



Energy Efficiency & Solar Programs

Briefing to the Austin Energy Utility Oversight Committee

May 28, 2015





Overview of Topics

- Customer Program Goals and Objectives
- Overview energy efficiency and demand response programs (Demand Side Management (DSM) programs. Focus today:
 - Low Income Weatherization
 - Green Building
 - Select Demand Response Programs
 - Residential App
- Solar Program

2014-2015
Progress Report
Provides Details
on All Programs



Goals

1. Reduce customer costs, enhance comfort
2. Enhance customer satisfaction
3. Provide value to the utility
4. Meet resource goals in most cost effective manner



55%

55%
renewable
energy

900



MW

Energy
Efficiency (EE)
and Demand
Response (DR)

+

950



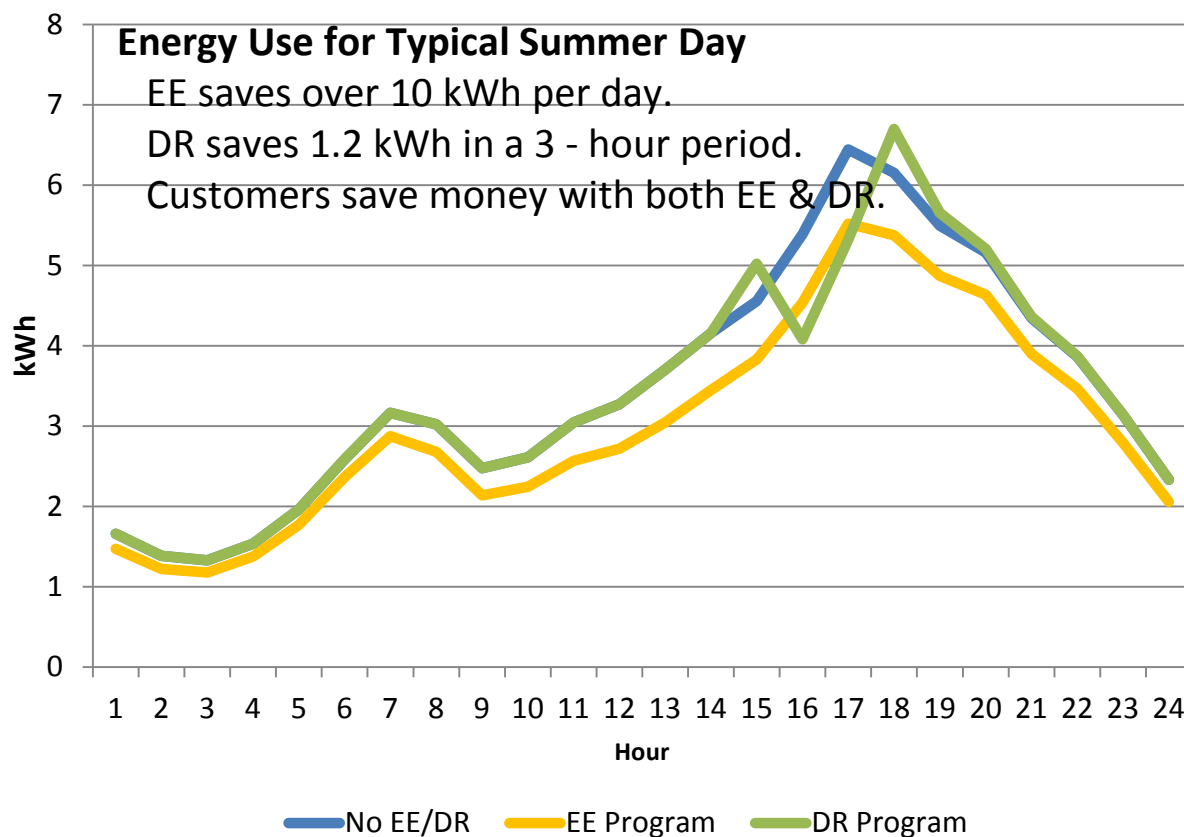
MW

Includes 200
MW from local
of which 100 MW
must be
customer-sited

Subject to Affordability



DSM = Energy Efficiency (Conservation) + Demand Response (Peak Reduction)



Customer Value:

- Reduced costs
- Increased comfort
- Improved quality

Utility Value:

- Reduced costs
- Enhanced customer satisfaction
- Goal contribution

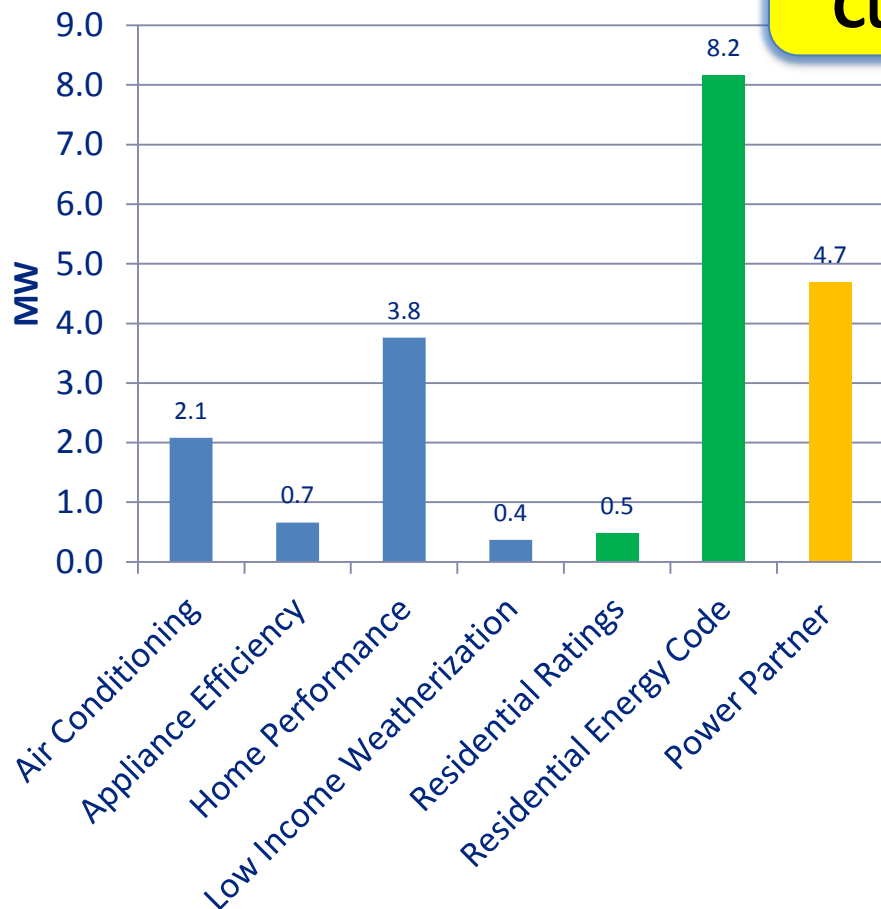


DSM Program Savings FY14

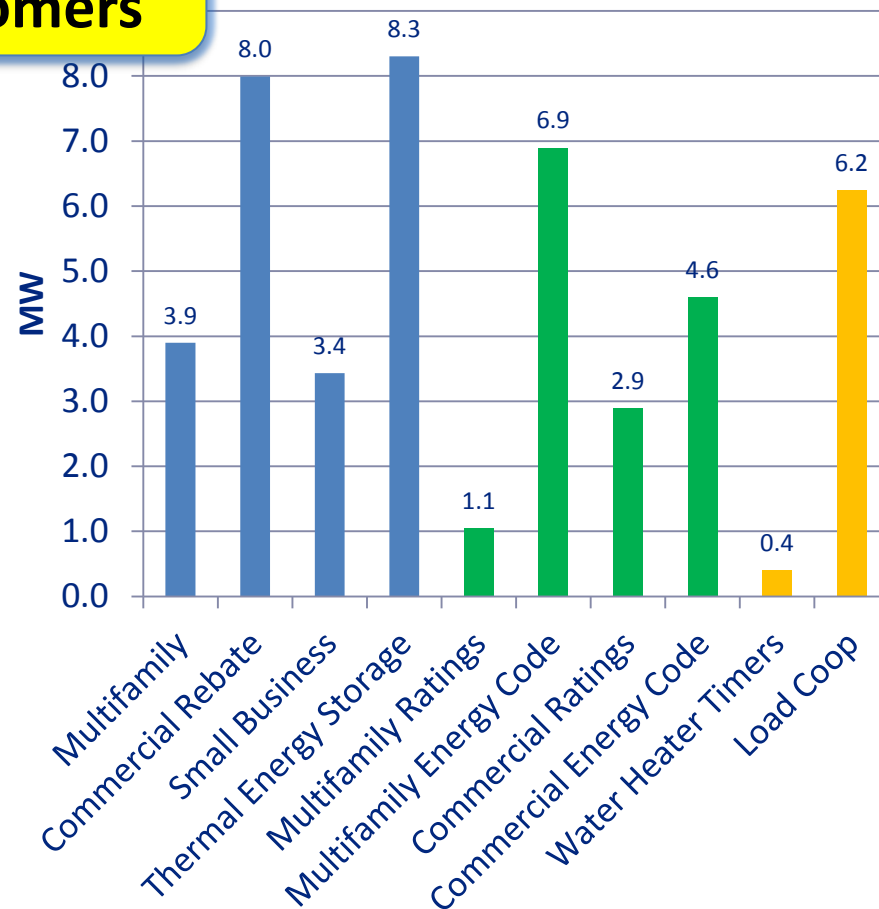
67 MW

38,000
Customers

Residential Programs



Commercial Programs



Blue: Energy Efficiency Programs

Orange: Demand Response Programs

Green: Green Building Programs



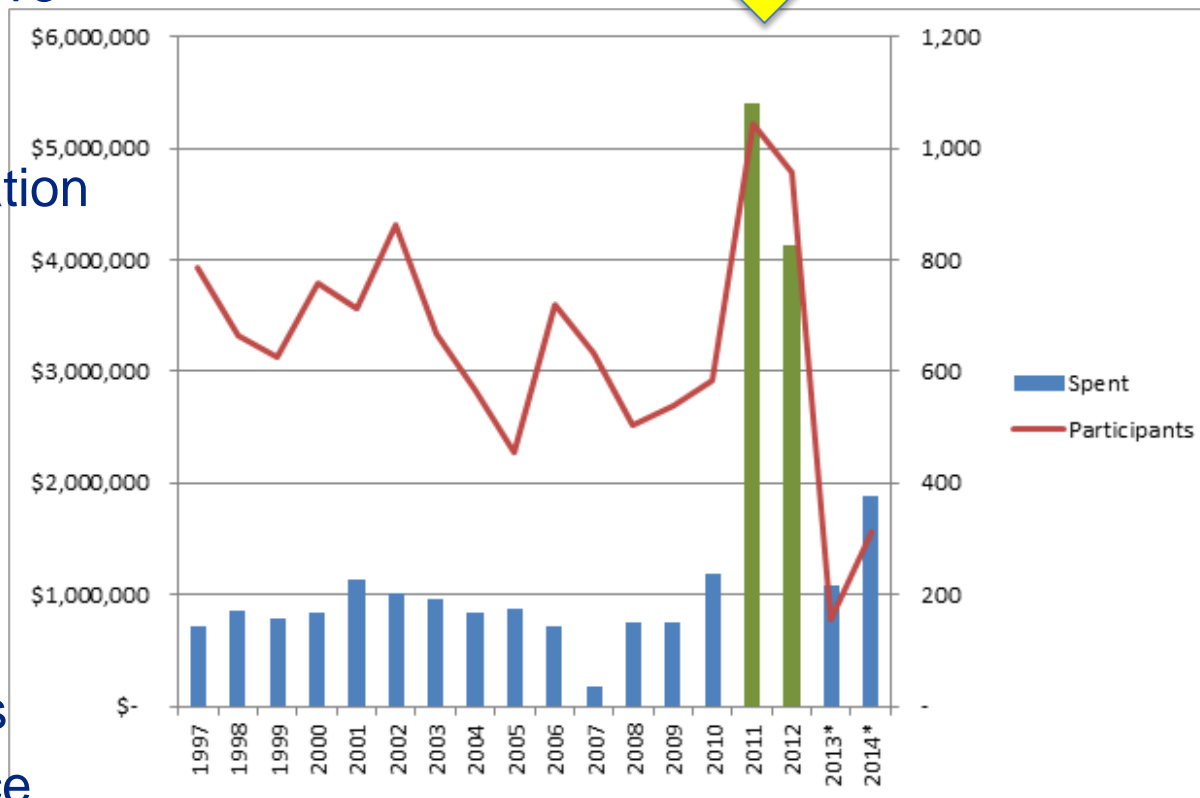
AE Weatherization Programs

- Over 17,000 low income homes weatherized since 1983
- 43,000 Customer Assistance Program households receive bill discounts
 - ❖ Many CAP customers eligible for weatherization

Coordinated efforts with

- Austin Water Utility
- Texas Gas
- Housing Repair Coalition
- Neighborhood Housing
- Health & Human Services
- Home Repair & Assistance Partners and Non-profits

Federal Stimulus Funding





Austin Energy Green Building (AEGB)

- Lead transformation of the building industry to a sustainable future.
- Provide consultation services to project teams on how to create buildings that are energy and resource efficient, healthier, durable and have a positive impact on the community.
- AEGB rating systems guide process and measure building sustainability. Inform local energy codes to help improve the efficiency of all buildings in Austin.

Results FY 2014	
Demand (MW)	25 (36% over goal)
Energy (MWh)	52,583 (33% over goal)
Building & Irrigation Water (M gal)	57.6
Construction Waste (tons)	41,301
Budget (actual)	\$2,180,273





BYOT Residential Thermostat Model

- Started in 2013; 8,500 customers
- Augments one-way thermostat and water heater timer program started in 2001
- BYOT Goal: 12 MW
- Enroll your own wifi-enabled thermostat, AE adjusts temp settings
- Approved 2-way devices
 - Add 2 new models annually
- Rebates
 - Customer: Rush Hour Rewards: \$85
 - To Vendor: \$25/customer enrolled; \$15/year for maintaining the customer
- Transition single family 1-way to BYOT, expand to commercial





Commercial Load Co-op Program

Program Description

- Voluntary program where Austin Energy demand rate customers curtail loads during peak demand periods
- \$1.45/kWh incentive

Benefits

- 38 customers, 205 participating locations
- Program Capacity: 21.82 MW*
- Maximum Event Performance: 13.52 MW**

Current Status

- FY 15 Goal: 5 MW

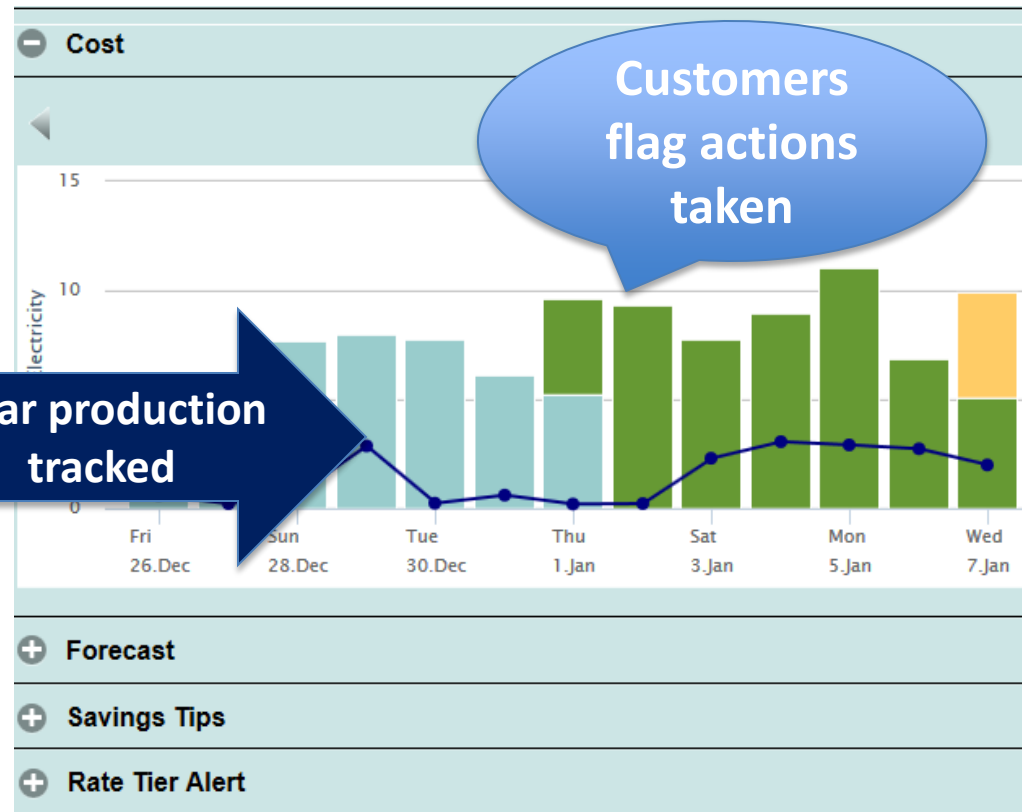
* Program capacity is the sum of all participants' best 2014 Load Coop performance. Includes 20% T&D&SR multiplier.

** Best performance for any one event in 2014 including 20%T&D&SR multiplier



Residential Web Application

- Free and easy to use
- Accessible from any web-connected device
- Next day information
- Color-coded tiers
- Usage alerts
 - Residential – tier alerts
 - Commercial – kw and kwh alerts
- Solar production
- Over 10,000 users

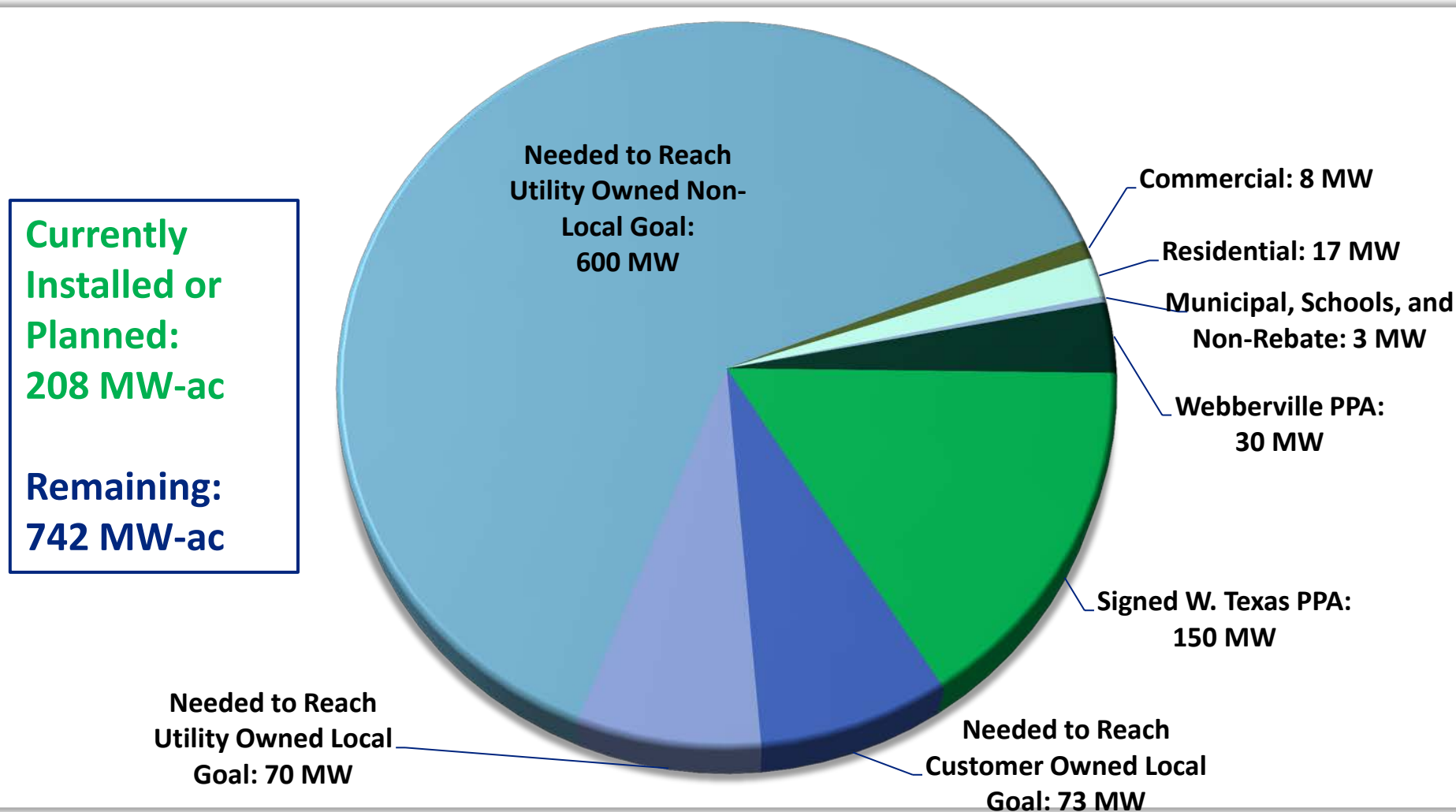


Communicate in a way
that is relevant and
meaningful



950 MW Solar Goal Status

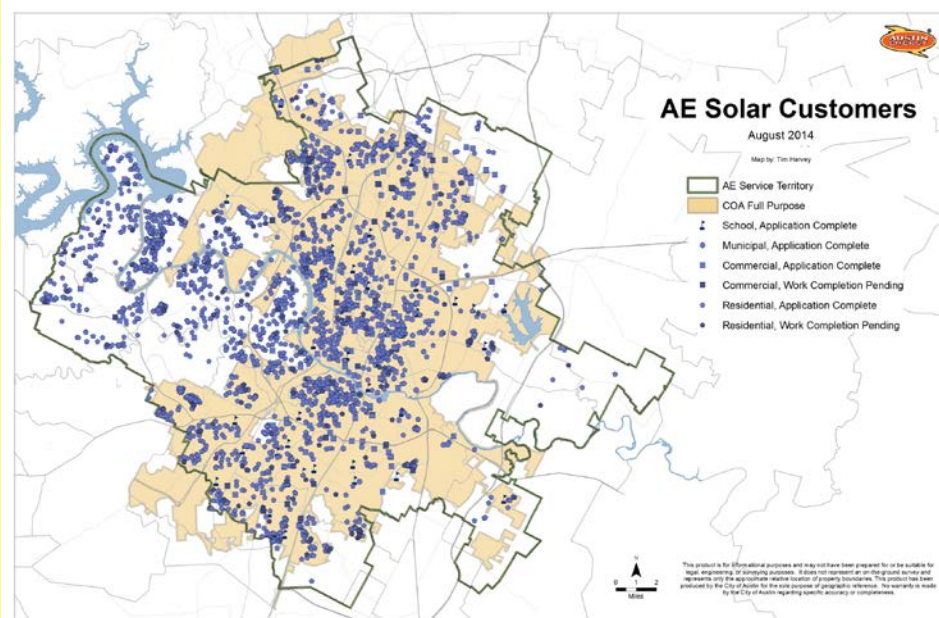
750 MW utility scale, 200 MW local with at least 100 MW customer-sited by 2025





AE Solar Highlights

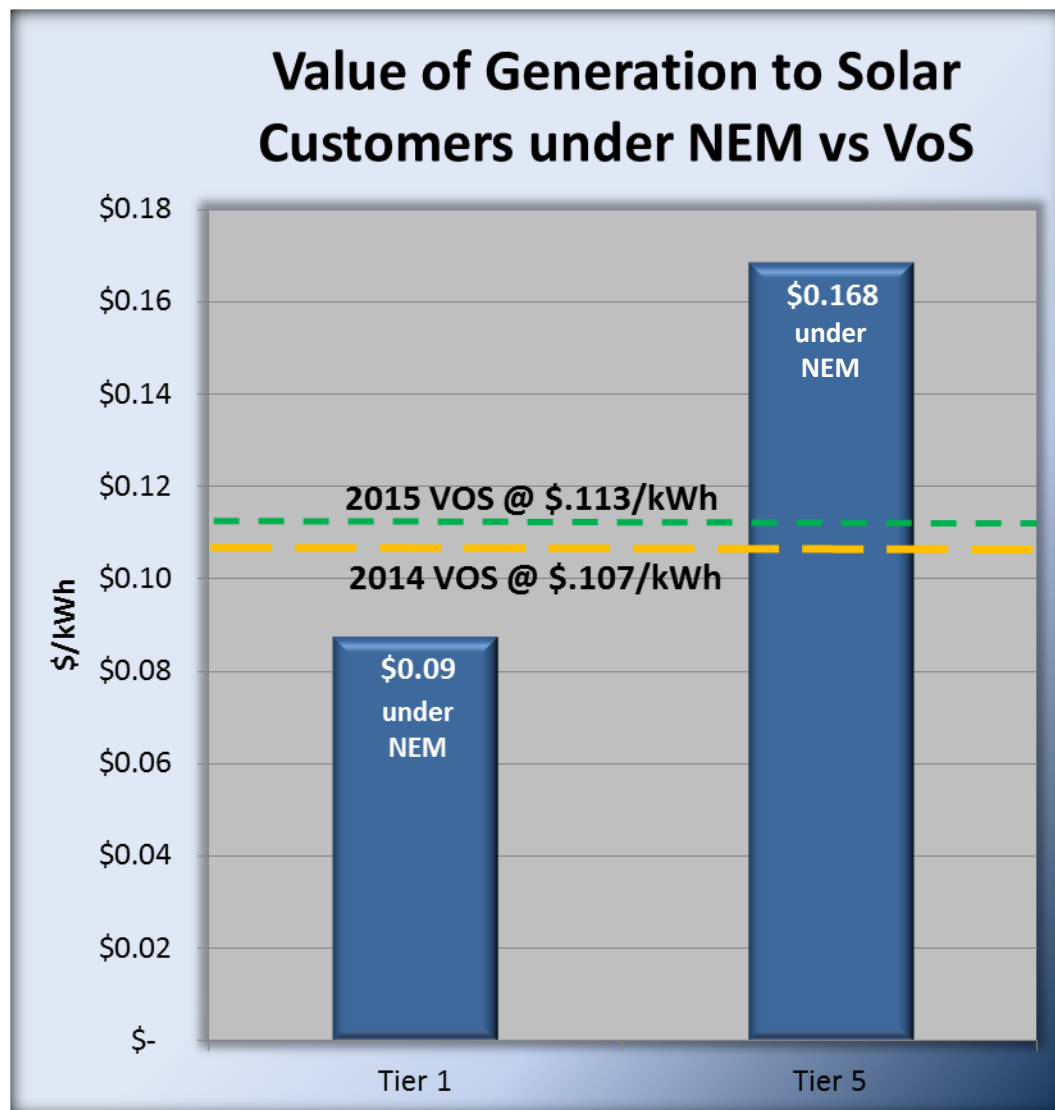
- Among lowest installed costs in the country
- 10 year rebate history:
 - \$43M for 3,417 residential projects to date
 - \$13M for 179 commercial projects committed to date
- Pioneered Value of Solar (VoS), promotes conservation, improves equity among customers and recovers fixed costs
- Residential equipment leases: no rebates
- 30% of Texas solar is in AE territory
- Developed strong local solar market, with 40+ solar companies





VoS Addresses Challenges of Net Metering

- Recovers fixed costs
- Improves equity
 - Between solar customers
 - Between solar and non-solar customers
- Better reflects value of local generation
- Promotes efficiency & conservation





Coming in 2016: Community Solar

- Provide access to solar energy for customers unable to install solar panels on their own homes or dwellings.
 - Renters and residents with shaded roofs
 - Customers unable to make upfront investment in rooftop systems or don't want to maintain their own system
- Allows participants to receive the benefits of solar power without actually owning/hosting the solar panels on-site



- 2 - 4 MW community solar project on 10 acres around Kingsbery substation
- Integrated with 1.6 MW energy storage pilot
- Program launch in 2016



Final Thoughts

- AE is committed to developing products and services that customers value
 - Reduce costs to customers and provide value to the utility
 - Enhance customer service
 - Provide residents and businesses more choice and control over comfort and expense
 - Meet goals in the most cost effective manner
- Continually seek opportunities to improve

Questions?

