



## **Item 5.2: 2018 Summer Operations**

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Board of Directors Meeting

ERCOT Public

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# Summer 2018 Resource Adequacy Outlook

Total Resources (as of April 30)	78,184			
Forecasted Peak Load	72,756 <sup>1</sup>			
<b>Scenarios:</b>	Forecasted Season Peak Load	Forecasted Season Peak Load / Extreme Generation Outages <sup>2</sup>	Forecasted Season Peak Load / Low Wind Output <sup>3</sup>	Extreme Peak Load <sup>4</sup> / Typical Generation Outages
Uses of Reserve Capacity	4,349	6,915	7,746	7,551
Capacity Available for Operating Reserves	1,079	(1,487)	(2,318)	(2,123)

<sup>1</sup> Based on normal weather from 2002-2016

<sup>2</sup> Based on typical generation outages (average historical planned and forced outages during peak hours for June-September weekdays, starting in 2015), plus additional forced outages at 90<sup>th</sup> percentile

<sup>3</sup> Based on 10<sup>th</sup> percentile of wind output during 100 highest Net Load hours for the 2013-2017 Summer seasons

<sup>4</sup> Based on 2011 weather

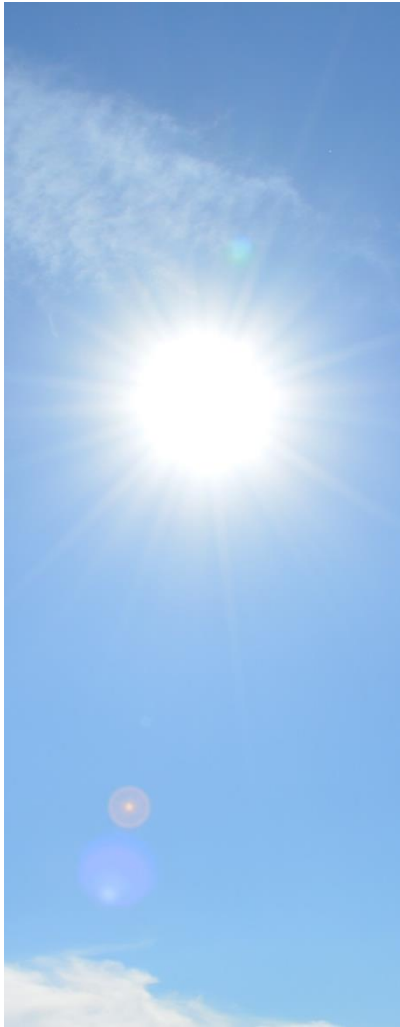


# Summer 2018 Transmission Outlook

- No expected wide-area reliability concerns this year, barring significant outages
- May experience congestion in some areas
  - Far West Texas due to rapid localized load growth and solar generation development
  - Panhandle export
  - Localized areas in the Hill Country, the Valley, and southeast Houston



# Summer 2018 Preparations



- ERCOT and the market participants are focused on performance.
- The PUC Chair and ERCOT met with market segments to encourage enhanced preparations for summer operations.
- Example initiatives:
  - Restrictions to reduce potential generation curtailment due to planned transmission outages
  - Coordination with gas pipelines to reduce potential for generation unavailability due to pipeline outages or electric curtailments

# Operational Changes for Summer 2018

- NPRR 815 implemented, increasing limit on Load Resources providing Responsive Reserve Service (RRS) to 60%; revised RRS quantities beginning June 1 for remainder of year.
- Integration of second hourly wind forecast completed.

# Operating Notices

Notice	Trigger
Operating Condition Notice (OCN)	Issued in anticipation of a possible emergency condition, such as when more resources may be needed
Conservation appeal	May be issued in anticipation of expected emergency conditions
Advisory	Available Operating Reserves, measured by Physical Responsive Capability (PRC), are less than 3,000 MW and not expected to recover within 30 minutes

# Energy Emergency Alert (EEA) levels

## EEA 1

PRC < 2,300 MW;  
> 30 mins

- Order all resources online
- Request DC-Tie emergency imports
- Deploy Emergency Response Service (ERS) 30-minute demand response
- Release generation Responsive Reserves

## EEA 2

PRC < 1,750 MW;  
> 30 mins

- Deploy ERS 10-minute demand response
- Deploy Load Resources
- Request TDSP Load Management
- Request TDSP Voltage Reduction
- Issue conservation appeal, if not already

## EEA 3

PRC < 1,375 MW

- Implement any measures not already being used

## EEA 3

PRC < 1,000 MW;  
> 30 mins

- Implement load shed to match generation to load and bring PRC above 1,000 MW

Questions?