

Pacific Power

2011 Annual Review of Energy Efficiency Programs - California

Table of Contents

Introduction.....	3
2011 Performance and Activity	4
Stakeholder Meetings, Communications and Filings	5
Outreach and Communications.....	6
Residential Energy Efficiency Programs and Activity	8
Non-Residential Energy Efficiency Programs and Activity	13
Surcharge to Fund Public Purpose Programs Balancing Account Summary	17

List of Table

Table 1 Total Portfolio Performance	3
Table 2 2011 Performance	4
Table 3 Low Income Weatherization Performance	8
Table 4 Home Energy Savings Program Performance	10
Table 5 HES Program Percent Savings by Category	10
Table 6 Home Energy Savings Measure Performance	11
Table 7 Refrigerator & Freezer Recycling Measure Details	12
Table 8 FinAnswer Express Performance.....	13
Table 9 FinAnswer Express Savings by Measure Group	13
Table 10 Energy FinAnswer Performance.....	15
Table 11 Energy FinAnswer Savings by Measure Group	16
Table 12 2011 Public Purpose Account.....	17

Introduction

Pacific Power works with its customers to reduce the need for investment in supply-side resources and associated infrastructure by reducing energy and peak consumption through cost-effective energy efficiency programs.

Pacific Power currently offers four energy efficiency programs in California approved by the California Public Utilities Commission (“Commission”), with expenditures associated with these programs recovered through the Surcharge to Fund Public Purpose Programs, Schedule S-191.

This report provides details on program results and activities, expenditures and Schedule S-191 revenue for the period of January 1, 2011 through December 31, 2011. Program results are summarized in Table 1 below.

Table 1 Total Portfolio Performance

2011 Total Portfolio Performance		
Total Revenues Collected	\$	1,501,049
Expenditures	\$	1,555,031
kWh/Yr Savings (Gross - At Generation)		6,939,322

As shown in Table 1 above, in 2011 Pacific Power acquired energy efficiency savings through its energy efficiency program activity totaling 6,939,322 kWh/year in California (at generation).¹

¹ Please see Note 2 on following page for complete explanation of Net- to- Gross and Line Loss Assumptions.

451-E – Suspension of Schedule S-191 Surcharge to Fund Public Purpose Programs and Extension of Program Budget Cycle (adjusted for low income weatherization program costs and savings). Total program expenditures also increased, from \$865,247 in 2010 to \$1,555,031 in 2011.

Stakeholder Meetings, Communications and Filings

The Company collaborates with stakeholders in California, including the Commission’s Energy Division and the Division of Ratepayer Advocates (“DRA”), regarding the Company’s California energy efficiency programs. The primary communications, meetings and filings occurring in 2011 are listed below with brief descriptions.

- On March 15, 2011, Pacific Power submitted to the Commission the Annual Review of Energy Efficiency Programs for 2010.
- On April 29, 2011 the Company filed its 2010 Annual Report on Low Income Assistance Programs in compliance with the requirements set forth in the April 5, 2004 Second Energy Division Workshop Report on the Review of the Accounting and Reporting Requirements for the California Alternate Rates for Energy (“CARE”) and Low Income Energy Efficiency (“LIEE”) programs (the LIEE program is now referred to as the Energy Savings Assistance Program (“ESAP”)) of the Small and Multi-Jurisdictional Utilities.
- On September 27, 2011, Pacific Power requested from the Energy Division the approval to suspend the Surcharge to Fund Public Purpose Programs, Schedule S-191 and extend Pacific Power’s current energy efficiency program budget cycle through December 31, 2012. The suspension was to allow for program expenses to catch-up with the current Surcharge over collection. The Company requested that the suspension remain in place until the Company files to reinstate the surcharge or when the surplus funds in the deferred account approach full utilization. The suspension of the surcharge was effective October 27, 2011.
- On November 4, 2011, Pacific Power provided the Energy Division and DRA with information concerning planned changes to the FinAnswer Express program. The program changes were designed to increase overall participation and energy savings acquired through the program, increase the comprehensiveness of the program and incorporate modifications to federal and state energy codes and standards. The agreed upon program modifications were posted to Pacific Power’s web site on December 5, 2011 and the changes became effective on January 19, 2012.³

³ This process is consistent with provision of service no. 1 in the FinAnswer Express Program tariff, Schedule A-115.

Outreach and Communications

The following outreach, communications and promotional activities occurred to support Pacific Power's energy efficiency programs during 2011. Public Purpose funds were used to support communications and outreach efforts. Customer awareness advertising and newsletters are funded through the Company's communications budget.

Events

Business Energy Efficiency Breakfasts

June 8, 2011 Crescent City, California

June 9, 2011 Yreka, California

Trade allies and customers were invited to learn about the resources available to help them save energy and money for themselves and their clients. The focus was the energy efficiency programs for business customers through FinAnswer Express.

Meetings highlighting the value of energy efficiency as a compliment in maximizing the efficiency and cost-effectiveness of solar installations were held.

June 20-21, 2011 Mt Shasta, California

June 22, 2011 Yreka, California

June 23, 2011 Crescent City, California

Attendees included residential and commercial customers, contractors, financiers and energy efficiency auditors.

A Home Energy Savings retail sales associate promotion ran in three appliance retailers during October and November in an effort to increase appliance redemptions prior to Black Friday. A total of 40 appliance applications were received as a result of this promotion.

Advertising

To help increase program awareness and participation, ads for Pacific Power's *See ya later, refrigerator*[®] program ran on cable TV, in newspapers and online from February through May 2011.

Energy FinAnswer and FinAnswer Express programs were featured in newspaper ads in January, April and October 2011.

Pacific Power also includes energy efficiency messages in radio and print ads as part of its Customer Awareness campaign that ran throughout 2011.

Bill Inserts

The following inserts were delivered to residential customers in bills in 2011:

- *See ya later, refrigerator*®, April
- *See ya later, refrigerator*®, August
- *See ya later, refrigerator*®, September
- Home Energy Savings (lighting), October

Newsletters

Residential customers received Pacific Power's Voices newsletter in bills in January, March, April, May, July, September, October and November 2011. Each issue covered energy efficiency and other topics.

Other newsletters such as Energy Insights, Energy Connections and Energy Update reach the community, business and government audiences on a quarterly or monthly basis. Each issue includes information on energy efficiency and other topics. Oftentimes a customer project is highlighted.

Direct Mail

Residential customers received a mailing with a magnet for Pacific Power's *See ya later, refrigerator*® program in October 2011.

Collateral Material

New point-of-purchase materials were developed for the Home Energy Savings program in 2011. These items included in-store banners for big box retailers, CFL cardboard kiosks, CFL booklet, CFL shelf flap, appliance table tents, appliance/lighting danglers and room air conditioner box stickers.

A new resource manual, pocket guide and fact sheets were also developed for participating retailers in California.

Website

Pacific Power's website, www.pacificpower.net, includes information on energy efficiency incentive programs, tips and other resources for customers to save energy and money.

Residential Energy Efficiency Programs and Activity

Low Income Weatherization

Pacific Power partners with local non-profit agencies to provide weatherization services through the ESAP to income-eligible households at no cost to the service recipient. Details of ESAP and the CARE program are included in the Annual Low Income Assistance Programs Progress Report that Pacific Power submits to the Commission each year on or before May 1.

The annual goal from Decision 08-12-019 of serving 500 homes through ESAP was exceeded. In 2011, 680 homes received energy efficiency measures as part of the program. The funding for the program was suspended on May 20, 2011 as requested through Advice Letter 438-E. Participation goals are being exceeded with lower than forecasted expenditures.

Results for 2011 are provided in Table 3 below.

Table 3 Low Income Weatherization Performance

Low Income Weatherization Performance - California	
kWh/Yr Savings (at Site)	271,482
kWh/Yr Savings (at Gen)	296,184
Expenditures - Total	\$ 370,893
Participation - Total # of Completed/Treated Homes:	680
<u>Number of Homes Receiving Specific Measures</u>	
Ceiling Insulation	2
Floor Insulation	1
Weather-stripping	7
Water Pipe Insulation and Sealing	256
Water Heater Repair	10
Water Heater Replacement	16
Furnace Repair/Tune-up	1
Furnace Filters	7
Furnace Replacement	1
Home Repairs	1
Microwaves	69
Outlet Gaskets	11
<u>Number of Units Installed of Specific Measures</u>	
Replacement Windows	340
Thermal Doors	19
Faucet Aerators	819
Showerheads	361
Compact Fluorescent Light bulbs (CFL)	5,564
CFL Fixtures	1
Replacement Refrigerators	52

Home Energy Savings Incentive Program (Schedule D-118)

The Home Energy Savings program has been available since 2008. The program offers incentives for the following broad categories of equipment and services:

Appliances and Lighting

- Appliances—washing machines, refrigerators, dishwashers, water heaters, room air conditioners
- Lighting—both compact fluorescent lamps (“CFLs”) and fixtures
- Ceiling fans
- Services—refrigerator/freezer and clothes washer recycling

Heating Ventilating and Air Conditioning (“HVAC”) Equipment and Services

- High-efficiency central air conditioning equipment
- Air conditioning equipment tune-ups
- Evaporative coolers
- Heat Pump equipment, tune-ups, conversions, and upgrades
- Ductless heat pumps
- Duct sealing

New Homes Whole Home (including)

- Windows and insulation
- Appliances
- Heating and cooling systems, duct sealing

The Home Energy Savings program is designed to leverage the marketing and delivery of energy efficient equipment and services through local business and service providers. Program delivery methods vary based on the type of equipment or service and include the following:

- 1) Manufacturer buy-down for CFLs resulting in the retailer offering a lower price to the retail customer;
- 2) Scheduled refrigerator/freezer pickup at customer’s home with incentive payment after unit is recycled; and
- 3) Post-purchase application and incentive payment for other types of equipment and services.

Program expenditures (including incentives), kWh savings and incentives paid are outlined in Table 4. Expenditures include costs of recycling and incentives paid to retailers, contractors and manufacturers. Incentives paid reflect only payments to end-use customers.

Table 4 Home Energy Savings Program Performance

2011 Home Energy Savings Program Performance	
kWh/Yr Savings 2011(Gross - At Gen)	2,573,706
Expenditures	\$ 622,348
Incentives Paid	\$ 153,291

Table 5 HES Program Percent Savings by Category

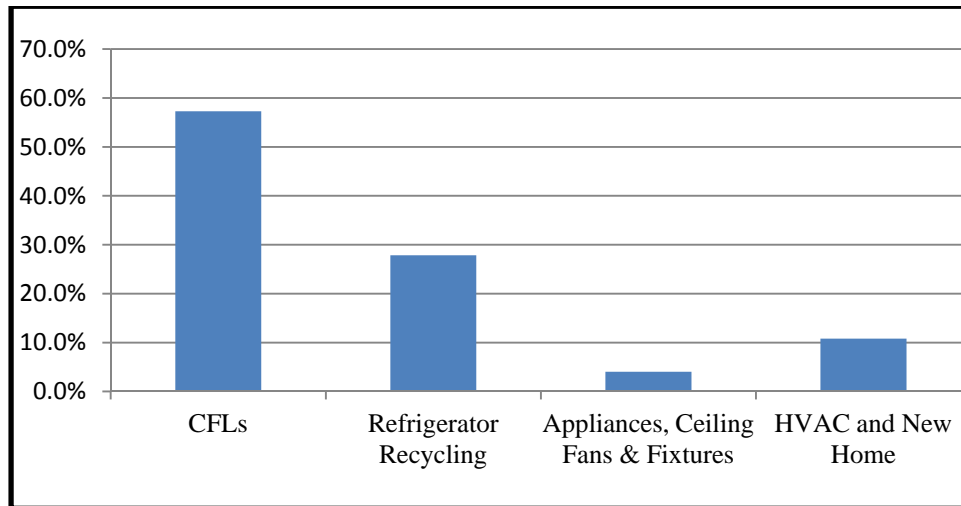


Table 6 Home Energy Savings Measure Performance

2011 Home Energy Savings Measure Performance

Home Energy Savings Measures	Unit of Measure	# of Units	Participants	kWh/Yr Savings (Gross - At Site)
Clothes Washer-Tier One (2.2 - 2.39 MEF)	Units	24	24	2,938
Clothes Washer-Tier Two (2.4 + MEF)	Units	333	333	50,211
Clothes Washer Recycling	Units	0	0	0
Dishwasher	Units	78	78	4,054
Electric Water Heater	Units	26	26	3,250
Evaporative Cooler (Portable)	Units	0	0	0
Evaporative Coolers (Permanently Installed)	Units	2	2	788
Refrigerator	Units	227	227	32,107
Room AC	Units	10	10	830
Ceiling Fans	Units	11	6	1,155
Fixtures	Units	7	6	644
Total Appliances, Ceiling Fans and Fixtures		718	712	95,977
CAC Tune up	Units	0	0	0
CAC (15 SEER)	Units	0	0	0
Heat Pump Tune-Up	Projects	1	0	82
Heat Pump Conversion (EFAF-8.5 HSPF)	Projects	18	18	76,482
Heat Pump Upgrade (7.7-8.5 HSPF)	Projects	19	19	41,401
Ductless Heat Pump - Single Head	Projects	25	25	108,700
Ductless Heat Pump - Multi Head	Units	5	5	30,000
New Homes-Gas	Units	0	0	0
New Homes-Electric	Units	0	0	0
Total HVAC & New Home		68	67	256,665
Refrigerator & Freezer Recycling	Units	493	462	661,209
CFLs-Specialty Bulbs	Bulbs	11,141	1,114	287,984
CFLs-Twisters	Bulbs	40,717	4,071	1,057,221
CFLs	Bulbs	51,858	5,186	1,345,205
Totals		53,137	6,427	2,359,056
kWh/Yr Savings at Generation				2,573,706

Note: CFL Participation based on 10 bulbs per participant

Table 7 Refrigerator & Freezer Recycling Measure Details

Refrigerator & Freezer Recycling Measure Details – 2011

Refrigerator Recycling Measure	Unit Count	Per Unit Savings (kWh/Yr)	Gross Savings (kWh/Yr) at Site
Refrigerator	363	1,149	417,087
Freezer	130	1,590	206,700
Total Units Recycled	493		623,787
Energy Savings Kits	462	81	37,422
		Total	661,209

The refrigerator and freezer recycling portion of the program includes pick up and recycling of up to two working refrigerator/freezer units and delivery of an energy savings kit that includes two CFLs, a refrigerator thermometer and a brochure with energy saving tips.

Major Trends and Activities

The economy continues to hamper participation. Sears in Yreka reports appliance sales are down 20% in 2011 compared to 2010. The program has responded by providing more promotional opportunities and by meeting with retailers and trade allies more often to keep them engaged in the program. Single-head ductless heat pumps and multi-head ductless heat pumps continue to be popular measures with installations increasing approximately 40% from the previous year. CFL lighting and ductless heat pumps are the two largest contributors of savings to the program. No new homes participated in the program in 2011. Construction activity is expected to remain very low throughout 2012. Online incentive applications were made available in 2011 for clothes washers, dishwashers, electric water heaters, refrigerators, electric water heaters, lighting fixtures, ceiling fans and room air conditioners.

Program Changes

Looking ahead the program will continue to expand retailer and trade ally partnerships. Additional retailer promotions will be designed to increase program participation. HVAC contractors will be targeted and provided additional support to continue the growth of ductless heat pump installations. Program impact and process evaluations for program years 2009 and 2010 were completed for the Home Energy Savings program in February, 2012. Findings from those evaluation reports will be reviewed and actionable recommendations implemented during the 2012 calendar year.

Non-Residential Energy Efficiency Programs and Activity

FinAnswer Express (Schedule A-115)

This program is for typical lighting, HVAC, motor and other retrofits or new installations which increase energy efficiency. The program offering includes an expedited energy analysis and pre-calculated incentives based on the equipment installed (\$/fixture, \$/ton, \$/horsepower, etc.). The program is marketed primarily through trade allies, Pacific Power staff, the program website (<http://www.pacificpower.net/wattsmart>), and other outreach efforts including print advertising.

Program expenditures (including incentives), kWh/year savings and incentives paid are outlined in the table below. Expenditures include support provided to equipment suppliers and contractors. Incentives paid reflect payments to end-use customers⁴.

Table 8 FinAnswer Express Performance

2011 FinAnswer Express Program Performance	
kWh/Yr Savings 2011 (Gross - At Gen)	985,208
Expenditures	\$ 369,571
Incentives Paid	\$ 109,340

Details of program savings by measure type are provided in the table below. kWh savings in Table 9 do not reflect line losses. The percentage of savings attributable to each measure group is not affected by line losses.

Table 9 FinAnswer Express Savings by Measure Group

2011 Savings by Measure Group		
Measure Group	Savings	
	(kWh/Yr) at Site	% of Total
Lighting	877,104	97%
Non-Lighting	27,822	3%
	<u>904,926</u>	

⁴ Note for one measure, Green Motor Rewind, there is a \$2/horsepower incentive paid to the motor service center. A minimum of \$1/horsepower is reflected as a credit on the service center's invoice to the customer for the rewind.

Major Trends and Activities

During 2011, the Company continued to support the Pacific Power Energy Efficiency Alliance, a trade ally network which provides support to lighting, motor, HVAC, air compressor, irrigation and other distributors and contractors who participate in offering the Company's energy efficiency programs. Distributors, contractors and others are recruited, approved and trained on the Company's incentive programs. Upon approval, trade allies can promote the programs and are listed on the Company's program website as a participating vendor. In June 2011, the company held vendor meetings in Yreka and Crescent City to review the FinAnswer Express program and the support available for participating vendors. Customers were also invited to these events. As of the end of 2011, 20 unique⁵ vendors serving the Company's California service territory are approved and trained on the program and are listed on the program website.

The Company reached out to lighting trade allies in 2011 to focus on the T12 fluorescent installation base with marketing materials to give customers information about the federal standard changes pending in 2012. Field outreach specialists targeted all technology sectors to promote information on available incentives and recruit additional trade allies, especially in the non-lighting side of the program to build a more successful 2012 list of project participation.

The Company expanded its outreach to irrigation trade allies in late 2011 with new, streamlined application materials designed to boost accessibility to program applications and rules for growers and staff at the retail sales counter where irrigation equipment purchasing take place.

Compressed air outreach specialists continued to meet with compressed air vendors that service customers in California. Through most of the year, customers were slow to implement projects to replace existing compressors with Variable Frequency Drive compressors, presumably due to the economy, but activity picked up at the end of the year, leaving 2012 with a sizable pipeline.

Program Changes

On November 4, 2011, Pacific Power provided the Energy Division and DRA with information concerning planned changes to the FinAnswer Express program. The program changes were designed to increase overall participation and energy savings acquired through the program, increase the comprehensiveness of the program and incorporate modifications to federal and state energy codes and standards. The agreed upon program modifications were posted to Pacific Power's web site on December 5, 2011 and the changes became effective on January 19, 2012. Program changes impact lighting, motors, HVAC, building envelope, food services, appliances, irrigation,

⁵ Several vendors participate in more than one technology category. Also, additional vendors participate but do not complete the trade ally network application to be approved and listed on the Company website.

dairy/farm equipment, compressed air, other energy efficiency measures and customer incentives. For details on all changes visit www.pacificpower.net/bus/se/epi.html

Energy FinAnswer (Schedule A-125)

This program is for more complex retrofits and new construction. The program offering includes:

- a vendor-neutral, investment-grade energy analysis to identify energy efficiency opportunities, and
- cash incentives equal to \$0.12 per kWh annual energy savings plus \$50 per kW average monthly demand savings (up to 50% of project costs)

Incentives offered through this program are subject to a cap that prevents the incentive from bringing the payback period for a project below one year. Lighting energy savings per project are capped because lighting-only projects are handled through the FinAnswer Express program. The program includes a commissioning requirement and a post-installation verification to document the energy savings and measure costs for installed measures.

For comprehensive new construction and major renovation projects where the whole building exceeds energy code by at least 10%, the following services and incentives are available: design assistance, design team incentives, and a sliding scale incentive formula that provides a higher incentive rate for projects based on the percentage that a project exceeds energy code.

The program is marketed primarily by Pacific Power account managers, trade allies, the program website (<http://www.pacificpower.net/wattsmart>), Energy FinAnswer consultants and project staff. Other leads come by word-of-mouth, past participants and other company outreach efforts.

Program expenditures (including incentives), kWh savings and incentives paid are outlined in Table 10 below. Expenditures include expenses related to site-specific energy engineering work, program design, marketing and administration. Incentives paid reflect payments to end-use customers.

Table 10 Energy FinAnswer Performance

2011 Energy FinAnswer Program Performance	
kWh/Yr Savings 2011 (Gross - At Gen)	3,084,223
Expenditures	\$ 192,219
Incentives Paid	\$ 115,251

Details of program savings by measure type are provided in Table 11 below. KWh savings in Table 11 do not reflect line losses. The percentage of savings attributable to each measure group is not affected by line losses.

Table 11 Energy FinAnswer Savings by Measure Group

2011 Savings by Measure Group		
Savings		
Measure Group	(kWh/Yr) at Site	% of Total
Motors	5,945	0.2%
Controls	1,388,347	48.7%
Lighting	1,457,747	51.1%
	<u>2,852,039</u>	

Major Trends and Activities

During 2011, a large industrial project was completed that contributed significantly to overall program savings. Energy FinAnswer savings increased from 7,088 kWh in 2010 to 2,852,039 kWh in 2011. The program experienced high savings with limited expenditures. Program interest has increased and several preliminary saving reports have been issued to potential customers.

Surcharge to Fund Public Purpose Programs Balancing Account Summary

2011 Public Purpose Surcharge (S-191) monthly expenditures, collected revenues and the balance in the balancing account is summarized in Table 12 below.

Table 12 2011 Public Purpose Account

2011 Public Purpose Account Report

Month	Expenditures	S-191 Revenue	Net Revenue Accrual	Carry Charges CA LIEE	Net Cost Accrual	Balance
Dec-10						\$ 3,193,591
Jan-11	\$ (87,551)	\$ 188,107	\$ 40,000			\$ 3,334,147
Feb-11	\$ (62,508)	\$ 188,892	\$ (15,000)			\$ 3,445,530
Mar-11	\$ (77,816)	\$ 165,872	\$ 10,000			\$ 3,543,587
Apr-11	\$ (98,740)	\$ 170,015	\$ (20,000)			\$ 3,594,862
May-11	\$ (97,383)	\$ 150,598	\$ (10,000)			\$ 3,638,077
Jun-11	\$ (104,102)	\$ 149,197	\$ (10,000)	\$ 16,249.00		\$ 3,689,421
Jul-11	\$ (150,887)	\$ 110,059	\$ (40,000)	\$ 211.00		\$ 3,608,804
Aug-11	\$ (117,699)	\$ 90,705	\$ (15,000)	\$ 194.00		\$ 3,567,005
Sep-11	\$ (134,045)	\$ 88,164	\$ (5,000)	\$ 186.00		\$ 3,516,310
Oct-11	\$ (107,143)	\$ 85,005	\$ 5,000	\$ 225.00		\$ 3,499,397
Nov-11	\$ (177,924)	\$ 76,770	\$ (90,000)	\$ 231.00		\$ 3,308,474
Dec-11	\$ (339,234)	\$ 37,665	\$ -	\$ 232.00	\$ (248,158)	\$ 3,007,137
2011Total	\$ (1,555,031)	\$ 1,501,049	\$ (150,000)	\$ 17,528	\$ (248,158)	\$ 2,758,979

Column Explanations:

Expenditures: Monthly expenditures for approved energy efficiency programs

S-191 Revenue: Revenue collected through Schedule S-191, Public Purpose Charge.

Net Revenue Accrual: Two accrual entries are made each month. The first estimates revenues to be received that month, and the second reverses the estimate from the previous month. The amount shown here is the net of the two entries.

Net Cost Accrual: Two accrual entries are made each month for expenditures of energy efficiency programs. The first estimates the incurred cost not yet processed, and the second reverses the estimate from the previous month. The amount shown here is the net of the two entries. This accounting principle was applied to the balancing account in December 2011 but is not included when calculating the carrying charges.

Balance: Current balance of the account; a running total of account activities. If more is collected in revenue than is spent in monthly program costs for a given month, then the balance will be increased by the net amount. A positive balance means cumulative

revenue exceeds cumulative expenditures; a negative balance means cumulative expenditures exceed cumulative revenue.

During calendar year 2011, the balance in the Public Purpose account decreased by \$434,612. Therefore, Pacific Power incurred \$434,612 more than was collected during the year. Program expenditures increased by \$689,784, or 80%, from 2010 to 2011; further enhancements designed to increase program participation are planned.

Pacific Power requested and the Commission approved the suspension of collections under Schedule S-191 effective May 20, 2011 for LIEE funded activities and Oct. 27, 2011 for the Company's remaining three programs i.e. Home Energy Savings, FinAnswer Express and Energy FinAnswer due to the over collection of revenues commensurate with program expenses. The Company intend to fund Programs utilizing the balance in the deferred account. The current forecast of Program expenditures projects the balance in the deferred Public Purpose account is sufficient to fund the Programs through at least 2012. The Company intends to file to reinstate the surcharges coincident with when the surplus funds in the deferred account approach full utilization.