



## Existing Involuntary Load Shed Processes

*Dan Woodfin*  
Senior Director, System Operations

PUC Workshop  
July 26, 2021

## Overview

- When there is not enough generation available to serve consumers' demand for electricity, and all other solutions available to ERCOT have been exhausted, ERCOT will instruct utilities to reduce power on the system to balance supply and demand. This is referred to as load shed.
- ERCOT determines how much power needs to come off the system.
- Distribution Service Providers (DSPs) are obligated to implement the load shed.
  - DSPs determine how to implement the load shed.
  - DSPs need to be represented by an entity with 24x7 operations who has hotline communications with ERCOT and control over breakers - typically a Transmission Operator (TO).
  - The load shed amounts are allocated in the ERCOT Operating Guides to the TOs.

# Current Load Shed Percentage Table (7/1/2021)

Transmission Operator	2020 Total Transmission Operator Load (%MW)
AEP Texas Central Company	8.23
Brazos Electric Power Cooperative Inc.	5.11
Brownsville Public Utilities Board	0.36
Bryan Texas Utilities	0.51
CenterPoint Energy Houston Electric LLC	24.78
City of Austin DBA Austin Energy	3.55
City of College Station	0.28
City of Garland	0.76
City of Lubbock	0.62
CPS Energy (San Antonio)	6.47
Denton Municipal Electric	0.48
GEUS (Greenville)	0.15
Golden Spread Electric Cooperative Inc.	0.38
Lamar County Electric Cooperative Inc.*	0.07
LCRA Transmission Services Corporation	6.05
Oncor Electric Delivery Company LLC	36.16
Rayburn Country Electric Cooperative Inc. DBA Rayburn Electric	1.38
South Texas Electric Cooperative Inc.	2.00
Texas-New Mexico Power Company	2.66
<b>ERCOT Total</b>	<b>100.00</b>

Per ERCOT Operating Guides:

- Percentages for load shedding are based on the previous year's Transmission Operators' peak loads, as reported to ERCOT.
  - These percentages are reviewed by ERCOT and modified annually.
- Each block of load shed is required to be shed within 30 minutes; if block size is above 1,000 MW, it may take longer to implement.

# Load Shed Survey for Summer 2021

- ERCOT requested information from Transmission Operators on their load shed capabilities for summer 2021:

At System Load =	60 GW	70 GW	80 GW
<b>Total load that can be shed:</b>	23	27	31
- Within 5 minutes	4.7	5.4	6.3
- Within 10 minutes	5.9	6.8	7.7
- Within 15 minutes	13	16	18
- Within 30 minutes	23	27	31

- The total amount of load that can be shed on a TO's system may be limited for the following reasons:
  - To avoid the use of circuits that provide underfrequency load shed protection
  - To avoid circuits that serve critical loads or are on networked distribution
  - Does not typically include the use of transmission-connected/industrial loads
- Available load shed may vary based on the specific weather conditions.