



Grid Operations and Planning Report

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**ERCOT Board of Directors
September 21, 2010**

Content

- **Summary**
- **August 2010 Operations**
 - Peak Demand: Actual vs. Forecast
 - On-line Resources: Total at Peak and Wind
 - CPS1 Monthly Performance
 - Day-Ahead Load Forecast Performance
 - Out of Merit Capacity Order (OOMC) & Replacement Reserve (RPRS) Purchases
 - Zonal Congestion
 - Significant System Incidents
 - Advisories, Watches and EEAs
 - Other Items
- **Planning Activities**
 - Summary
 - Generation Interconnection Requests
 - Wind Capacity

Summary

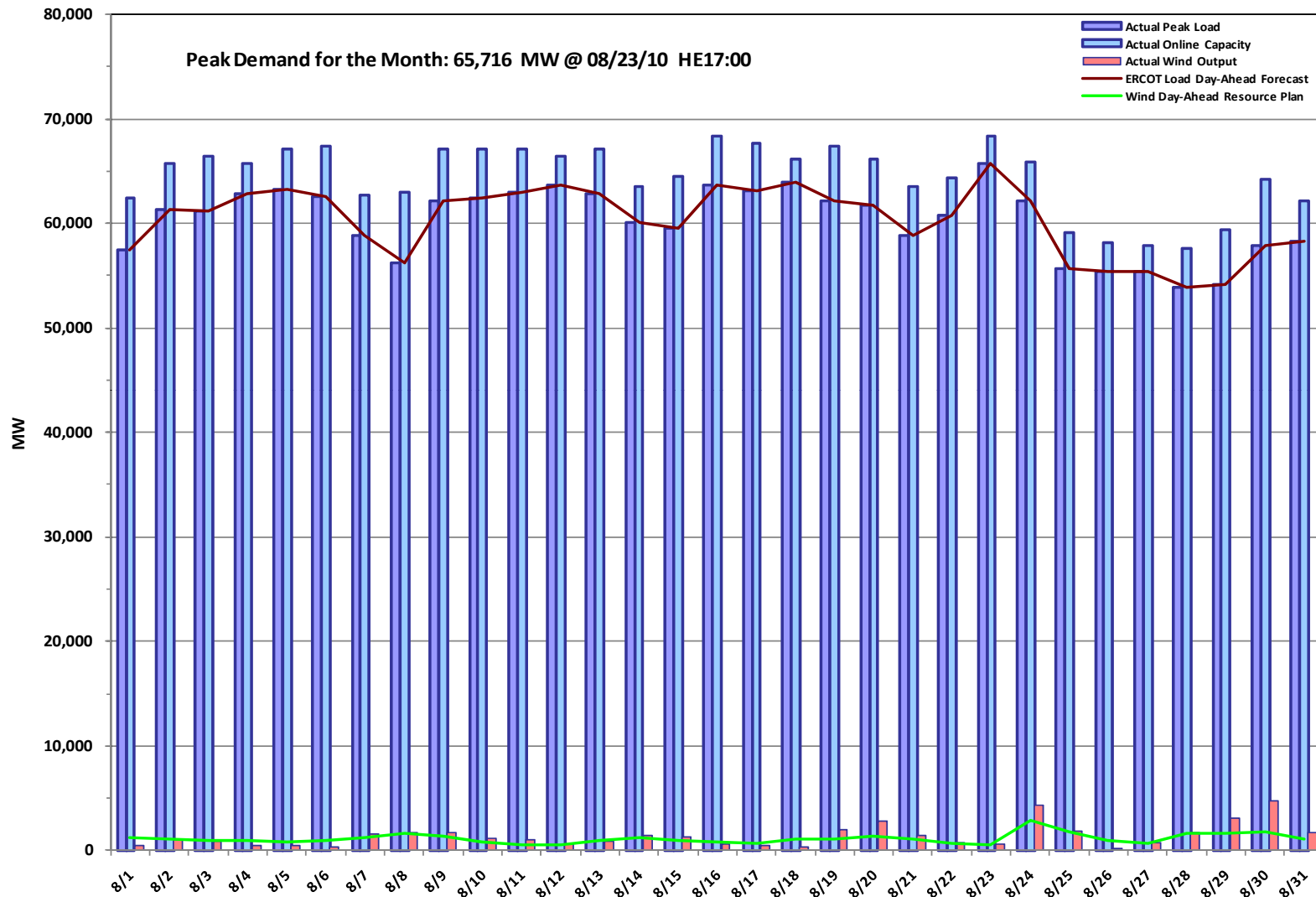
- **August 2010 Operations**

- The peak demand of 65,716 MW on August 23rd was an all-time high but slightly less than the long term forecast peak of 65,797 MW. The August 2009 actual peak interval demand was 62,241 MW.
- Day-ahead load forecast error for August was 2.29%.
- Advisory for Adjusted Responsive Reserve (ARR) below 3000 MW issued six days
- A Watch for ARR under 2500 MW issued one day
- An Energy Emergency Alert (EEA) Level 1 event of 47 minutes duration occurred on August 20.
- No Transmission Watches issued

- **186 active generation interconnect requests totaling over 65,000 MW as of August 31, 2010. Twenty-two fewer requests and 4,000 MW lower than July 31.**

- **9,317 MW wind capacity on line August 31, 2010. No change from July 31.**

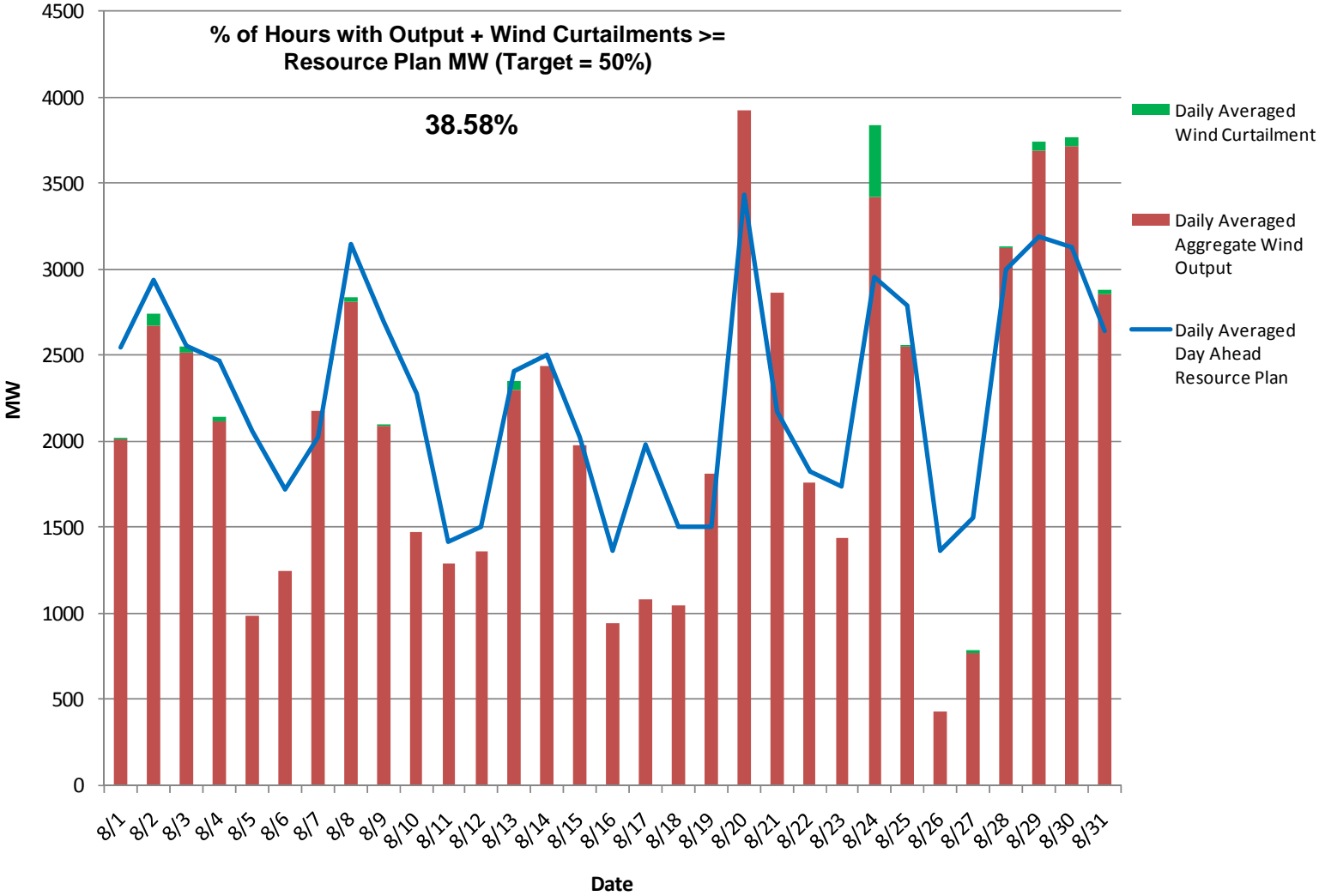
August 2010 Daily Peak Demand: Hourly Average Actual vs. Forecast, Resource Plan & On-line Capacity at Peak



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

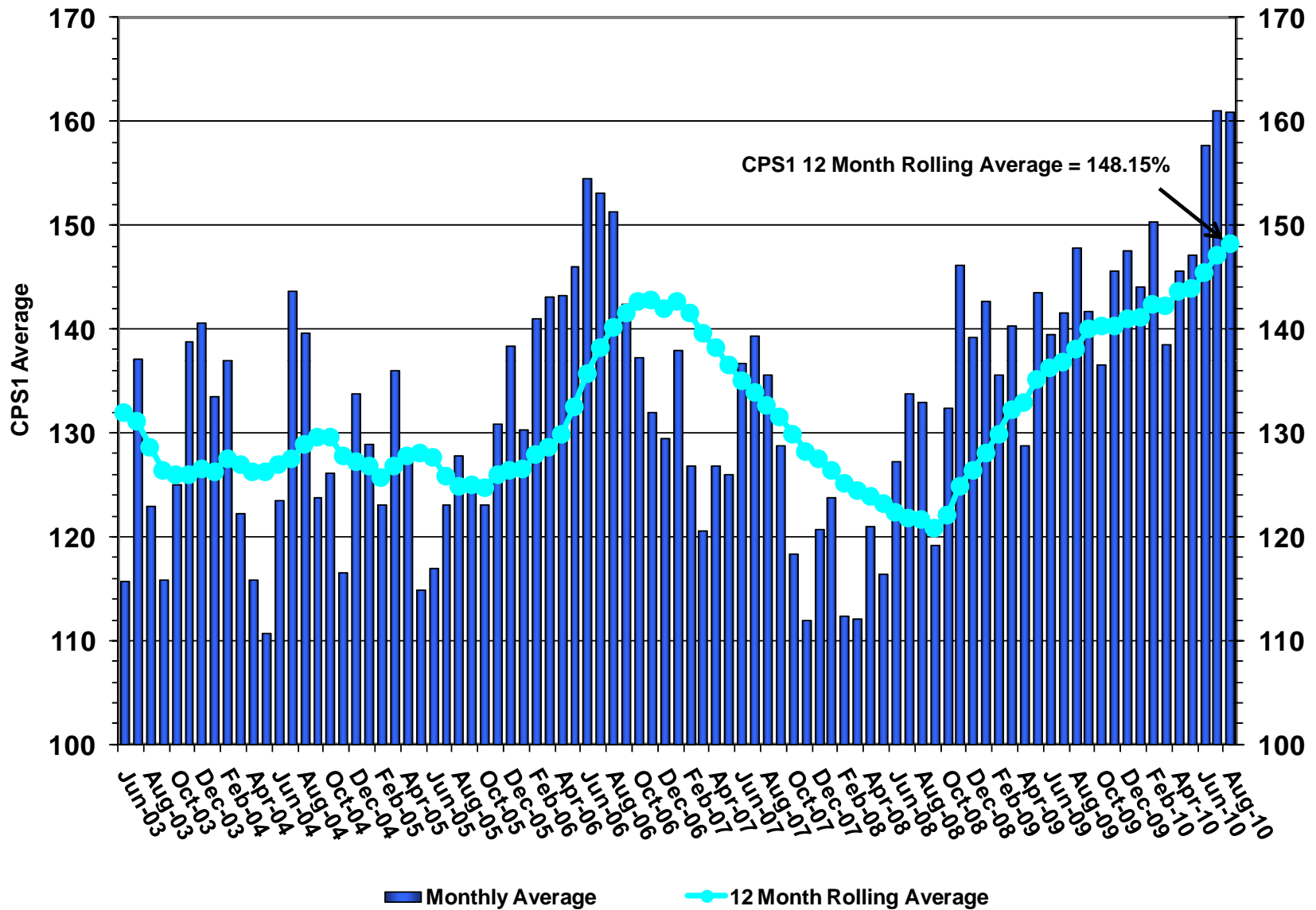


August 2010: Actual Wind Output w/ Curtailment Added Back vs. Wind Day-Ahead Resource Plan Based on AWS Forecast for All Hours

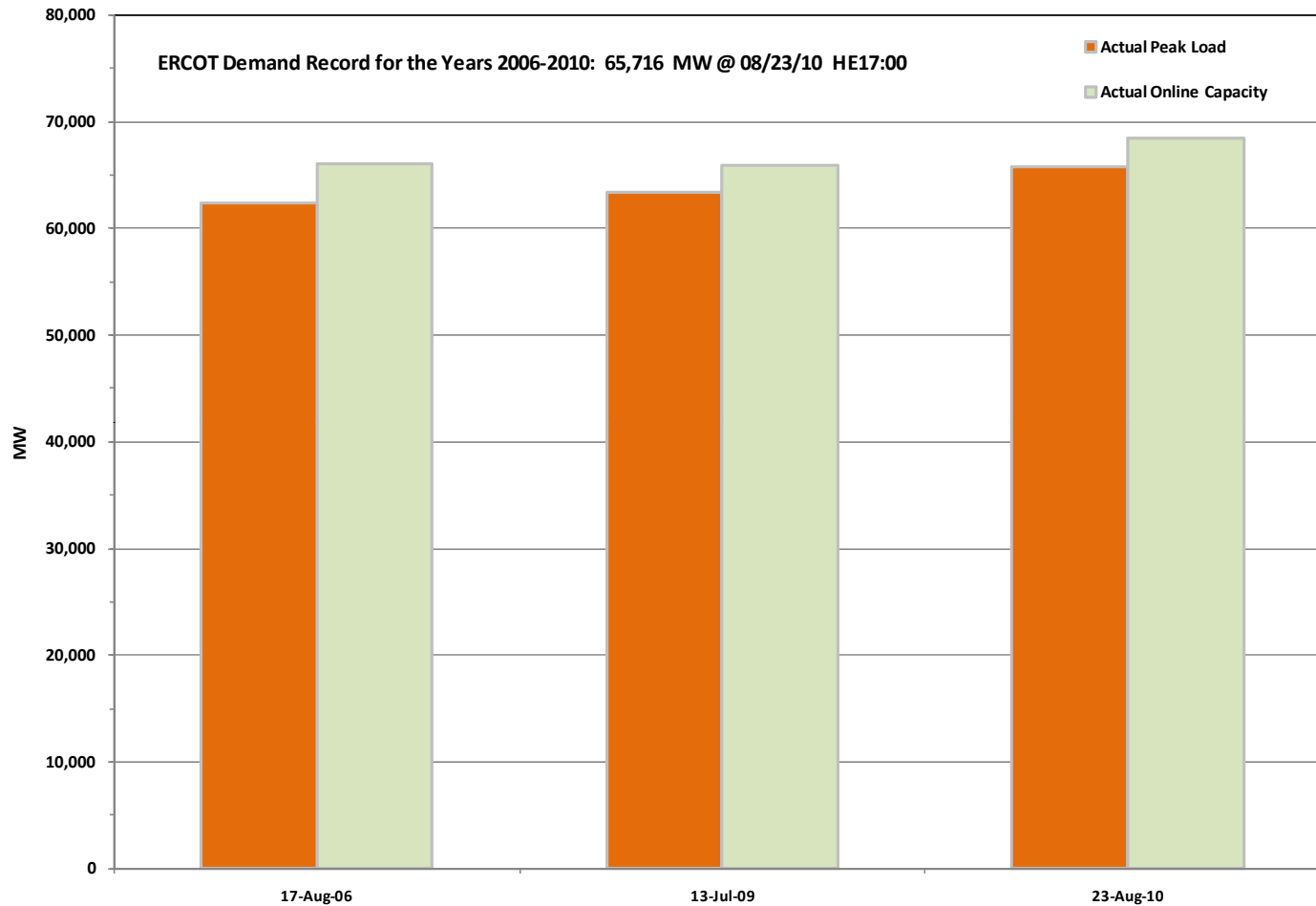


Note: QSEs must use AWST 50% probability of exceedence forecast for Day-Ahead Resource Plans

August 2010 ERCOT's CPS1 Monthly Performance



Peak Demand Record Report 2006-2010

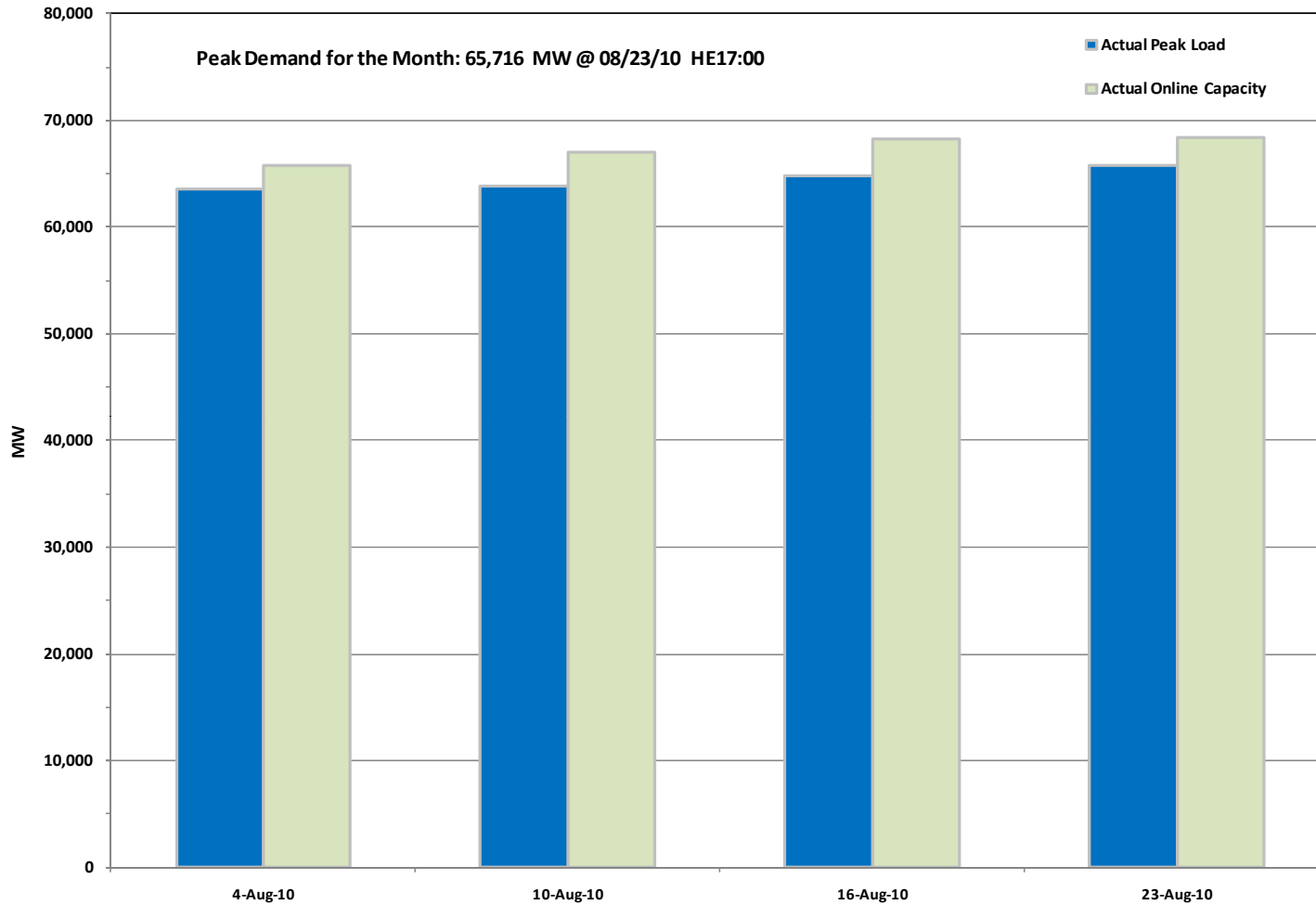


ERCOT Demand Records	
	MW
August 17, 2006	62,339
July 13, 2009	63,400
August 23, 2010	65,716**



Note: **The number is not final until completion of the market's financial settlement process six months after the operating day

ERCOT Breaks Electricity Demand Record for Fourth Time in August 2010

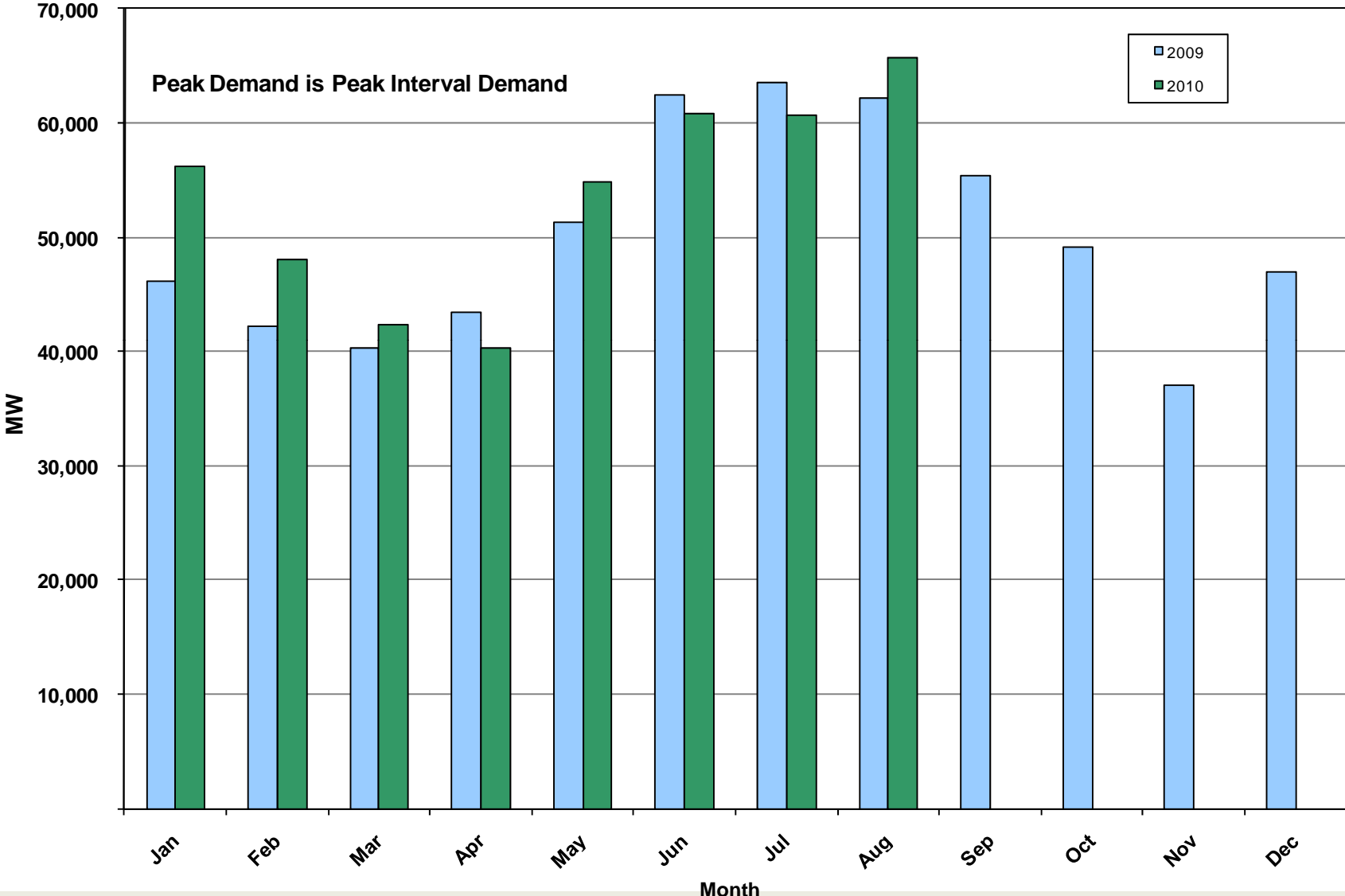


ERCOT Demand	MW
August 04, 2010	63,594**
August 10, 2010	63,830**
August 16, 2010	64,805**
August 23, 2010	65,716**

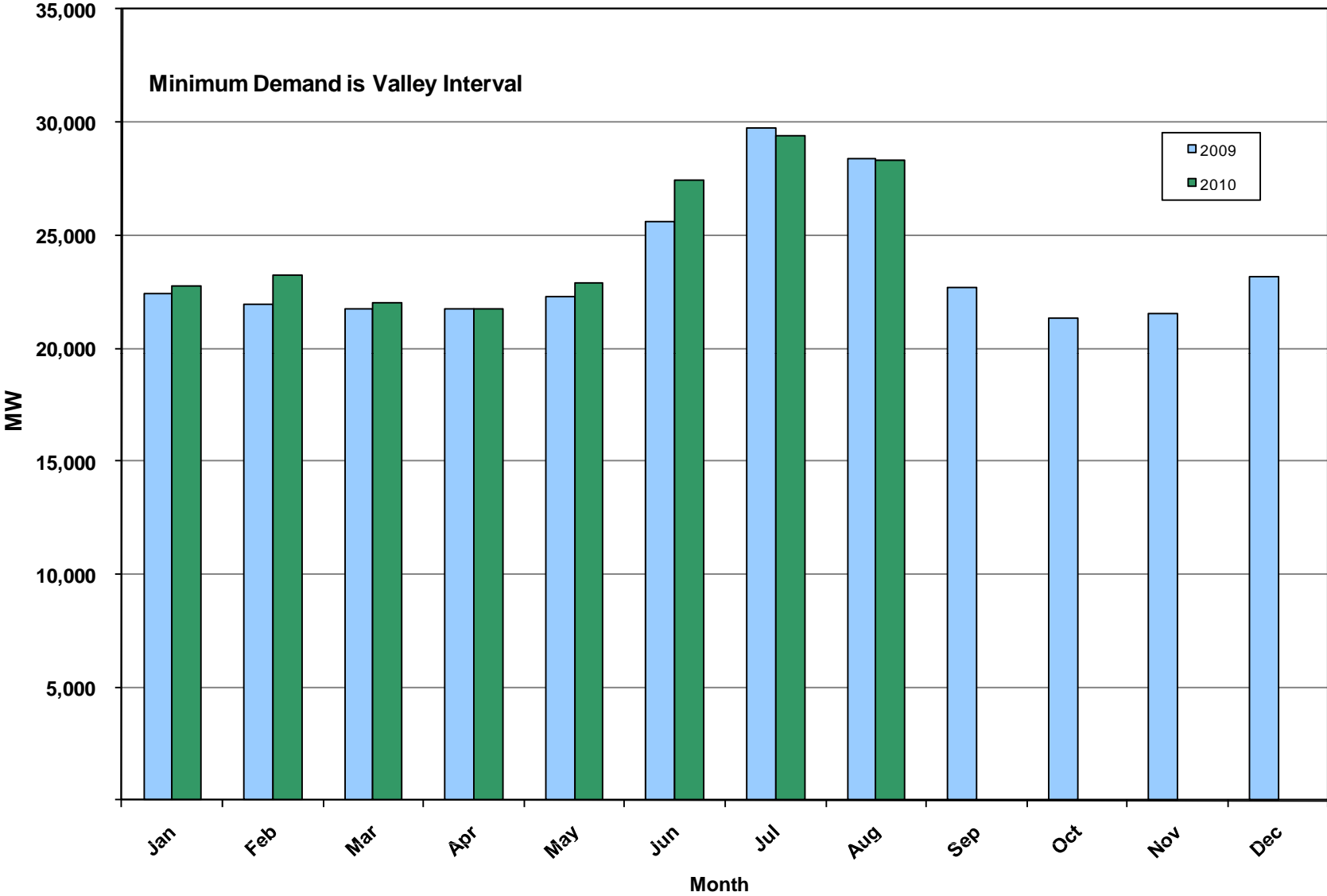
Note: **The number is not final until completion of the market's financial settlement process six months after the operating day



August 2010: Monthly Peak Demand: Actual



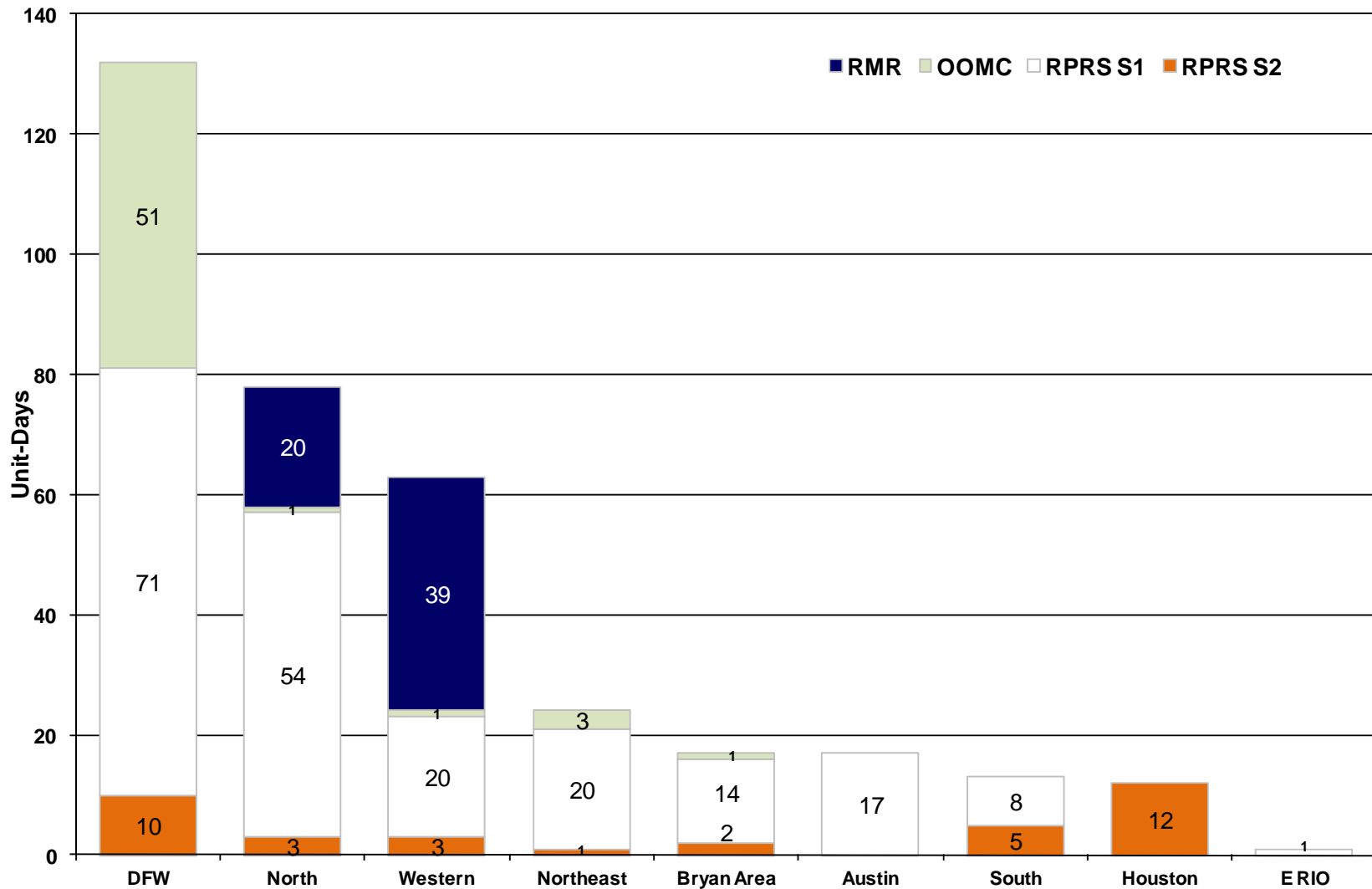
August 2010: Monthly Minimum Demand: Actual



Day-Ahead Load Forecast Performance in August 2010

	Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF) Run at 16:00 Day Ahead				
	2007 MAPE	2008 MAPE	2009 MAPE	2010 MAPE (YTD)	August 2010 MAPE
Average Annual MAPE	3.55	3.30	3.11	2.80	2.29

Capacity Purchases of RMR, OOMC & RPRS to Manage Local Congestion in August 2010



Zonal Congestion

CSC	Aug 09 Days	Jun 10 Days	Jul 10 Days	Aug 10 Days	Last 12 Months Total Days (Aug 09 – Aug 10)
North – Houston	4	11	6	4 Aug-(21, 25, 28, 2 9)	54
North – West	0	0	0	0	0
West – North	11	19	11	14 Aug-(1-4, 8, 13, 15, 19, 20, 24, 25, 28, 29, 30)	163
South – North	0	0	0	2 Aug-(14, 16)	6
North - South	0	0	0	0	7

Advisories and Watches in August 2010

- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
 - Issued 6 Days.
- **Watches issued for Adjusted Responsive Reserve (ARR) below 2500 MW.**
 - Issued 1 Days.
- **Transmission Watches**
 - None
- **Energy Emergency Alerts**
 - August 20th ERCOT declared Level 1 of its Energy Emergency Alert (EEA) due to Adjusted Responsive Reserve dropping below 2300 MW after LaaRs were deployed due to underfrequency after two unit trips). The EEA was ended after 47 minutes.

Significant System Incidents in August 2010

- **August 20th**

- Emergency Notice for a NERC Reportable Disturbance Control Standard (DCS) Event for loss of two units at a different plants for a total of 1394 MW of generation in the Houston and West area; however it should be excluded from compliance evaluation for being larger than the single largest contingency event, based on NERC Reliability Standard BAL-002. The ERCOT ISO system frequency recovered to 60 Hz in approximately 4 minutes and 42 seconds.

ERCOT declared Level 1 of its Energy Emergency Alert (EEA) due to Adjusted Responsive Reserve dropping below 2300 MW. Loads acting as Resources (LaaRs) were automatically deployed due to underfrequency. Adjusted Responsive Reserve was restored after a period of 38 minutes.

Other Items

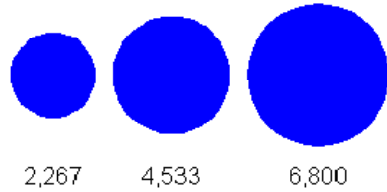
- **August 22nd**
 - Watch issued for a projected capacity reserve shortage for hours ending 1600 - 1800.

Planning Summary

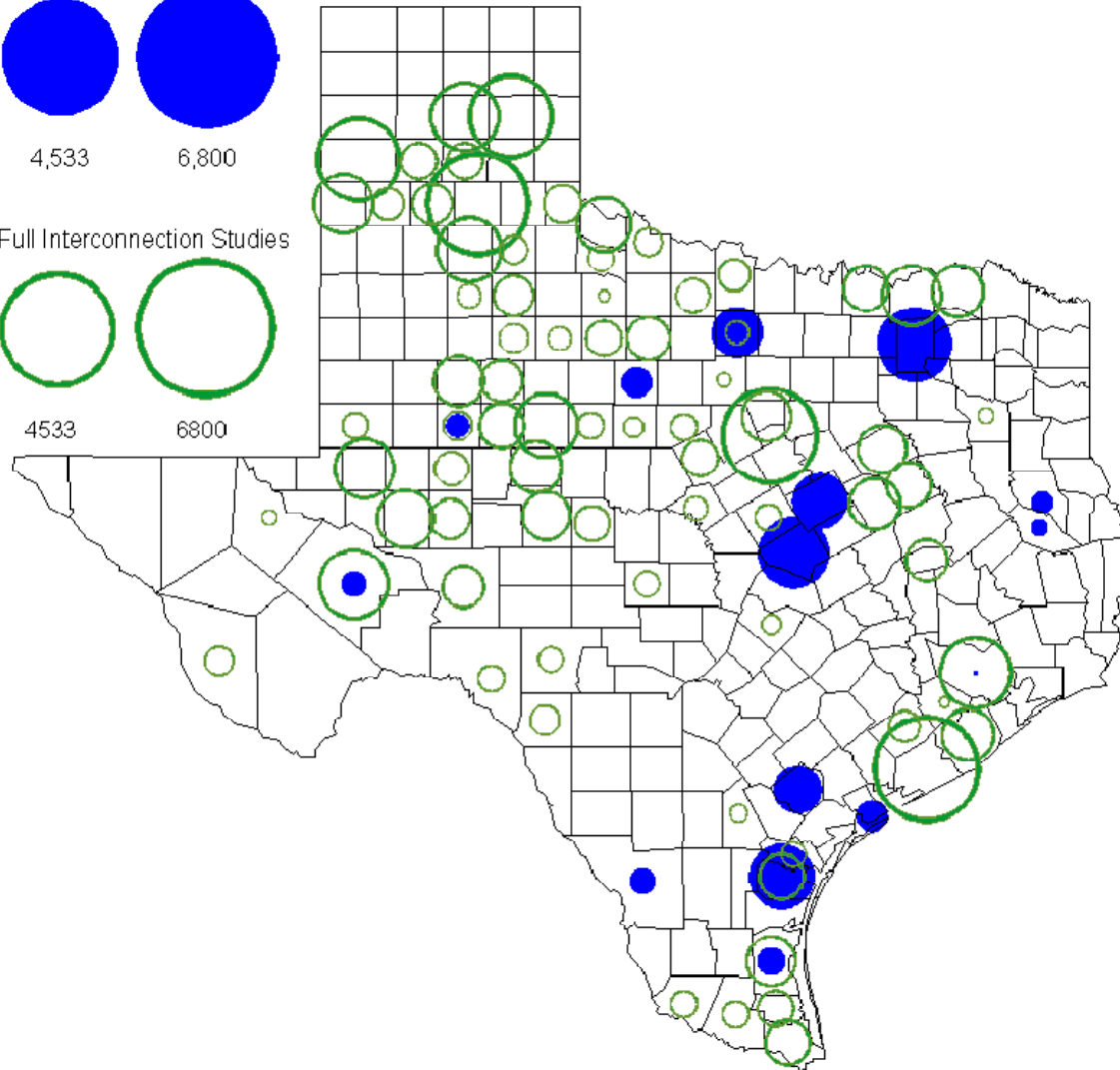
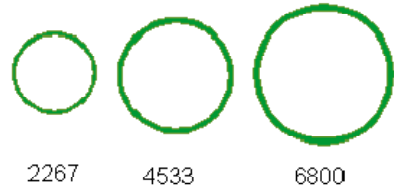
- **ERCOT is currently tracking 186 active generation interconnection requests totaling over 65,000 MW. This includes over 38,000 MW of wind generation.**
- **Mid-Term Planning is currently reviewing proposed transmission improvements with a total cost of \$80.8 Million**
- **Transmission Projects approved in 2010 total \$230.4 Million**
- **All projects (in engineering, routing, licensing and construction) total approximately \$9.6 Billion**
- **Transmission Projects energized in 2010 total about \$435 million**

County Location of Planned Generation with Interconnection Requests (all fuels) August 2010

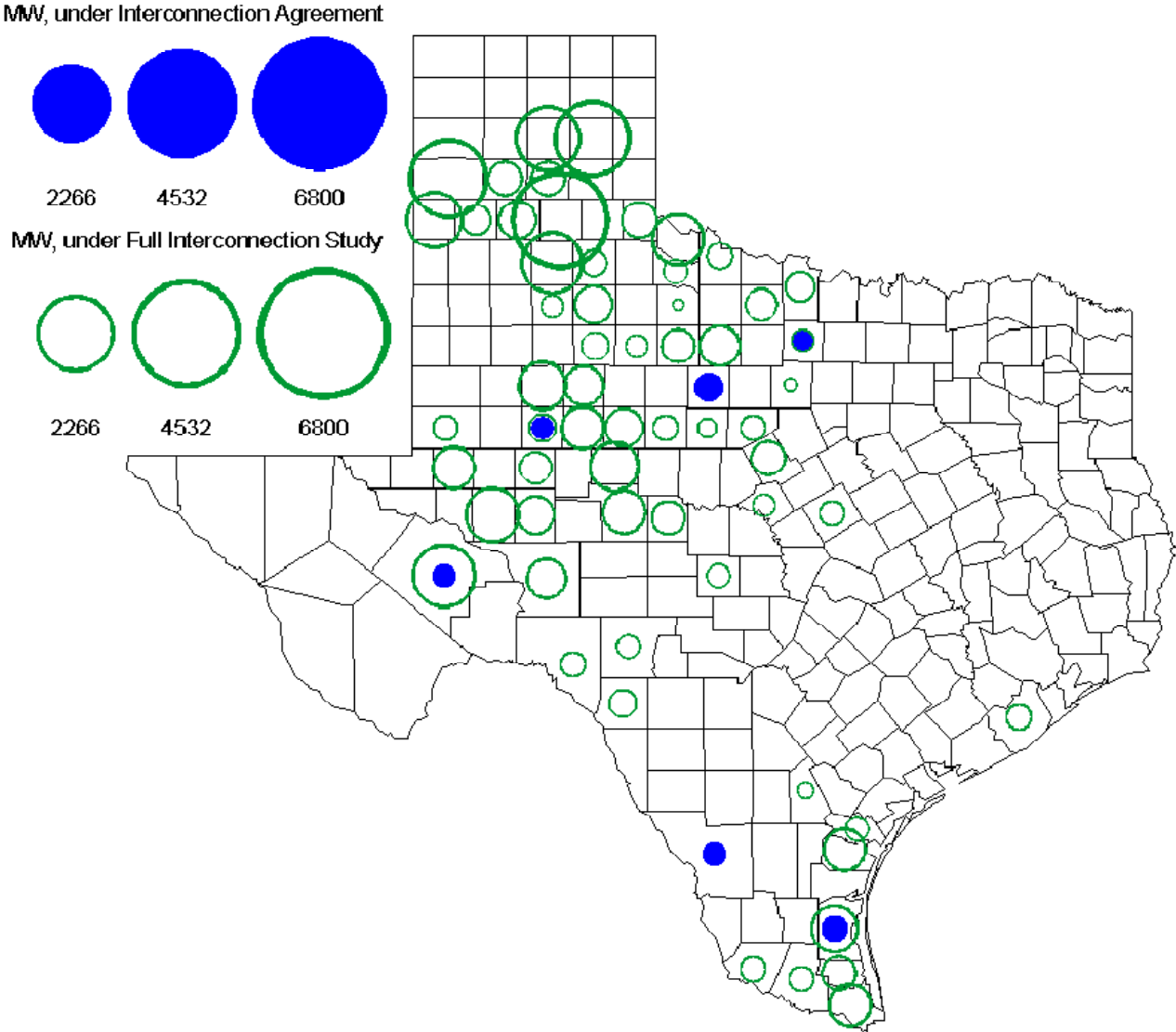
MW under Interconnection Agreements



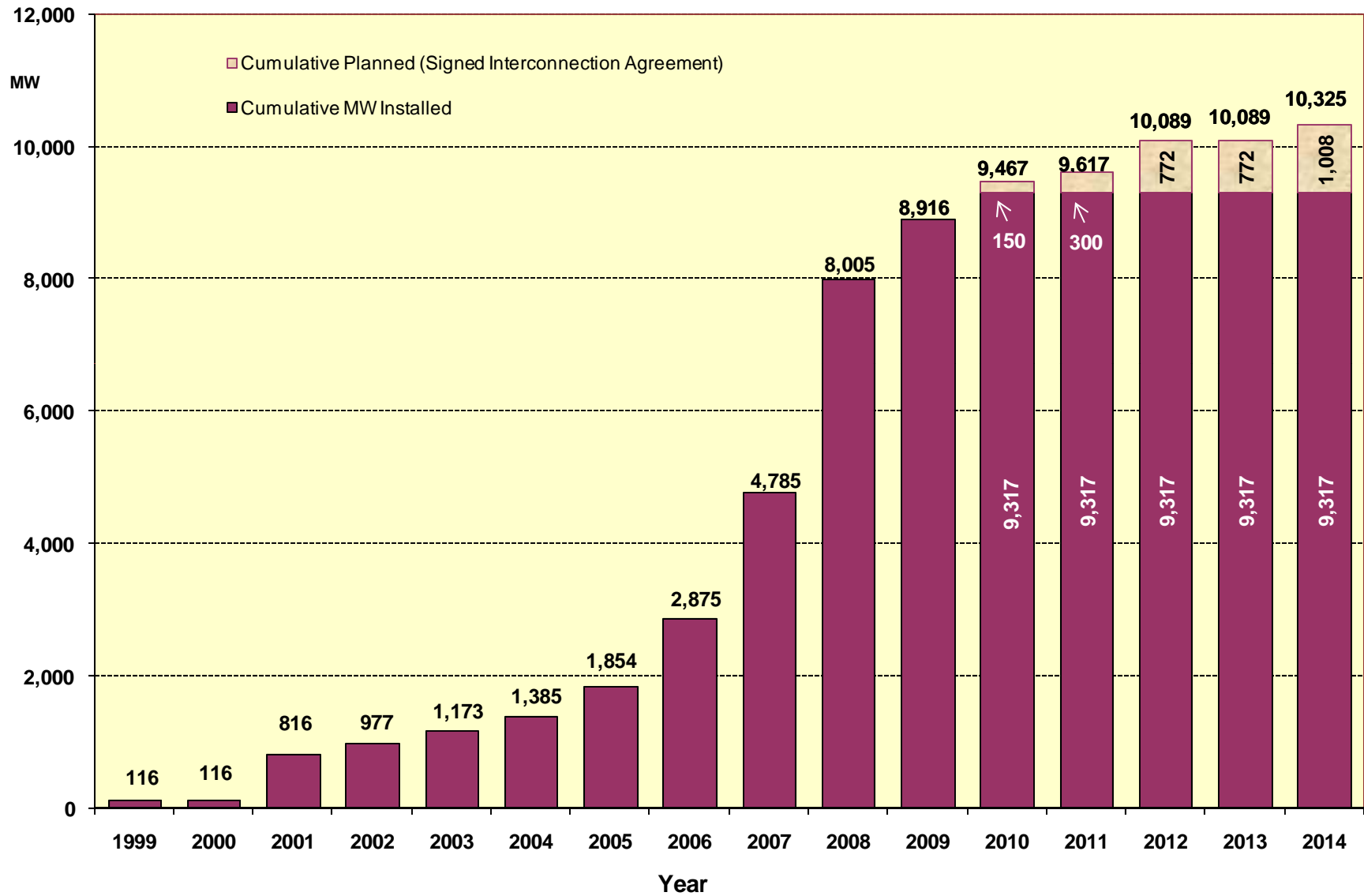
MW under Full Interconnection Studies



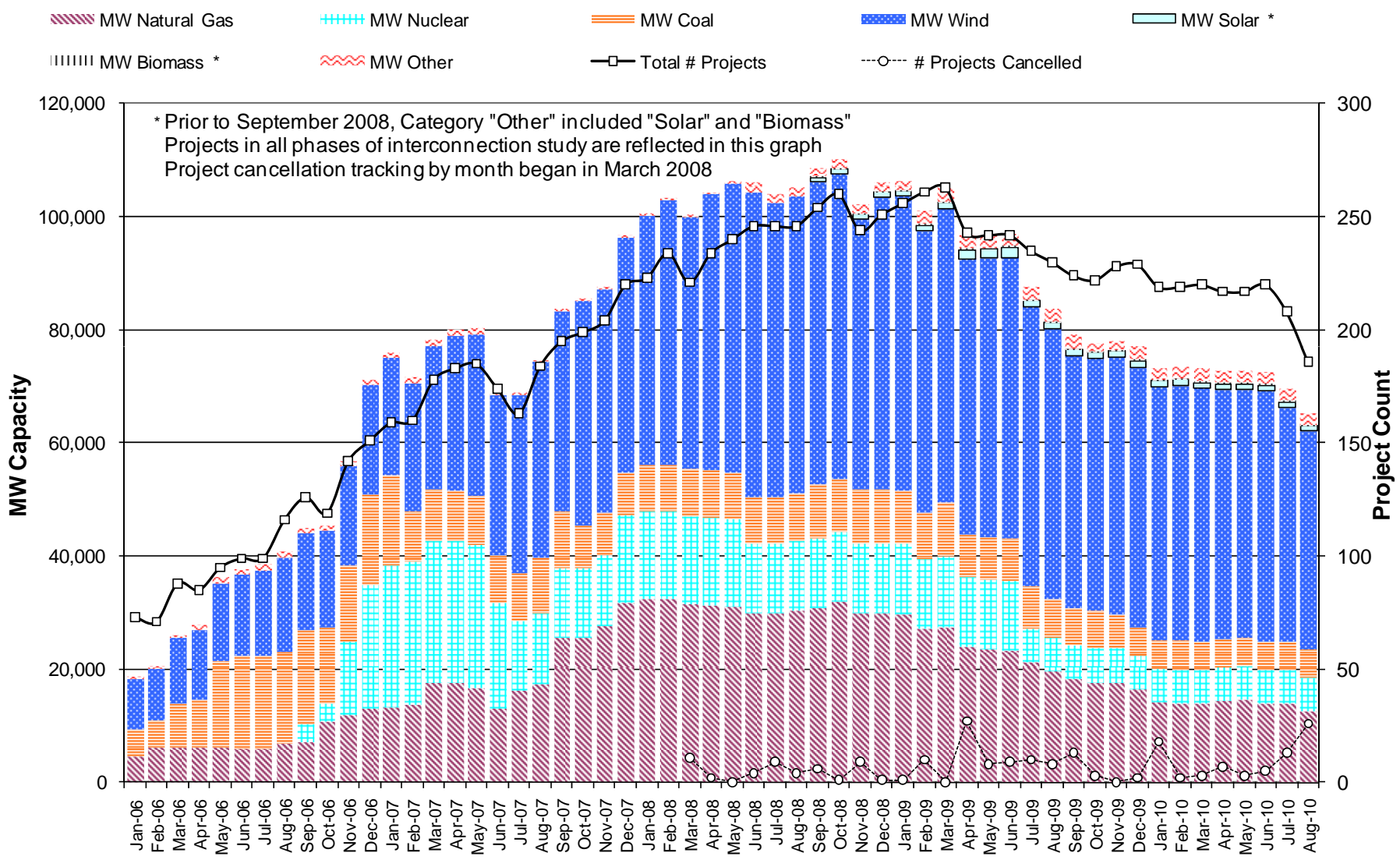
County Location of Planned Generation with Interconnection Requests (Wind) August 2010



Wind Generation



Generation Interconnection Activity by Fuel



Generation Interconnection Activity by Project Phase

