

Austin Energy Customer Energy Solutions Budget – Fiscal Year 2019

Overview

Austin Energy (AE) has led the nation in customer distributed energy resource (DER) and renewable energy program offerings for over 35 years. As defined herein, DER refers to energy efficiency and demand response (demand side management or DSM) programs, distributed solar, electric vehicles, and storage. Austin Energy’s renewable energy offerings also include GreenChoice® and Community Solar programs.

The purpose of these programs is to:

1. Save all Austin Energy customers energy and money, deferring the need to acquire and deliver more ‘supply side’ resources.
2. Enhance customer satisfaction and customer collaboration by reducing barriers to installing cost-saving measures (appliances, highly efficient lighting, solar etc.). The programs reach all customer demographics and geographic areas.
3. Achieve Council-established goals:
 - a. Efficiency
 - i. Achieve a 900 MW demand reduction goal by 2025, with at least 200 MW coming from demand response programs subject to affordability limits.
 - ii. Assess the potential to achieve even more ambitious goals of 1000 MW of aggregate demand savings by 2027.
 - b. Solar
 - i. Achieve 110 MW of local solar by 2020 (70 MW customer-sited).
 - ii. Achieve 200 MW of local solar by 2025 (100 MW customer-sited).
 - iii. Enhanced incentives and/or programs for affordable housing projects by FY18.
 - c. Renewables
 - i. Achieve at least 55% renewable energy (as a share of customer consumption) by 2025.
 - ii. Achieve at least 65% renewable energy (as a share of customer consumption) by 2028.
 - d. Storage:
 - i. Complete the Austin Sustainable and Holistic Integration of Energy Storage and Solar Photovoltaics (SHINES) project by FY19. The project includes assessing the value and business case for integrating stationary distributed energy storage, and leveraging findings to determine applicability to electric vehicle (EV) batteries.
 - ii. Prior to the FY19 generation plan update, complete an analysis of potential value streams related to energy storage. Value streams may include demand charge reduction, peak load reduction, energy arbitrage, price responsive opportunities, voltage support, and congestion management.
 - e. Electric Vehicles
 - i. Initiate private and public partnerships that promote, market, and provide support for electric vehicles (EV).
 - ii. Expand efforts to utilize these vehicles as a valid distributed storage technology.
 - iii. Support the City of Austin Fleet Services’ electrification plan by assisting with the deployment of EV charging infrastructure (including at least 8-10 Austin Energy owned and operated DC Fast Charging stations by FY18, and at least 330 new charging stations by 2020), and transitioning 65 Austin Energy retired internal combustion engine vehicles to new electric vehicles by 2020.
 - iv. Support the growth of public and private charging station deployments by offering rebates, operational support, outreach, and special public charging rates to low income populations.
 - v. Evaluate open standards and business cases that could apply to a future state of feasible and affordable EV distributed storage.
 - vi. Identify potential load and storage resulting from aggressive EV development.
 - vii. Leverage the residential EV time-of-use rate pilot "EV360" (launched in 2017) to develop lessons learned.

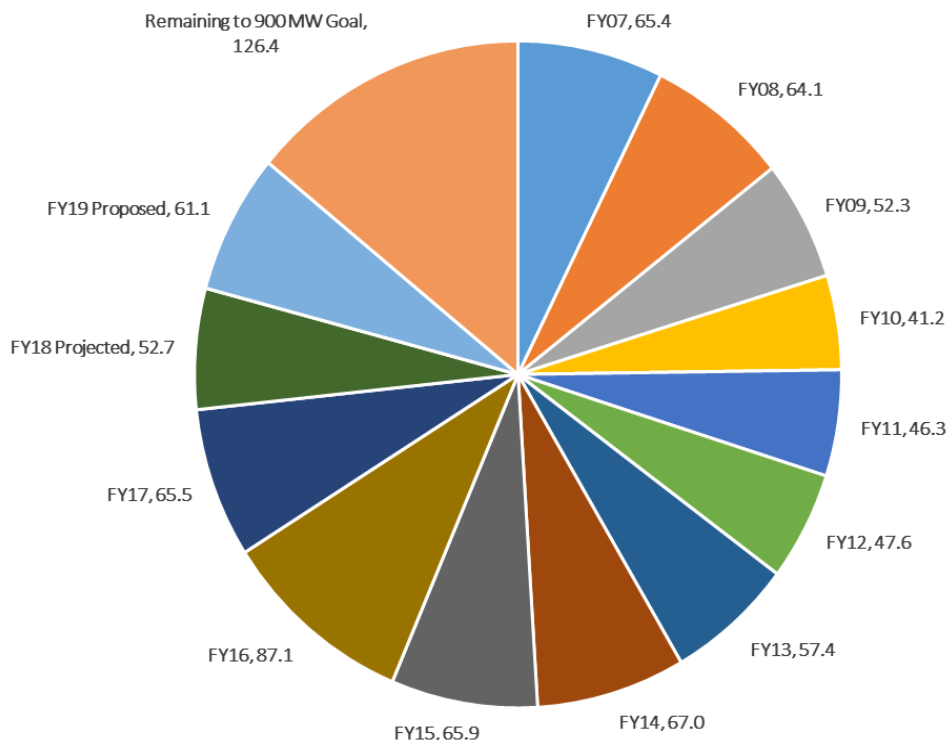
FY 2018 Results

This document provides an overview of projected year end performance for FY18 and the assumptions underlying the proposed FY19 budget.

Goal Status



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Austin Energy is on track to post demand reduction savings of a little over 52 MW for FY18. This would result in a demand reduction savings of 711 MW (79% of the 2025 goal) since 2007. To reach the 900 MW goal by 2025, Austin Energy will need to achieve a remaining savings of approximately 193 MW, while adhering to the affordability criteria. A demand response study is being completed in order to assess the ability to achieve a larger goal, in combination with the assessment from a benchmarking consultant which is currently in the RFP process with the City of Austin.

As of June 2018, 65 MW of customer-sited solar is installed or in progress, leaving 5 MW to meet the 2020 interim customer-sited solar goal, and 35 MW to meet the 2025 customer-sited solar goal. The Webberville and Community

Solar projects add another 33 MW of local solar, leaving 12 MW to meet the 2020 local solar goal, and 102 MW to meet the 2025 local solar goal.

CES Program Funding Sources

For FY18, the Customer Energy Solutions (CES) budget is a little over \$43M. Of this, the rebate budget totals slightly more than \$22 million, with an additional \$1 million in Customer Assistance Program (CAP) weatherization funds. Approximately \$28 million is collected in the Energy Efficiency Services (EES) tariff, and \$1 million is collected from the CAP tariff. The latter is earmarked for low income weatherization. The rest of CES budget derives from other Austin Energy funds.

The CES Operations & Maintenance (O&M) budget is approximately \$20M. Of this, \$8.5 million is collected in the EES tariff related to solar and demand side management program execution. The remaining funds come from base rates. Costs included in base rates include Key Accounts, Electric Vehicles and Data Analytics.

Key Program Accomplishments YTD through June 2018

Noteworthy highlights for FY18 are as follows:

1. A database was created which combines billing data with tax appraisal, Census and psychographic data for a broader view of current and prospective customers.
2. Tools were developed for Customer Service Reps (CSRs) to use when discussing billing issues with customers.
3. The Energy Efficiency Shared Services department has responded to over 9,000 phone and email inquiries.
4. Customer Energy Solutions has provided over 7,000 community outreach and education touches in the form of outreach events (e.g. Earth Day, Cool House Tour, training, etc.).
5. Energy Efficiency Services and Solar departments have processed over 13,500 rebates.
6. There are currently over 26,000 AE App subscribers utilizing usage tracking, alerts, proper PV system production, and in-store rebates.
7. Over 860 quality assurance site-inspections have been completed.
8. 86% of Commercial square footage and 87% of multifamily square footage is in compliance with Austin's Energy Conservation Audit and Disclosure (ECAD) Ordinance. In addition, over 2,300 Single-Family home energy audits have been completed and filed.
9. The Instant Savings program has grown to include 21 participating retailers in 90 locations throughout Austin Energy's service territory. This program offers point-of-sale discounts on Energy Star LED bulbs, Energy Star appliances, and do-it-

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- yourself (DIY) products (including entry door top and side seals, heat control window film, and air filters). Wi-Fi thermostat and heat pump water heater promotions are also provided at these locations.
10. New Appliance Efficiency Program (AEP) guidelines and contractor handbook were issued to participating contractors. Lowered AEP heating ventilation and air conditioning (HVAC) rebate levels assisted the program to be in better alignment with the FY18 rebate budget and MW goals.
 11. The AEP and Home Performance with Energy Star® (HPwES) program teams increased training efforts to improve contractor and internal staff awareness and understanding of the program guidelines and technical requirements.
 12. The HPwES program has expanded to include an air conditioner (AC) tune-up measure, and new rebate-and-loan interest rates as low as 1.99% for qualifying customers.
 13. The Environmental Protection Agency (EPA) and Department of Energy (DOE) recognized Austin Energy as a Partner of the Year for Sustained Excellence due to AE's leadership in energy efficiency and the Energy Star Program.
 14. The low income Weatherization Assistance Program (WAP) has expanded to include an AC tune-up measure. For those wanting a new AC unit, there is a rebate-and-loan program for qualified homes. CES and Customer Care (CC) have contacted over 7,000 potential customers in regards to weatherization.
 15. The Multifamily Weatherization Assistance Program (MFWAP) for low income properties was featured in Public Utilities Fortnightly as being a Top Forty Innovator.
 16. Thirty-nine rebates, totaling \$375k and 941 kW, have been provided to Houses of Worship (HOW).
 17. The Thought Leader Award was accepted at the Peak Load Management Alliance for integrating demand response requirements with new construction properties.
 18. The Power Partner Thermostat program has grown to include 35 types of participating thermostats. Smart Thermostats were added to the multifamily and MFWAP efficiency programs. A new request for proposals (RFP) is being released this summer to increase the number of eligible thermostat models.
 19. The commercial and industrial Load cooperative program has over 500 participating service points, representing about 60 customers.
 20. Effective April 2017, energy code savings from building permits (related to commercial, residential and multifamily Green Building projects) will be reported one year post permit. Prior to the change, savings were reported upon issuance of the permit. This change was made to better align the claimed savings with building occupancy rather than the initiation of construction. Therefore, projected FY18 energy code savings reflect the time lag caused in the reporting methodology change.
 21. GreenChoice® was ranked #4 in the nation for green power sales (based on MWh), and #8 on a participant basis.
 22. Over 900 customers have installed solar through the solar incentive program. In May, the capacity-based ramp down of residential solar rebates concluded. It was replaced by a Solar Education program targeted at upfront consumer education, a \$2,500 rebate per qualifying residential installation, and streamlined processing with decreased installation timelines.
 23. The Commercial Solar performance based incentive (PBI) continues the planned ramp down, with roughly 12 MW available at incentive levels ranging from 2-5 cents/kWh. Non-profit customers are eligible for higher incentives. Remaining capacity can be tracked at www.austinenergy.com/go/currentsolar.
 24. As requested by stakeholders in the 2017 Rate Case, Austin Energy studied and implemented a commercial Value of Solar rate. The new rate took effect January 1, 2018.
 25. Austin Energy's Community Solar Program expanded significantly with the addition of the La Loma community solar project. The 2.6 MW project came online in early 2018, enabling 440 households to subscribe to 100% renewable, local solar – with no upfront cost, no contracts, no maintenance, and a fixed rate for 15 years. Council also approved a discounted Community Solar rate for low-income participants for half of La Loma's production. Two-hundred and twenty Customer Assistance Program (CAP) customers are now enrolled in Community Solar, and seeing slight bill reductions each month.
 26. The US Conference of Mayors awarded Austin with the 2018 Mayors' Climate Protection Award for Austin Energy's community solar program which encompasses the key themes of Austin Energy's vision – customer value, expanded customer offerings, innovative technology and environmental leadership.
 27. Austin Energy commenced a Shared Solar pilot for individually-metered multifamily affordable housing properties. Three participating properties are expected to install solar by the end of the fiscal year, allowing 177 low-income tenants to begin receiving Value of Solar credits for their share of system production starting in FY19.
 28. Austin Energy was named to the Smart Electric Power Alliance (SEPA)'s Top 10 Utility 2018 list, recognizing Austin Energy as the #4 utility in the country with the most solar capacity added -285.9 megawatts (MW) installed in 2017.

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29. Austin Energy was named 2018 Public Power Utility of the Year by SEPA, recognizing Austin Energy for thought leadership on renewable energy and Distributed Energy Resources. Related programs include: the Austin SHINES program (integrating solar and energy battery storage), the Community Solar Program, and the utility's Electric Vehicle (EV) Program.
30. Austin Energy was presented with a Grid Edge Innovation Award for the Austin SHINES project at Greentech Media's Grid Edge Innovation Summit. This honor recognizes advancements in deploying a progressive distributed energy resource management system (DERMS).
31. The US Department of Energy approved the vehicle to grid's (V2G) scope associated with the SHINES grant program.
32. Smart Cities Connect presented a Smart 50 Award to Austin Energy's SHINES Project.
33. Smart Cities Connect presented a Smart 50 award to Austin Energy's Electric Drive Sustainable Transportation Showcase.
34. AE attracted General Motor's Maven "gig economy" fleet to Austin. Austin is the first city to receive the 100% electric, shared use fleet (Chevrolet Bolts).
35. The EV program launched an outreach campaign featuring stEVie the "EV loving t-Rex". The campaign includes bi-lingual videos and online announcements.
36. The EV department launched an innovative electric e-Pedicab pilot in association with the Austin Transportation Department. The department began an "EVs are for Schools" pilot, in partnership with AISD. A program for low and low-moderate income (LMI) communities, titled "EVs are for EVeryone", was started (with support from the 11th Hour Project).
37. The Texas Commission on Environmental Quality (TCEQ) Alternative Fueling Facilities Program (AFFP) approved up to \$1.6M in grant-funding for the installation of DC Fast Charging Stations along the IH-35 corridor.
38. The Plug-In EVerywhere Home Charging Station Rebate Program was moved to AE's Energy Efficiency Collaboration Platform (EECP) to allow for better customer experience. It includes a new rebate pricing structure to help "future-proof" demand response initiatives.

FY19 Program Budgets

The FY19 proposed program budget for CES programs is \$44.4 million with 61 MW of savings proposed. As noted, most costs are recovered via the Energy Efficiency Services component of the Customer Benefit Charge (CBC). The CAP weatherization program costs are recovered in the CAP component of the CBC, and other expenses are recovered in base rates. The proposed FY19 EES recoverable budget represents an approximately \$578k increase for rebates over the FY18 amended budget, and \$300k from areas collected from the base rate.

Staff developed the proposed FY19 budget after extensive review of opportunities and challenges within each market sector, with the objective of ensuring Austin Energy reaches the 900 MW DSM and 200 MW local solar targets in a manner that is cost effective, while providing benefits to all sectors of residential and commercial customer classes served. With respect to comparisons between FY18 and FY19, key adjustments are as follows:

1. The demand response (DR), energy efficiency, energy codes, and green building programs continue to collaborate through cross promotion and new offerings. The low income direct-install program in single and multifamily homes is further complemented by the addition of the Partners and Events DI proof-of-concept for FY18. Smart thermostats and the promotion of Auto DR are further emphasized in the commercial sectors. Specifically, the code requirement for smart thermostats has increased the number of new homes that are eligible for the Power Partner program. Additionally, Home Performance, AEP and multifamily efficiency programs have added smart thermostats to the list of rebate eligible measures.
2. The Solar O&M budget is increased by almost \$186,000 (reflected in the Energy Efficiency Services O&M) due to: the move of one Full-Time Employee (FTE) from Data Analytics & Business Intelligence (DABI) to Solar, management of the GreenChoice® program, Green-E certification fees for GreenChoice® and Community Solar, seasonal temp support for solar inspections, and consultant support for solar studies as required in the Resource & Generation Plan.
3. Solar Residential and Commercial incentive budgets reflect expected expenditures, including residential rebates, multifamily affordable housing incentives, and commercial performance based incentive (PBI) payments for existing commercial projects. The expenditures are in line with the \$7.5M budget set in the Resource & Generation Plan.
4. The old Green Building methodology allowed for reporting of claimed savings at the time the permit was issued, the new methodology calls for a one year delay in reporting savings from issuance of the building permit. This allows for better timing of the claimed savings with occupancy, and allows for better forecasting.

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5. Multifamily and Multifamily Weatherization programs budgets have been decreased due to participation forecasts. Since inception, AE has provided energy efficiency measures for over 1,000 multifamily properties and 150,000 units; however, the pool of eligible properties is now shrinking.
6. There will be additional focus on Commercial Rebates and Small Business rebates for FY19.
7. Green Building and EES have added three FTEs to the Commercial and Shared Services groups.
8. DABI supports a number of business units within and outside of CES. An FTE was reassigned to Solar to assume Green Choice responsibilities. This move consolidates all customer subscription programs in one group.
9. Emerging Technologies is shifting service funds (net zero impact to overall budget) to support one new contracting staff member to help manage new Council directives under the Austin Energy Resource, Generation, and Climate Protection Plan.

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Customer Energy Solutions FY2018 Amended vs FY2019 Proposed Budgets*			
COMPONENT	PROGRAM NAME	FY 2018	FY 2019
CBC-CAP Tariff	CAP Weatherization (with Direct Install) Program	1,000,000	1,000,000
CBC-CAP Tariff Total		1,000,000	1,000,000
CBC-EES Admin	Outreach and Marketing	889,789	792,186
	Green Building Prgm	434,637	478,298
	Green Building - Res	823,370	890,095
	Green Building - Com	862,733	899,817
	Green Building -Evaluation & Dev	760,691	767,747
	DSM Management	532,072	449,161
	DSM Program Management	1,948,055	1,710,058
	DSM Program Support	2,445,994	2,847,204
	DSM Solar Program	1,185,006	1,361,014
	EES Technical Support	1,123,722	1,171,264
	DSM Commercial/MultifamilyPrgm Mgmt	1,256,268	1,102,048
CBC-Energy Efficiency Admin Total		12,262,337	12,468,892
CBC-EES Incentives	AE Weatherization (with Direct Install)	1,427,000	1,277,000
	AC Tune Up	50,000	0
	Multi-Family Rebates	850,000	525,000
	Multi-Family Weatherization Program	1,000,000	675,000
	Loan Options	250,000	300,000
	Commercial-Existing Construction	2,400,000	3,100,000
	Small Businesses	1,700,000	1,900,000
	Commercial Power Partner	52,000	90,400
	Residential Solar Program	5,000,000	5,000,000
	Comm Solar Performance Based Incentive	2,500,000	2,500,000
	Residential Power Partner-Aggr	1,158,000	1,483,000
	School Based Education	200,000	200,000
	Load Coop	1,237,000	1,270,000
	Thermal Energy Storage	28,000	28,000
Customer Energy Solutions FY2018 Amended vs FY2019 Proposed Budgets*			
COMPONENT	PROGRAM NAME	FY 2018	FY 2019
	Water Heater Timers	688,000	494,800
	Home Performance w Energy Star	1,500,000	1,650,000
	Appliance Efficiency Program	1,300,000	1,500,000
	Partners and Events (with Direct Install)	150,000	0
	Point of sale discounts -SPUR	800,000	875,000
	Municipal Conservation Program	60,000	60,000
CBC-EES Incentives Total		22,350,000	22,928,200
Base Rate Recoverable	Key Accounts Management	1,787,219	1,822,783
	Data Analytics & Business Intelligence	3,619,218	3,740,083
	CES Admin	458,083	467,377
	Electric Vehicles	1,020,171	1,029,798
	Emerging Technologies	484,421	491,532
	Electric Vehicles Incentives	315,000	450,000
	CES Corporate	35,273	39,269
Base Rate Recoverable Total		7,719,385	8,040,842
Grand Total		43,331,722	44,437,934

* CES FY18 Budget as of June 2018; excludes \$557K CAP low income weatherization carryover from FY17