Overview

Austin Energy has led the nation in customer distributed energy resource and renewable energy program offerings for over 35 years. As defined herein, distributed energy resource refers to energy efficiency and demand response (demand side management) 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 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

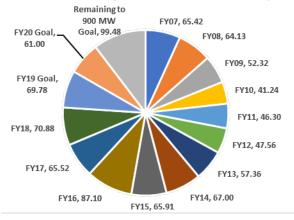
- i. Achieve at least 55% renewable energy (as a share of customer consumption) by 2025.
- ii. Achieve at least 65% renewable energy (as a share of customer consumption) by 2028.

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 next update of the Austin Energy Resource, Generation and Climate Protection Plan, 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 EVs.
- 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 FY20 and up to 330 new charging stations 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 2019 Results

This document provides an overview of projected year-end performance for FY19 and the assumptions underlying the proposed FY20 budget.

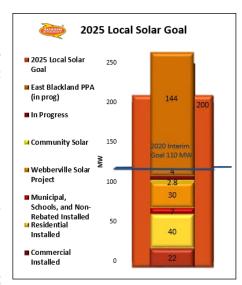
Goal Status In FY19, Austin Energy has a goal of approximately 70 MW. This would result in a demand reduction savings of around 800 MW (since 2007) and achievement of the 2020 local solar goal. With changing legislation expected to significantly reduce potential Green Building savings and given our focus on low income and hard to reach programs that require more resources, our path to reach the 900 MW goal by 2025 will need to shift, while still adhering to affordability.

An assessment from a benchmarking consultant is in progress reviewing the ability to achieve a larger goal.

As of July 2019, 74 MW of customer-sited solar is installed or in progress. The 2020 interim customer-sited solar goal has been exceeded. There are 26 MW remaining to meet the 2025 customer-sited solar goal. The Webberville and Community Solar projects add another 33 MW of local solar. With the addition of the contracted East Blacklands PPA, the 2025 utility local solar goal will be exceeded, shown in the chart to the right.

Customer Energy Solutions Program Funding Sources

For FY19, Austin Energy's Customer Energy Solutions budget is a little over \$44 million. Of this, the rebate budget totals slightly more than \$23 million, with an additional \$1 million in Customer Assistance Program (CAP) weatherization funds. \$13 million provides marketing, contractual and operations support of the energy efficiency and solar programs. This budget is paid for through the Energy Efficiency Services (EES) tariff, which has collected approximately \$21 million through May 2019. At the end of FY19, \$1 million will be collected from the CAP tariff. The latter is earmarked for low-income weatherization. The remaining



CES budget is provided through Austin Energy base rates. Costs included in base rates include Key Accounts, Electric Vehicles, and Data Analytics.

Key Program Accomplishments YTD through June 2019

Noteworthy highlights for FY19 are as follows:

- 1. Weatherization Assistance Program (WAP) has expanded to include manufactured home communities. To date, WAP outreach staff has met with 16 manufactured home communities, provided 2,591 flyers for distribution, and provided program information to be added into community newsletters.
- 2. The Energy Efficiency Home Performance with ENERGY STAR program earned the **2019 ENERGY STAR® Partner of the Year Sustained Excellence Award** for its Energy Efficiency Program. The Home Performance program team continued to offer customers new Velocity Credit Union low interest loan rates as low as 1.99% for qualifying homes through the winter.
- 3. Ace Breed & Company joined the Strategic Partners of Utility Retailers (SPUR) with lighting rebates and Wi-Fi thermostat program promotion.
- 4. SPUR is in the process of creating a new Request for Proposal to include new program features like in-store mobile coupons that will allow customers to receive larger rebates on appliances and more.
- 5. Austin Energy's All-Stars Educational Program for 6th Graders provides teachers, students, and their families with opportunities to explore ways to efficiently use energy. The students receive a take-home kit that includes a Filtertone® (sounds when it's time to change air filters), a smart power strip, and an LED light bulb. The kits are designed to bring awareness to the importance of air quality and energy efficiency. The All-Stars program received the *Best Practices Award* from the Smart Energy Collaborative in 2019. The award recognizes leadership in consumer education by educating youth about resource conservation and energy efficiency.
- 6. The Energy Efficiency Commercial Rebates Program presented the *Excellence in Energy Efficiency* award at the Building Owners and Managers Association (BOMA) and the Austin Association of Facility and Maintenance Engineers (AAFAME) luncheon to The Innovation Group (TIG) properties.
- 7. Two additional Power Partner vendors were added to the program along with the two current vendors. This will allow more new thermostats and other potential demand response (DR) devices to curtail this summer.
- 8. Demand Response staff successfully tested new Virtual End Node (VEN) at a customer's site and are currently working on adding six more VENs that will add this customer's nine stores to AutoDR which will bring the total number of buildings under ADR control to approximately 65.
- 9. Austin Energy is scheduling customer meetings for high-level DR audits and discussion of DR performance, as well as educating and recruiting into AutoDR. AutoDR typically increases energy savings by 20-30% due to automated equipment dispatching signals to reduce consumption during curtailment events instead of depending on human interaction to reduce usage.

- 10. Process changes for Energy Conservation Audit and Disclosure (ECAD) sectors will be implemented to the online rebate processing system to help with compliance tracking, storing audits, and providing further insight to customer usage and recommended energy efficiency improvements.
- 11. To date, over 3,000 low-income households have benefitted from Austin Energy's solar incentives, including 1.4 MW-ac installed on multifamily affordable housing properties and 1.3 MW of community solar dedicated to CAP participants, for a total of approximately \$3 million in incentives.
- 12. Austin Energy is finalizing an agreement with the City of Austin Department of Aviation to develop a community solar project on a new parking garage at the Austin-Bergstrom International Airport (ABIA).
- 13. Austin Energy Green Building (AEGB) awarded ratings to 535 homes, of which 47% are in SMART Housing developments.
- 14. AEGB awarded star ratings to six SMART multifamily housing developments with 881 units.
- 15. AEGB awarded star ratings to an additional 15 commercial and multifamily projects with over 2.6 million square feet and 660 units.
- 16. AEGB engaged the new Austin Energy Headquarters, ABIA's new Information and Technology Building, and HEB Austin 8 (S. Congress), along with four other active projects, in the integrated energy modeling incentive design and verification process for high performance buildings.
- 17. AEGB promoted public education opportunities through its Green by Design workshops, Cool House Tour, AIA Homes Tour, Summer Social on Aldrich Street, and World Refugee Festival, and created learning opportunities for building professionals through monthly seminars, Realty Roundup, AIA Austin Committee on the Environment, and HBA of Greater Austin.
- 18. AEGB received the *USGBC Greater Texas Leadership Green Pioneer Award* for furthering eco-innovation and smart growth.
- 19. In partnership with the Texas Solar Energy Society, AEGB hosted the 23rd annual Cool House Tour, with attendance increasing by 20% over 2018.
- 20. The number of Austin Energy interactive web app users increased 25% over this same time last year.
- 21. The EVs for Schools program was launched, deploying EV charging infrastructure at four Austin area schools along with curriculum designed to promote the value of green building and energy conservation as they relate to the technologies of EVs and renewable resources at Austin Energy.
- 22. Austin Energy earned the *Top 10 Solar Utility Award* from Smart Electric Power Alliance for connecting the most solar to the grid in 2018. Austin Energy ranked No. 7 on the utility solar list, with 192.9 MW installed in 2018.
- 23. The Solar Residential Education Program launched a learning series, collaborating with local community centers to offer the Solar Residential Education Course, in person, to underserved communities.

Program Budget

The proposed program budget for Customer Energy Solutions programs is approximately \$44.5 million with a little over 61 MW of savings proposed. As noted, funding is obtained from the Energy Efficiency Services component of the Customer Benefit Charge (CBC). The Customer Assistance Program (CAP) weatherization program costs are recovered in the CAP component of the CBC and other expenses are recovered in base rates. Staff developed the proposed FY20 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 differences in the last year's and proposed budgets, some adjustments are considered:

- 1. 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.
- 2. Multifamily and Multifamily Income Qualified program budgets will increase due to ongoing efforts to revise rebate levels and simplify property eligibility requirements. In addition, Austin Energy anticipates contracting a third party to support management of the program with further outreach, and contractor and tenant education. The purpose is to support Austin Energy's efforts to increase participation, recruit and manage contractors, and educate customers.
- 3. The Data Analytics and Business Intelligence staff is working with internal and City staff on more responsive reporting and analytics.
- 4. The Home Performance with ENERGY STAR revised program handbook and rebate processing system configuration will be in effect in FY20. The revisions include shifting rebate levels to increase certain duct system improvement rebates and to incentivize system performance projects.

5. The Appliance Efficiency Program will assess its program handbook and rebate processing system configuration for process improvements to support the program's savings goals.

COMPONENT	PROGRAM NAME	FY 2019	FY 2020
			PROPOSED
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 CBC-Energy Efficiency Admin Total	Outreach and marketing	792,186	774,650
	Green Building	479,056	610,672
	Green Building - Residential	890,095	902,575
	Green Building - Commercial	899,817	953,906
	Green Building - Evaluation & Development	767,747	794,712
	DSM Management	444,097	329,08
	DSM Program Management	1,706,500	1,794,27
	DSM Program Support	2,845,791	2,844,73
	DSM Solar Program	1,361,894	1,382,90
	EES Technical Support	1,171,264	1,105,26
	DSM Commercial/Multifamily Program Management	1,202,048	1,718,36
	. rog.am management	\$12,560,495	\$13,211,14
CBC-EES Incentives	AE Weatherization	1,277,000	1,277,000
	Multi-Family Rebates	425,000	1,060,00
	Multi-Family Weatherization Program	675,000	1,060,00
	Loan Options	200,000	100,00
	Commercial-Existing Construction	3,100,000	2,335,12
	Small Businesses	1,900,000	2,260,16
	Commercial Power Partner	90,400	
	Residential Solar Program	5,000,000	3,000,00
	Commercial Solar Performance Based Incentive	2,500,000	2,500,00
	Residential Power Partner- Aggregate	1,483,000	1,499,91
	School Based Education – All-Stars Program	200,000	200,00
	Load Coop	1,270,000	1,486,50
	Thermal Energy Storage	28,000	
	Water Heater Timers	494,800	494,80
	Home Performance with Energy Star	1,650,000	1,800,00
	Appliance Efficiency Program	1,500,000	1,600,00

	Direct Install Partners and Events	150,000	0
	Direct Install Partners and Events SPUR Strategic Partnership	150,000	0
	w/Utilities & Retailers	875,000	1,000,000
	Municipal Conservation Program	60,000	60,000
CBC-EES Incentives Total		\$22,878,200	\$21,733,501
Base Rate Recoverable	Key Accounts Management	1,823,714	1,792,387
	Data Analytics & Business Intelligence	3,740,083	4,186,487
	Customer Energy Solutions Administration	467,377	403,849
	Electric Vehicles	1,029,798	1,179,254
	Emerging Technologies	491,532	497,045
	Electric Vehicles Incentives	450,000	450,000
	Customer Energy Solutions Corporate	39,269	62,463
Base Rate Recoverable Total		\$8,041,773	\$8,571,485
Total		\$44,480,468	\$44,516,127