

# Austin Energy Operational Update Q1 FY21

## Austin Energy Utility Oversight Committee

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# Austin Energy Operational Update

## Vision

Powering a cleaner, brighter future with customer-driven, community-focused solutions.

## Mission

Safely deliver clean, affordable, reliable energy and excellent customer service.

## Discussion Topics

1. Power Generation & Renewables
2. District Cooling Updates
3. System Reliability
4. Other:
  - ✓ Jan 10<sup>th</sup> Outage Event in review
  - ✓ Renewable updates



# Austin Energy Operational Update Performance

## Commercial Availability & Start Success

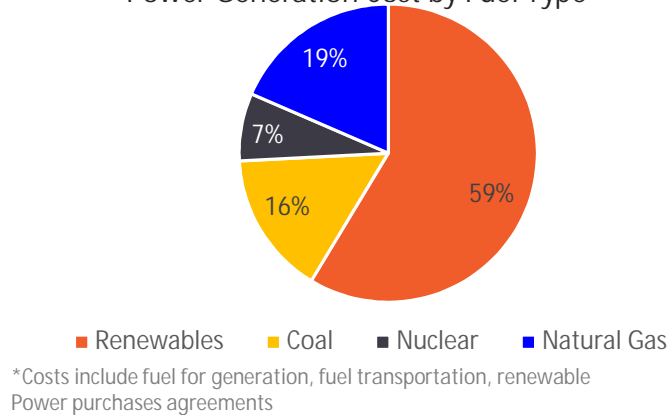
Generation Resource	Target Seasonal Commercial % Availability	Commercial Availability Actuals (%)	
		Q4 FY20 AVG	Q1 FY21 AVG
Decker Steam Units	95	89	39
Sand Hill Combined Cycle	95	95	69
Fayette Units	97	100	97
South Texas Project	100	100	100

Start Success	Start Success Target(%)	Start Success Actuals (%)	
		Q4 FY20 AVG	Q1 FY21 AVG
Simple Cycle Start Success	99	100	100

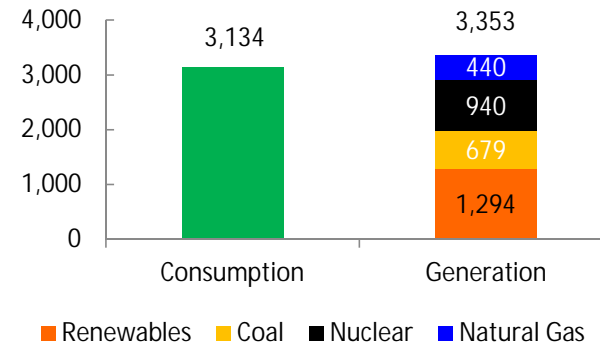


# Net Generation and Load Analysis FY 2021 Q1

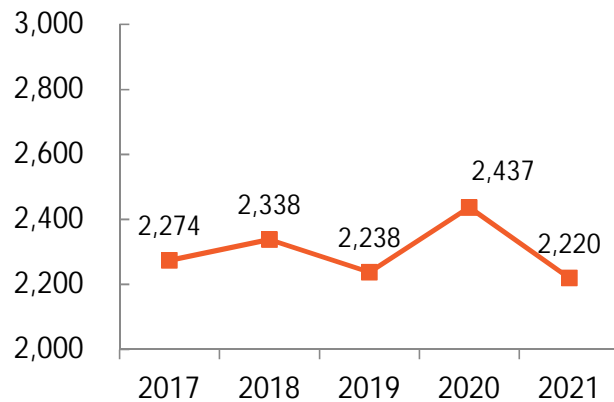
Power Generation Cost by Fuel Type



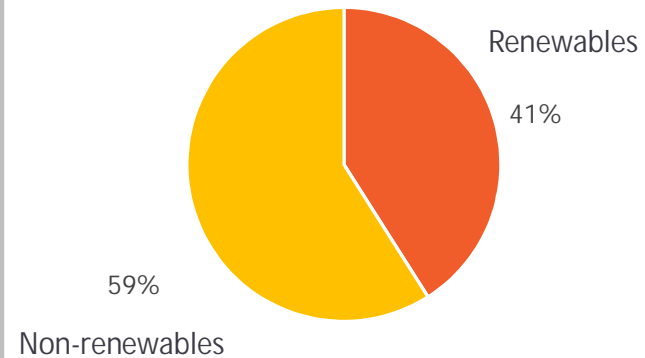
Consumption vs. Generation (GWh)



Historical FY Q1 System Peak Demand (MW)

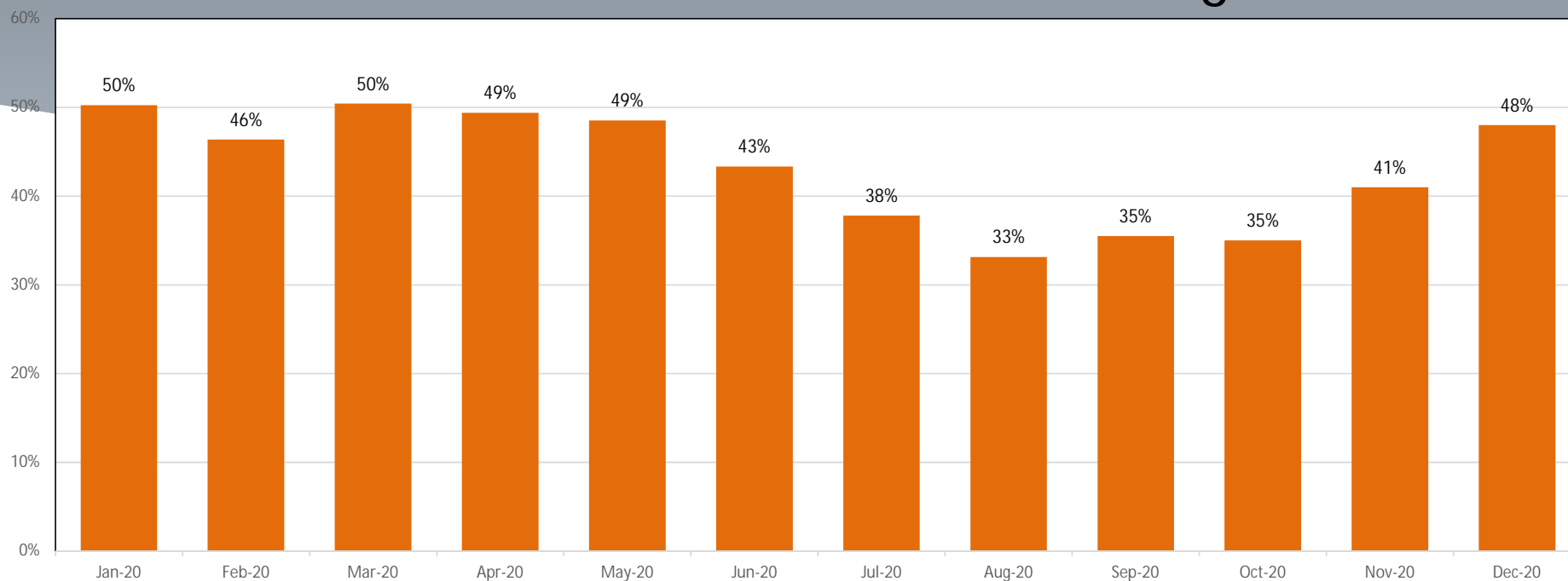


Renewable Power as Percent of Consumption



# Renewable Resources Update

## Renewable Generation as a Percentage of Load



# District Energy & Cooling Activities

## District Cooling Plant #3 (Downtown, Crescent Tract)

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

- Chiller building and cooling towers are complete
- Start-up and commissioning of major mechanical and electrical equipment is ongoing
- Art in Public Places structure erection is complete
- Remaining work: finishing aesthetic façade, site paving, landscaping, and cleanup
- On-Target for substantial completion in April 2021

## District Cooling Plant #4 (Downtown, Convention Center)

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

- Project Completed Q3 2020

## Austin Community College Highland Campus

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

- Chillers, switchgear, pump, piping, TES tank, cooling tower, and other plant appurtenances are all on site and being installed in accordance to schedule and manufacturers recommendations
- On-Target for substantial completion in Q2 2021

## Mueller Energy Center #2 (Mueller Redevelopment Zone)

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

- Design and equipment selection in-progress
- Targeted for substantial completion in Q2 2022



# Distribution Grid Resilience

Grid Resilience Metric	On Target	FY 2021 Target	Last Reported Value	Variance
System Average Interruption Duration Index (SAIDI)	Yes	57.00	55.96 (FY20)	1.04
System Average Interruption Frequency Index (SAIFI)	Yes	0.7	0.68 (FY20)	0.02
Customers Experiencing Multiple Interruptions (CEMI) <i>*n=04; Number of customers with interruptions&gt;=n</i>	Yes	7%	Rolling 365: 1.92%	5.08%

## Project Updates:

### [Improve Distribution System Reliability](#)

- Worst Performing Feeders (WPF) and Wildfire Mitigation Feeders (WFM) identified; 36 IR line inspections completed as of 11/16/20; Vegetation management work under way

### [Improve Substation Reliability](#)

- Fiskville MB1 upgrade - Design complete, and construction begun; On track to complete 02/26/21 pending approved ERCOT outages

### [Improve Underground Network Reliability](#)

- GIS- Data modeling and testing complete; ADMS- go live completed 9/20/2020
- Downtown network model "live" as of 9/25/2020; Full network modeled Q4FY21

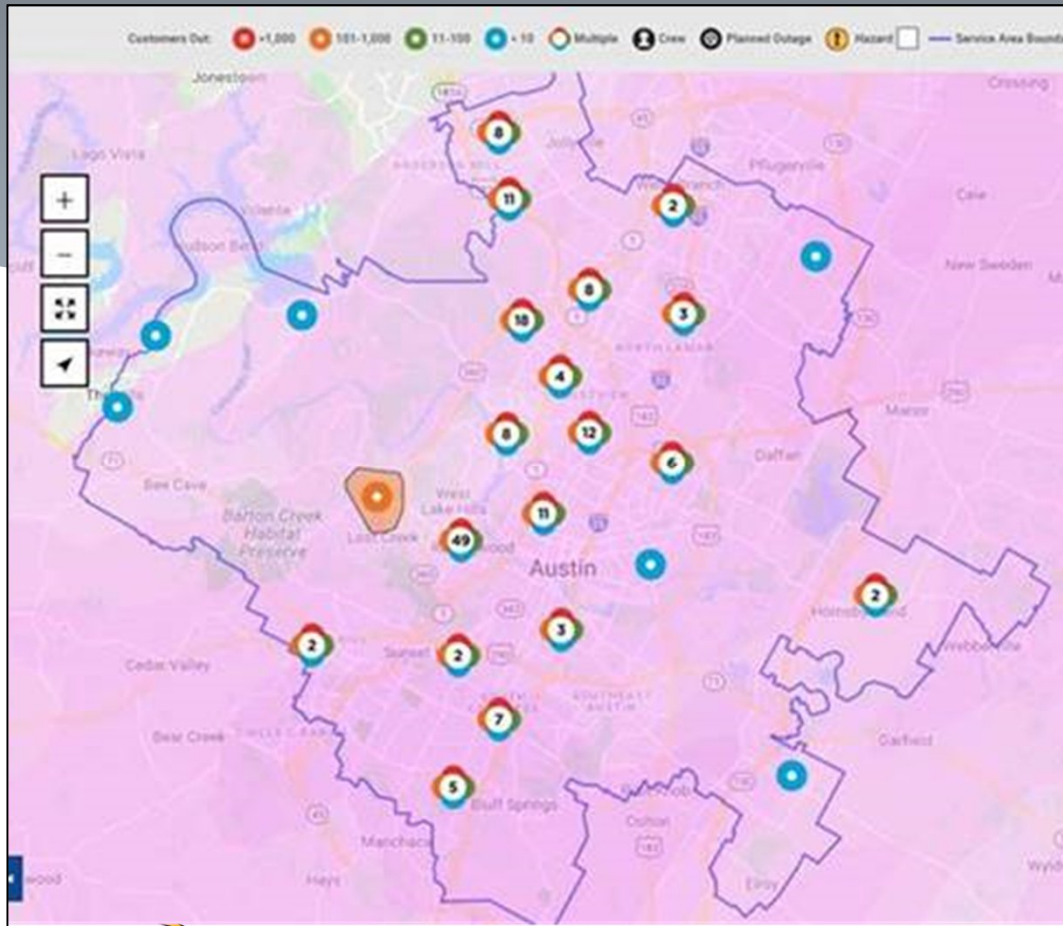
### [Transmission System of the Future](#)

- 08/31/20- RFP development in discovery phase; Conduct guidelines developed and distributed for signature; Team working on solicitation for consultant Q3FY21



# Snow Event - Jan 10-11

## Outage Restoration



- ✓ Outage Start: Jan 10<sup>th</sup> 10:52 AM
- ✓ Outage End: Jan 11<sup>th</sup> 10:29 AM
- ✓ Up to 4" of snow received across region. Relatively little wind.

### Outage Stats:

- 66,345 customer affected
- 6,933 customer calls
- Distribution Breakers Tripped – 32 circuits

### Outage Characteristics:

- No distribution poles down
- Vegetation contacts – common failure mode (falling branches, vegetation contacts)
- System Protection effectively protected public while successfully isolating electrical faults







# Environmental Focus

## Renewable Initiatives

### Austin-Bergstrom Airport Project (ABIA)

- Parking on 6th floor opened on 12/17/2020
- Contractor working up pricing for bollard installation on 6th floor for raceways extending up thru the parking deck
- Shutdown for System A,B & C was scheduled on 1/19/2021 to reconnect the equipment and was completed
- On-Target for substantial completion in February 2021

### New Wind and Solar Resources

- Raymond Wind Farm (200 MWs) achieved PPA COD on December 29, 2020
- Gulf Wind Farm's (170 MWs) expected COD is now mid-February
- Pflugerville Solar (144 MWs) and Aragon Solar (180 MWs) are both expected to achieve COD in Q3 2021



# Austin Energy Operational Update

## Conclusion/Questions

