

Energy Efficiency Update



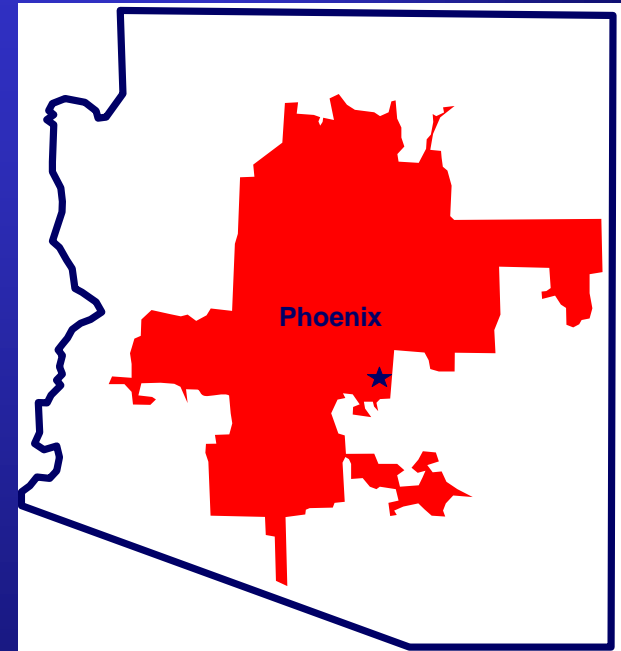
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November 15, 2007



Energy Efficiency

Profile: Arizona Public Service

- Largest electric utility in Arizona
- 1.1 million customers
- Peak demand of 7,500 MW
- Annual sales of 29,000 GWH
- Annual sales growth rate of 4.5%
-4 times higher than national average
- 2.5 billion in annual revenue
- 1% of annual revenue spend on Energy Efficiency (\$25 M)



Energy Efficiency

Energy Efficiency Portfolio Timeline

- April 2005 Settlement Agreement – called for \$48 million of “energy efficiency” DSM 2005-2007
- July 2005 Portfolio Plan Filed with ACC
4 Residential & 6 Non-Residential Programs
- Aug. 2005 ACC Approval of 1 Residential Program: Consumer Products (CFLs)
- Feb. 2006 ACC Interim Approval of Non-Residential Programs
Required additional update filing in 13 months



Energy Efficiency

Energy Efficiency Portfolio (cont.)

- April 2006 ACC Approval of Remaining 3 Residential Program
- Mar. 2007 13-Month Filing Updating Non-Residential Programs
-- Decision still pending --
- Aug. 2007 ACC Approval Expedited Filing Adds \$3.5 million to Non-Residential Program Budget
- Dec. 2007 Filing to increase Portfolio expenditures and expand program measures



Current DSM Programs

Energy Efficiency

■ Residential

- New Construction
- Existing Homes HVAC
- Consumer Products
- Low Income

■ Non-Residential

- Large Existing Facilities
- New Construction
- Small Businesses
- Schools
- Building Operator Training
- Energy Information Services

Demand Response

- C&I Program (planned)



Energy Efficiency

Non-Residential Programs

- Existing Facilities – Promote the installation of prescriptive and custom high efficiency technologies including: lighting, HVAC equipment, motors, and refrigeration.
- New Construction – Includes three components: design assistance, custom efficiency and prescriptive measures.
- Small Business – Provides prescriptive incentives for energy-efficiency improvements in lighting, HVAC, motors and refrigeration.



Non-Residential Programs (cont.)

- Schools - Provide assistance for reducing energy use in school buildings; includes financial incentives to schools to assist with cost of energy-efficiency upgrades.
- Building Operating Training – Training for building operators and facility maintenance technicians on energy-efficient building operations and maintenance practices.
- Energy Information Services – Web-based energy information tool that provides near real-time feedback on energy consumption and load profiles to customers.

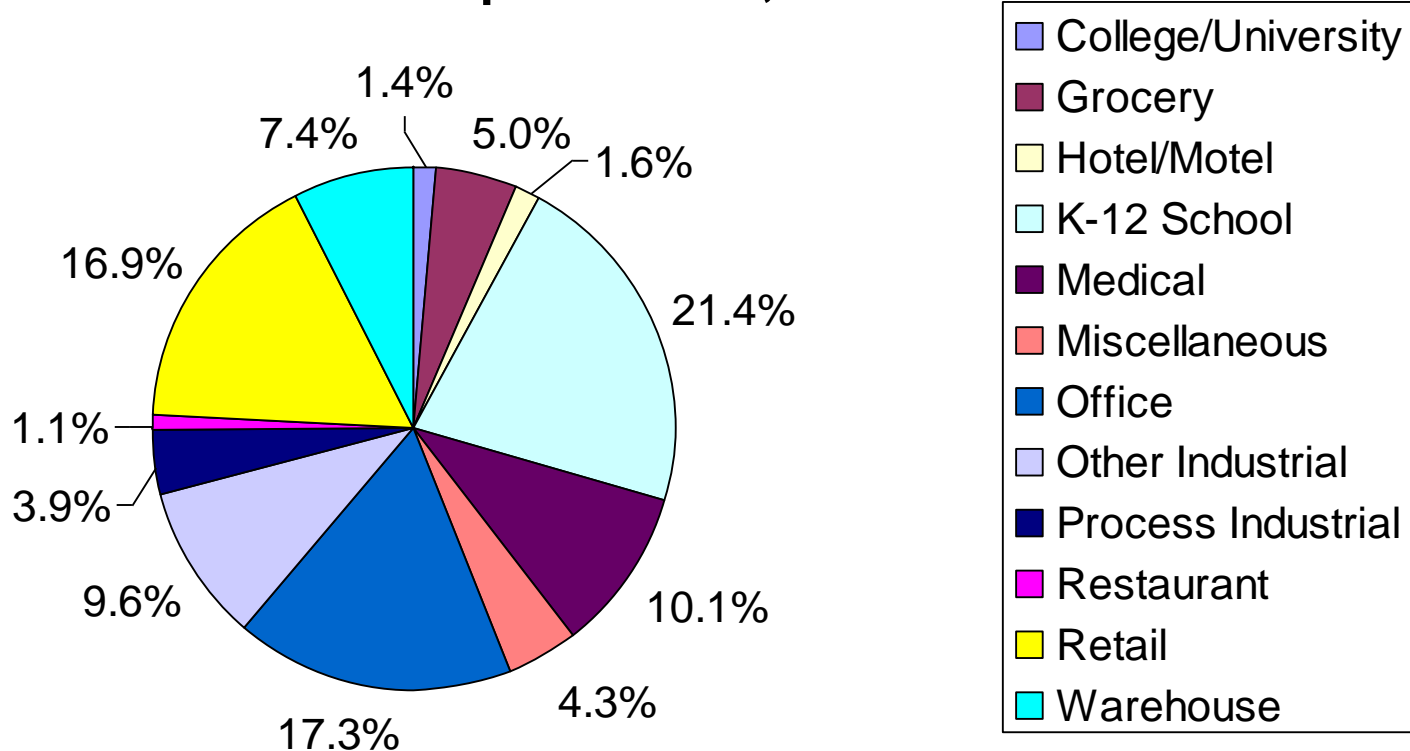


Energy Efficiency

Incentives by Business Type

Program to Date

Incentives Reserved & Paid by Business Type:
September 30, 2007



Non-Residential Program Estimated Benefits

- Lifetime estimated savings nearly **\$35 million**
- Lifetime MWh saved 550,000

Environmental

- Water 130 mil Gal
- Sox 2,400 Lbs
- Nox 95,000 Lbs
- CO2 500 Mil Lbs
- Equivalent to: Total energy use of 140 grocery stores and removing 38,000 cars from our roads.



Energy Efficiency

Residential Programs

- Consumer Products – Promotes Energy Star approved **lighting and discount prices for CFL's in retail stores**; up-stream buy-down with manufacturers.
- New Construction – Promotes high-efficiency construction practices for new homes. Energy Star requirements save 20% energy use vs IECC standard.
- Existing Homes HVAC – Improves the performance of residential heating and air-conditions systems with high-efficiency equipment; includes incentives based on SEER/EER levels; includes additional incentive for Quality Installation.



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Residential Programs (cont)

- Home Performance with Energy Star – Diagnostic system testing and repair of energy inefficient HVAC equipment in homes.
- **Low Income “Energy Wise”** – Weatherization of low income housing units and bill assistance for qualifying customers in crisis.



Energy Efficiency

Residential Program Estimated Benefits

- Lifetime estimated savings nearly **\$105 million**
- Lifetime MWh saved 1,200,000

Environmental

- Water 300 Mil Gal
- Sox 5,200 Lbs
- Nox 208,000 Lbs
- CO2 1,100 Mil Lbs
- Equates to enough energy to power more than 87,000 homes in a year and save emission reduction from 83,000 cars per year.



Energy Efficiency

Total Portfolio

Results through June 07

DSM Program	Capacity Savings MW	Lifetime MWh Savings	Program Cost
Residential			
Low Income	0.2	31,000	\$ 1.9
Res Existing Homes HVAC	4.3	158,000	\$ 2.4
Res New Home Construction	0.6	30,000	\$ 1.2
Consumer Products	27.5	994,000	\$ 4.0
Totals for Residential	32.7	1,213,000	\$ 9.6
Non-Residential			
Large Existing Facilities	4.4	454,000	\$ 3.8
Large Non Res New Const	0.5	41,000	\$ 1.5
Small Business	0.3	21,000	\$ 1.2
Bldg Operator Training	0.1	8,000	\$ 0.1
Energy Information Svcs	0.0	-	\$ 0.1
Schools	0.2	23,000	\$ 0.4
Total for Non-Residential	5.5	547,000	\$ 7.0
Subtotal	38.2	1,759,428	\$ 16.6
Measurement, Evaluation & Research	0.0	-	\$ 1.4
Performance Incentive			\$ 2.6
TOTAL	38.2	1,760,000	\$ 20.6



Energy Efficiency

Raising Program Awareness ...

Recognition:

- Partner of the Year Award for Excellence in CFL Program Delivery
 - 2007 EPA/DOE Energy Star Partner of the Year award
- Exemplary Program Award 2007 CFL Program
 - 2007 American Council for an Energy Efficient Economy (ACEE)
- E Source Resource Guide on CFLs
 - CFL Program selected as a utility success story to be featured in the E Source Resource Guide



Energy Efficiency

Raising Program Awareness ...

Promotions:

- TV Appearances – Horizon Show, Channel 12
- TV Ads – during Prime Time, Baseball, Football
- Radio Ads – KTAR, KYOT, KSLX, KOOL
- Print Ads – Arizona Republic, Business Journal
- Bill Inserts & Newsletters
- Event Participation (Tradeshows, Change A Light, Training Classes etc.)



Energy Efficiency

Upcoming Program Enhancements

December 2007 Filing

New Measures

■ Residential

- Clothes Washers
- Pool Pump Timers
- High Efficiency Pool Motors
- Energy Star for Manufactured Homes
- Energy Star Plus Homes (50% better than IECC)
- Window upgrades to Low E

■ Non-Residential

- Pump Testing & Repair
- Direct Install for Schools
- Custom Measures and Studies for Small Businesses



Energy Efficiency

Program Enhancements (cont.)

New Features

- Raise C/I per Customer incentive cap
- Allow 3rd party financing for C/I measures
- Remove cap on training incentives
- Allocate \$ to Low Income Multi Family Housing Projects and to Special Projects



Energy Efficiency

Incentive to Invest in Energy Efficiency ???

- **Current:** Performance Incentive of 10% of Net Benefits
 - Capped at 10% of spending
- **Issues:**
 - Recovery of costs lagged one year
 - Performance Incentive not sufficient to cover lost margin on sales
 - Spending cap reached before Net Benefits cap
 - No earnings on EE investment provides disincentive to increase investment



Incentive to Invest in Energy Efficiency ???

■ Possible Solutions:

- Forward looking DSM Adjustor Mechanism
- Removal of cap on spending – just based on Net Benefits alone
- Increased Performance Incentive %
- Earnings bonus on EE investment



Energy Efficiency

Summary

- We've come a long way baby!
- Net benefits are substantial
- Seeking regulatory approval to enhance programs
- Increased EE investment will require removal of financial disincentive
- Cooperation required to make EE work for CUSTOMERS and all interested parties



Energy Efficiency