

Mission: Deliver clean, affordable, reliable energy and excellent customer service.

Council Work Session 3 – Energy Efficiency Goals, Distributed Solar Goals, and Customer Assistance Program Goals March 27, 2012



Energy Efficiency Goals



Austin City Council Resolutions

- 1999 Council Resolution
 - "Cost-effective conservation programs shall be the first priority in meeting new load growth requirements of Austin Energy."
- 2003 Strategic Plan to 2020
 - 15% energy reduction
 - 20% renewable energy
 - 100 MW solar
- 2006 Green Building Code
 - New construction building code of zero-energy-capable homes by 2015
- 2007 Austin Climate Protection Plan amended by 2010 Austin Resource, Generation, and Climate Protection Plan to 2020
 - 800 MW demand savings
 - 35% renewable energy
 - 200 MW solar
 - Reduce CO₂ emissions 20% below 2005 level

Why Promote Energy Efficiency?

- Benefits of greater efficiency
 - Lowers costs to Austin Energy and all of its customers
 - Deferral or avoidance of new power plants
 - Reduces power plant emissions
 - Promotes economic development in the region
- Energy efficiency programs drive market transformation
 - Maximizes energy resources by lowering customer electric consumption and electric bills
 - Increases customer comfort and satisfaction

Overview of Austin Energy's Energy Efficiency Programs

- Energy Efficiency Services comprehensive program of residential and commercial energy management products and services
 - Technical assistance
 - Recommendations on most cost-effective measures
 - Financial incentives for installation of qualifying equipment
- Green Building Program promotes green building products and services
 - Plan-review and technical assistance to building industry professionals seeking to have their projects evaluated for energy and resource efficiency or sustainability
 - Lead development and implementation of City building energy code
- These programs have achieved almost 1,000 MW of demand savings since 1982

Austin Energy's Commitment to Energy Efficiency

2010 Energy Efficiency Results for Transmission and Distribution Utilities in Texas

Distribution Utility	Peak Demand (Megawatts)	Demand Savings (Megawatts)	Funds Expended (\$)	Number of Metered Customers	Funds Expended per Metered Customer	Spending per MW Peak Demand	Demand Savings per \$ Expended (Megawatts)	kW Demand Savings per MW Peak Demand
SWEPCO	1,452	14.8	\$ 4,282,043	228,712	\$ 18.72	\$ 2,949	3.5	10.2
AEP-Texas Central	4,242	27.0	\$ 12,898,287	817,806	\$ 15.77	\$ 3,041	2.1	6.4
AEP Texas North	1,024	5.1	\$ 2,238,100	183,647	\$ 12.19	\$ 2,186	2.3	5.0
Centerpoint (Houston Area)	16,315	121.0	\$ 28,806,909	2,119,000	\$ 13.59	\$ 1,766	4.2	7.4
Entergy	3,621	13.2	\$ 7,060,072	401,654	\$ 17.58	\$ 1,950	1.9	3.6
El Paso Electric	1,245	9.9	\$ 4,166,737	307,191	\$ 13.56	\$ 3,347	2.4	8.0
Oncor (Dallas, Ft. Worth &								
North Texas)	24,642	101.1	\$ 41,107,131	3,170,903	\$ 12.96	\$ 1,668	2.5	4.1
Texas New Mexico Power	1,557	5.2	\$ 2,754,742	229,530	_		1.9	3.3
Excel	2,260		\$ 2,004,726				1.8	1.6
Austin Energy	2,628	41.2	\$ 23,523,802	413,881	\$ 56.84	\$ 8,951	1.8	15.7

Sources:

- (1) Frontier Associates, "Energy Efficiency Accomplishments of Texas Investor Owned Utilities" Calendar Year 2010, page 7.
- (2) Various Utilities, 2011 Energy Efficiency Plan and Report, Substantive Rules 25.181 and 25.183. April 2011. http://www.texasefficiency.com/index.html.
- AE spends \$57 per metered customer compared to range of \$7 to \$19 for investor owned utilities
- AE achieved 15.7 kW demand savings per MW peak demand compared to range of 1.6 – 10.2 kW for investor owned utilities

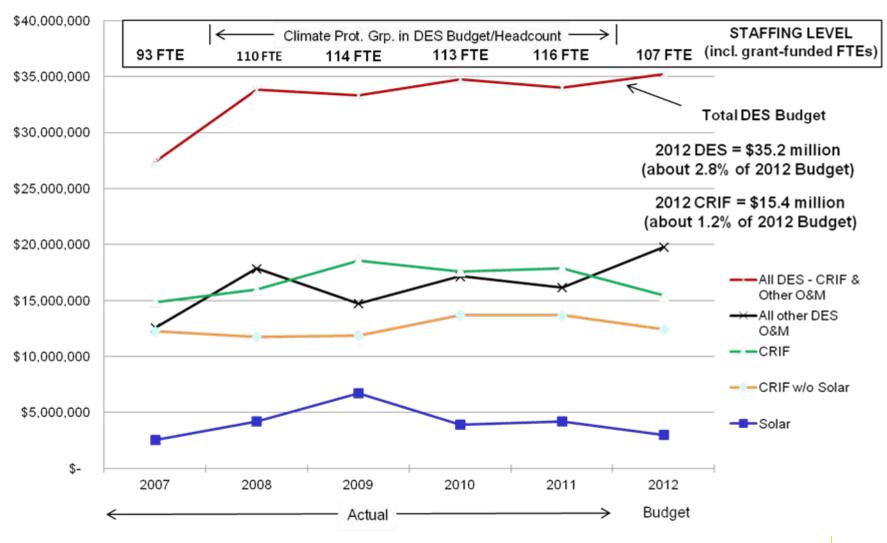


Distributed Energy Services Grants

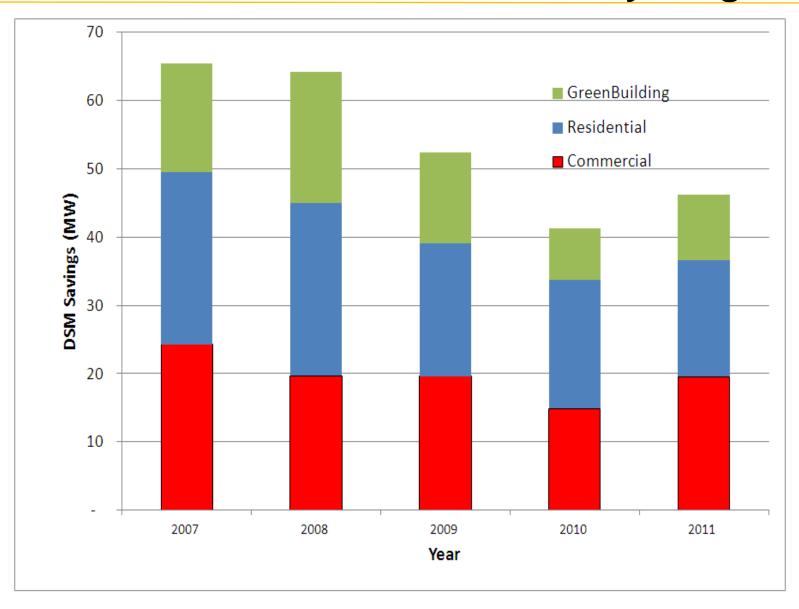
Grant Title	Grant Amount	Term
Austin Solar City Partnership	206,930	09/15/2007 - 04/30/2012
ARRA - Clean Energy		
Accelerator	10,000,000	05/24/2010 - 05/23/2013
ARRA - Energy Efficiency &		
Conservation Block Grant	7,492,700	12/28/2009 - 12/27/2012
ARRA - Weatherization	1	
Assistance Program	9,190,874	09/01/2009 - 08/31/2011
ARRA - Solar Curriculum		
Development and School		
Demonstration Projects	450,000	04/19/2010 - 03/31/2012
ARRA - Solar Carver Museum	363,250	09/19/2011 - 04/30/2012
The Texas River Cities Electric		
Vehicle Initiative	499,782	10/01/2011 - 09/30/2012
Power Factor Correction		
Through Energy Efficiency	55,000	07/01/2011 - 09/30/2012
Total	28,258,536	



DES O&M, incl. Conservation Rebate Incentive Fund (2007-2012)



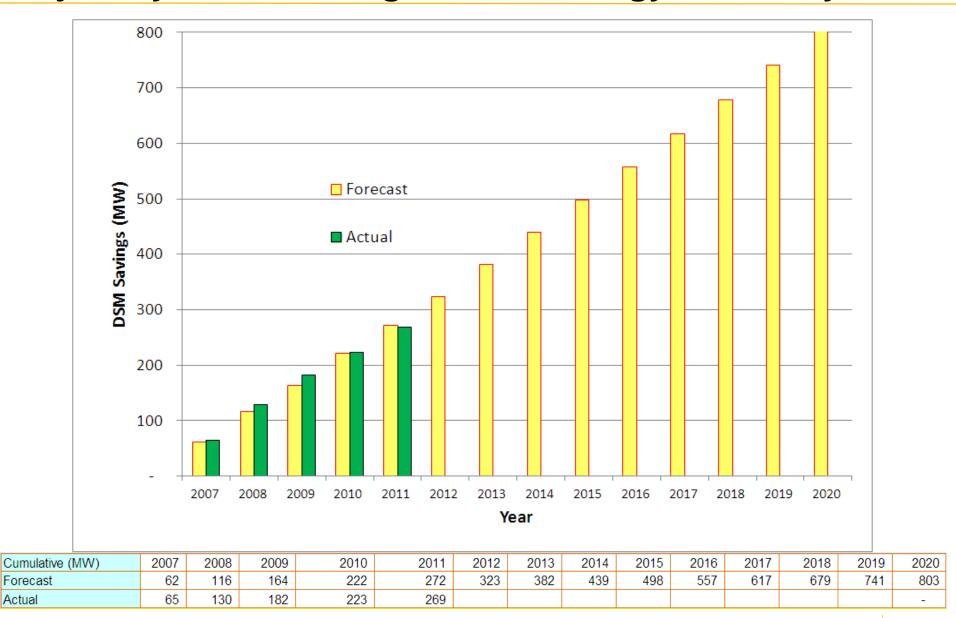
Historical Peak Demand Reductions by Program



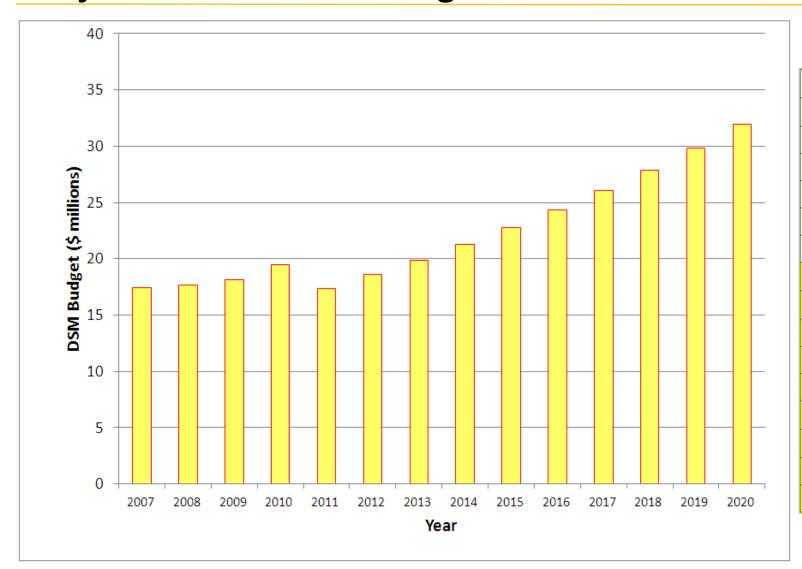


Actual

Trajectory for Achieving 800 MW Energy Efficiency Goal



Projected Incentives Budget to Meet 800 MW Goal



	(\$ Millions)
Year	Budget
2007	17.4
2008	17.7
2009	18.1
2010	19.5
2011	17.4
2012	18.6
2013	19.9
2014	21.3
2015	22.8
2016	24.4
2017	26.1
2018	27.9
2019	29.9
2020	31.9

Energy Efficiency Programs Impact on Utility's Revenue Requirement

- Austin Energy's energy efficiency program costs are a component of the utility's Test Year revenue requirements.
- Funding of Austin Energy's energy efficiency programs is included in the utility's revenue requirements in the amount of \$23,367,359 (includes Conservation Rebates and Incentive Fund and Green Building Program).

Energy Efficiency Program Spending and Performance: 2007-2010

	2007	2008	2009	2010
Participants	48,012	55,471	45,914	42,764
Expenditures (\$)	20,910,129	20,348,302	23,367,358	21,825,950
Peak Demand Reduction (MW)	65.4	64.1	52.4	41.2
Energy Savings (MWh)	119,178	132,192	102,228	88,957

Issue: Impact of EE Goal on Revenue Requirement

Do adjustments to the revenue requirements need to be made to account for Austin Energy's energy efficiency goals?

Austin Energy Recommendation	Basis of Recommendation
No adjustments need to be made.	 Austin Energy's spending for energy efficiency programs is included in the Test Year revenue requirements Program costs in FY 2009 are representative of a typical year

Distributed Solar Goals



Overview of Austin Energy's Solar PV Program

- Solar Rebate Program residential customers
 - Austin Energy began providing rebates for solar PV systems in 2004
 - Rebate level has fluctuated over time depending on customer demand, budget, and market dynamics
 - Current rebate level is \$2.50/watt
- Performance-Based Incentive (PBI) Program commercial and multi-family housing units
 - Credits program participants \$0.14/kWh for all energy produced from the solar PV system for 10 years
 - Launched in 2011
 - Recently increased system size limitation from 20 kW to 200 kW
- The solar program has resulted in more than 1,600 rooftop solar installations totaling 6.5 MW of solar PV installed in Austin Energy's service territory



Solar PV Program Detailed Spending and Performance History

Solar Rebate Program Residential Capacity Based Incentive	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Program Totals & Averages
Rebate Dollars	\$117,451	\$1,782,183	\$ 2,074,101	\$ 1,664,541	\$ 2,799,978	\$ 4,215,291	\$ 3,216,535	\$ 4,822,774	\$20,692,856
MW-AC	0.02	0.30	0.40	0.31	0.53	0.80	0.79	1.35	4.50
\$/W-AC	\$ 6.11	\$ 6.03	\$ 5.24	\$ 5.36	\$ 5.31	\$ 5.26	\$ 4.05	\$ 3.57	\$ 4.60
Commercial Capacity Based Incentive							Partial FY		
Rebate Dollars	\$11,478	\$1,028,044	\$305,206	\$700,479	\$1,455,069	\$2,086,483	\$556,649	N/A	\$6,143,408
MW-AC	0.00	0.17	0.05	0.13	0.26	0.38	0.11	N/A	1.10
\$/W-AC	\$ 5.58	\$ 6.07	\$ 5.65	\$ 5.48	\$ 5.54	\$ 5.54	\$ 5.24	N/A	\$ 5.59
Commercial Performance Based Incentive									
Rebate Dollars Paid	N/A	N/A	N/A	N/A	N/A	N/A	\$ -	\$ 8,939	\$ 8,939
MW-AC	N/A	N/A	N/A	N/A	N/A	N/A	0.02	0.16	0.18
Incentive Rate (\$/kWh)	N/A	N/A	N/A	N/A	N/A	N/A	\$ 0.14	\$ 0.14	\$ 0.14

Solar PV Program Impact on Utility's Revenue Requirement

- Austin Energy's distributed solar program costs are a component of the utility's Test Year revenue requirements.
- Funding of Austin Energy's solar rebate program is included in the utility's revenue requirements in the amount of \$4,352,770.

Solar Photovoltaic Program Spending and Performance: 2007-2010

	2007	2008	2009	2010
Participants	147	210	325	234
Expenditures (\$)	2,265,589	3,614,181	4,352,770	4,372,958
Peak Demand (MW)	0.60	0.94	1.77	1.34
Energy (MWh)	765	1,279	2,288	1,720

Issue: Impact of Solar Goal on Revenue Requirement

Do adjustments to the revenue requirements need to be made to account for Austin Energy's distributed solar goals?

Austin Energy Recommendation	Basis of Recommendation
No adjustments need to be made.	 Austin Energy's spending for the solar rebate program is included in the Test Year revenue requirements Program costs in FY 2009 are representative of a typical year

Customer Assistance Program Goals



Programs to Assist Low-Income Customers

- Customer Assistance Program
 - Discount Program—monthly waiver of customer charge and reduced fuel charge
 - Financial Support Program (Plus 1)—one time bill payment assistance
 - Free Weatherization—free home weatherization assistance for qualifying low-income households
 - Medically Vulnerable Population (MVP)—provide one-to-one case management
- Deferred Payment Arrangement (DPA)
- Budget Bill Program

Objectives to Modify Program Design and Delivery

- Coordinate delivery of low-income assistance across all programs.
- Increase funding level to serve more customers in need
- Target high usage CAP customers for free weatherization
- Expand case management approach to help customers in need better manage electricity usage and costs
 - Discounts to mitigate bill impacts
 - Conservation programs
 - Education

Engagement with Our Community Partners

Present:

Work with Community Partners in identifying customers for Plus 1 assistance

Future:

Increase input from community partners

Creation of Discount Steering Committee (DSC):

- Assistance in program implementation, ongoing oversight and delivery refinement
- Seven members representing: religious organizations, elderly services, veterans services, homeless services, children services, local & state governments, and low-income services.

Automatic Eligibility and Automatic Enrollment

- Austin Energy has received many questions asking about automatic enrollment in the Discount Program
- Key programmatic distinction:
 - Automatic Eligibility: identifying customers who receive certain assistance programs within our service territory
 - Automatic Enrollment: computerized process for flagging program participants in the customer database to ensure the customer receives the discount on their monthly utility bill

Current Discount Eligibility/Enrollment Practices

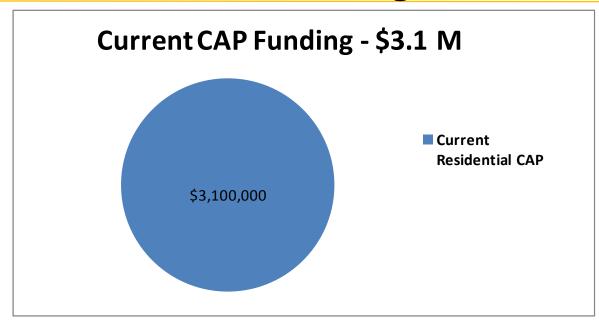
- Three qualification paths into the current CAP program:
 - Automatic eligibility using HHSC Medicaid lists
 - Referrals from community partners
 - Direct application with Austin Energy
- Enrollment is a manual process
 - Flagging of the accounts in the customer database to ensure proper billing is performed manually by AE (and many other Retail Electric Providers)

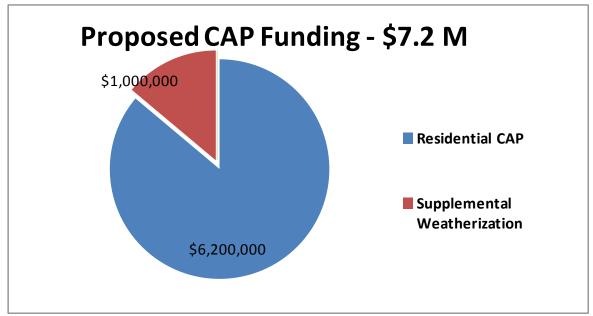
Comparison of Alternatives

	Lite-Up	City of
	Texas	Austin
Uses Federal Poverty Income Level (FPIL) target of 125%	Solix	AE
Household benefits determine eligibility	-	AE
Uses the following criteria for automatic eligibility:		
Medicaid	Solix	AE*
Supplemental Nutrition Assistance Program (SNAP)	Solix	-
Comprehensive Energy Assistance Program (CEAP)	-	AE
Medical Assistance Program (MAP)	-	AE
Supplemental Security Income (SSI)	-	AE
Allows customers to self enroll	Solix	AE
Utilizes local community agencies for program referrals	-	AE
Offers year-round discount	-	AE
Consistent discount percentage from year-to-year	-	AE

^{*}Eligibility is limited to certain types of Medicaid: State paid Medicare Parts A and B, Type 3, 12, 13, 14, 18, 19, 22, 23,24, and 51.

Current CAP Funding and AE's Proposal





Source of Funds

- \$1.00/month
 Residential 54%
- \$ 0.65/MWh
 Commercial &
 Industrial 46%

Customers Accommodated

- Approx. 17,000 customers
- \$1 mm for conservation

Alternative Scenario Developed in Response to Councilmember Spelman's Inquiry

- •Scenario:
 - •\$77.5 mm Phase I increase in Revenue Requirement
 - •\$15 Customer Charge
 - Qualify 40,000 CAP discount customers
- •Benefit Level:
 - •Waive \$15 monthly customer charge
 - •10% discount on remaining billed charges, including fuel
 - Waive CAP charge
- •Customer Cost:
 - •\$2.50 per residential customer per month
 - •\$0.65 per MWh for commercial customers
- •Total Cost:
 - •\$13.2 million annually for CAP
 - •Includes \$1.2 million for free weatherization



CAP Discount Structure Options

Customer Assistance Program Discount Option Analysis - Impact on Customers Served (about 10,000 customers currently served)									
Discount Structure Scenario	# of Customers Served (\$6.2 million	Average Monthly Discount for	Average Monthly Discount at 1000	Number of Add'l Customers Served per \$1 Increase in	Charge Needed to Serve 40,000 Customers	Cost to Serve 40,000 Customers			
	annual budget)	CAP Partipant	kWh Usage	CAP Charge	Custoffiers	customers			
\$10 Discount - 12 months	51,667	\$ 10.00	\$ 10.00	36,500	\$ 0.68	\$ 2,980,000.00			
\$12 Discount - 12 months	43,056	\$ 12.00	\$ 12.00	30,417	\$ 0.90	\$ 3,940,000.00			
\$22 Discount - 12 months	23,485	\$ 22.00	\$ 22.00	16,591	\$ 2.00	\$ 8,740,000.00			
\$12 Discount + 5% - 12 months	30,051	\$ 17.19	\$ 16.50	21,229	\$ 1.47	\$ 6,432,762.82			
\$22 Discount + 5% - 12 months	23,079	\$ 22.39	\$ 26.00	16,304	\$ 2.04	\$ 8,925,525.63			
\$12 Discount + 10% - 12 months	19,356	\$ 26.69	\$ 21.00	13,674	\$ 2.51	\$ 10,992,762.82			
\$22 Discount + 10% - 12 months	16,461	\$ 31.39	\$ 30.00	11,629	\$ 3.02	\$ 13,245,525.63			
State Design Current (10% for 5 months)	81,219	\$ 6.36	\$ 4.25	57,378	\$ 0.28	\$ 1,233,457.98			
State Design Max (20% for 5 months)	40,610	\$ 12.72	\$ 8.50	28,689	\$ 0.98	\$ 4,286,915.97			

 Under fixed charge waiver discount scenario (\$22 discount) about 16,500 additional low-income customers can be served with every \$1 increase in the CAP charge for residential customers

Questions?

