



Grid Operations and Planning Report

Kent Saathoff

Board of Directors Meeting
September 20, 2011

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Summary

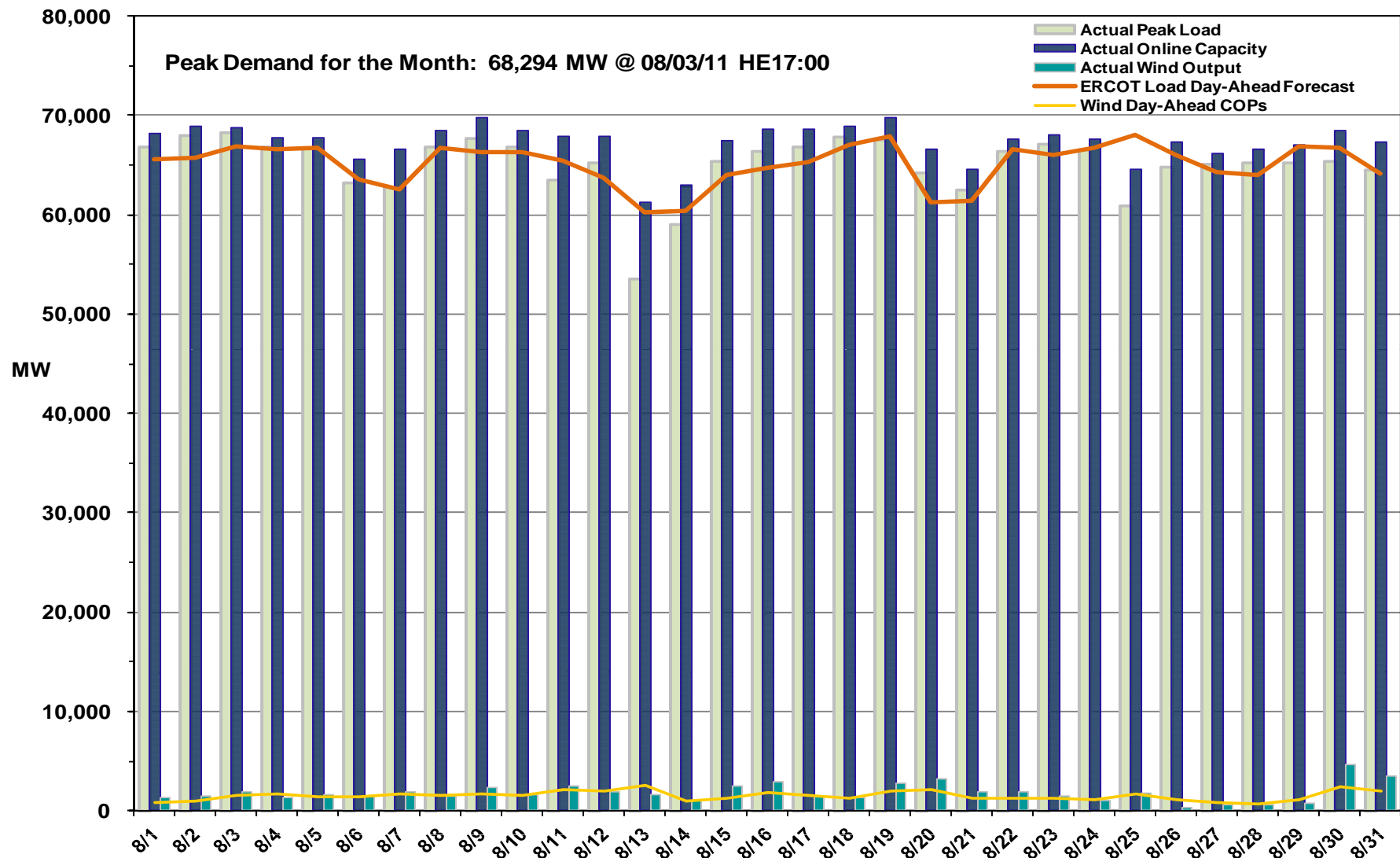
- **August 2011 Operations**

- The peak demand of 68,294 MW on August 3rd was more than the mid-term forecast peak of 66,868 MW and more than the August 2010 actual peak demand of 65,776 MW.
- Day-ahead load forecast error for August was 2.28%
- Advisory for Physical Responsive Capability (PRC) below 3000 MW occurred 25 days
- Watch for PRC under 2500 MW occurred 14 days
- Energy Emergency Alert (EEA) events occurred 6 days

- **Planning Activities**

- 190 active generation interconnect requests totaling over 60,000 MW as of August 31, 2011. Sixteen fewer requests and 3,000 MW less than July 31, 2011.
- 9,400 MW wind capacity on line August 31, 2011. No change from July 31, 2011
- Three units returned from mothball status dispatched 5 days
- RMR contract for Greens Bayou 5 pending

August 2011 Daily Peak Demand: Hourly Average Actual vs. Forecast, Wind Day-Ahead COPs & On-line Capacity at Peak

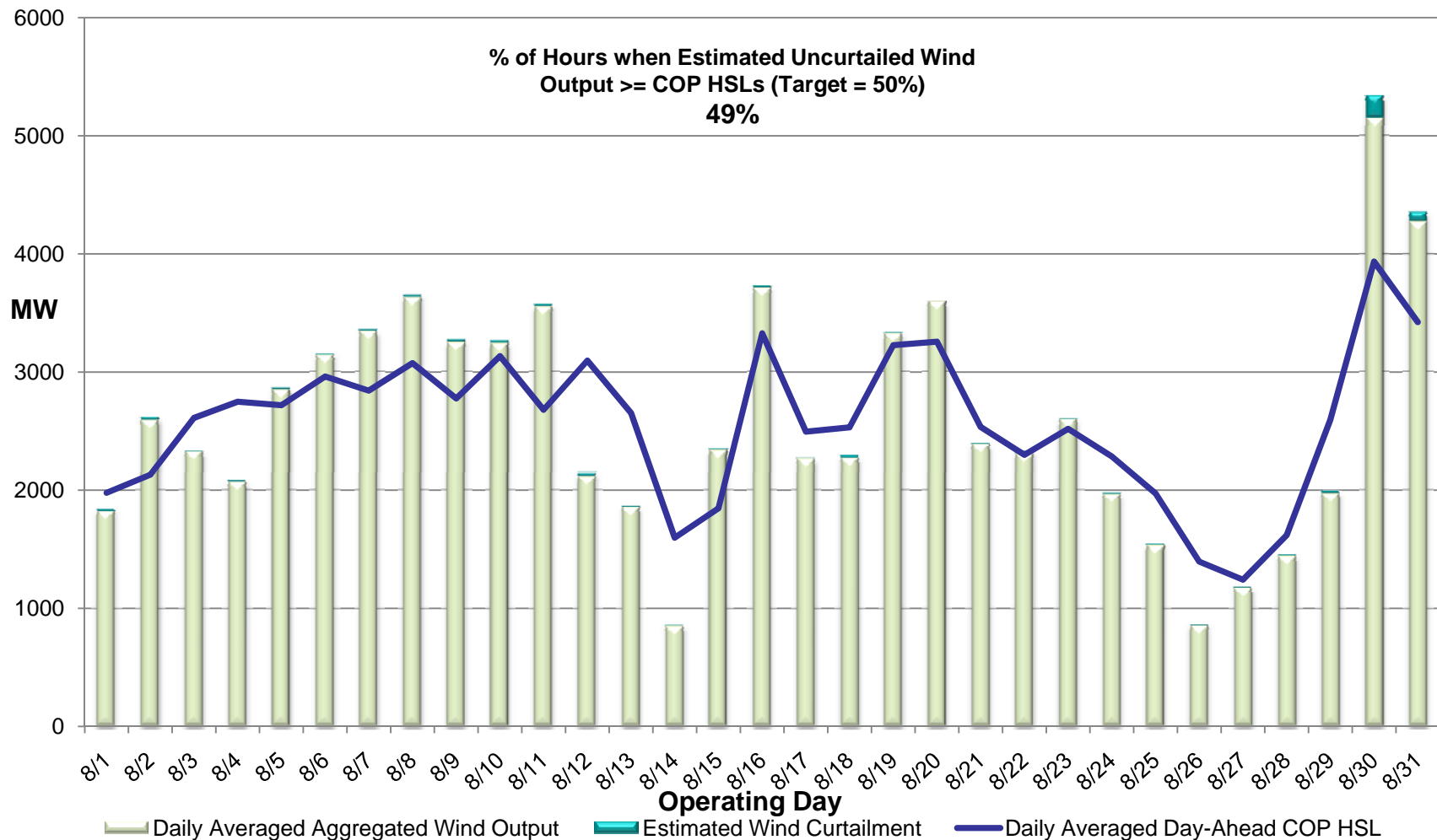


Note: All data are hourly averages during the peak load hour obtained from COPs, and EMMS.



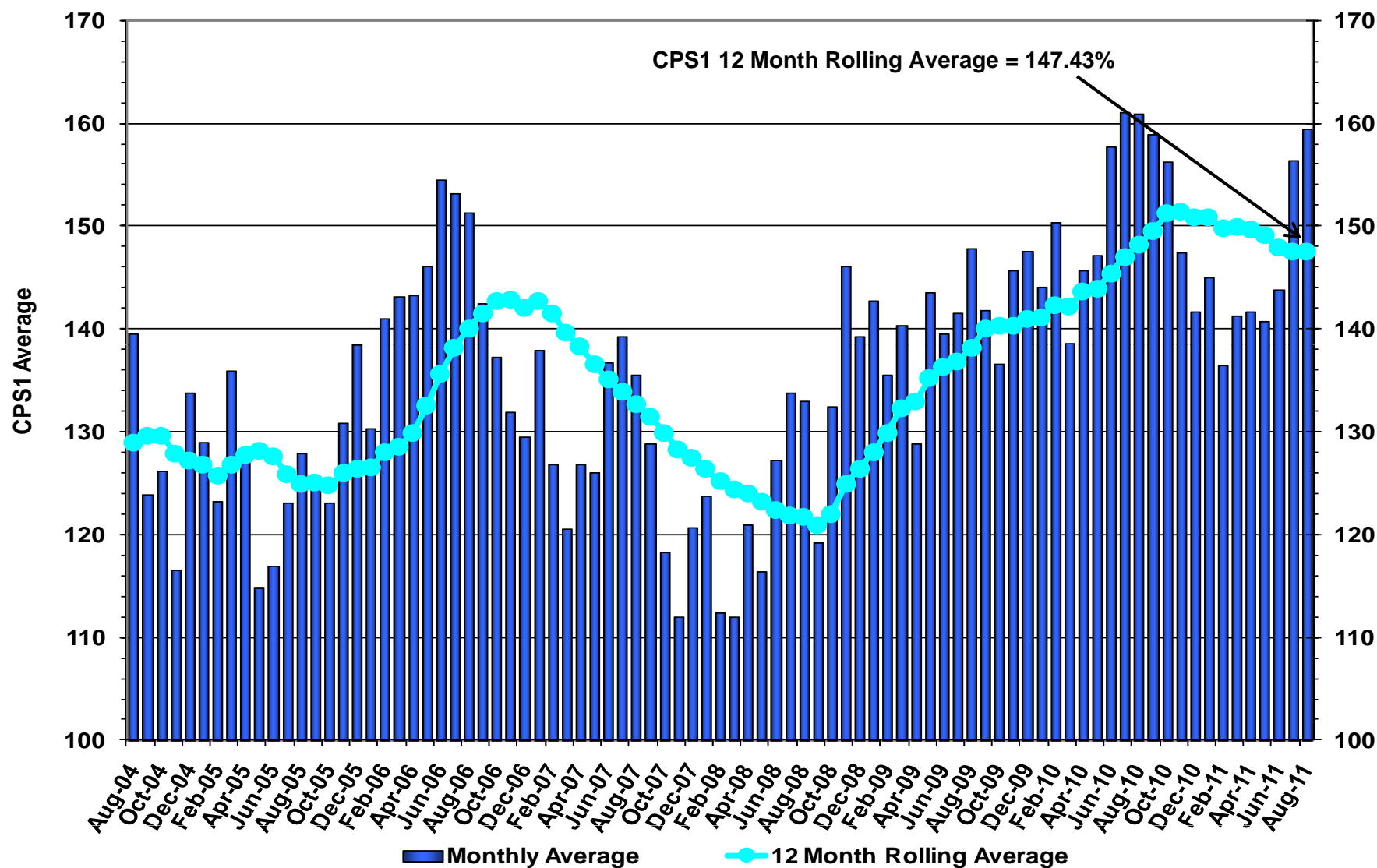
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August 2011: Actual Wind Output plus Curtailments vs. Wind Day-Ahead COPs for All Hours

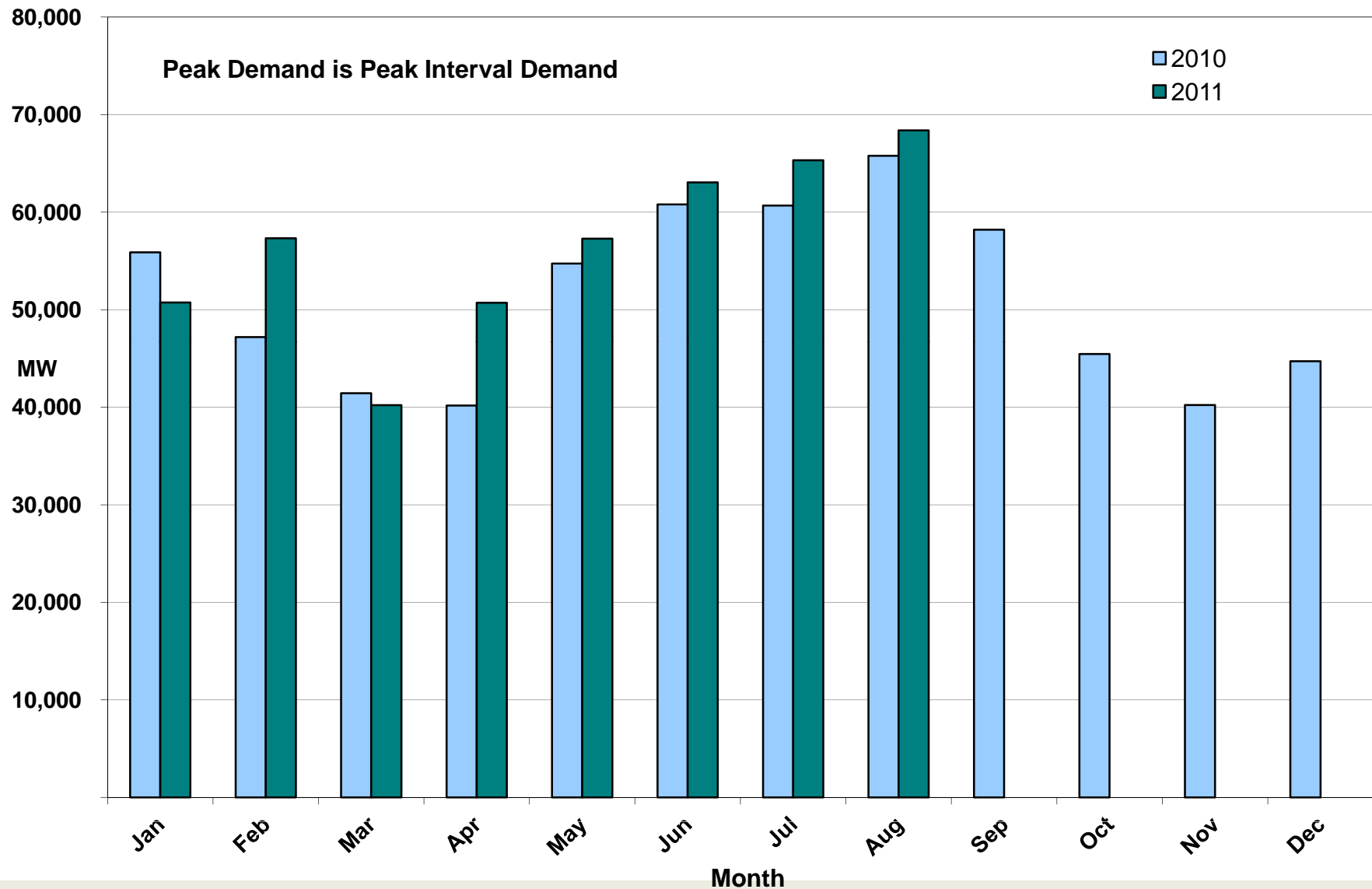


Note: QSEs must use the AWST 50% probability of exceedance forecast as the HSL in their COPs

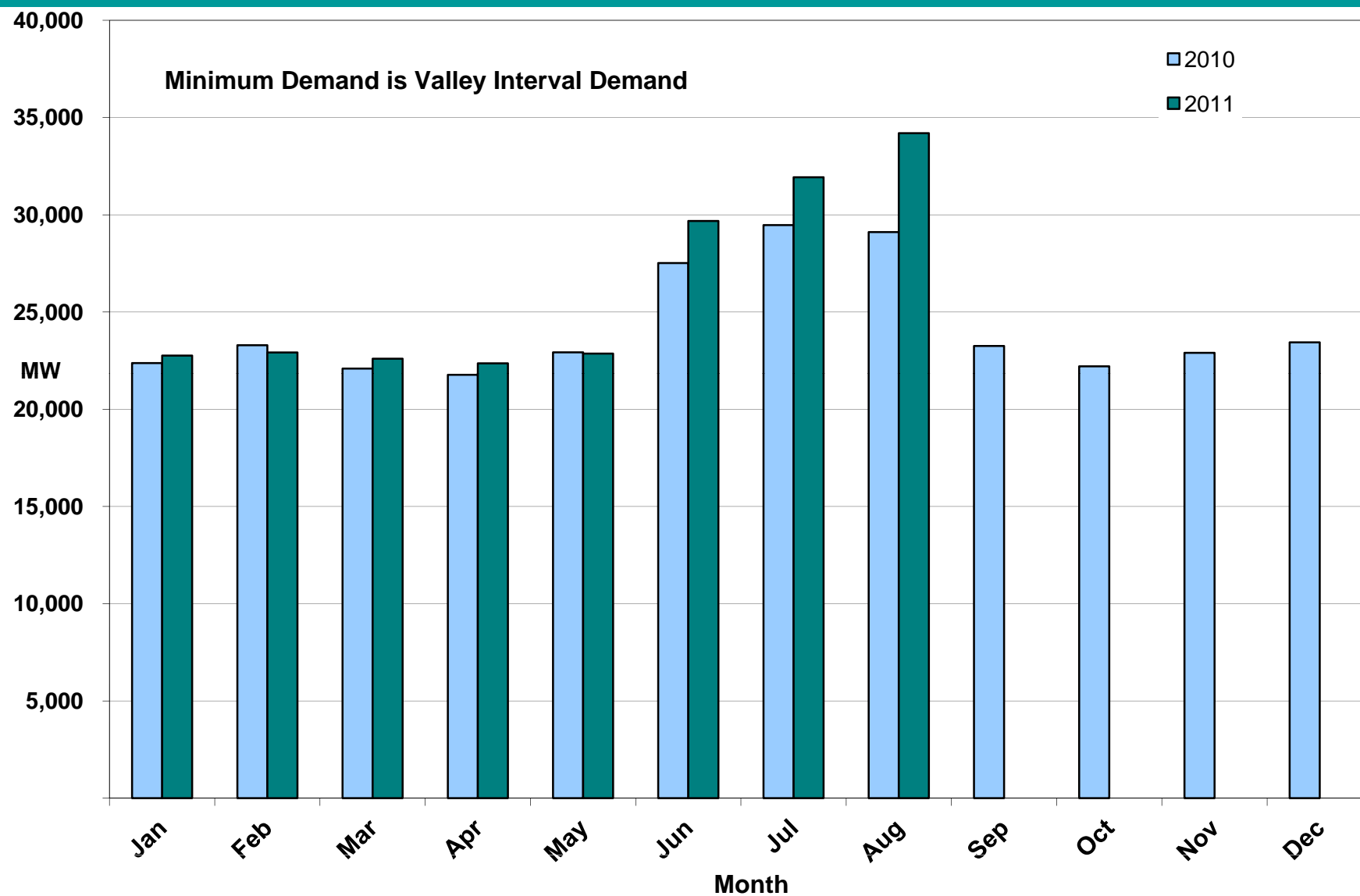
August 2011 ERCOT's CPS1 Monthly Performance



August 2011: Monthly Peak Actual Demand



August 2011: Monthly Minimum Actual Demand

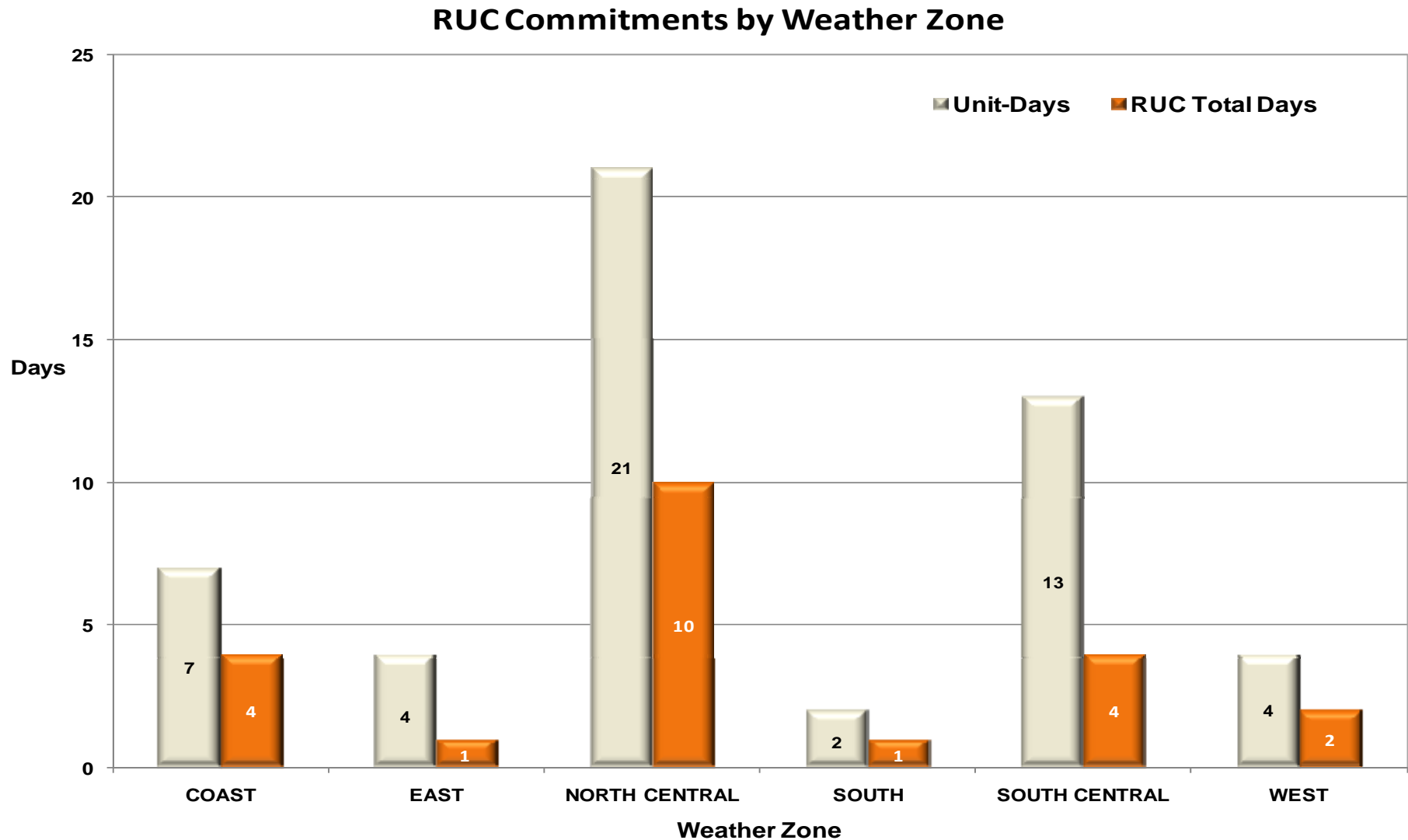


Day-Ahead Load Forecast Performance in August 2011

**Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF)
Run at 14:00 Day Ahead**

	2008 MAPE	2009 MAPE	2010 MAPE	2011 MAPE	August 2011 MAPE	
Average Annual MAPE	3.30	3.11	2.83	2.68	2.28	
Lowest Monthly MAPE	2.45	1.93	2.24	1.63	Lowest Daily MAPE	0.62 Aug- 22
Highest Monthly MAPE	4.99	4.11	3.79	3.55	Highest Daily MAPE	8.28 Aug- 25

Reliability Unit Commitment (RUC) Capacity by weather zone in August 2011



August 2011: Generic Transmission Limits (GTLs)

GTLs	Aug 10 Days CSC	Jun 11 Days GTLs	Jul 11 Days GTLs	Aug 11 Days GTLs	Last 12 Months Total Days (Aug 10 – Aug 11)
North – Houston	4	0	0	0	32
West – North	14	29	4	2 Aug–(30, 31)	259
Valley Import	0	0	0	0	15

GTL: A transmission flow limit more constraining than a Transmission Element's normal limit established to constrain flow between geographic areas of the ERCOT Transmission System that is used to enforce stability and voltage constraints that cannot be modeled directly in ERCOT's transmission security analysis applications.

Note: This table lists how many times a constraint has been activated to avoid exceeding a GTL limit, it does not imply an exceedance of the GTL occurred.

Advisories and Watches in August 2011

- **Advisories issued for Physical Responsive Capability (PRC) below 3000 MW.**
 - Issued 25 Days
- **Watches issued for Physical Responsive Capability (PRC) below 2500 MW.**
 - Issued 14 Days
- **Transmission Watches**
 - August 9th ERCOT issued a Transmission Watch due to post contingency overloads in the Wichita Falls area.
- **Energy Emergency Alerts**
 - **08/02** 14:40 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). Cancelled at 18:00.
 - **08/03** 14:50 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). Cancelled at 18:10.
 - **08/04** 13:45 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). At 14:32 ERCOT issued an EEA Level 2A (PRC dropped below 1,750 MW) and Load Resources deployed. At 15:44 ERCOT declared EEA Level 2B and EILS deployed. At 17:53 ERCOT moved back to EEA Level 2A from EEA Level 2B. At 18:09 ERCOT moved back to EEA Level 1 from EEA Level 2A. At 18:52 EEA Level 1 was cancelled.
 - **08/05** 15:10 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). Cancelled at 18:05.
 - **08/23** 15:43 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). Cancelled at 17:17.
 - **08/24** 14:18 ERCOT issued an EEA Level 1 (PRC dropped below 2,300 MW). At 15:08 ERCOT issued an EEA Level 2A (PRC dropped below 1,750 MW) and one block of Load Resources deployed. At 17:26 ERCOT moved back to EEA Level 1 from EEA Level 2A. At 18:08 EEA Level 1 was cancelled.

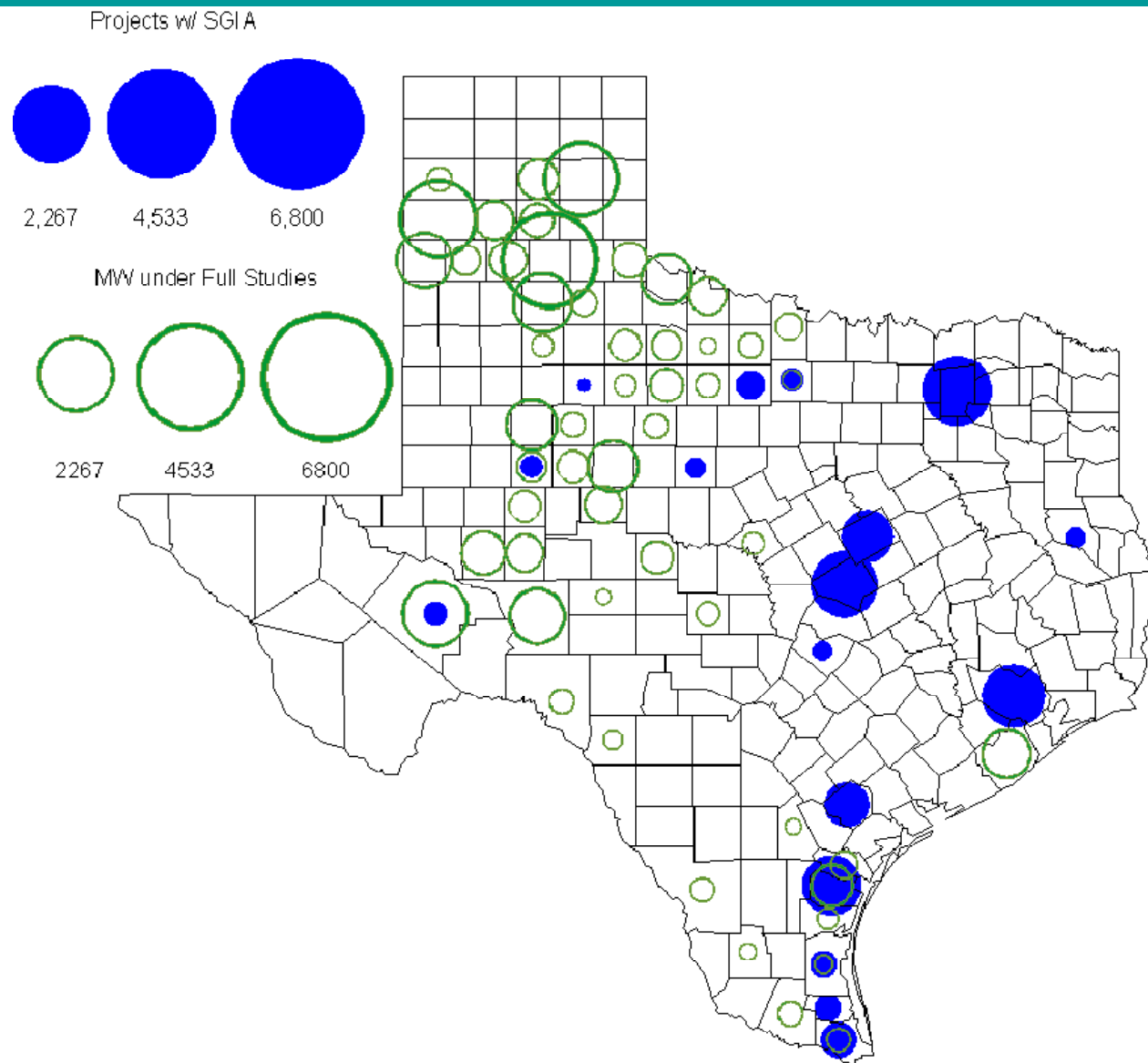
Significant System Incidents in August 2011

- **August 14th**
 - At 15:47, ERCOT experienced the simultaneous loss of three 138 KV lines out of Brownwood substation as a result of the 138 kV bus trip. There were thunderstorms in the area.
- **August 23th**
 - At 22:36, ERCOT experienced the simultaneous loss of four 138 KV lines and one 69 kV line at San Marcos substation as a result of a 138 kV bus trip. There was a loss of 26 MW of load in the area.
- **August 27th**
 - At 12:45, ERCOT experienced the simultaneous loss of one 138 KV line and 3 wind generators connected to the line. This resulted in the loss of about 132 MW of generation.

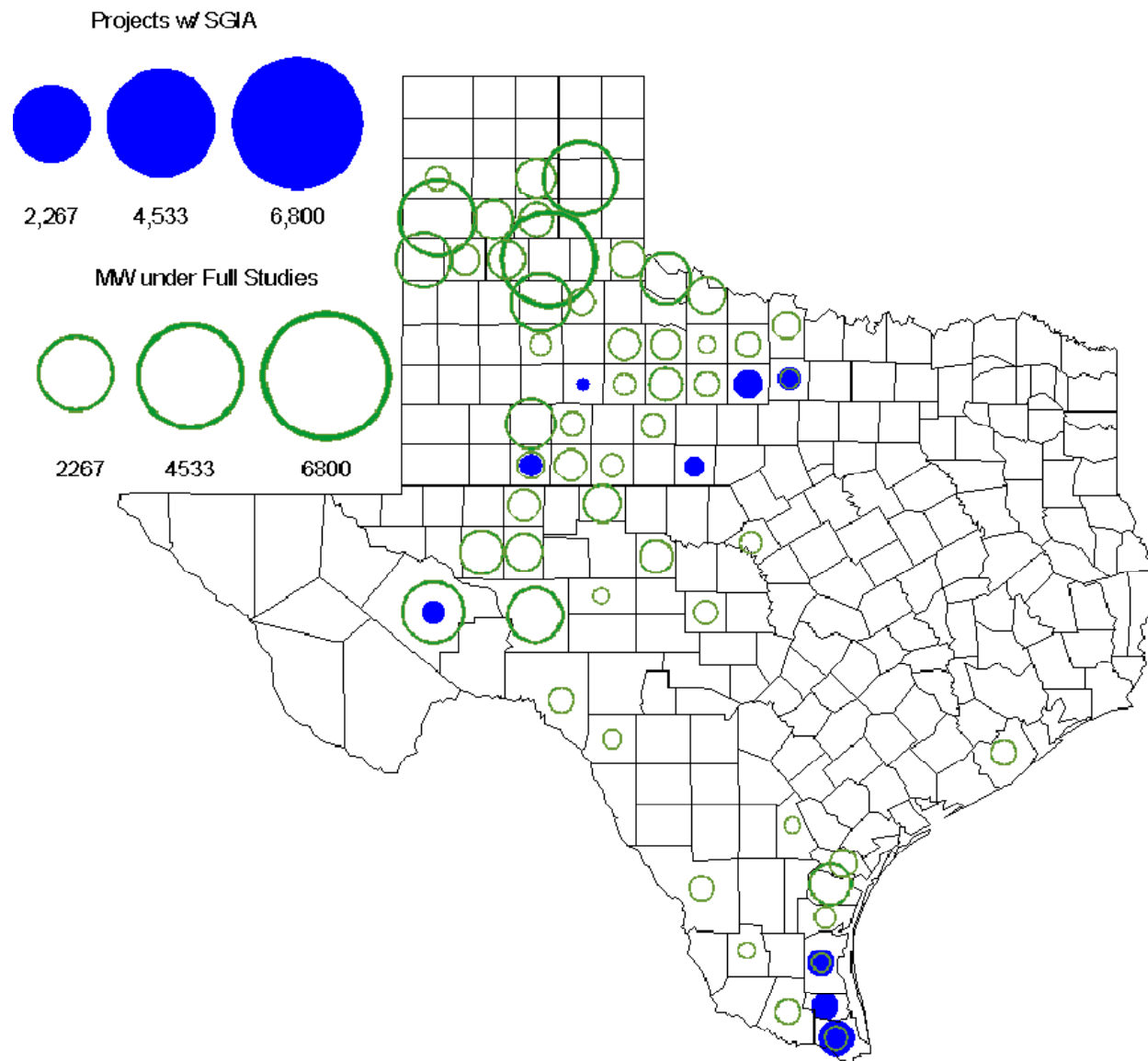
Planning Summary

- **ERCOT is currently tracking 190 active generation interconnection requests totaling over 60,000 MW. This includes over 35,000 MW of wind generation.**
- **ERCOT is currently reviewing proposed transmission improvements with a total cost of \$767.9 Million**
- **Transmission Projects endorsed in 2011 total \$43.9 Million**
- **All projects (in engineering, routing, licensing and construction) total approximately \$10.0 Billion**
- **Transmission Projects energized in 2011 total about \$401.8 million**

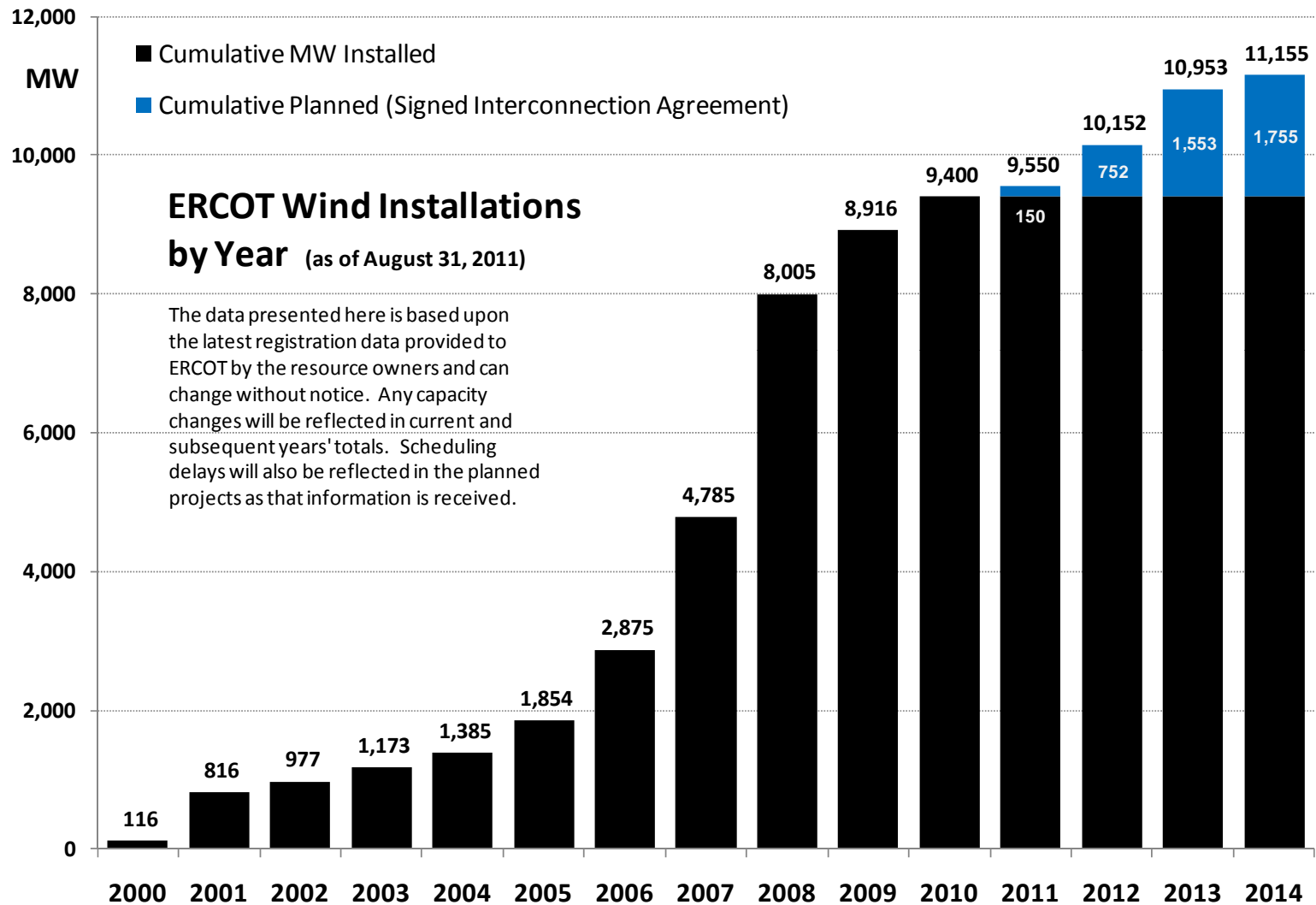
County Location of Planned Generation with Interconnection Requests (all fuels) August 2011



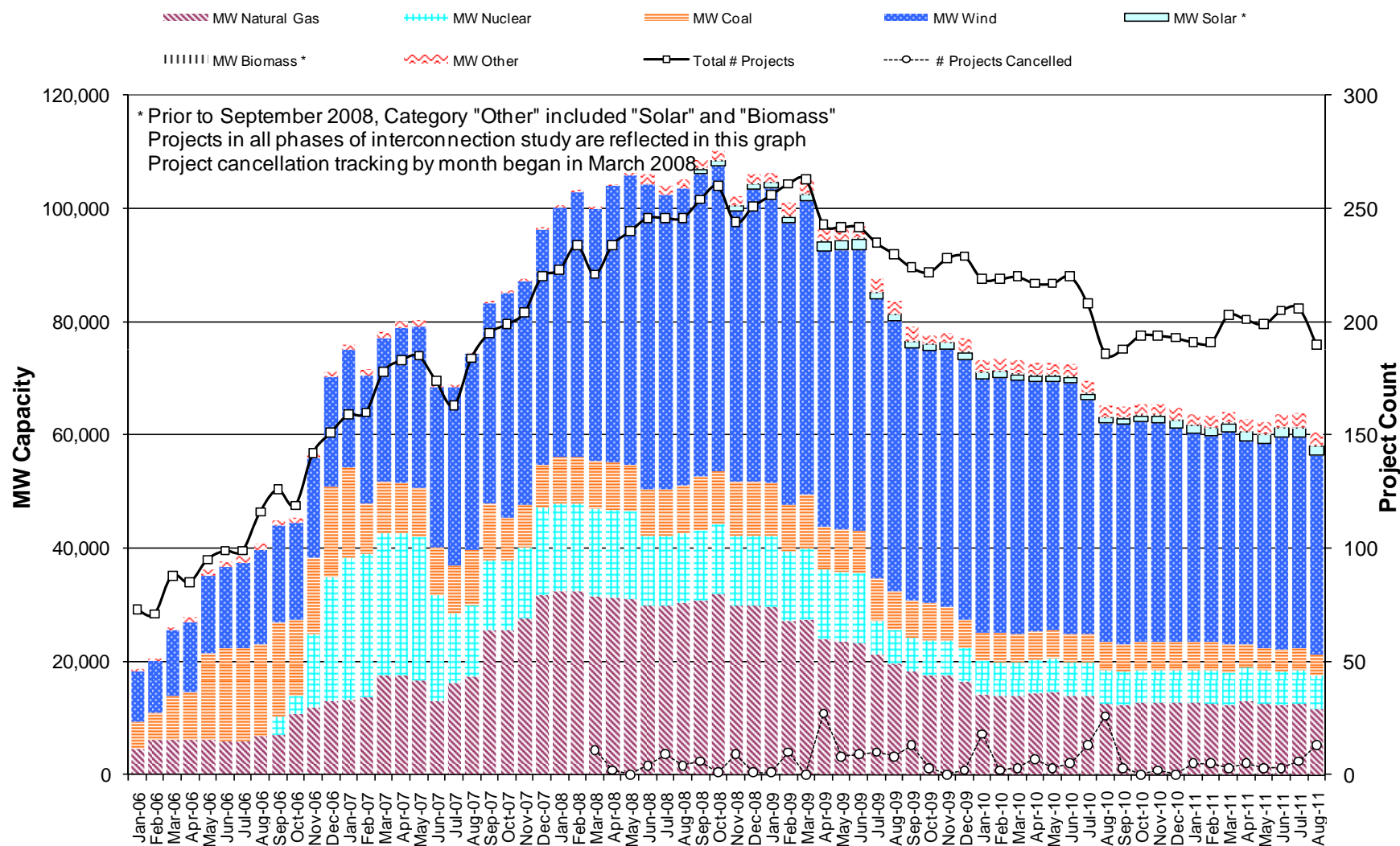
County Location of Planned Generation with Interconnection Requests (Wind) August 2011



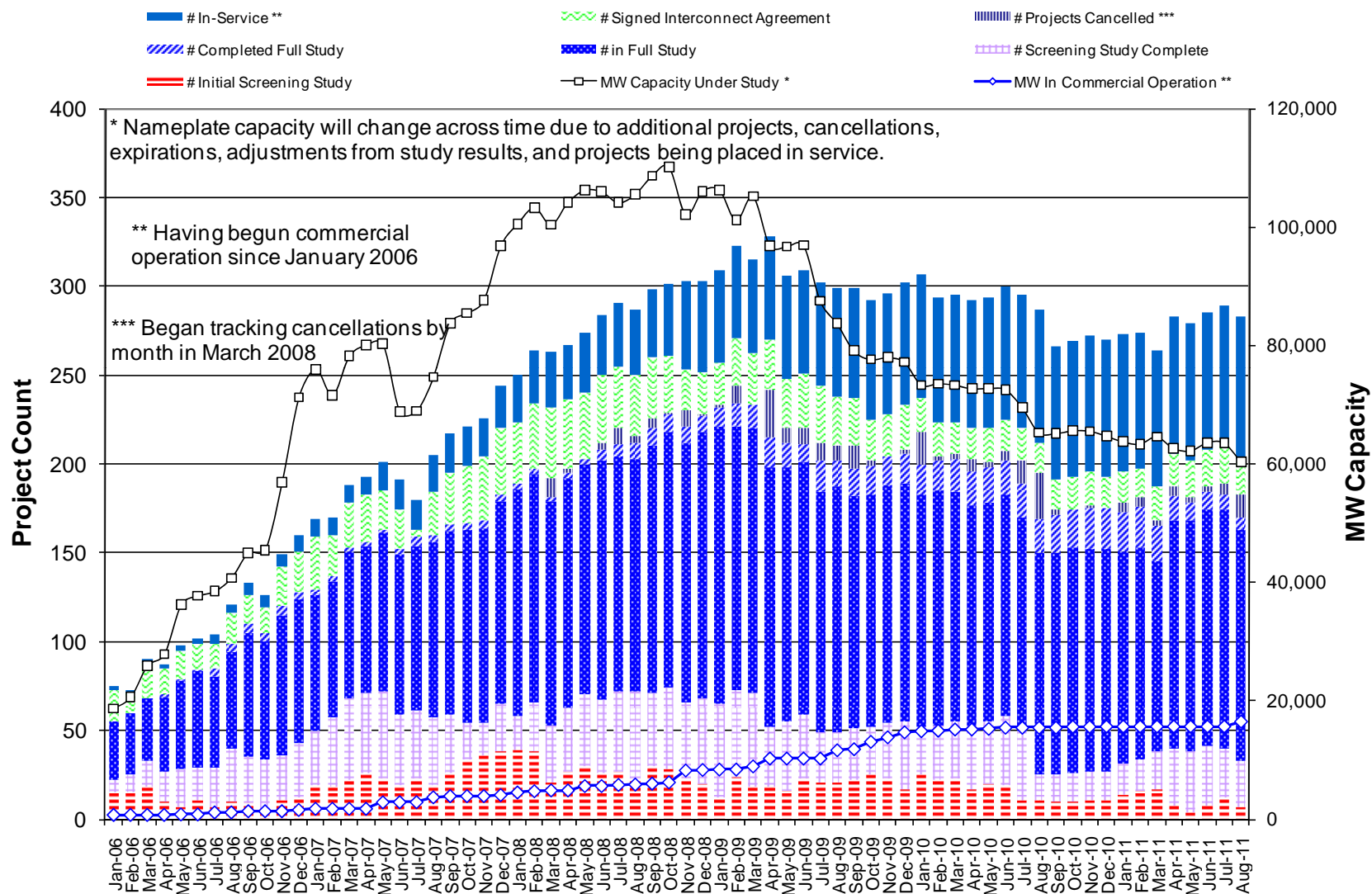
Wind Generation



Generation Interconnection Activity by Fuel



Generation Interconnection Activity by Project Phase



Resources Returned from Mothball Status

Units returned from mothball status:

- Spencer Unit 5 - August 22
- Spencer Unit 4 - August 23
- SR Bertron Unit 2 - August 27
- SR Bertron Unit 1
 - Contract mutually terminated on August 31
 - Mechanical issues identified during efforts to restore

Resources dispatched

- 8/23 - Spencer Units 4 & 5
- 8/24 - Spencer Units 4 & 5
- 8/28 - SR Bertron 2, Spencer Units 4 & 5
- 8/29 - SR Bertron 2, Spencer Units 4 & 5
- 8/31 - SR Bertron 2, Spencer Units 4 & 5

- **ERCOT evaluated the need to keep currently available Greens Bayou 5 as an RMR Resource.**
- **Greens Bayou 5 assists in resolving the Garrott to Midtown 138 kV overload which tends to occur during shoulder months**
- **Project to upgrade this transmission element is currently underway and expected to be completed during the first quarter of 2012.**