

Austin Energy Operational Update Q2 FY20

Austin Energy Utility Oversight Committee – June 2020

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Austin Energy Operational Update

Discussion Topics



Safety

Performance



Carbon Footprint

Power Production



On-Site Energy
Resources

Future State



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Safety



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 | ↑ |

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Performance



Commercial Availability & Start Success

Commercial Availability

| Generation Resource | Target Seasonal Commercial % Availability (Jan-Mar) | Commercial Availability Actuals (%) | |
|--------------------------|---|-------------------------------------|-------------|
| | | 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

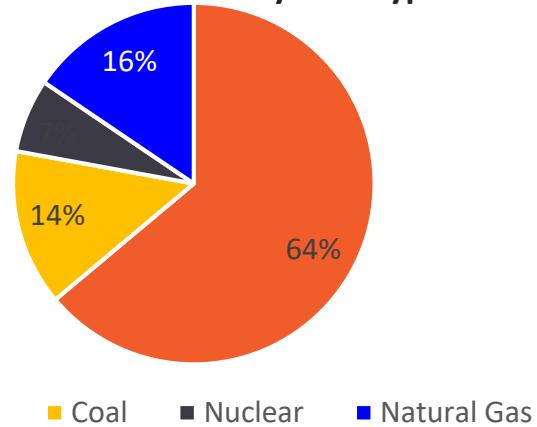
Start Success

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



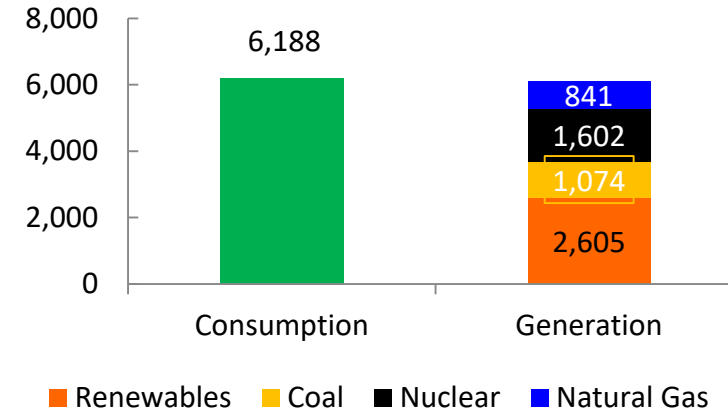
Net Generation and Load Analysis FY 2020 Q2

Power Generation Cost by Fuel Type

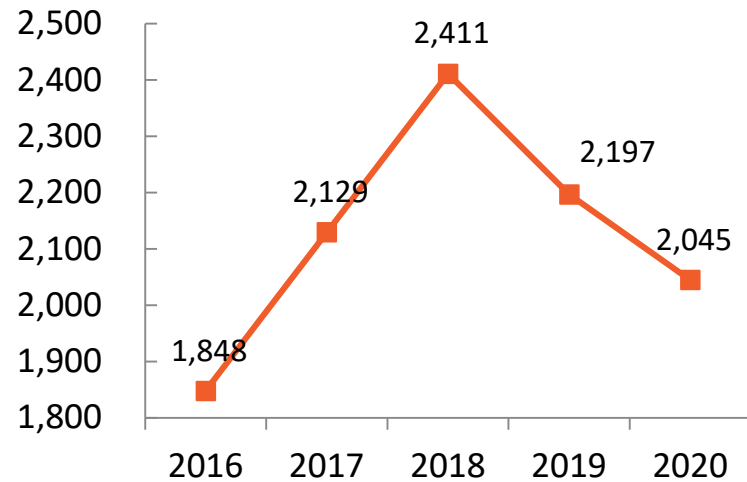


**Costs include fuel for generation, fuel transportation, renewable Power purchases agreements*

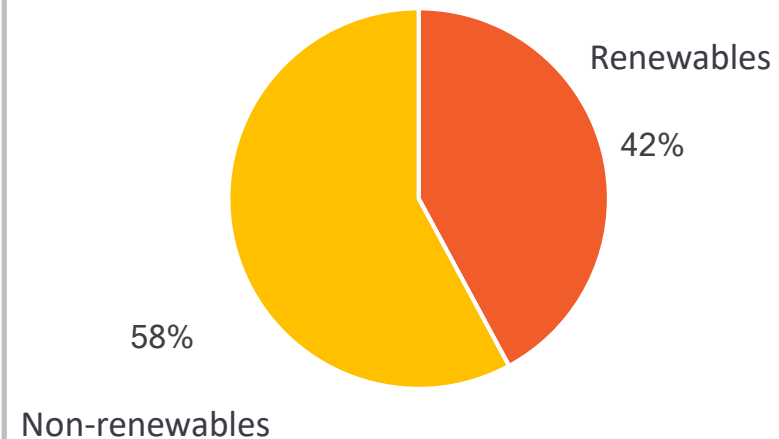
Consumption vs. Generation (GWh)



Historical FY Q2 System Peak Demand (MW)



Renewable Power as Percent of Consumption



System Reliability Metrics

CAIDI = Customer Average Interruption Duration Index

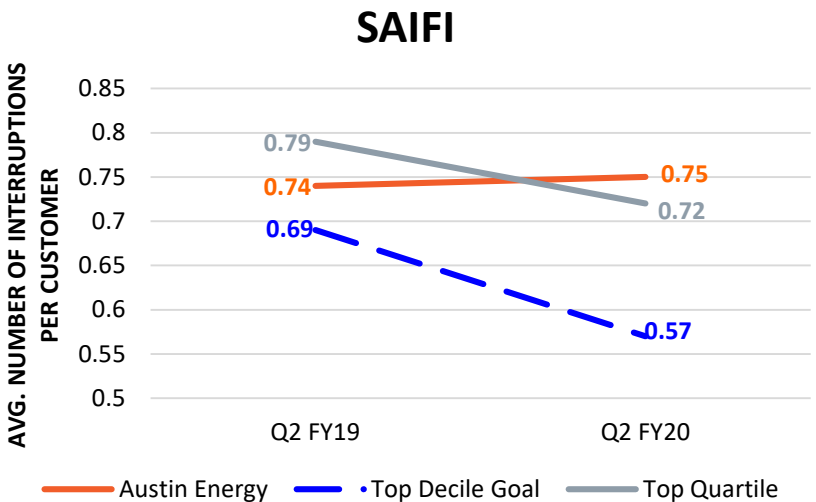
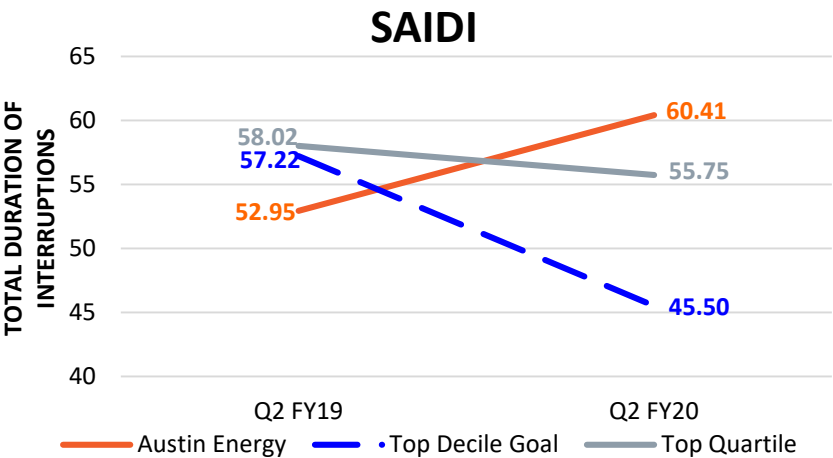
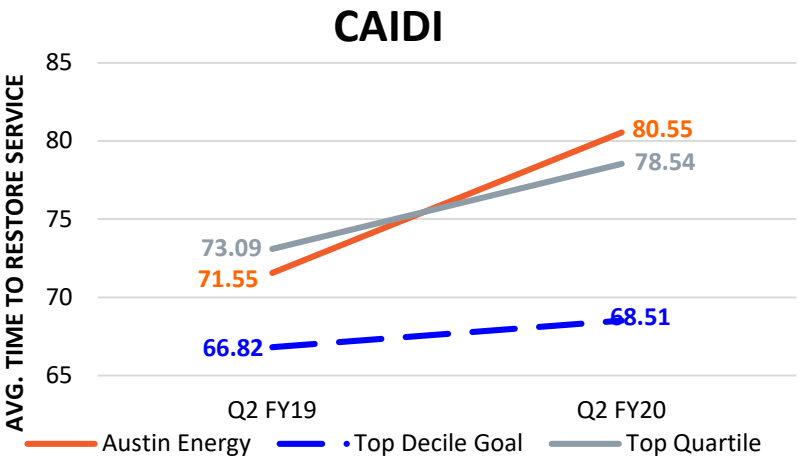
Average time to restore service.

SAIDI = System Average Interruption Duration Index

Total duration of interruptions for the average customer, during a period of time.

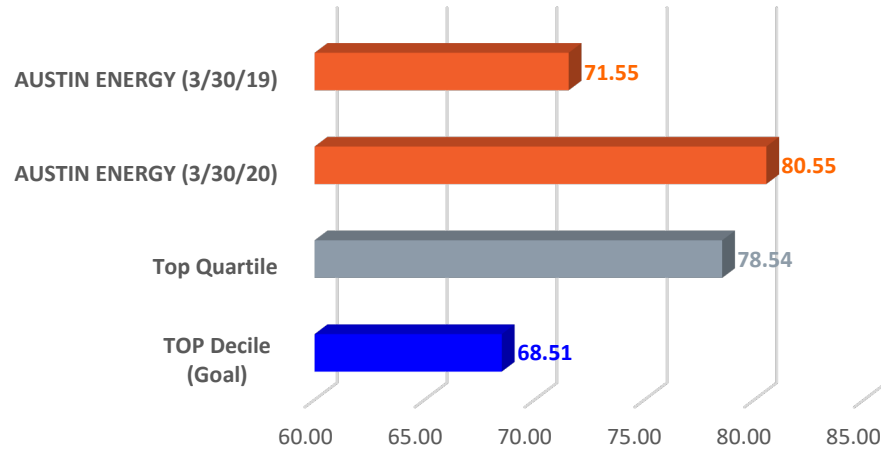
SAIFI = System Average Interruption Frequency Index

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

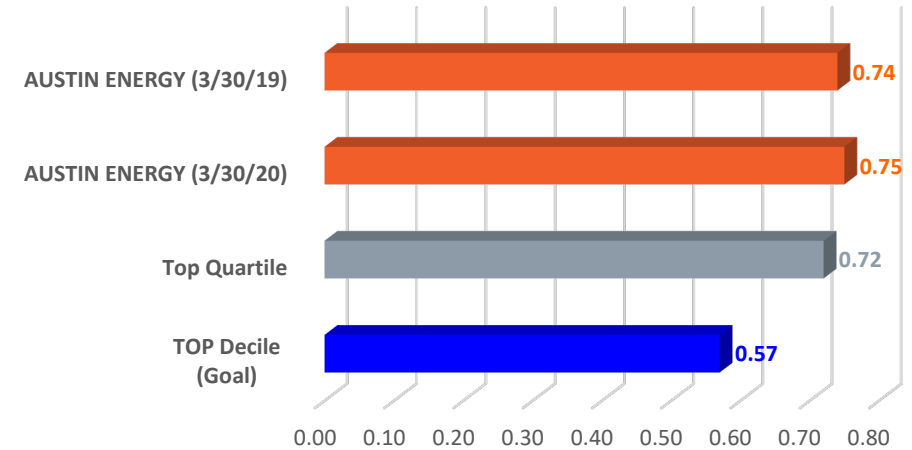


System Reliability Benchmarking

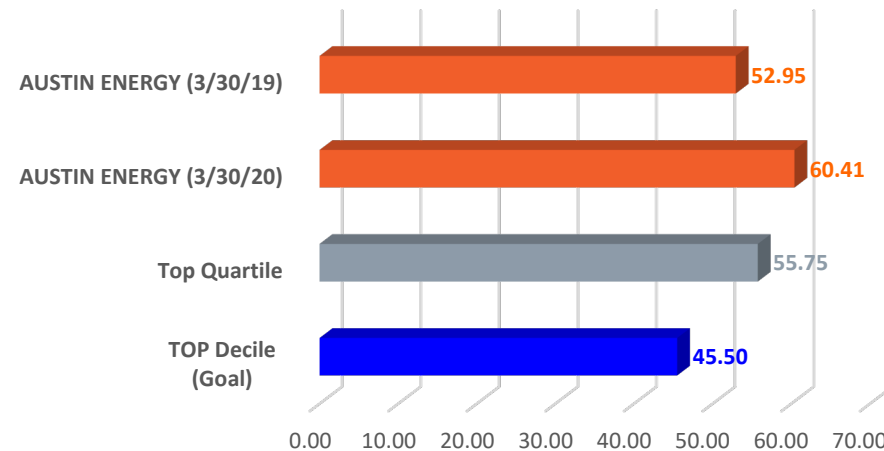
CAIDI



SAIFI



SAIDI

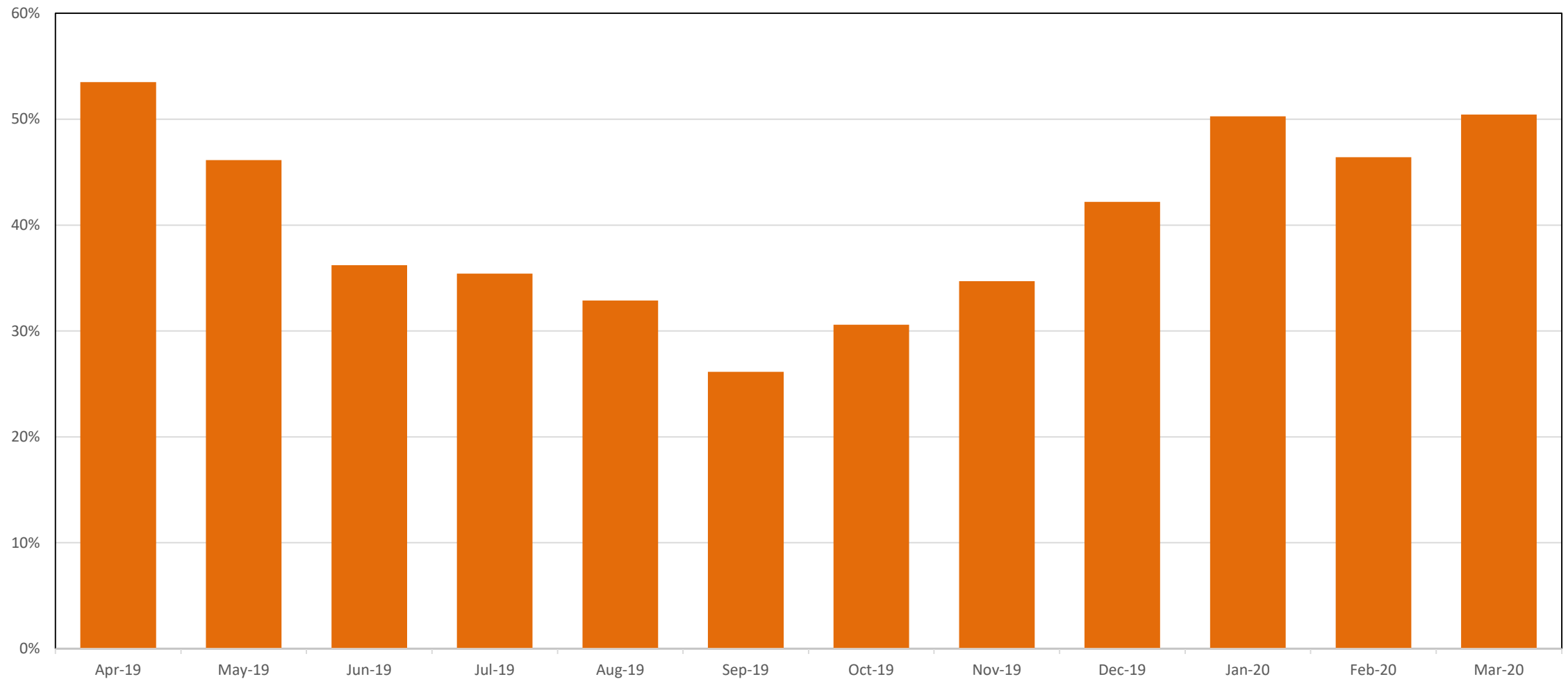


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Carbon Footprint



Renewable Generation as a Percentage of Load



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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

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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



Power Production Updates

- Decker Steam Unit 1

- Notice of Suspension of Operation (NSO) *Today*
- 10/31/2020 retirement date
- Awaiting ERCOT approval

- Nacogdoches

- Notice of Suspension of Operation (NSO) submitted to ERCOT
- Requested Seasonal Mothballing from 10/16/2020 – 5/15/2021
- Plans to run during the summer months
- Awaiting ERCOT approval



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Appendix

