

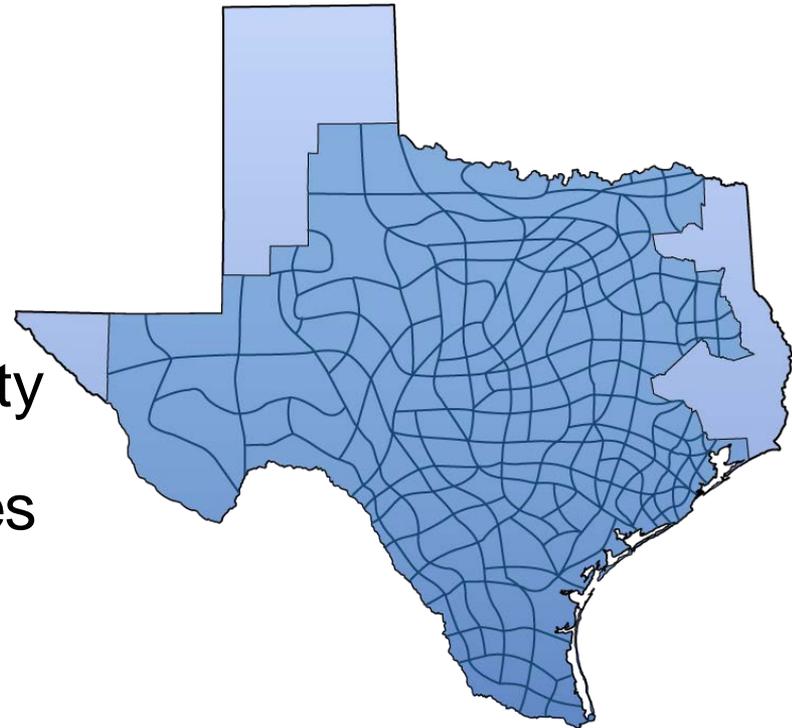
Introduction to ERCOT

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ERCOT Training and Education



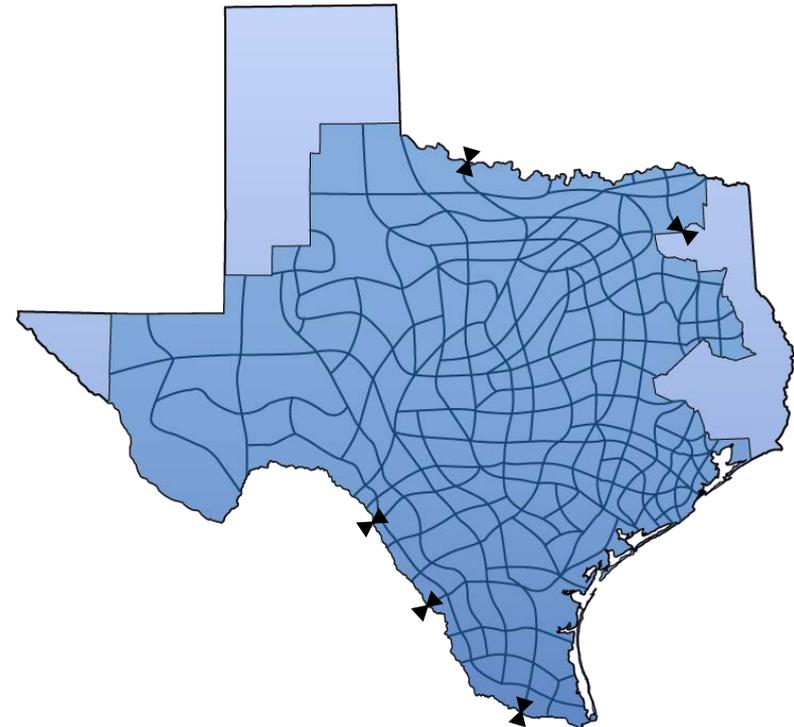
Key Features of the ERCOT Grid

- Contained entirely in Texas
- Represents 85% of Texas Load
- ~80,000 MW of generation capacity
- ~41,000 miles of transmission lines



Key Features of the ERCOT Grid

- Electrical island
- Interconnections to other grids
 - DC Ties
 - Block Load Transfers



ERCOT's Primary Responsibility is Reliability

- Match generation with demand
- Operate transmission system within established limits

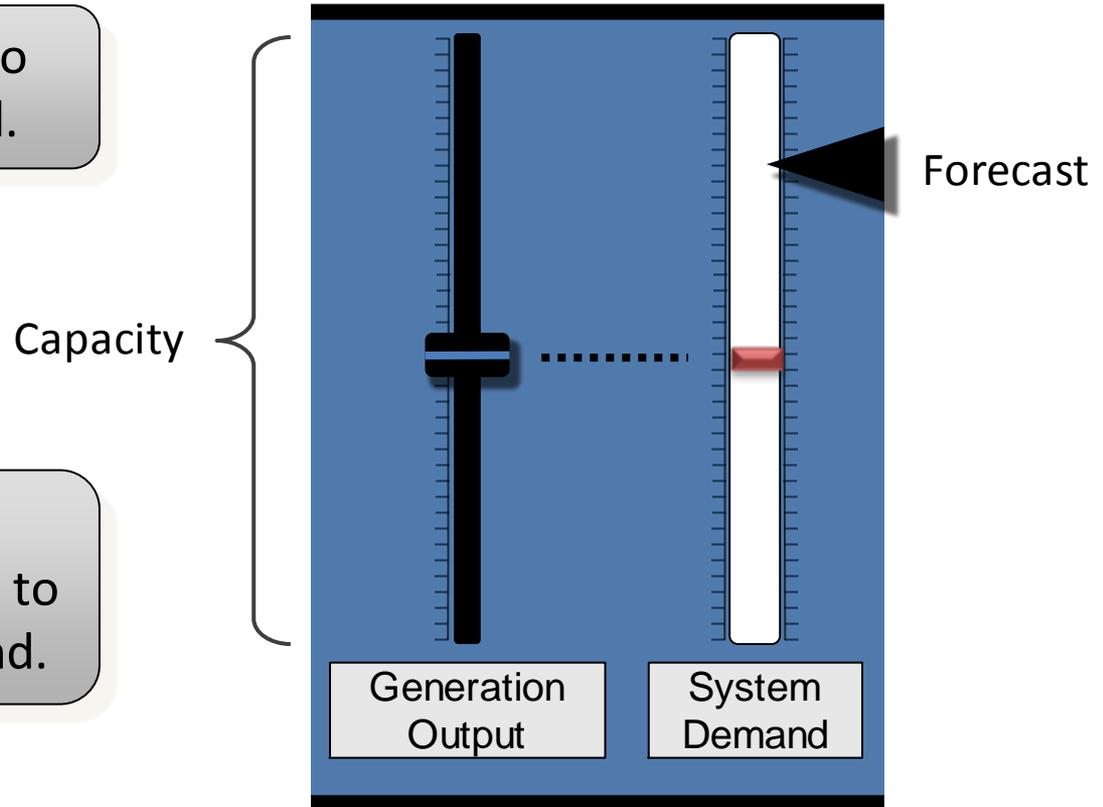


ERCOT facilitates competitive markets
to help achieve reliability.

Energy and Capacity

ERCOT dispatches Energy to follow the system demand.

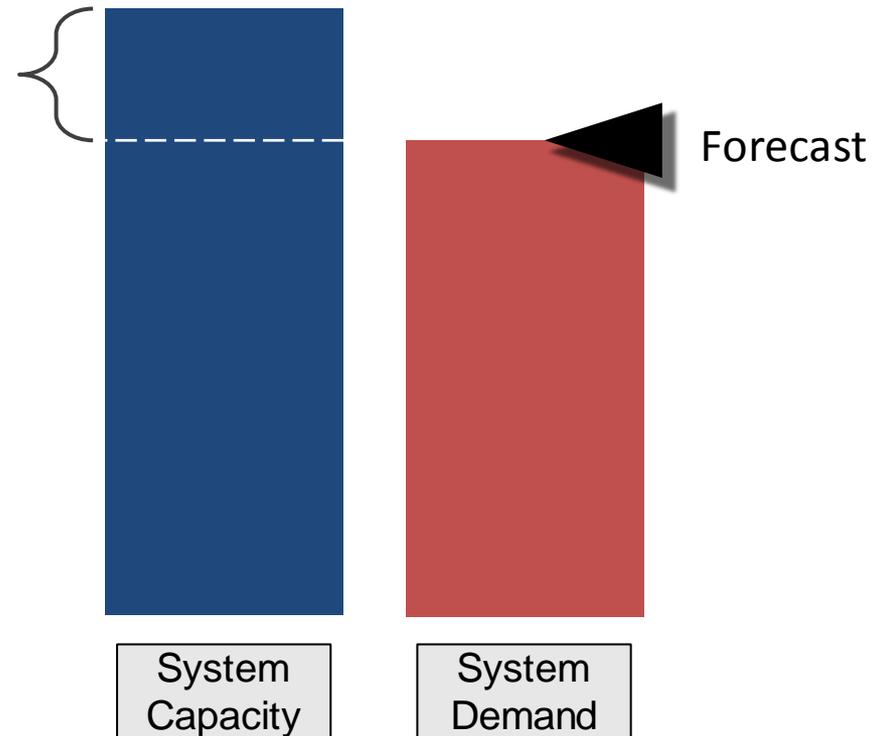
ERCOT must also ensure sufficient Capacity is on-line to meet the forecasted demand.



More about Capacity

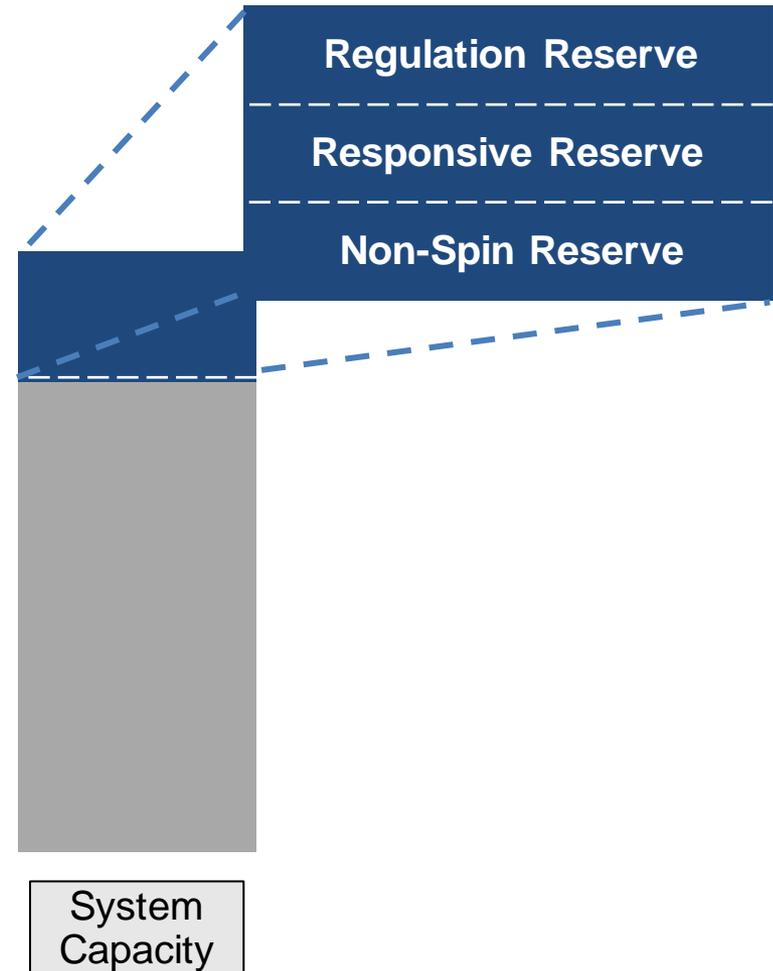
Reserved
Ancillary Service
Capacities

Ancillary Service Capacities are reserved for responding quickly to changing conditions.



Ancillary Service Capacity

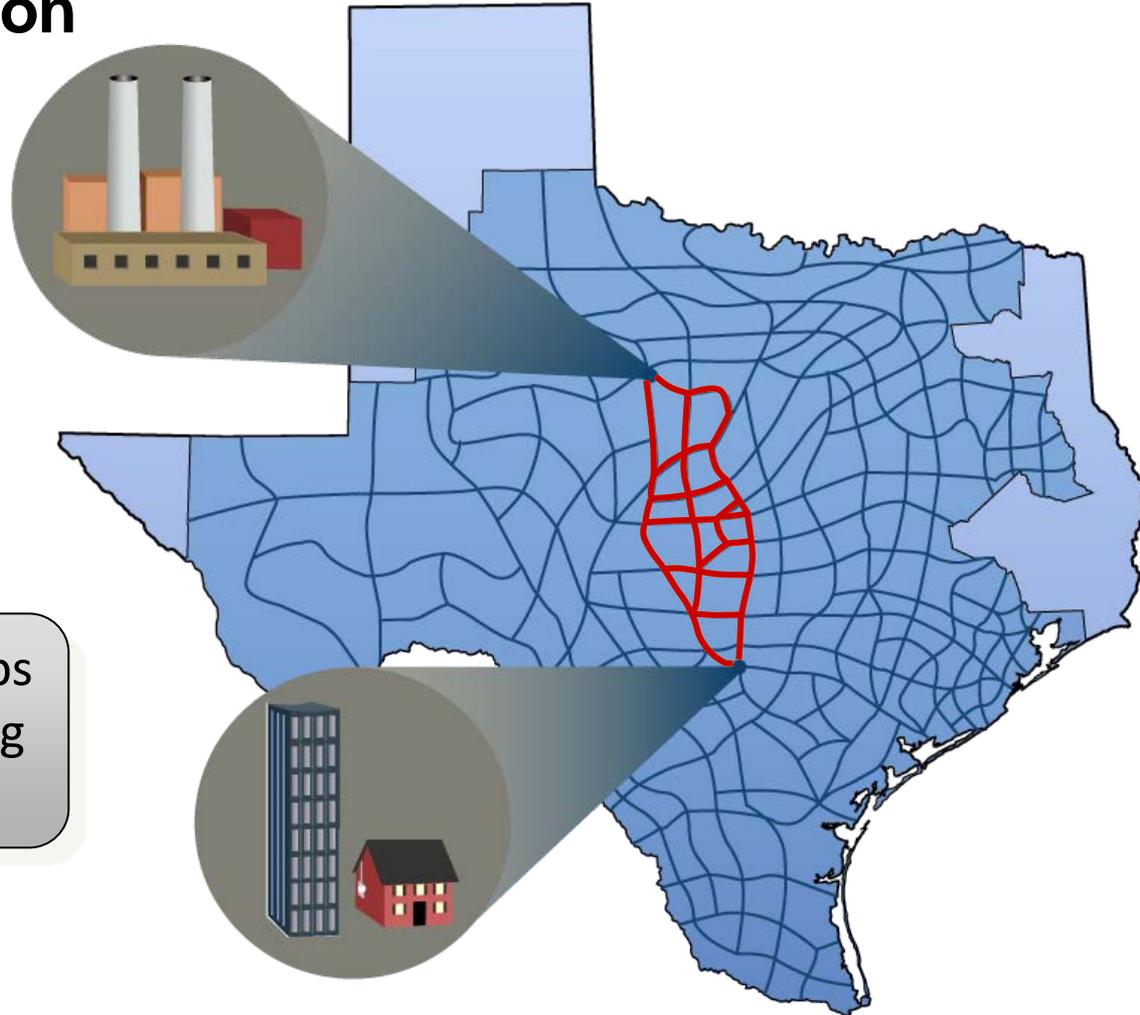
- Three types of Ancillary Service Capacities
- Different purposes and response times



Transmission Congestion

- Generators and Loads separated by distance
- Transmission system has limits

Congestion management keeps transmission system operating within limits



Accessing additional information

ERCOT Protocols

<http://www.ercot.com/mktrules/nprotocols/>

ERCOT Training

<http://www.ercot.com/services/training/>

ERCOT Client Services

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