, the Winter Home Comfort Guide, a newspaper section sponsored by PSE, reached nearly 100,000 customers in the Eastside Journal, South King County Journal, Northshore Citizen and Mercer Island Reporter. General information regarding energy efficiency in the home, and specific information regarding how to contact PSE for additional energy efficiency services were featured. Also in October, the Company participated in the US Navy's Energy Awareness Week, targeting housing at Whidbey, Bangor and Keyport facilities.

REES Customers and Energy Savings, January - December, 1999

	Customers		**Savings**	
	Electric	**Gas**	**kWh**	**Therms**
Energy Efficiency Hotline	13,003	10,204	793,183	30,612
Personal Energy Profile	12,221	5,238	1,466,520	52,380
Energy Efficiency Information	28,318	24,744	1,727,398	74,232

Residential Low Income Program, Schedules 201/203

PSE provides prescriptive funding for cost-effective retrofit weatherization measures installed in qualifying structures. Installed measures must meet PSE and Washington State Department of Community, Trade and Economic Development (CTED) standards for quality and energy efficiency. PSE and CTED jointly signed the Low Income Matchmaker Agreement on December 29, 1997. The agreement covers low income weatherization measures and payments and was extended through December 31, 1999. PSE, under its Matchmaker Agreement, has provided the following funding to CTED in 1999 in payment for completed and in-progress weatherization jobs:

- Electric Tariff $390,943
- Gas Tariff $113,880

Additional funding not associated with the weatherization measures was provided to CTED in accordance with electric and gas schedules 209.

As part of its contractual agreement with PSE, CTED provides tracking and reporting of completed low income jobs and measures. As of December 31, 1999, CTED reported the following:

	Single and Multi-Family Units	Annual Energy Savings	Measure + Agency & CTED Admin
Tariff Electric	410	678,000 kWh	$289,840
Tariff Gas	134	37,000 Therm	$99,686

These unit counts, savings and costs are based on preliminary figures provided by CTED. Detailed costs and savings data, by fuel type for single and multi-family units will be available in late February 2000. Delay in data availability is attributable to changes in CTED's tracking database to accommodate additional electric conservation measures added to electric Schedule 201 in November 1999.

Billing analysis of the Gas Low Income Pilot and the Electric Mobile Home Pilot was summarized in a final evaluation report in February 1999. The Electric Mobile Home Pilot program showed average program savings of 12.4% of pre-installation energy consumption. The Gas Low Income Program billing savings were 27.4% after measure installation.

A new agreement finalizing eligible Low Income Program measures and funding for inclusion in the new conservation tariffs was negotiated with low income customer advocates, PSE and commission staff during the second and third quarters of 1999. All parties acknowledged and agreed to the need to document the non-energy benefits inherent in efficiency upgrades, as lower energy billings and improved comfort accrue additional benefits unique to low income customers.

The agreements allow four additional energy saving measures (ceiling insulation, structure sealing, thermostats, water heating efficiency devices and compact fluorescent lighting fixtures) for HUD Code manufactured housing to meet TRC funding criteria. Similar additional measures are now funded for single and multi-family low-income housing as well.

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. The program was originally developed by EcoGroup, now Nexus Energy Software, a Massachusetts company that sells to utilities around the nation, rights to In Concert and other education, environmental and conservation programs. Nexus Energy, PSE, and its partners have expanded and customized the program to meet the needs of several energy, waste and environmental utilities or agencies in Western Washington.

For the period January through December 1999, 8,855 students completed the In Concert curriculum. The gas and electric numbers in the table below are estimates of activity for the calendar year 1999, based on actual numbers of participating students and survey results. PSE estimates that approximately 40 percent of participants have natural gas service for space heating. Sixty percent are electric service only customers of PSE.

In Concert Participation and Energy Savings, January-December 1999

Student Households		Energy Savings	
Electric	**Gas**	**kWh**	**Therms**
5315	3,542	515,555	131,054

There are 26 contributing partners that sponsor this program along with PSE. In 1997 and 1998, the program underwent significant growth. The number of partners doubled, the number of students that received In Concert increased, and we contracted the services of a third facilitator. In 1999, PSE focused its attention on developing and maintaining the existing partnerships. Several issues were addressed:

- Communicated PSE's commitment to deliver a cost effective conservation program, how the program is funded, and the purpose of program evaluation.
- Clarified the program's mission statement.
- Negotiated a new contract with Nexus to preserve customization of the In Concert software and make it Y2K compliant at no additional cost to PSE or the Partners.
- Changed the content of the *Dear Head of Household* letter in the Student Workbook to better explain the partnership, the purpose of the program, and include the PSE Energy Efficiency Hotline as a contact phone number.
- Improved an explanation of *Head of Household Information* on page one of the student workbook to more clearly state that providing the information is optional, and when provided, remains confidential.
- Prepared a sample letter for teachers to send home with the workbook, to better explain the program to parents.
- Developed an "imaginary home" model that can be used in place of "real life" data.
- Reviewed the content of the presentation to ensure messages were positive, removed biases and insured that content met program objectives.

In October of 1999 EES began identifying corporations, grants and foundations that may provide for additional program funding. Focusing first on corporations, an information packet was developed with the In Concert partners, to solicit corporate contributions in 2000. Partners have also been asked to identify corporate contacts and attend meetings with prospective sponsors.

After significant work behind the scenes to schedule schools and classrooms, In Concert facilitators meet with teachers and deliver workbooks to be distributed to students. Instructions included with the workbooks ask students to complete the workbook at home, with the help of their parents. In Concert facilitators return to the classroom about three weeks later.

The In Concert four day curriculum is described by day below:

Day 1

- Starts with discussion about natural resources. Students are asked to identify natural resources, name their source and how they are used. Facilitators discuss electricity and natural gas.
- An activity is introduced to the class called "Activity Books" . These books highlight real life student activities and demonstrate how their choices impact the use of natural resources. Working in small groups, students read through the activity book and make choices about how they will use a natural resource. For example, students may choose to drive a car or take a bus to the mall, or they may chose to use a microwave to heat their pizza or eat it cold. As a result of their choices, students keep track of how much electricity, gas, water or other natural resources are used for an activity. At the end, they tally their results and each group presents their findings to the rest of the class.
- Before the class ends, students are given a one page journal and are asked to reflect on what they learned, what they can do to conserve resources, and record this in their journal.

Days 2 and 3

- Introduce computers to the classroom. One-half of the students enter the workbook answers into the In Concert software program and print their results. The other half of the students participate in an activity (hands on or a video) that may demonstrate either water

conservation/quality, air quality or recycling. The next day the students switch, those that participated in an activity enter their answers into the software program and those that completed the computer program participate in an activity.

- At the end of each session, students are given time to reflect on what they learned and what they can do and are asked to record this in their journal. Facilitators prepare student folders and insert partner handouts and informational material

  Day 4

- Facilitators give an overview of the In Concert report. Students are asked to "investigate" the categories from their report (weatherization, heating and cooling, lights and appliances, landscaping, recycling and solid waste). Examples for each category are represented on a display board that has pictures or real examples of the recommendations from the report. Students review the boards and identify "ways they can save". Facilitators interact with students and discuss their findings.

Residential Duct Systems, Schedules 203/204

Residential Duct Systems includes a retrofit duct sealing pilot and a new construction pilot. Residential Duct Systems compliments Northwest Energy Efficiency Alliance's Performance Tested Comfort Systems^{SM}, and has contributed to a better understanding of the home heating market.

Retrofit Duct Sealing Pilot Phase II

Phase I of the Duct Sealing Pilot was completed in the fall of 1998. Project results were analyzed and formally reported in early February of 1999. Phase II of the project was modified to leverage the new information from the significant findings of Phase I.

There were several key findings. One was that it was not possible to reliably predict which homes will have significant duct leakage, based on a combination of selecting high space heating use (bill history) and conducting homeowner phone interviews about gas and electric end uses and structure characteristics. Diagnostic field visits to heavily pre-screened high bill homes still only yielded approximately one in three homes that could achieve the target 10% or greater annual heating cost savings from heating supply duct sealing. Previous regional duct sealing knowledge did not identify this relatively high cost/effort of locating homes that could meaningfully benefit from duct sealing.

Another key finding was, a significant percentage of the 166 gas heating systems checked, exhibited elevated flue gas carbon monoxide levels, and venting related problems. Similarly, the small number of heat pump equipped homes receiving diagnostic visits showed a high percentage of systems that were incapable of efficient operation. This was due to a combination of compressor failure (some homeowners were unaware of it) and control malfunctions.

Phase II of the project has focused on the ultimate objective of recruiting heating contractors to perform a basic duct leakage test as a supplementary service during a heating system maintenance or repair visit. During 1999 diagnostic field visits have been made to 47 heat pump equipped homes participating in the project. The research contractor is accompanied by a residential heat pump contractor's technician on most visits. An extensive diagnostic checklist is completed for the heat pump system and a duct leakage test is performed at each site. Minor efficiency adjustments are made to the heat pumps by the technician when appropriate. Each homeowner is given a detailed report of the heat pump condition, any needed repairs or adjustments that are needed, and projected energy savings and estimated savings for duct sealing work.

Numerous equipment and control problems have been identified. Owners have been appreciative of receiving an objective diagnosis of their systems and for information about how to correctly operate and maintain their heat pumps. As of year-end, three owners have elected to contract for duct sealing. Nine have had recommended adjustments, cleaning and repairs performed to date (average annual savings: 900 kWh per home)

All participants will be surveyed in late February, 2000 to determine the repairs and maintenance they have undertaken since receiving the diagnostic reports. Final project results are expected by late Spring, 2000.

Compact Fluorescent Lighting, Schedule 205

PSE's compact fluorescent lighting activities work in conjunction with LightWise, a fluorescent bulb and fixture program promoted by the NEEA. In addition to the NEEA initiative, PSE provides technical assistance, product information and some funding incentives to developers and builders who agree to install compact and linear fluorescent fixtures in their multi-family, new construction projects. In 1999, over 150 builders were contacted, 715 new multi-family units were converted to fluorescent lighting, and 2,340 fixtures were installed for an estimated energy savings of 761,087 kWh. A joint venture torchiere turn-in event with Seattle City Light, Tacoma Power and Snohomish County PUD is planned for the Spring of 2000.

High Efficiency Clothes Washers, Schedule 206

PSE's high–efficiency clothes washer activities are coordinated with the regional programs underway through NEEA and water utilities in the region. EES is introducing high-efficiency clothes washers to coin operated laundromats and multi-family common area laundry rooms, and continues to promote the Energy Star Washwise program throughout the service area.

Coin-op Laundry

High-efficiency washers are now being promoted to coin-operated laundromats in King County through a joint effort between PSE, Seattle City Light and Seattle City Water. PSE's participation is limited at this time to providing a rebate of $150 for the purchase of high–efficiency washers if the laundromat's water is heated with electricity. Since most laundromats in King County have natural gas water heat, few PSE rebates are anticipated. Though there is no corresponding conservation schedule for gas customers, gas energy savings are bound to result from this joint venture.

Multi-Family Common Laundry

In cooperation with Seattle City Light, Tacoma City Light, Seattle Water, City of Kent, and Lacey, Olympia, Tenino and Tumwater (LOTT) water & wastewater departments, PSE offered $50 rebates for high–efficiency washers installed in multi–family common laundry rooms with electric water heat. By the end of December, 73 rebates were paid for an estimated 58,400 kWh savings.

Several laundry service route companies throughout Western Washington are assisting with marketing the program to their customers who lease or buy efficient front load washing machines. A direct mail campaign to over 6000 multi–family building owners and property managers throughout our service territory was mailed in April 1999.

Duplex/Triplex Weatherization Pilot, Schedule 207

The Duplex/Triplex Weatherization Pilot is provided for by electric Schedule 207. Early in 1999 a package describing the program was mailed to 50 duplex/triplex owners in King County, who's property had at least one qualifying high usage electrically heated unit. A second group of 50 qualifying property owners in Thurston County received the packet in May. Five owner responses

were received by PSE as a result of the 50 King County offers. For Thurston County, 13 responses were received by PSE.

During the summer, PSE's field contractor contacted each of the 18 property owners and made arrangements to check the structures for existing insulation levels, presence of moisture problems, and code-required ventilation provisions for attics and crawl spaces. Following the site inspection of each property, the contractor reported the results of the inspection to each owner.

Below is a summary of the results of the inspections and owner decisions related to participation.

Non Residential Structure	Existing Insulation Exceeded Program Criteria	Building Received Measures Under Former Puget Program	Eligible for Measure(s) Grant/Unwilling to Provide/Pay for Needed Venting/Vapor Barrier	Existing Structural Decay or Severe Moisture Problems in Attic or Crawlspace	No Owner Response/Not Interested in Participation (following the site inspection)
1	8	2	2	3	2

Pilot program results show that a least-cost, prescriptively-administered, program will not be cost-effective due to challenges in recruiting qualified participants.

Refrigerator Bulk Purchase Pilot, Schedule 208

Carried over from 1998, the Energy-Efficient Refrigerator Bulk Purchase Pilot struggled in 1999. Housing authorities and low income weatherization agencies had expressed an interest in taking advantage of this opportunity. To help overcome logistical problems, PSE agreed to cover the costs associated with bulk storage and handling. An agreement was forged with Maytag to provide super-efficient 15 and 18 cubic feet models.

However, orders did not materialize in 1999. Reasons for not participating included:

- Other higher priorities for housing agency staff
- Already purchasing the same or comparable product
- Smaller counties did not need bulk orders of products, and had little interest in combining orders
- Lower prices available through other manufacturers
- Resistance to changing purchasing procedures

Commercial-Industrial Energy Efficiency Services, Schedules 250/205

PSE encourages implementation of energy–efficient projects and practices by owners and tenants of commercial and industrial facilities by providing energy use information, energy analyses, an assessment of costs and savings of energy-efficiency improvements, and recommendations for both low-cost/no-cost actions (maintenance and behavioral) and for cost-effective capital intensive projects. Where significant engineering costs are involved in an analysis, the Company works closely with the customer's design engineers, and may recommend and provide partial funding toward the costs of third party engineering costs. For projects meeting cost-effective conservation criteria, PSE grants are available toward the cost of installing conservation measures with pay-backs greater than 1.5 years.

The primary marketing of PSE's Commercial and Industrial Energy Efficiency Services (C/I EES) continues to be "word-of-mouth", with information on services frequently provided to contractors, engineer firms and other trade allies. This "leveraging" of private sector marketing activity can be an effective way to capture customers with motivation to carry through on projects. Past participating customers are also an excellent source for leads; customers who have heard about the service from other customers. PSE staff make presentations to business customer associations (e.g. BOMA), and place ads in targeted trade journals (ASHRAE) and industry association newsletters. A significant number of projects begin with the customer calling PSE with questions about their energy use; PSE uses the opportunity to not only help the customer understand their energy use, but also makes energy efficiency recommendations. In 2000, PSE's new corporate website is anticipated to generate some additional projects.

In 1999, 68 customer projects involving electrical efficiency saved a total of 20,781 MWh. Nine customer projects involving natural gas efficiency saved 244,300 therms. Many projects involved

recommendations with low-cost or short pay-backs. Twenty-eight projects received grant funding totaling $328,115 for installation of energy efficiency measures; PSE funding is typically 10-35% of the installed cost, with a maximum grant available at 50%.

The most common electric energy–efficiency measures recommended to customers involve lighting and heating, ventilating and air–conditioning (HVAC) systems. Gas energy–efficiency opportunities primarily include maintenance and operational improvements to gas–fired boilers, heating systems and controls.

Commercial-Industrial New Construction, Schedule 251

PSE supports compliance with Washington State's Non-Residential Energy Code (NREC). To encourage further energy efficiency opportunities, Schedule 251 went into effect May of 1999. Through the end of 1999, six projects were completed for a total savings of 1,074 MWh. The current building climate has very aggressive schedules, which makes it more difficult to interject additional review of energy efficiency in these projects. Because of the lead times required for new construction, it is anticipated that more projects will be completed in 2000.

PSE staff work with designers and developers of new Commercial and Industrial facilities, or major remodels, to propose cost effective energy-efficient equipment, building shell, or industrial processes. (At the same time, PSE promotes opportunities to include commissioning, operations and maintenance documentation in coordination with Schedule 256). PSE staff review customers' energy savings estimates and analyses, and work with the customer design teams to help ensure that financial decision makers are aware of cost saving opportunities; including lower overall operating cost projections that may help in obtaining more favorable financing.

PSE targets customer and trade ally channels similar to those targeted for Schedule 250; and has provided program information to ASHRAE, NEEC and AIA members. A major challenge, especially in the current building market in the greater Puget Sound area, is getting involved with projects at an early stage. Builders and developers are reluctant to make changes which require revisions once submitted for permit, due to cost and delays. Also, equipment orders have long lead times.

For energy efficient measures with energy savings beyond those achieved using Washington State's NREC as a baseline, and with a minimum simple customer payback of one and a half years, PSE provides grants toward the installed cost of the measure. Maximum grants are fifty percent (50%) of the incremental installed measure cost.

As a total energy company, PSE is able to review the most cost-efficient fuel selection with customers at the time of construction. While natural gas is frequently recommended, conservation incentives are not currently available under C/I New Construction for gas end-uses.

Premium Efficiency Motors, Schedule 252

PSE continues to encourage commercial and industrial customers to install efficient electric motors as applications arise, in support of NEEA's Drive Power Initiative. As the regional program gains momentum, PSE expects that customers will express more interest. Under the regional program, two newsletters, "Windings", were published and distributed to PSE customers in 1999. In addition, four circuit riders are now in the field; a consultant is available to answer customer questions regarding motor repair, replacement and high-quality motor reconditioning; and a motors management web-site has been linked to the Electric League web-site.

Resource Conservation Manager, Schedules 253/208

The Resource Conservation Manager Program (RCM) primarily targets school districts and city governments. Energy savings, as well as savings from other resources (e.g., water, sewer, solid waste, and recycling) are achieved through use of an on-site resource conservation manager. RCM activity in 1999 is summarized below:

- Formal agreements for on-site resource conservation managers in five school districts (Federal Way, Seattle, North Thurston, Puyallup and Lake Washington), NAS - Whidbey Island, and the Nuclear Underwater Warfare Center – Keyport.
- Eleven additional customers are obtaining monthly billing data downloads from PSE to track their energy with Utility Manager software
- Provided training and support for an additional eleven customers: Central Kitsap School District, Kent School District, Northshore School District, Peninsula School District, Tahoma School District, Tumwater School District, City of Olympia, King County Metro Transit, The Bon Marche, Multicare Healthcare Systems, and the Washington State Military Department. (These customers have no formal RCM agreements with PSE.)
- Three quarterly RCM training and round table meetings hosted in February, May and November; and co-hosted a meeting with the State of Washington RCM group in September.

Three customers with formal RCM agreements reported savings totaling 2.6 million kilowatt-hours and 260,000 therms in 1999. In addition to documented energy savings, our customers have claimed significant non-energy benefits; more than enough to cover the RCM salary.

The quarterly meetings hosted by PSE focused on providing technical training opportunities for the resource conservation managers and their key maintenance staff. Training topics included:

- How to Establish Baselines
- How to Analyze Reports
- Billing Analysis
- Efficient Irrigation Practices
- Efficient Boiler Operation - Site Tour
- HVAC Controls - Site Tour
- Maintenance Management System – Site Tour
- Central Kitchen – Site Tour
- Getting the Most from Your Resource Accounting Tools

The meetings also included time for a round table forum where RCMs shared their experiences and exchanged ideas.

Northwest Energy Efficiency Alliance, Schedule 254

Infrastructure and market transformation activities with the Northwest Energy Efficiency Alliance (NEEA) are proceeding in line with regional expectations and with PSE's continuing support. 1999 was the third year of NEEA's original 3-year plan, and work was completed early in 2000 which conditionally secured new funding for an additional 5 years from BPA and all investor owned utilities in the region. Additional information regarding NEEA activities is available on line at www.nwalliance.org.

Small Business Energy Efficiency, Schedules 255/255

Small Business Energy Efficiency Services is aimed at addressing cost-effective conservation for commercial customers with a relatively small amount of energy use. Many small commercial customers, especially where the business is in a leased facility, find value in having PSE staff explain how their space uses energy and provide recommendations on how to operate systems to control energy costs. These customers often do not have opportunities to make cost-effective investments in new equipment or controls, but can realize savings benefits from information aimed at helping them understand how their equipment works, and what to look out for with maintenance. This service can be expensive to deliver, relative to the energy savings potential, and yet is not readily available in the marketplace unless equipment needs repair. It is anticipated, similar to our experience with residential programs, that significant savings will be achieved with a quality information program, if sufficient volume can be generated.

Based on program experience with small commercial customers, including customer comments and feedback, development of this program has focused on cost–effectively reaching these customers. PSE's program will use a combination of energy Hotline telephone advice, new small business brochures on "Energy Efficiency Operations and Maintenance" and "Smart Lighting Options", and new prescriptive rebates for selected lighting retrofits and set-back controls. As volume increases and customers provide additional feedback, we expect in 2000 to add further services, including more brochure materials, contractor referrals and financing options.

Prescriptive incentives are currently available for selected lighting equipment and electronic thermostats. Customers need PSE pre-approval for rebate incentives; contractors can assist in obtaining the approval. Customers who install eligible equipment are responsible for contractor payment and submittal of approved invoices prior to receiving rebates. PSE reserves the right to inspect all installations.

Marketing is anticipated through bill inserts and targeted direct mailings. In addition, PSE hopes to promote some of these services "online" in 2000.

Building Commissioning, Schedule 256

As with C/I New Construction (Electric Schedule 251), PSE continues to work with prospective customers for Building Commissioning projects; and monitor NEEA funded projects through the Commissioning Public Buildings in the Pacific Northwest initiative.

Several non-public sector projects are in the early planning stage. PSE plans to be involved in the pre- through post- commissioning phases, and has agreed to provide funding for a) the commissioning plan, and b) the commissioning implementation report. Projects underway are not expected to be completed until sometime in the year 2000. PSE continues to be interested in and monitor national and regional developments in methods to attribute energy savings to commissioning projects.

We recognize a strong tie between "Commissioning" a building, and ongoing operation and maintenance. To that end, EES staff work to promote Building Operator training and certification for facility operators who will be involved in commissioned buildings.

LED Traffic Lights, Schedule 257

In 1999, energy-efficient traffic signal rebates were offered to over 37 city and county transportation departments that install traffic signals within PSE's service area. The City of Bremerton installed 317 red signals, for a total kWh savings of 193,455. Other cities are in the process of budgeting for the more expensive signals and plan to install them during the next year.

High Voltage/Optional Large Power Customers, Schedule 258

To address energy efficiency needs unique to High Voltage and Optional Large Power Sales Customers, an RFP was mailed by July 1, 1999. In the second quarter of 1999, a pilot program development group involving ten major customers and ICNU was formed from an invitation to interested TAG members and all eligible customers. Their assistance led to the development of the RFP.

Applications for projects with a guarantee for funding will be accepted through March 31, 2001. After that date, unassigned Schedule 258 funds will be available to all eligible customers to compete for conservation projects.

Activity in 1999 includes one retrofit project with premium-efficiency motors nearing completion for a projected 379,815 kWh per year, and four additional applications for projects awaiting final plans and approval. PSE continues to meet with eligible customers, and provide guidance for prospective projects.

Local Infrastructure/Market Transformation, Schedule 270

Activity in Local Infrastructure and Market Transformation, electric Schedule 270, includes a combination of conservation cost-sharing for annual dues, and staff participation to promote and leverage energy efficiency activities in and by organizations such as E-Source, ASHRAE, BOMA, IES and the Electric League of the Pacific Northwest.

PSE again hosted Building Operator Certification (BOC) classes in Kent in 1999, the first BOC Level II classes in the region. We are monitoring Sustainable Building activities in western Washington, and will look for an opportunity to support owners and developers willing to commit to sustainable building projects yielding energy savings.

Together with several other agencies in the region, PSE has participated in EPA's Climate Wise program. Two PSE customers received recognition and rewards for development of action plans, which included recommendations and review from PSE. In addition, a commercial customer was recently sited by EPA for a Climate Wise award which included previous lighting retrofits funded by PSE energy efficiency programs.

Net Metering, Schedule 150

Schedule 150, Net Metering for Renewable Energy Services, became effective February 11, 1999. This schedule applies to customers who operate hydroelectric, solar or wind generators of no more that 25 kW. Customer generation can be used to offset part or all of the customer-generator's electricity use under Schedule 7, 24, 25 or 29 of Electric Tariff G.

During 1999, nineteen PSE customers inquired about net metering of renewable energy generation. Five indicated that they had, or very shortly would have, a qualifying generator in place. Two micro hydro customer-generators were interconnected in 1999; one with 7.5 kW capacity; the other with 4.0 kW. As of the end of 1999, two additional customers with solar photo-voltaic systems had signed net metering agreements and were scheduled for interconnection in 2000.

Electric Rider Accounting Overview

1999 Recovery

Program costs for the 1999 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, 1999 through March 31, 2000. The worksheet on page 15 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 2000 electric DSM program costs in the same manner as the 1999 rider program. The program costs will be debited to FERC account 182.3 "Other Regulatory Assets. The recovery is for the period April 1, 2000 through March 31, 2001. 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 1999 rider into the 2000 rider.

Puget Sound Energy
DSM Rider Report
For Period January - December 1999

Order Number	Tariff Sch. No.	Description		Jan-Dec Rider
RESIDENTIAL				
18230128	150	Net Metering	$	21,917
18230601/18230602				
18230603/18230604	200	Residential Efficiency Services		221,977
18230611	201	Low Income Retrofit		419,704
18230621	202	In Concert with the Environment		108,974
18230631/18230632				
18230633	203	Duct System Pilot		51,016
Summary of Residential Conservation Programs:			$	823,588
COMMERCIAL/INDUSTRIAL				
18230641	205	CFL Conservation Pilot	$	8,496
18230651/18230422	206	High Efficiency Clothes Washers Pilot		19,187
18230711	250	C/I Energy Efficiency Services	$	1,047,805
18230715	251	C/I New Construction		1,654
18230723	253	Resource Conservation Manager		60,084
18230725	255	Small Business Energy Efficiency		2,465
18230726	256	Building Commissioning		1,528
18230728	257	LED Traffic Lights		13,330
18230729	258	High Voltage Pilot		3,631
Summary of Commercial/Industrial Conservation Programs:			$	1,158,180
REGIONAL MARKET TRANSFORMATION SUPPORT				
18230420	208	Bulk Refrigerator Pilot		7,710
18230421/18230727	254	NW Energy Efficiency Alliance		2,523,219
18230730	270	Local Infrastructure/Market Transformation		56,443
Summary of Regional Market Transformation Support Programs:			$	2,587,372
PRIOR, ONGOING COMMITMENTS				
18230423	207	Residential Prior, Ongoing Commitments	$	10,570
		C/I Prior, Onging Commitments		-
Summary of Prior, Ongoing Commitments Programs:			$	10,570
Total Conservation Spending as of December 31,1999			$	4,579,710
Conservation Costs Recovered Through Rates as of 12/31/99			$	5,141,948
Under Collection Related to 1998 Rider			$	198,990
Under Collection/(Over Collection) as of 12/31/99			$	(363,248)
Conservation Costs Recovered through Rates in January 2000		$ 766,585		
Forecasted Recoveries for February 2000 through March 2000		$ 1,180,757		
			$	1,947,342
Estimated Under Collection/ (Over Collection)			$	(2,310,590)

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

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, 1999 Lost Margins were calculated based on price per therms included in Rate Schedules 23 & 24. The amount calculated for January through December, 1999 is $69,172.

Through December 31, 1999, 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	$ 2,978
Residential DSM - AFUCE	31,312
LIW DSM - AFUCE	12,400
LIW DSM - Equity Kicker	1,403
	$48,094

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 worksheets provide summaries of all deferred costs to be recovered in the twelve months beginning April 1, 2000, through the DSM tracker filing accompanying this report. An adjustment was made to the calculation to true-up the 1997 Tracker Recovery for the amount of $19,561 and is presented on page 17. 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 87.50% firm sales and 12.50% interruptible sales as shown in Exhibit B of this filing. Accordingly, it is appropriate and consistent with prior action under this docket, that the fifth year program recovery, excluding revenue related taxes and fees, be collected at .091 cents per therm for all firm sales customers and .078 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.

PUGET SOUND ENERGY
DSM Tracker Report
For Period January - December 1999

Order/Account Number	Tariff Sch. No.	Description	Jan - Dec 1999 Expenditures
RESIDENTIAL			
Order:			
18230661	203	Low Income Retrofit	$ 130,467
18230681/18230682/18230683	204	Duct System Pilot	6,873
18230652/18230653/18230654	206	Resident Efficiency Services	252,320
18230671	207	In Concert with the Environment	212,685
Summary of Residential Conservation Programs:			$ 602,345
COMMERCIAL/INDUSTRIAL			
Order:			
18230731	205	C/I Energy Efficiency Services	$ 50,949
18230691	208	Resource Conservation Manager	40,940
18230692	255	Small Business Energy Efficiency	1,753
Summary of Commercial/Industrial Conservation Programs:			$ 93,641
AFUCE			
Account:			
18230372		Commercial Conservation Programs	$ 2,978
18230382		Energy Education Programs	31,312
18230392		Low Income Weatherization Programs	12,400
18230402		Equity Kicker on Low Income Weatherization	1,404
Summary of AFUCE:			$ 48,095
TOTAL			$ 744,080
1997 Tracker Recovery True-up			$ 19,561
Total Conservation Tracker Recovery			$ 763,641

Exhibits

Exhibit A illustrates the forecast of 2000 therms as well as the development of the apportioned factors for the Firm and Interruptible Schedules. Exhibit B provides the 2000 Tracker Recovery allocation which includes the 1997 Tracker True-up.

PUGET SOUND ENERGY

DOCKET NO.	UG-950288
EXHIBIT NO.	1999 Annual Report Exhibit A
SCHEDULE NO.	
SHEET NO.	1 OF 1

2000 Annual Forecast of Therms and Gas Cost Recoveries

Line No.	Gas Cost Recovery Rates Rate	Commodity	Demand	Total	4/00 - 3/01 Forecast Volumes	Total Forecast Gas Cost Recoveries
	(a)	(b)	(c)	(d)	(e) (in therms)	(f)
1	11,16	$ 0.20364	$ 0.08146	$ 0.28510	131,708	$ 37,550
2	23,24	$ 0.20364	$ 0.11475	$ 0.31839	515,025,279	163,978,899
3	31,36,51	$ 0.20364	$ 0.10342	$ 0.30706	193,772,794	59,499,874
4	41	$ 0.20364	$ 0.05791	$ 0.26155	52,924,311	13,842,354
5	43	$ 0.20364	$ 0.10842	$ 0.31206	-	-
6	50	$ 0.20364	$ 0.03716	$ 0.24080	374,724	90,234
7					762,228,816	$ 237,448,911
8	85	$ 0.20364	$ 0.07969	$ 0.28333	27,563,307	$ 7,809,512
9	86	$ 0.20364	$ 0.07969	$ 0.28333	32,997,251	9,349,111
10	87	$ 0.20364	$ 0.04794	$ 0.25158	66,687,384	16,777,212
11					127,247,942	$ 33,935,835
12			**TOTAL SALES VOLUMES**		**889,476,758**	
13			**FIRM SCHEDULES**		**762,228,816**	**85.69%**
14			**INT. SCHEDULES**		**127,247,942**	**14.31%**
15			**TOTAL GAS COST RECOVERIES**			**$ 271,384,746**
16			**FIRM SCHEDULES**			**$ 237,448,911** **87.50%**
17			**INT. SCHEDULES**			**33,935,835** **12.50%**

PUGET SOUND ENERGY

DOCKET NO.	UG-950288
EXHIBIT NO.	1999 Annual Report Exhibit B
SCHEDULE NO.	
SHEET NO.	1 OF 1

2000 Annual Forecast of Therms and Gas Cost Recoveries

Tracker Recovery Calculation

Line No.	(a)	(b)	(c)
1	2000 Budget Therms		
2	Firm	762,228,816	85.69%
3	Interruptible	127,247,942	14.31%
4	Total Sales Volumes	889,476,758	100%
5	1999 Program Costs	$ 744,080	
6	1997 Tracker Recovery True-up		
7	Firm	$ 17,773	90.86%
8	Interruptible	$ 1,788	9.14%
9	Total Required True-Up	$ 19,561	100.00%
10	Tracker Recovery Allocation - Including 1997 Recovery		
11	Firm	$ 668,808	87.50%
12	Interruptible	$ 94,833	12.50%
13	Tracker Recovery	$ 763,641	100%
14	Tracker Recovery Cents per Therm (Excluding Revenue Sensitive Items)		
15	Firm (line 11 / line 2)	$ 0.00088	87.50%
16	Interruptible (line 12 / line 3)	$ 0.00075	12.50%
17	Total Required Recovery		100%