



Item 5.1: 2016 Summer Operations

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Board of Directors Meeting

ERCOT Public

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Summer 2016 Resource Adequacy

Summer 2016	Forecasted Season Peak Load	Extreme Load ² /Typical Generation Outages ³	Extreme Load/Low Wind Output ⁴	Extreme Load/Extreme Generation Outages ⁵
Total Resources (as of June 1)	78,434			
Peak Demand	70,588 ¹			
Uses of Reserve Capacity	3,171	5,925	8,003	7,727
Capacity Available for Operating Reserves	4,675	1,921	(157)	119

¹ Based on normal weather from 2002-2014

² Based on 2011 weather

³ Based on historical average of planned and forced outages during peak hours for June through September weekdays (starting in August 2010).

⁴ Based on 10th percentile of wind output during 100 highest Net Load hours for the 2013-2015 Summer seasons

⁵ Based on historical additional forced outages at 90th percentile



Grid Conditions

Normal Conditions

- Sufficient generation, all is well

Conservation Alert

- Potentially tight operating reserves – generation/demand
- Don't issue routinely just because hot or cold

Power Watch Conservation Needed

- Energy Emergency Alert (EEA) 1
- Operating reserves <2,300 MW
- First stage demand response programs

Power Warning Conservation Critical Risk of Rotating Outages

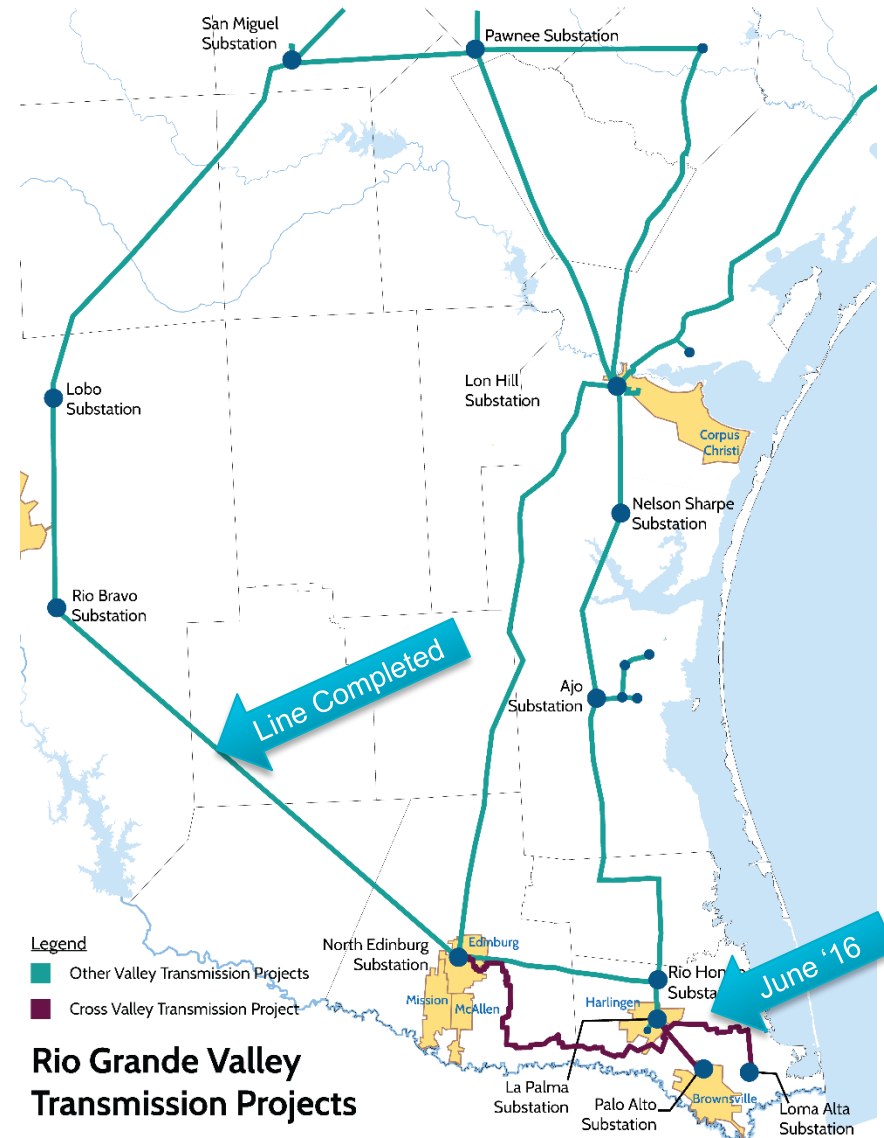
- EEA 2; Operating reserves <1,750 MW
- Load resources, Emergency Response Service

Power Emergency Rotating Outages in Progress Conservation Critical

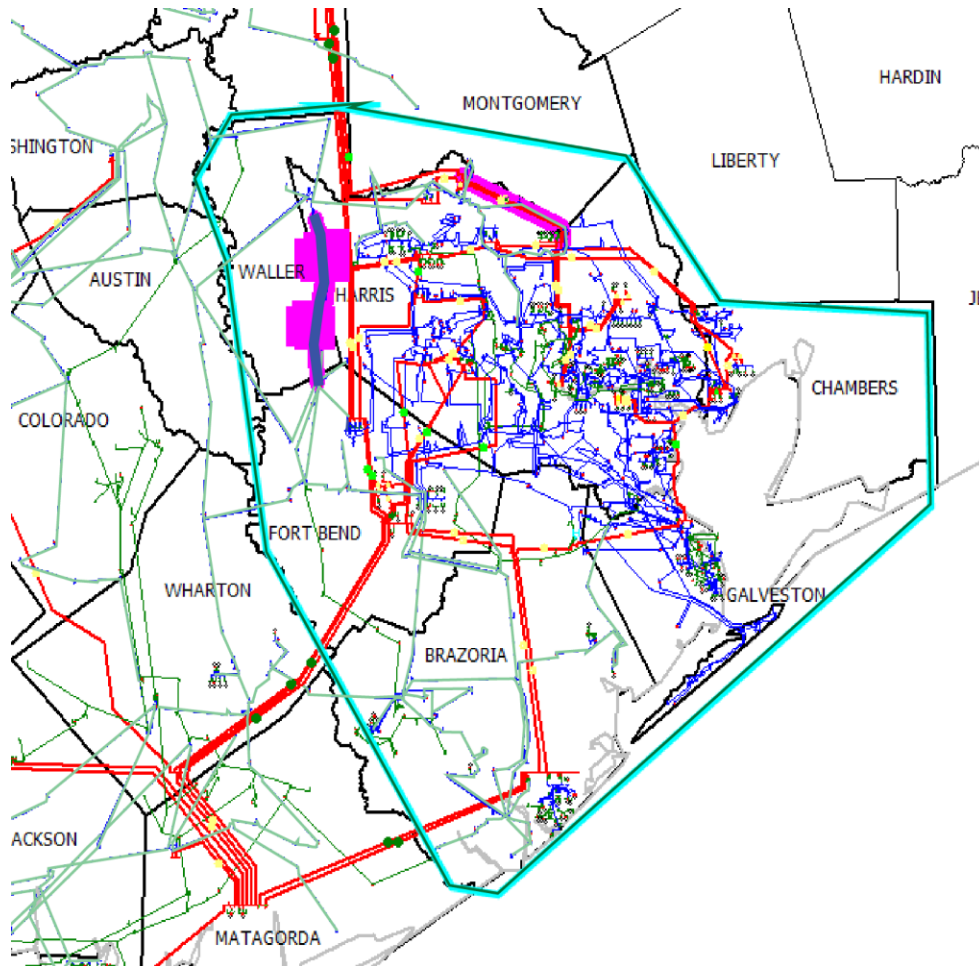
- EEA 3
- Direct transmission providers to begin rotating outages to reduce demand on system.

Rio Grande Valley

- New 345 kV line into Valley was energized on May 23.
 - Series capacitors tested but remain out of service
- Cross Valley project is expected to be completed by mid-June.
- Frontera will leave 1 CT and ST in ERCOT through summer.
- Exports to Mexico over DC Tie may need to be limited under certain conditions.



Houston/RMR



- Houston area has significant generation and load but limited import capacity
- RMR analysis for the Greens Bayou unit showed that the Houston area will be tight, even with the Greens Bayou RMR unit, if more than one generating unit is out under high demand

Other Operational Changes for Summer 2016

- Remove non-frequency responsive capacity from calculation of Physical Responsive Capacity (PRC) that is used to determine need for EEA (NPRR 706)
- Clarification of EEA levels and actions (NPRR 708)
- Changes to Reserve Discount Factor (RDF) and 2016 Ancillary Services
- Upgraded EMS

ERCOT Communication Channels

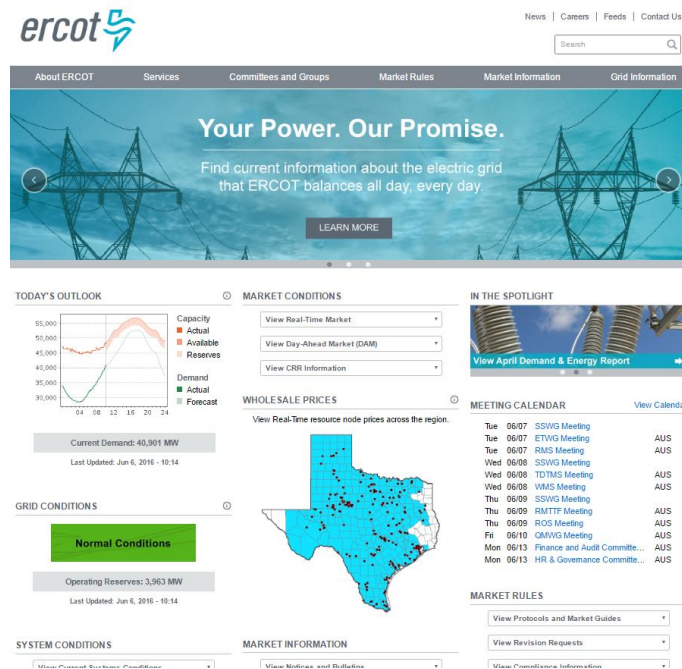
ERCOT website – www.ercot.com

- Today's Outlook and grid conditions
- Daily and seasonal weather
- Market information, prices and more



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Questions?