

Item 5.2: 2015 Summer Operations and Communications

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Board of Directors Meeting ERCOT Public June 9, 2015

Summer 2015 power outlook

Summer 2015	Forecasted Season Peak Load	Extreme Load/Typical Generation Outages**	Extreme Load/Extreme Generation Outages***	
Total Resources (as of June 1)	77,684 MW			
Peak Demand	67,986 MW*			
Uses of Reserve Capacity	2,726	6,095	8,345	
Capacity Available for Operating Reserves	6,972	3,603	1,353	

^{*} Based on weather similar to 2013 and 2014, wetter and milder than 12-year average



^{**} Based on historical average June through September weekdays, starting August 2010; includes planned and forced outages.

^{***} Based on historical additional forced outages at 90th percentile

Grid conditions – Protecting the grid, informing the public

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

Power Warning

Conservation Critical Risk of Rotating Outages

Power Emergency

Rotating Outages in Progress
Conservation Critical

- Energy Emergency Alert (EEA) 1
- Operating reserves <2,300 MW
- First stage demand response programs
- EEA 2; Operating reserves <1,750 MW
- Load resources, Emergency Response Service
- EEA 3
- Direct transmission providers to begin rotating outages to reduce demand on system.



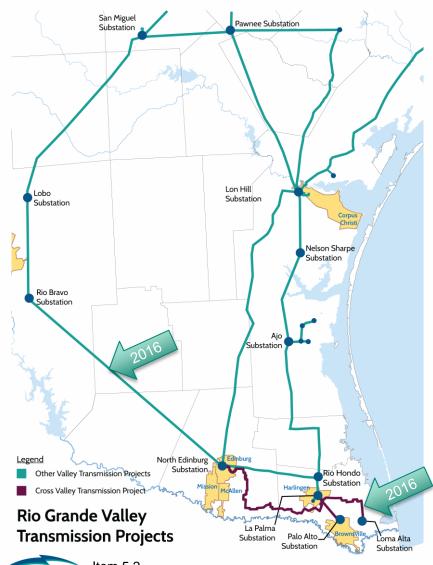
When Generation is Not Sufficient to Serve Demand

- Goal is to provide maximum possible continuity of service while protecting the integrity of the ERCOT system.
- Controlled, rotating outages reduce risk of cascading outages and blackouts.
- Curtailing firm load:
 - Responsibility is based on the Transmission Operator's (Oncor, Centerpoint, etc.) load ratio share.
 - Megawatts ordered shed by each of the Transmission Operators per every 100 MW instructed by ERCOT.
 - Location of specific load shed and rotation sequence is determined by each Transmission Operator.
- Has occurred throughout system three times in ERCOT history: December 1989, April 2006, February 2011.
 - Also had rotating outages in the Lower Rio Grande Valley in October 2014.

Transmission Operator	2014 Total Transmission Operator Load (%MW)	
American Electric Power Service Corp.	8.80	
Brazos Electric Power Cooperative Inc.	4.80	
Brownsville Public Utilities Board	0.41	
Bryan Texas Utilities	0.51	
CenterPoint Energy Houston Electric LLC	24.97	
City of Austin DBA Austin Energy	3.85	
City of College Station	0.29	
City of Garland	0.85	
CPS Energy (San Antonio)	7.14	
Denton Municipal Electric	0.51	
GEUS (Greenville)	0.17	
LCRA Transmission Services Corporation	5.58	
Oncor Electric Delivery Company LLC	36.46	
Rayburn Country Electric Cooperative Inc. DBA Rayburn Electric	1.09	
Sharyland Utilities	0.25	
South Texas Electric Cooperative Inc.	2.03	
Texas-New Mexico Power Company	2.29	
ERCOT Total	100.00	



Rio Grande Valley Transmission Upgrades



ERCOT Board endorsed Valley-area improvements in 2011.

The Lower Rio Grande Valley project will upgrade and increase capacity of facilities that import power into the Valley from the Corpus Christi area and will provide a new circuit into the Valley from the Laredo area.

The Cross Valley project will provide a new circuit connecting facilities in Hidalgo County to the facilities at the Brownsville Ship Channel.

The ERCOT Regional Planning Group is evaluating a need for additional improvements to keep up with growth in the region.

2015 Valley Peak Conditions

Case	Valley Load 90 th % Peak (MW)	Frontera Plant Status	No Outage	CC Plant Out	345 kV Circuit Out
2015 Summer Peak	2,514	1 CT in Mexico			

- Can securely serve 90th percentile load forecast if all facilities are in service.
- If 345kV circuit or combined cycle plant is out, at peak demand conditions, may have to shed load
 - If these outages were to occur at lower Valley demand, they would not require load shed.
- This assessment assumes no exports to Mexico over DC Tie.
 - Might have to declare Transmission Emergency in order to cut export if outage occurs during high demand



Other Topics for Summer 2015

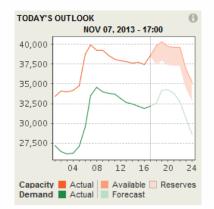
- Revised Responsive Reserve Service quantities were implemented on June 1 (pursuant to 2015 Ancillary Services Methodology approved by the Board on 12/09/2014)
- System-wide Offer Cap increased to \$9000 per MWh on June 1 (pursuant to PUCT Substantive Rule 25.505 (g)(6)(B)(iii))

Seasonal Outreach Activities

- Release of final summer SARA and weather outlook for summer May 4
 - Good media call participation and coverage
 - Broad interest in weather outlook, including ERCOT video
- Pre-summer Market Participants' Communicators Meeting May 15
 - 16 participants in person; additional by phone
 - Representation from market participants from throughout region, including new participants
 - Presentations by Dan Woodfin, Dana Lazarus, Chris Coleman
- Pre-summer Media Day May 20
 - Included participants from four Austin-area and Houston-area TV outlets, as well as Bloomberg, Energy Wire and Taylor Daily Press
 - Presentations by Dan Woodfin, Warren Lasher, Chris Coleman
- Valley-area media visits May 26-28
 - Visited three newspapers, two radio stations, one TV station, most in partnership with Brownsville Public Utilities Board
 - Also recorded segment for Brownsville city-owned television



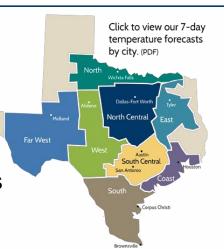
ERCOT Communication Channels



ERCOT website – added features

 Today's Outlook: Actual generation and load information

 Weather page: Daily, seasonal updates; seasonal and holiday videos



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- Twitter: @ERCOT_ISO
- Facebook: Electric Reliability Council of Texas
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ERCOT Energy Saver mobile app

- System conditions Real-Time updates
- Wholesale pricing information Hubs and Load Zones
- Information sharing options and more



