

AAFAME Meeting

Commercial Offerings/Programs

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Jessica Galloway



October 2, 2019

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Agenda

- Overview
- Why we offer incentive programs
- Commercial Rebates/Incentives
- Load Profiler
- Energy Conservation and Disclosure Ordinance (ECAD)
Overview



Retail Electric Revenue

FY17

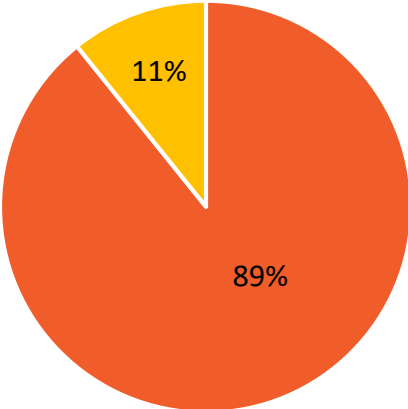
473,000 Customers



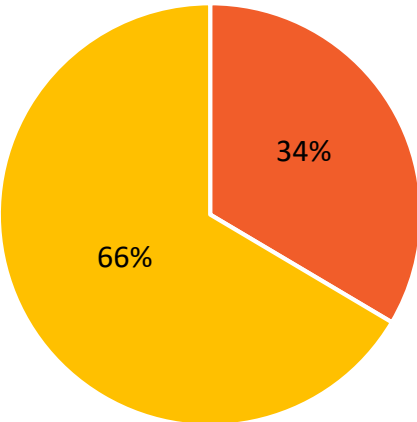
13,010 gWh



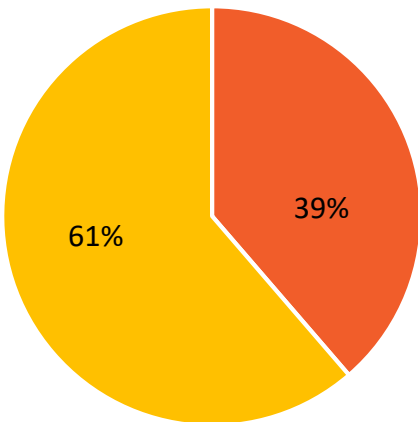
\$1,183M Revenue



■ Residential
■ Commercial & Industrial



■ Residential
■ Commercial & Industrial



■ Residential
■ Commercial & Industrial



Austin Energy 2027 Goals



Offset 65% of customer load with renewable resources



1000 MW of savings from energy efficiency and demand response



750 MW utility-scale solar + 200 MW local solar, including 100 MW customer-sited PV



10 MW battery storage and 20 MW thermal energy storage



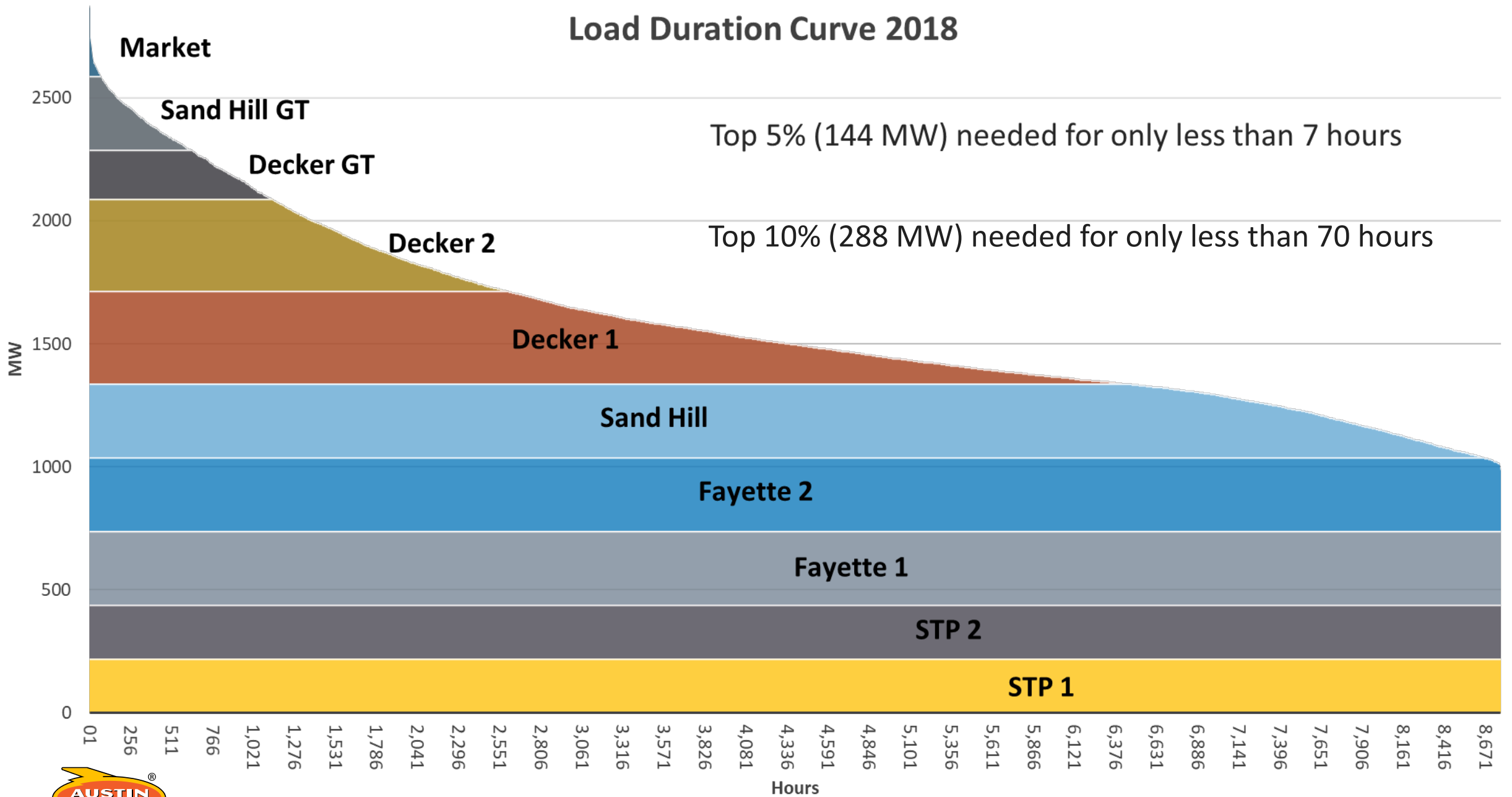
Net zero community-wide GHG emissions by 2050



All subject to meeting **Affordability Goals:**

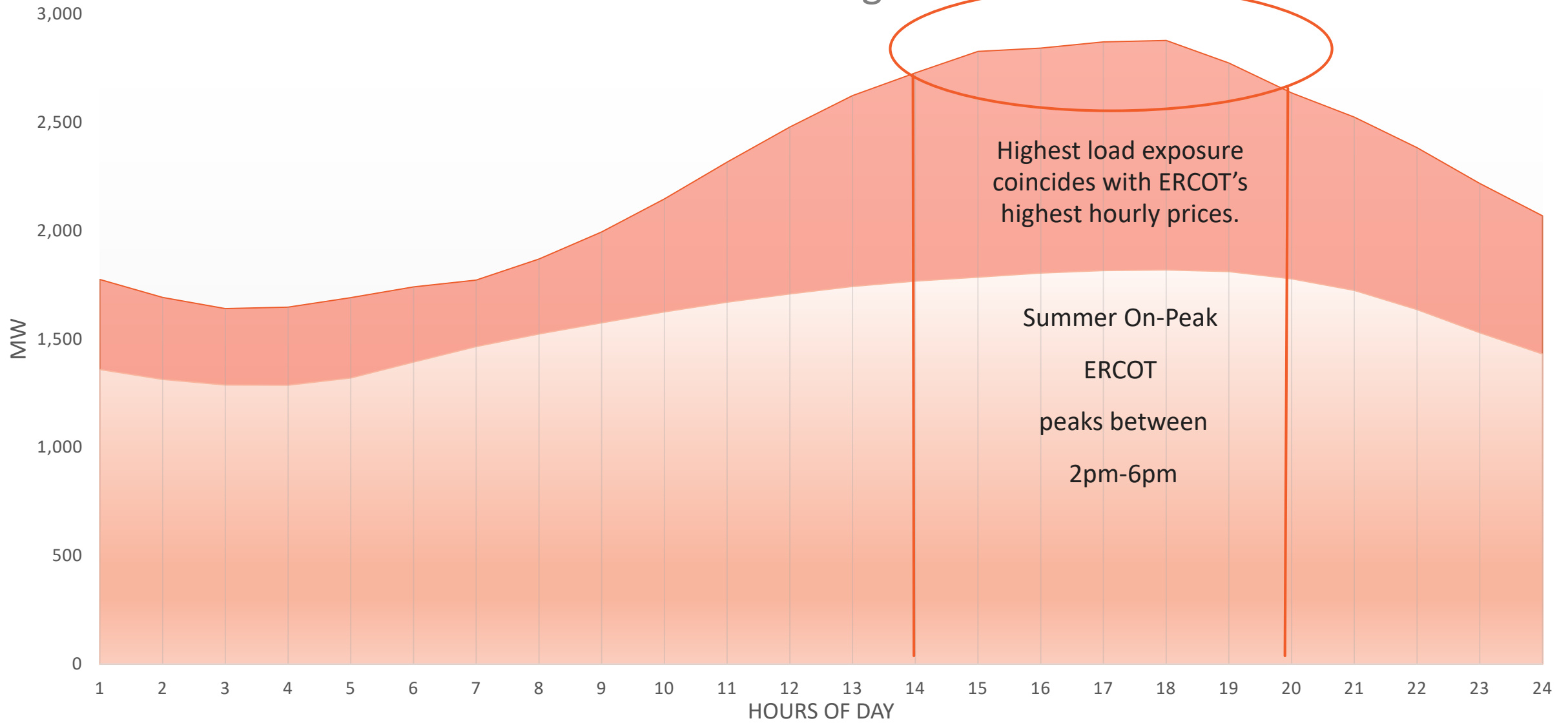
<2% rate increase per year, Austin Energy rates in lower 50th percentile of statewide utilities

Load Duration Curve 2018



*Indicative generation production, not actuals

Peak Load Management



Risk Mitigation

Market Risk

- ERCOT Reserve Margin for Summer 2019 - 7.4% (Updated 1/17/19)
- Stays near or below single digits over the next five years
- Operating Reserve Demand Curve (ORDC) standard deviation changes approved
- System Wide Offer Cap is at \$9000/MWh or \$9.00/kWh
- Regulatory changes impact costs
- Cover price exposure through management of load
- Demand Side Management is even more important



Energy Efficiency Rebates

Commercial and Small Business

Incentivize Peak Demand Reduction

Current Code IECC 2015



Energy Efficiency Rebates

Mechanical Equipment

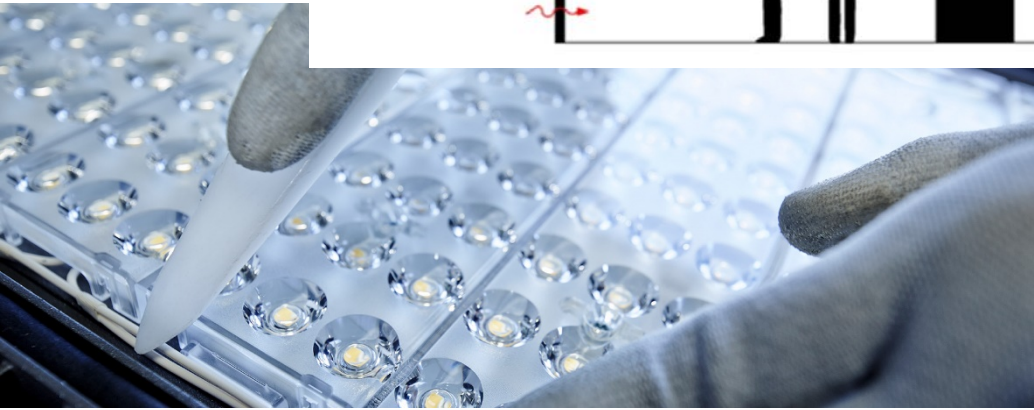
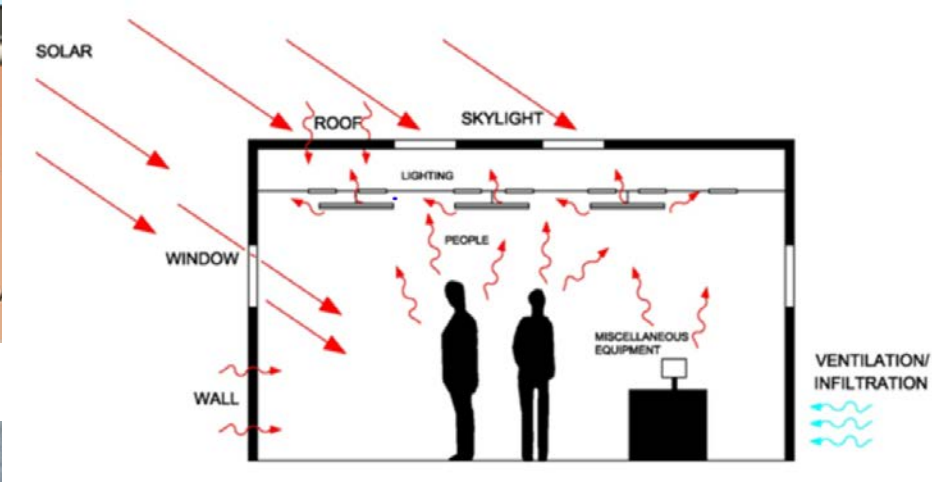
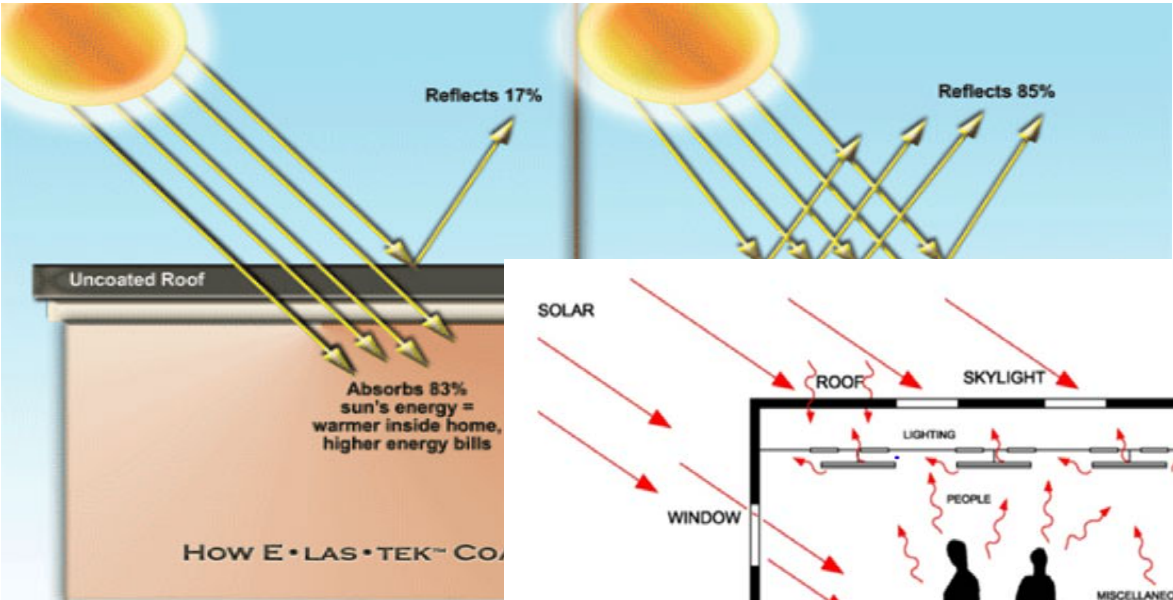
- Chillers
- Cooling Towers
- Direct Expansion (DX) Air Conditioning
- Energy Recovery Ventilators
- Thermal Energy Storage

Electrical Equipment

- Uninterruptible Power Supply (UPS)
- Variable Frequency Drives (VFD)
- ECM Motors (Fans, etc.)



Austin Energy Rebates for Energy Efficiency



Building Envelope

Ceiling and Roof Insulation

Reflective Roof Coating

Window Tint and Window Replacement

Lighting

Fixture Replacement

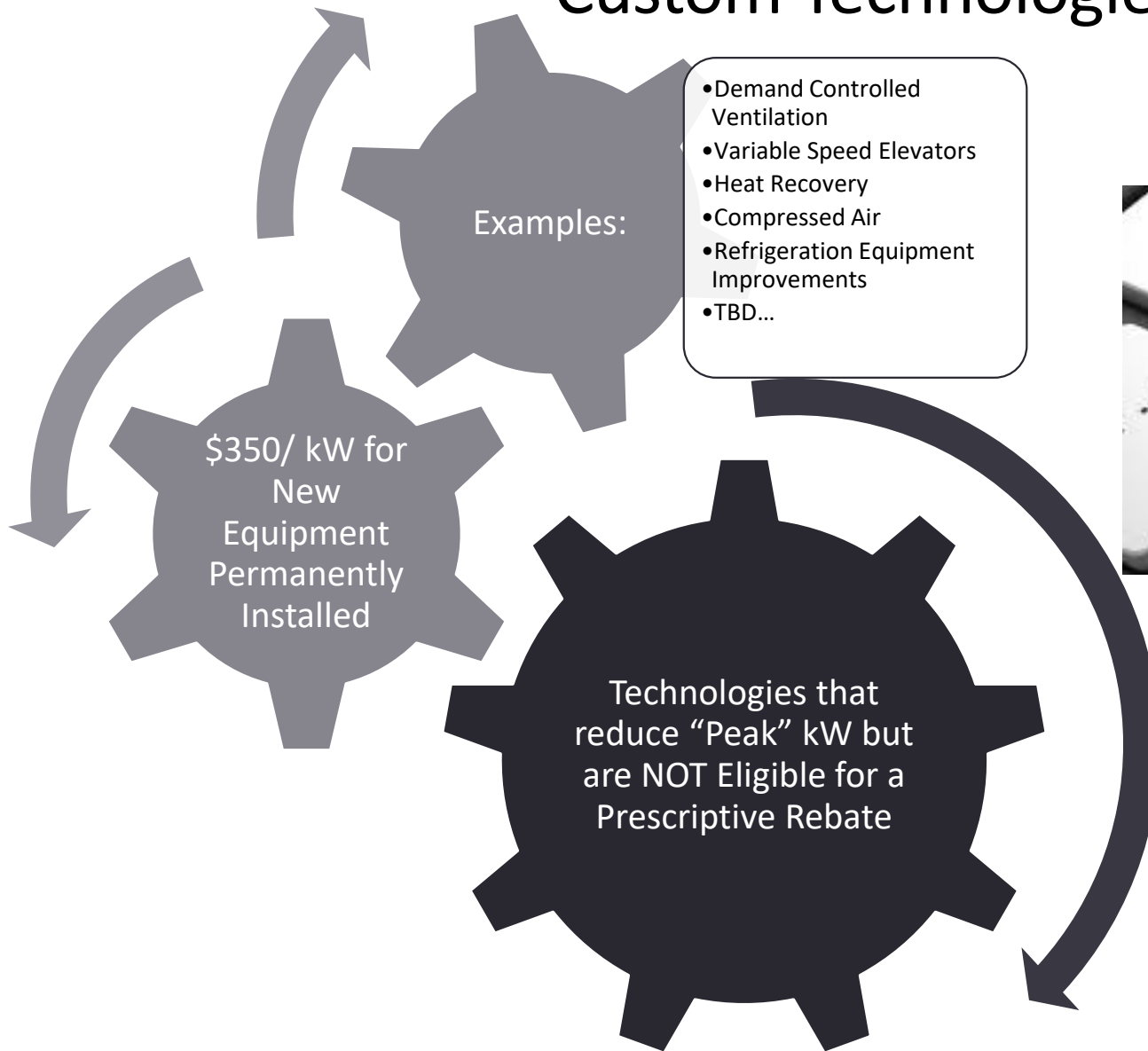
Lamp Replacement

New Construction

Lighting Controls



Custom Technologies



Rebate Levels (Condensed)

TECHNOLOGY	REBATE
Air Conditioning (Direct Expansion and VRF) *	\$660/kW
Air Conditioning (Chillers) *	Air Cooled: \$300/kW Water Cooled: \$450/kW
Cooling Towers	\$300/kW
Commercial Kitchen	\$550/kW (see 'Kitchen Equipment')
Custom Technology	Process Change: \$200/kW Custom Equipment: \$350/kW
Electronically Commutated Motors (ECM)	\$350/kW
Energy Recovery Ventilators (ERV)	\$300/kW
Guest Room Controllers	\$50 per device installed
Heat Pump Water Heaters	\$800 per unit installed
Lighting	Up to \$420/kW (New Construction \$125/kW)
New Construction	New Construction Lighting: \$125/kW All other technologies: identical \$/kW to retrofit rebates
Thermal Energy Storage (TES)	\$350 per kW
Variable Frequency Drives (VFD)	\$400/kW (plus \$50 if installed with CEE Tier 2 motor)
Others	Up to \$350/kW

- All technology must exceed the current International Energy Conservation Code (IECC) baseline.
- More granular detail please visit www.savings.austinenergy.com



Rebate Process

High Level Overview



Contact us:

ACommercialRebates@austinenergy.com



Load Profiler Tool

Scott Jarman



Electric Metering

Commercial Metering

- Multiple service types
- Metering upgrades

Billing Determinates

- Monthly demand and energy

Metering Systems

- AMR, AMI, and MV90

Metering Data Collected

- Monthly, daily, 15 minute



Load Profiler

Energy Profiler Online

- Online system for understanding energy usage patterns and cost
- Utilizes 15 minute energy usage data
- Displays graphs and charts
- Users can setup customized dashboards
- Provided Green Button and Green Button Connect functions
- AE set up IDR meter and EPO user account



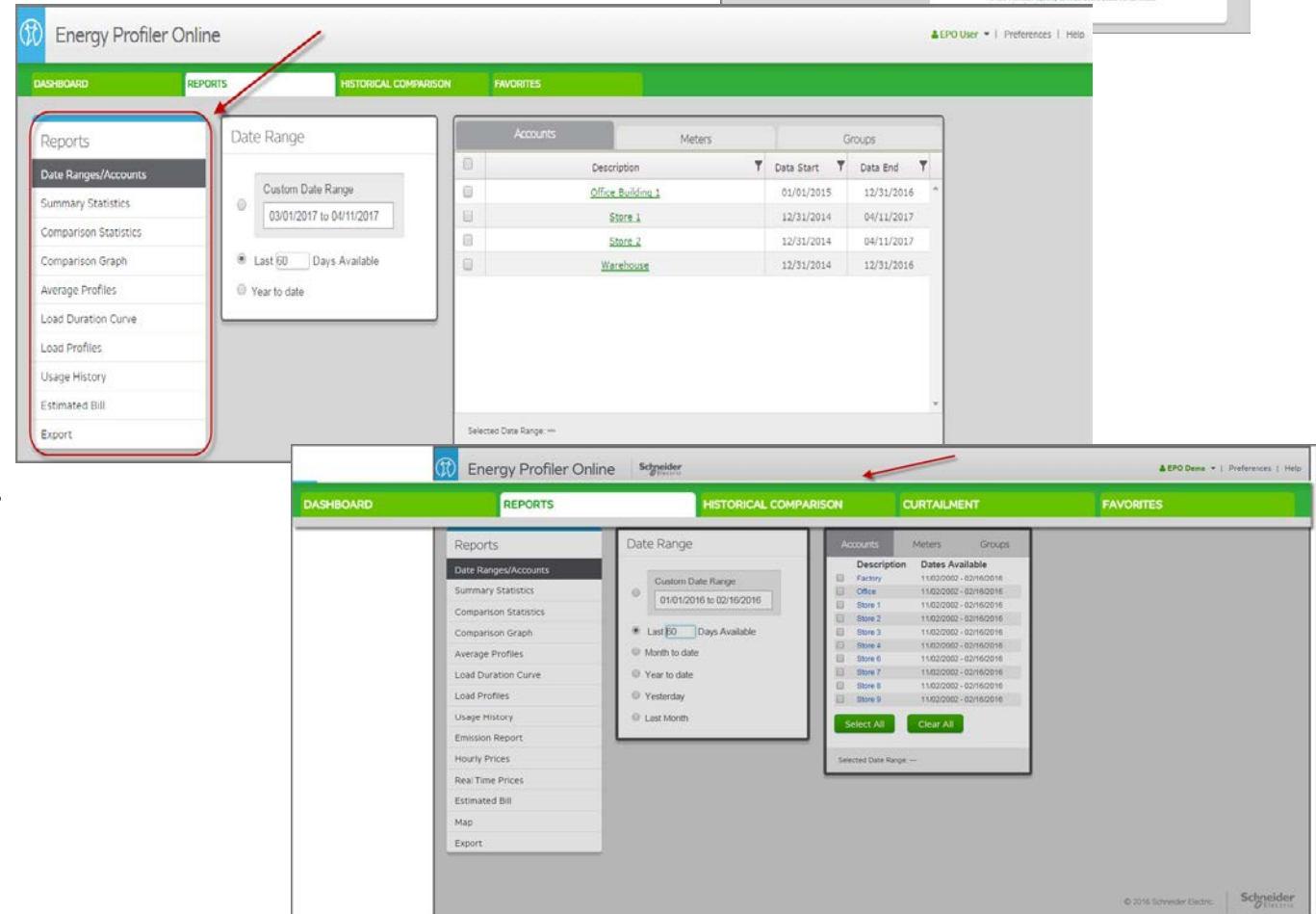
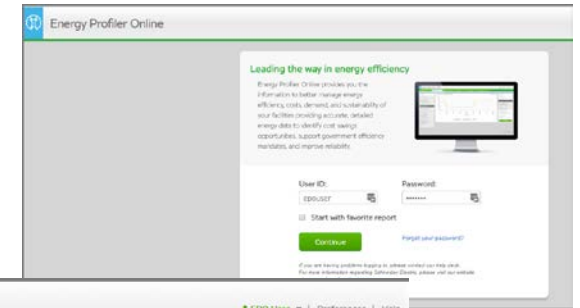
EPO User Functionality

- Demand profiles & energy usage
 - Daily, weekly, monthly
- Heat maps & diagnostic visualizations
- Historical comparisons
- Preconfigure reports in dashboards
- User can setup 10 dashboard report
- Setup and manage subscriptions



Login & Navigation

- Secure access over SSL
- 24 x 7 availability
- User ID and password provided by administrator or account manager
- Tabs located on the horizontal tool bar near the top of the screen are used to navigate the main functions
- The navigation bar at the left side of the screen lists the reports available in the selected tab, based on subscription level



Load Profiles

- Provides valuable information about how and when energy is used in your facility
- Helps isolate points in time and probe into equipment operations
- Can help identify what equipment or practices create the largest impact on the utility bill



Average Profiles

The average profile graphs show average weekday, weekend, and peak day load profiles. Ideally, the peak day should match the average day.



Usage History & Summary Statistics

- The Usage History chart shows the total amount of energy consumed and the peak demand. It provides a way to compare consumption versus usage on a daily, weekly, or monthly basis.
- These statistics provide a summarized account of energy and demand data based on the rate Time of Use definitions, if available.



Summary Statistics - Saturday, October 1, 2005 through Wednesday, November 30, 2005

Description	Value
Total Energy Usage (kWh)	779,206
Total Weekday Energy Usage (kWh)	695,499
Total Weekend Energy Usage (kWh)	83,707
Weekday Maximum Demand (kW)	1,498
Weekend Maximum Demand (kW)	297.5
Load Factor	35.54%
On-Peak - Total Energy (kWh)	371,505
On-Peak - Maximum Demand (kW)	1,498
On-Peak - Maximum Demand Time	10/27/2005 11:45
Off-Peak - Total Energy (kWh)	407,701
Off-Peak - Maximum Demand (kW)	1,428
Off-Peak - Maximum Demand Time	11/22/2005 07:00

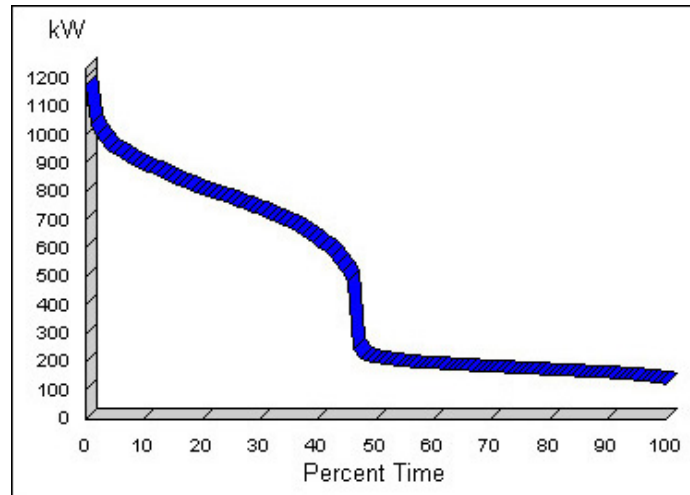
Selected Date Range: Saturday, October 01, 2005 through Wednesday, November 30, 2005



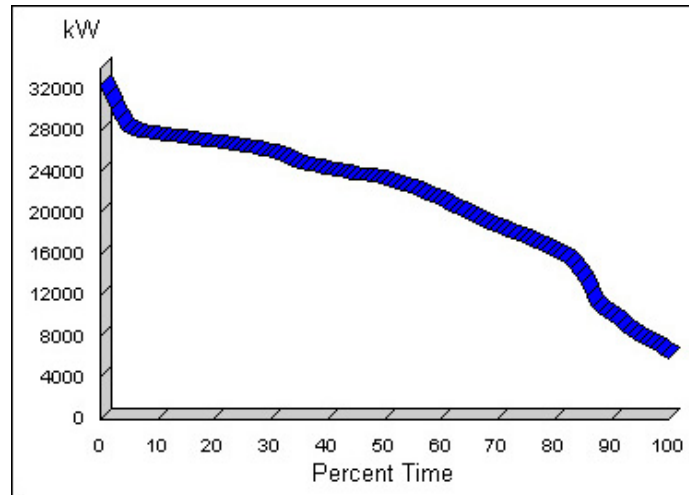
Load Duration Curve

- A load duration curve represents the percentage of time the load persists at a given level.
- This type of graph can be used to evaluate whether load management or energy efficiency measures, such as lighting and motor retrofits, should be pursued to lower energy costs.

A.



B.



Export & Green Button

- Meter data can be exported from EPO into a variety of formats
- Allows for further analysis using MS Excel or customized tools
- Green Button/Green Button Connect capable


Reports

- Select Customer
- Date Ranges/Accounts
- Summary Statistics
- Comparison Statistics
- Comparison Graph
- Average Profiles
- Load Duration Curve
- Load Profiles
- Usage History
- Emissions
- Hourly Prices
- Estimated Bill
- Map
- Export**

Export Data - Saturday October 1, 2005 through Wednesday November 30, 2005

Export Options

Select File Type :

- CSV Convert to Demand
- CMEP
- Green Button 
- Vertical

Select Interval Length:

- Metered Interval Length
- Convert to Hourly Intervals

[Continue](#)

Selected Date Range: Saturday, October 01, 2005 through Wednesday, November 30, 2005



Energy Conservation Audit Disclosure

Jessica Galloway



Compliance: All Properties in the City of Austin and Served by Austin Energy



Single Family

- Units 1-4
- Age over 10 years old
- Audit required and good for 10 years
- Seller must provide buyer a copy of the audit during time-of-sale option period
- Compliance estimated at 60 percent



Multifamily

- Units 5 or more
- Age over 10 years old
- Audit required and good for 10 years
- Property must display and provide Energy Guide to all potential renters
- Compliance required for rebate participation
- Compliance at 88 percent



Commercial

- Buildings over 10,000 square feet
- EUI annual calculation and comparison or PM score
- Compliance required for rebate participation
- Compliance at 88 percent

Enforcement: Violations may be reported by anyone at the City of Austin Municipal Courts for review and action.



Commercial ECAD Audit

What It Is

- Energy Use Intensity (EUI) score per building attested by the property manager or building owner
- EPA Portfolio Manager score based on national building performance data
- ECAD compliance necessary to participate in AE's rebate programs

What It Is Not

- It does not include utility pricing
- It is not disclosed to anyone other than the building owner or property manager

Drivers

- Behavior effects on billing
- Benchmarking allows owners to know where they stand and if they need to make improvements.



Annual self-reporting of energy consumption per square foot or PM Score

Commercial Benefits

Benefits for Commercial Building Owners

- Compares energy efficiency of the building with other buildings of similar size
- Provides market differentiation
- Increases knowledge of building energy use
- Allows Portfolio Manager compliance option to add additional knowledge of the buildings energy use intensity



Thank you!

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Community Focused.SM**

