



Commercial Demand Rates

Commercial Demand Rates, March 2014





Understanding Demand

- What is Demand
 - Expressed in kW
 - Generally measured as peak consumption during a 15-minute interval
- How is it measured
 - Billed on highest monthly peak
- Ideas for reducing demand
 - Behavioral modifications
 - Stagger AC units
 - Put a timer on your electric water heater (we have a program for that!)
 - Upgrade inefficient lighting (we have a program for that!)
 - Avoid electric instant water heaters



Electric Bill Components

- Customer Charge – fixed amount
- Electric Delivery – based on peak kW (demand)
- Demand – based on peak kW (demand)
- Energy – based on kWh (energy)
- Power Supply Adjustment – based on kWh (energy)
- Community Benefit Charge – based on kWh (energy)
 - One line item with three components
 - Low income residential customer assistance program (CAP)
 - Service area street and traffic lights
 - Energy efficiency
- Regulatory
 - Based on kWh for non-demand classes
 - Based on kW for all other rate classes



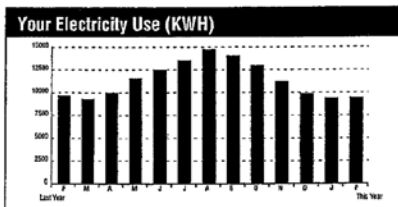
Rate Class Assignment

- Prior to FY2016, Secondary and Primary customers were assigned to a rate class based on their highest demand during the four summer months.
- Starting in FY2016, rate class assignments are based on the average of peak demands during each of the four summer months.
- This change will result in some demand customer's being re-assigned to non-demand rate classes.
- No non-demand customers will become demand customers because of this methodology change.
- Class re-assignments will take place in January 2016, and every October, thereafter.



Sample Bill

Service Details



Days of service 29
kWh used 9400
Avg. kWh per day 324.1
Avg. cost per day \$42.93
 13 month avg. consumption: 11378.46



ELECTRIC SERVICE

PowerLink Number: 000000

Meter #	Read Date	01/08/2014	02/06/2014	Consumption
	Read	12638	12873	235
				Reading Difference 235
				Meter Multiplier 40
				Total Consumption in KWH 9400
				Demand Usage 41.60
				Power Factor 0.99

COA - Electric Commercial Secondary Voltage >10kW <50kW

Customer Charge	\$25.00
Electric Delivery 41.60 kW at \$4.00 per kW	\$166.40
Demand Charge 41.60 kW at \$5.15 per kW (winter)	\$214.24
Energy Charge 9,400 kWh at \$0.02414 per kWh (winter)	\$226.92
Community Benefit Charges	\$62.32
Regulatory Charges 41.60 kW at \$2.56 per kW	\$106.50
Power Supply Adjustment 9,400 kWh at \$0.03709 per kWh	\$348.65
Summary of Current Charges	\$1,150.03
Commercial Sales Tax	
Capital Metro Sales Tax 1%	\$11.50
City Sales Tax 1%	\$11.50
State Sales Tax 6.25%	\$71.88
TOTAL CURRENT CHARGES	\$1,244.91

Want to save money on your electric bill? Visit austinenergy.com for information on our rebate programs and energy saving tips.



CLEAN COMMUNITY SERVICE

Service Dates	01/13/2014	02/11/2014
City of Austin - Clean Community Fee Commercial		
Austin Resource Recovery		\$7.10
Code Compliance		\$6.20
TOTAL CURRENT CHARGES		\$13.30



Your Electric Rates

Commercial Rates

Billing Components	Inside Secondary Service <10 kW	Outside Secondary Service <10 kW	Inside Secondary Service 10-<50 kW	Outside Secondary Service 10-<50 kW	Inside Secondary Service >50 kW	Outside Secondary Service >50 kW
Customer Charge (\$/month)	\$ 18.00	\$ 18.00	\$ 25.00	\$ 25.00	\$ 65.00	\$ 65.00
Electric Delivery (¢/kWh)	\$ -	\$ -				
Electric Delivery (\$/kW billed)			\$ 4.00	\$ 3.98	\$ 4.50	\$ 4.47
Demand (\$/kW billed)						
Summer (June-September)	\$ -	\$ -	\$ 6.15	\$ 6.11	\$ 7.85	\$ 7.81
Non-Summer (October-May)	\$ -	\$ -	\$ 5.15	\$ 5.12	\$ 6.85	\$ 6.81
Energy (¢/kWh)						
Summer (June-September)	6.198	6.198	2.914	2.896	2.247	2.234
Non-Summer (October-May)	4.598	4.598	2.414	2.399	1.747	1.737
Power Supply Adjustment (¢/kWh)						
	3.139	3.139	3.139	3.139	3.139	3.139
Community Benefit Charges (¢/kWh)						
Customer Assistance Program	0.065	0.065	0.065	0.065	0.065	0.065
Service Area Street Lighting	0.096	-	0.076	-	0.068	-
Energy Efficiency Programs	0.337	0.337	0.378	0.378	0.198	0.198
Regulatory Charge						
(¢/kWh)	1.530	1.530				
(\$/kW billed)			\$ 4.57	\$ 4.57	\$ 4.43	\$ 4.43



Power Factor

- Low Power Factor is created by equipment within a facility
 - Motors, magnetic ballasts
- Ratio of active (real) power to reactive power
 - Real power provides energy to drive motor
 - Reactive power creates magnetic field needed to enable motor to turn
- Low Power Factor results in inefficient use of AE's system and causes to oversize AE its wires and transformers
- Customers can improve their Power Factor



Root Beer Float Power Factor Analogy

Reactive Power

(Customer equipment causes reactive power)



Active Power

(Real power used to do work)



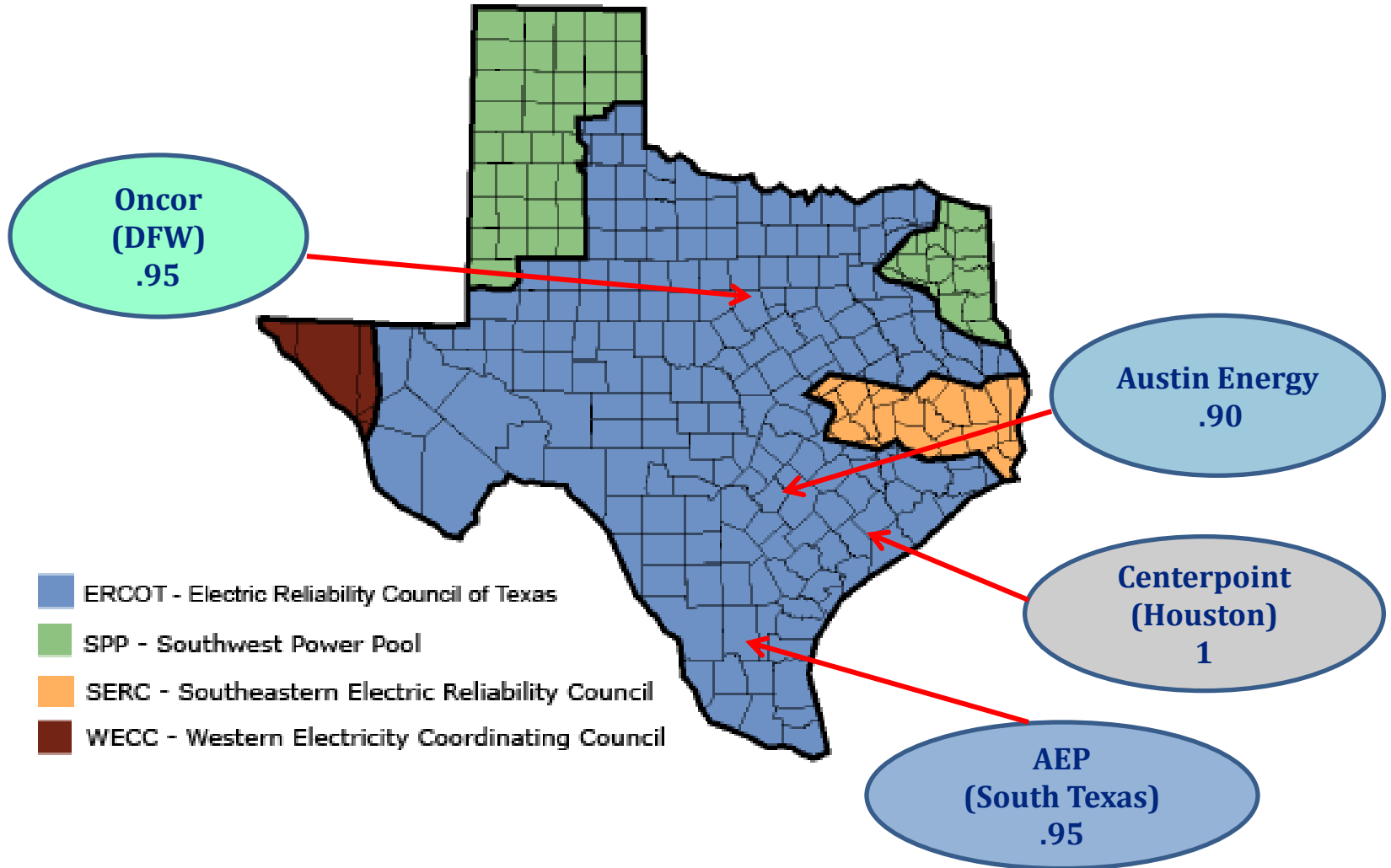
Apparent Power

(AE has to size equipment and provide full amount of power needed)





Power Factor in Texas





Power Factor Calculation

- Calculation
 - Billed demand = peak demand (kW) * .90/measured power factor (power factor >90% is not adjusted)
- Note that Power Factor adjusted demand applies to:
 - Electric Service Delivery Charge
 - Demand Charge
 - Regulatory Charge
- For more information and vendor list
 - [Learn More About Power Factor Adjustment](#)
 - [Download the List of Power Factor Vendors \(pdf\)](#)



Power Factor Bill Example

Power Factor Bill Example at .90

Summer rate

Measured peak demand **100**

Power Factor at peak demand **0.9**

Electric Service Delivery \$ 4.50 \$ 450.00

Demand \$ 7.85 \$ 785.00

Regulatory \$ 2.49 \$ 249.00

Total **\$ 1,484.00**

Power Factor Bill Example at .80

Summer rate

Measured peak demand **100**

Power Factor at peak demand 0.8

Adjusted peak demand **112.5**

Electric Service Delivery \$ 4.50 \$ 506.25

Demand \$ 7.85 \$ 883.13

Regulatory \$ 2.49 \$ 280.13

Total **\$1,669.50**

Additional 12.5kW results in Power Factor adjustment of
\$185.50



Ways to Control Your Energy Costs

- Participate in [Austin Energy's PowerSaver™ Energy Efficiency Rebate Programs](#)
 - [Small Business Lighting Program](#) (< 200 kW)
- [Manage Your Commercial Energy Usage](#)
 - Manage Peak Demand
 - Improve Power Factor
 - [Participate in Load Co-Op](#) - Get paid from Austin Energy by reducing peak demand during summer months when requested.



Energy Efficiency Rebates

- High Efficiency Lighting
 - Automatic Lighting Controls
 - Daylight Harvesting
 - Re-lamp Existing Fixtures
- Cooling and Heating
 - Chillers
 - Cooling Towers
 - DX Air Conditioning
 - Energy Recovery Ventilators
 - Thermal Energy Storage
 - Guest Room Controllers
- Adding Insulation or Window Treatments
- Energy Efficient Commercial Kitchen Equipment
- UPS and VFDs
- New Construction



Small Business Lighting Program

- Applies to customers with <200 kW or a facility <30K SF
- One of the best energy efficiency programs in the country
- Direct install turnkey program with set pricing and established set of approved contractors
- Contractor performs lighting audit & proposal
- Austin Energy covers 50%-85% of the total cost
- Majority of projects have a simple payback < than 2 yrs
- For more information, please call 512-482-5346



Load Co-op Program

- Reduce demand when given 1 hour notice June–Sept.
- Approximately 15 events
- AE pays \$1.25 per kWh curtailed
- Voluntary program with no penalties for non-performance
- Free audit of your control and manufacturing systems
- Free basic [Load Profiler](#) for one year
- For more information, please call 512-972-7636



Contact Us

- For Billing Questions, call 512-494-9400
- For information on Austin Energy's Energy Efficiency Rebate Programs, call 512-482-5346