Austin Energy Operational Update Q2 FY20 To the Electric Utility Commission

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Austin Energy Operational Update Discussion Topics







Safety

Carbon Footprint

Performance

Power Production

On-Site Energy Resources

Future State



Austin Energy Operational Update Safety







Data	Q1 FY20 (10/19 – 12/19)	Q2 FY20 (1/20 – 3/20)	
Total Near Misses	13	8	
Total Injuries	15	14	
Total Recordable Cases	6	6	
Total Vehicle Accidents	8	11	



Austin Energy Operational Update Performance





Commercial Availability & Start Success

Commercial Availability

Constation Decourse	Target Seasonal Commercial % Availability	Commercial Availability Actuals (%)	
Generation Resource	(Jan-Mar)	Q1 FY20 AVG	Q2 FY20 AVG
Decker Steam Units	95	30	46
Sand Hill Combined Cycle	95	39	82
Fayette Units	97	73	77
South Texas Project	100	88	90

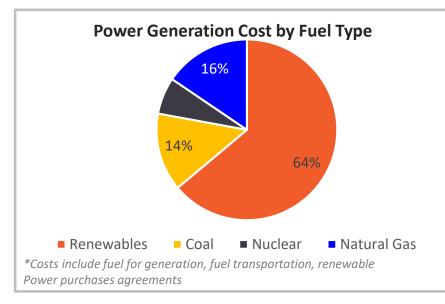
Commercial Availability values reflect maintenance or refueling outages typical for this period

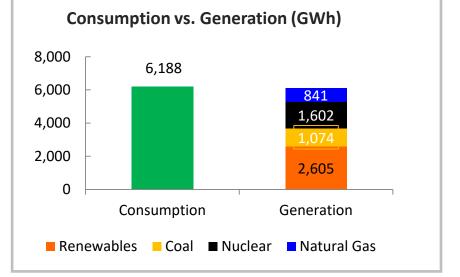
Start Success

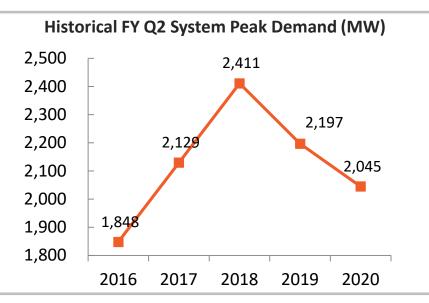
		Start Success Actuals (%)	
	Start Success Target(%)	Q1 FY20 AVG	Q2 FY20 AVG
Simple Cycle Start Success	99	100	100



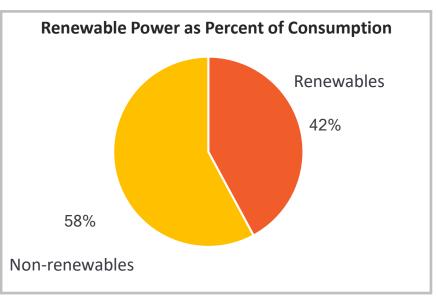
Net Generation and Load Analysis FY 2020 Q2







AUSTIN ENERGY



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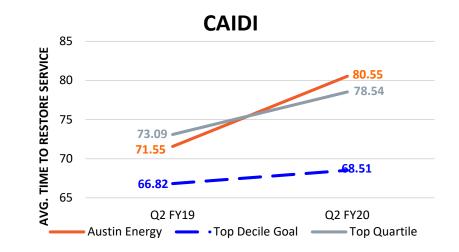
System Reliability Metrics

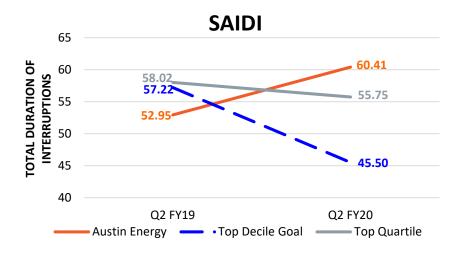
- **CAIDI = Customer Average Interruption Duration Index** *Average time to restore service.*
- **SAIDI = System Average Interruption Duration Index** *Total duration of interruptions for the average customer,*

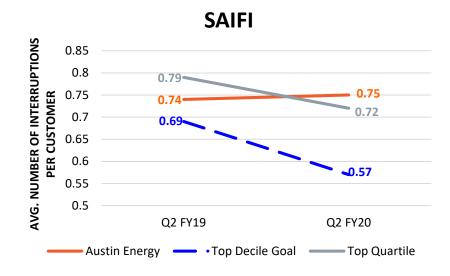
during a period of time.

SAIFI = System Average Interruption Frequency Index

How often the average customer experiences a sustain interruption, over a period of time.

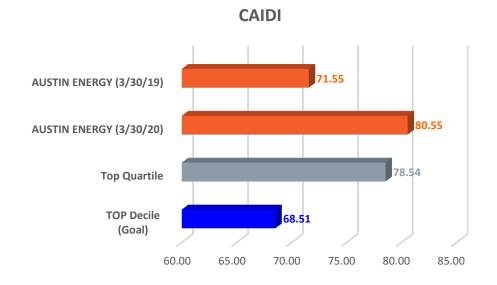








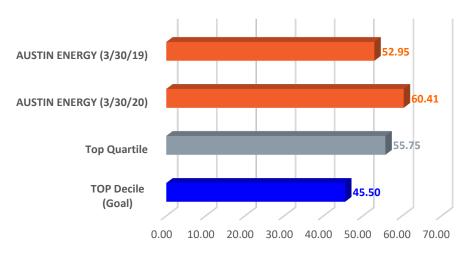
System Reliability Benchmarking



AUSTIN ENERGY (3/30/19) AUSTIN ENERGY (3/30/20) Top Quartile TOP Decile (Goal) 0.00 0.10 0.20 0.30 0.40 0.50 0.60 0.70 0.80

SAIFI

SAIDI

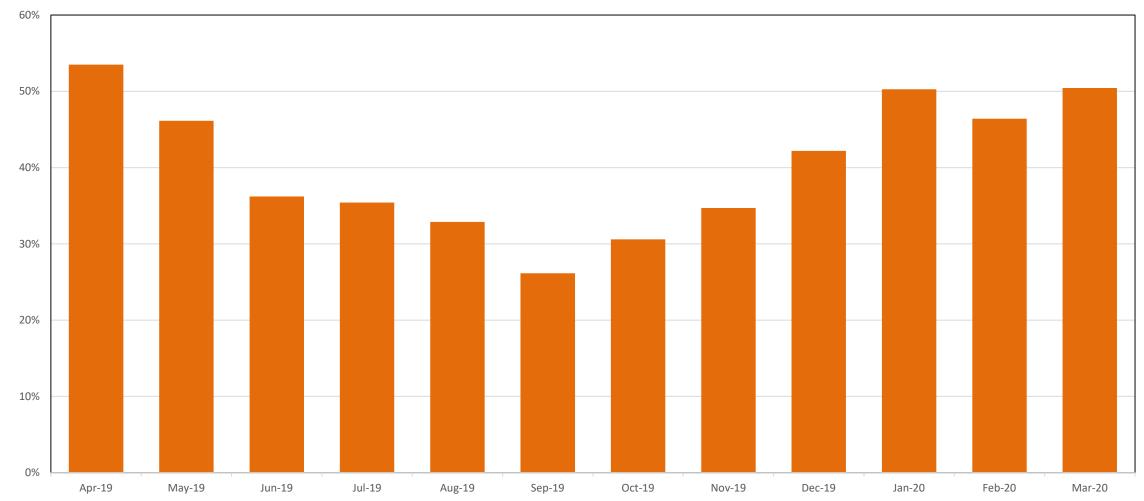




Austin Energy Operational Update Carbon Footprint



Renewable Generation as a Percentage of Load





Austin Energy Operational Update Power Production & OSER



Key District Energy & Cooling Activities

District Cooling Plant #3 (Downtown, Crescent Tract)

Constructing 10,000 ton chilled water plant for the Downtown System

- Contractor has completed building and has moved in chiller equipment
- Currently installing electrical equipment
- On-Target for final completion by December 2020

Austin Community College Highland Campus

Constructing a 6,000 ton chilled water plant with Thermal Energy Storage

- Building completed
- AE contractor (Flintco) installing equipment
- On-Target for substantial completion in Q2
 2021

District Cooling Plant #4 (Downtown, Convention Center)

Constructing 3,000 ton chilled water facility on roof of Convention Center

- Building complete and all equipment installed
- Control systems to be configured and tested in early May
- On-Target for final completion by Q2 2020

Mueller Energy Center #2 (Mueller Redevelopment Zone)

Constructing a 6,000 ton chilled water plant with Thermal Energy Storage

- Working with developer to convey site to AE
- Plan to procure modular plant underway
- Targeted for substantial completion in Q2
 2021



Currently seeking a location for another downtown plant due to continued demand

In discussions with Aviation Dept. re: providing chilled water to expanded airport facilities

Austin Energy Operational Update Future State



Our Focus

Our Customers (improving reliability and connectivity)

- AMI Upgrades (Residential & Commercial Meters)
- Small Cell Deployment
- Customer Reliability Assessments

Our Community (ensuring the resiliency of the system)

- District Cooling Plant Construction
- Chilled Water Plant Construction

Environmental (reducing our carbon footprint)

- Reducing our fossil fuel
- Expanding Renewable Portfolio

Grid Modernization (innovating to a smart future)

SHINES Deployment

(Sustainable and Holistic INtegration of Energy Storage and Solar PV)

- Advanced Metering Infrastructure
- Grid Automation
- Distributed Energy Resource
 Integration
- Asset Management



Austin Energy Operational Update Appendix

