



# Grid Operations and Planning Report

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**ERCOT Board of Directors  
August 17, 2010**

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# Summary

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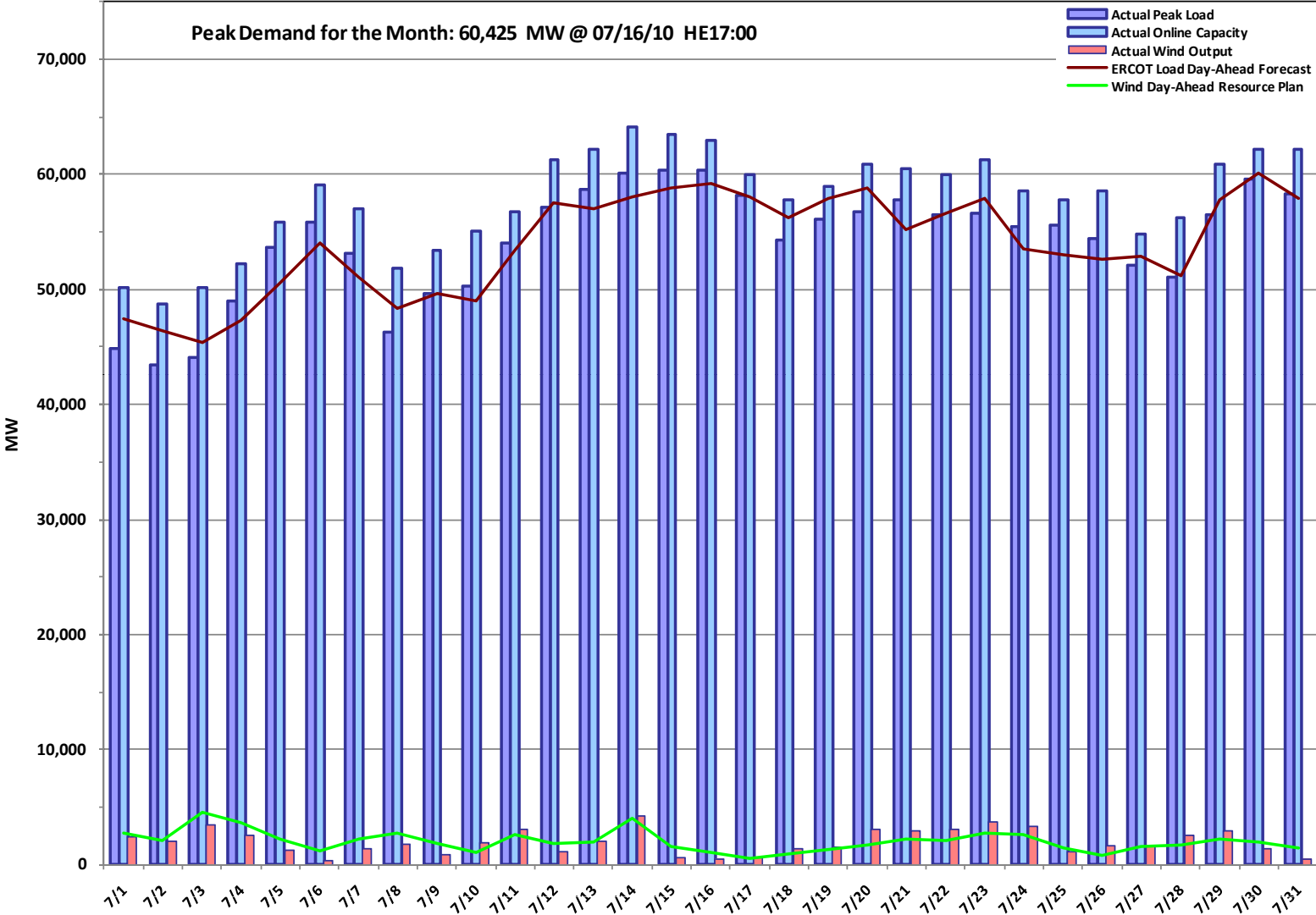
- **July 2010 Operations**

- The peak interval demand of 60,425 MW on July 16<sup>th</sup> was more than the long term forecast peak of 60,071 MW and less than the July 2009 actual peak interval demand of 63,518 MW.
- Day-ahead load forecast error for July was 2.39%.
- Advisory for Adjusted Responsive Reserve (ARR) below 3000 MW issued four days
- No Watches for ARR under 2500 MW issued
- No Energy Emergency Alert (EEA) events
- Transmission Watches issued 2 days (Gails substation block load transfers out of ERCOT)

- **208 active generation interconnect requests totaling over 69,000 MW as of July 31, 2010. Twelve fewer requests and 3,000 MW lower than June 30.**

- **9,317 MW wind capacity on line July 31, 2010. No change from June 30.**

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

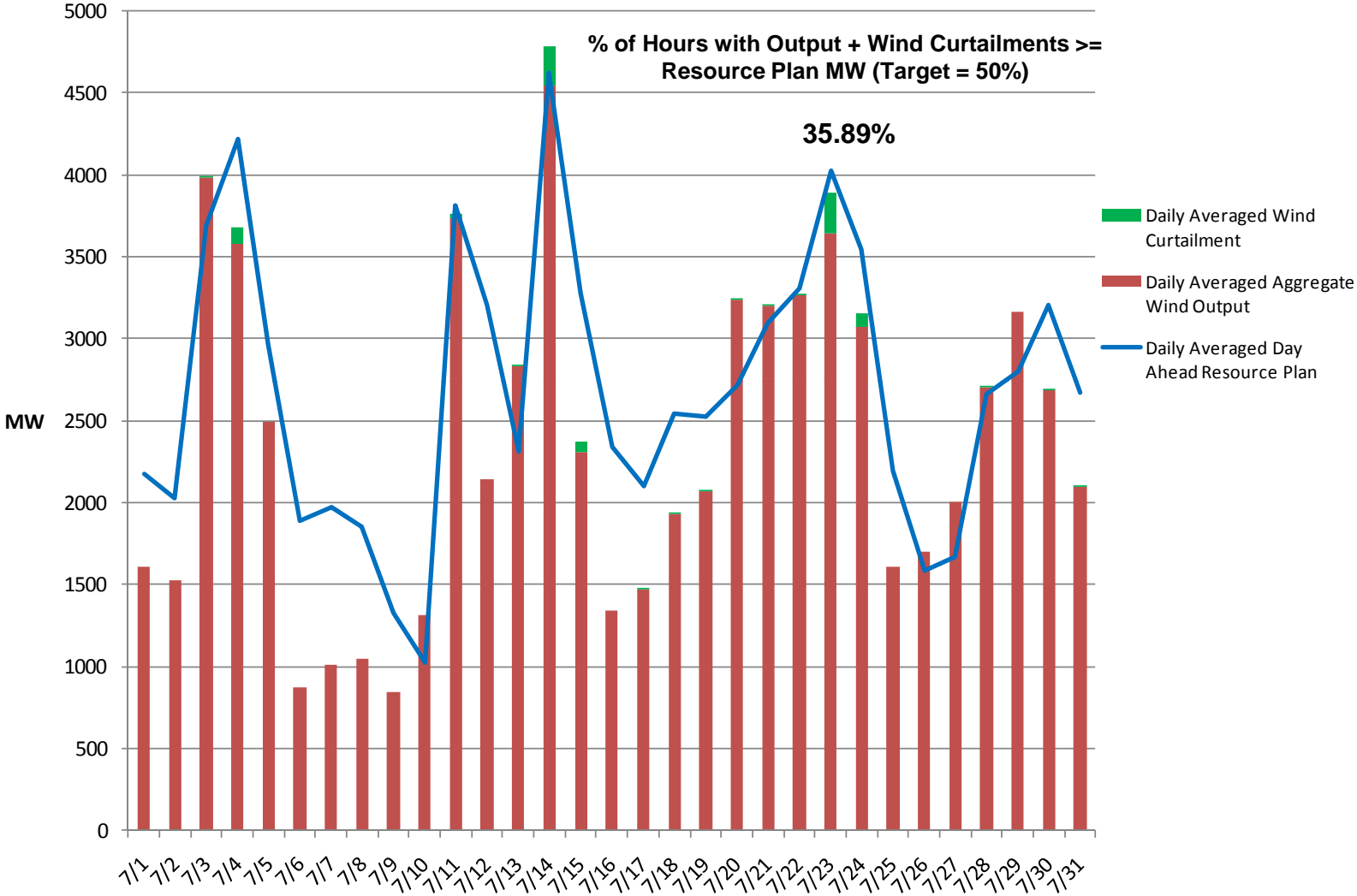


Note: All data are hourly averages during the peak load hour obtained from Resource Plans, and EMMS.



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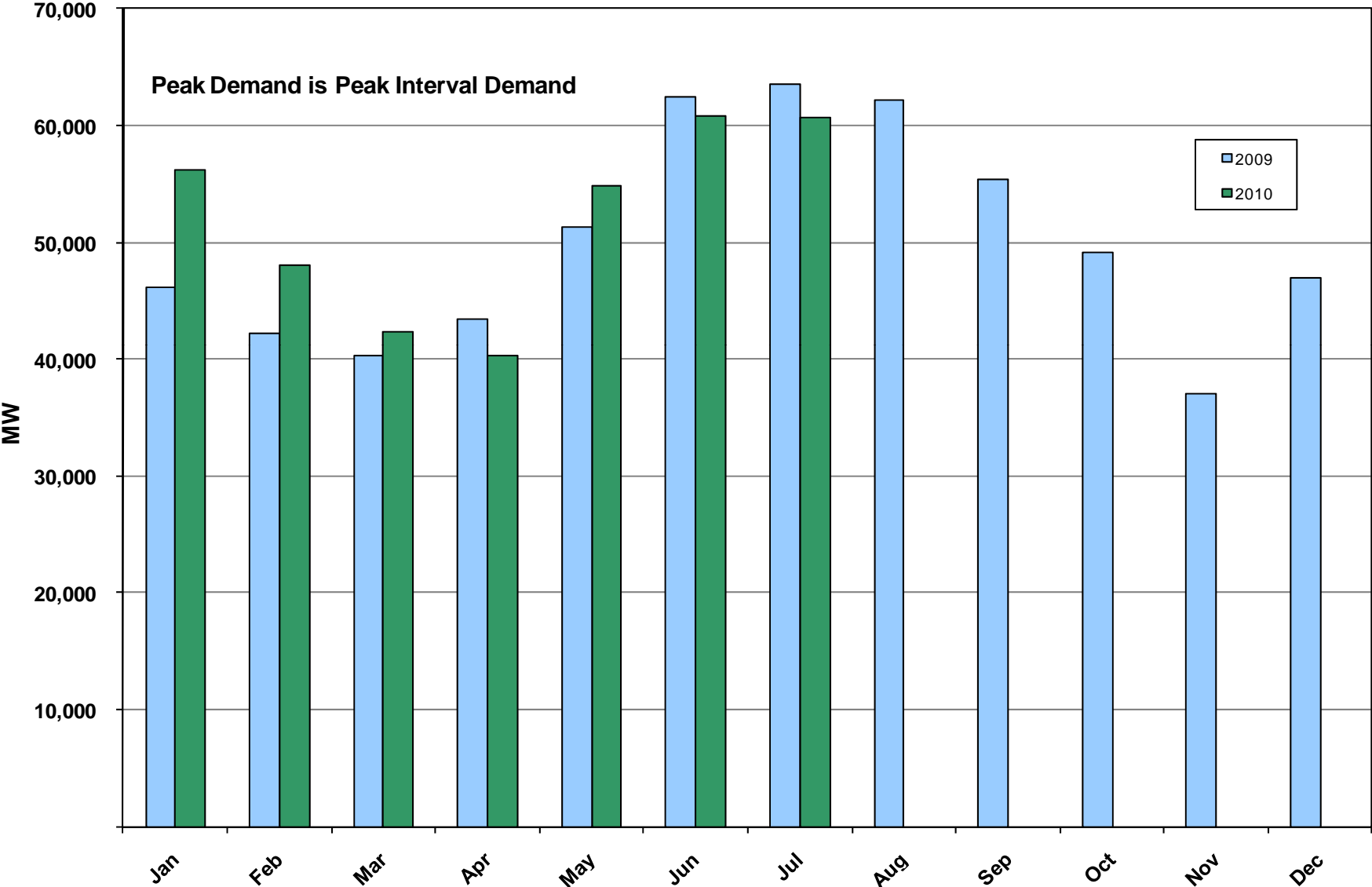
# July 2010: Actual Wind Output w/ Curtailment Added Back vs. Wind Day-Ahead Resource Plan Based on AWS Forecast for All Hours



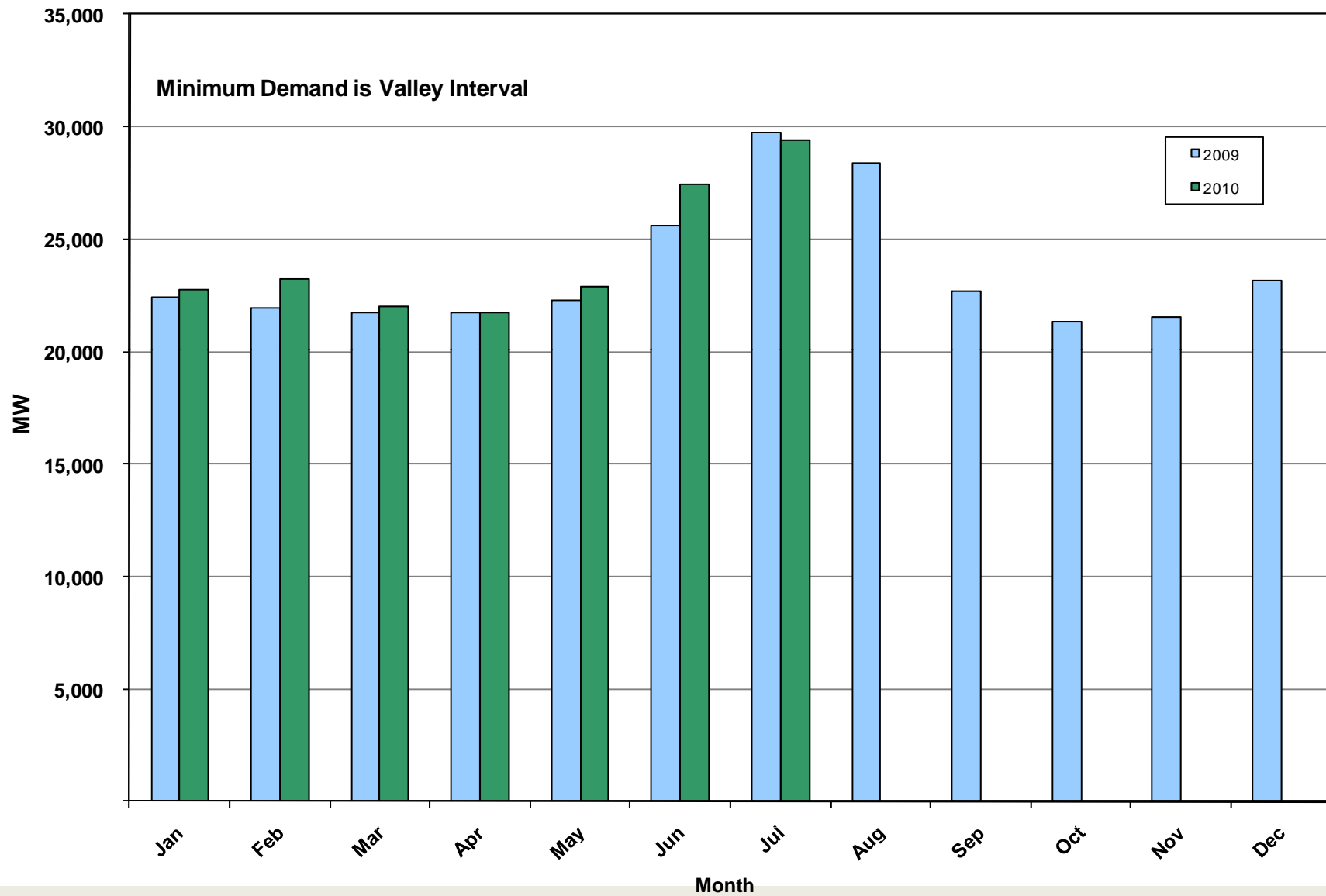
Note: QSEs must use AWST 50% probability of exceedence forecast for Day-Ahead Resource Plans

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# July 2010: Monthly Peak Demand: Actual



# July 2010: Monthly Minimum Demand: Actual

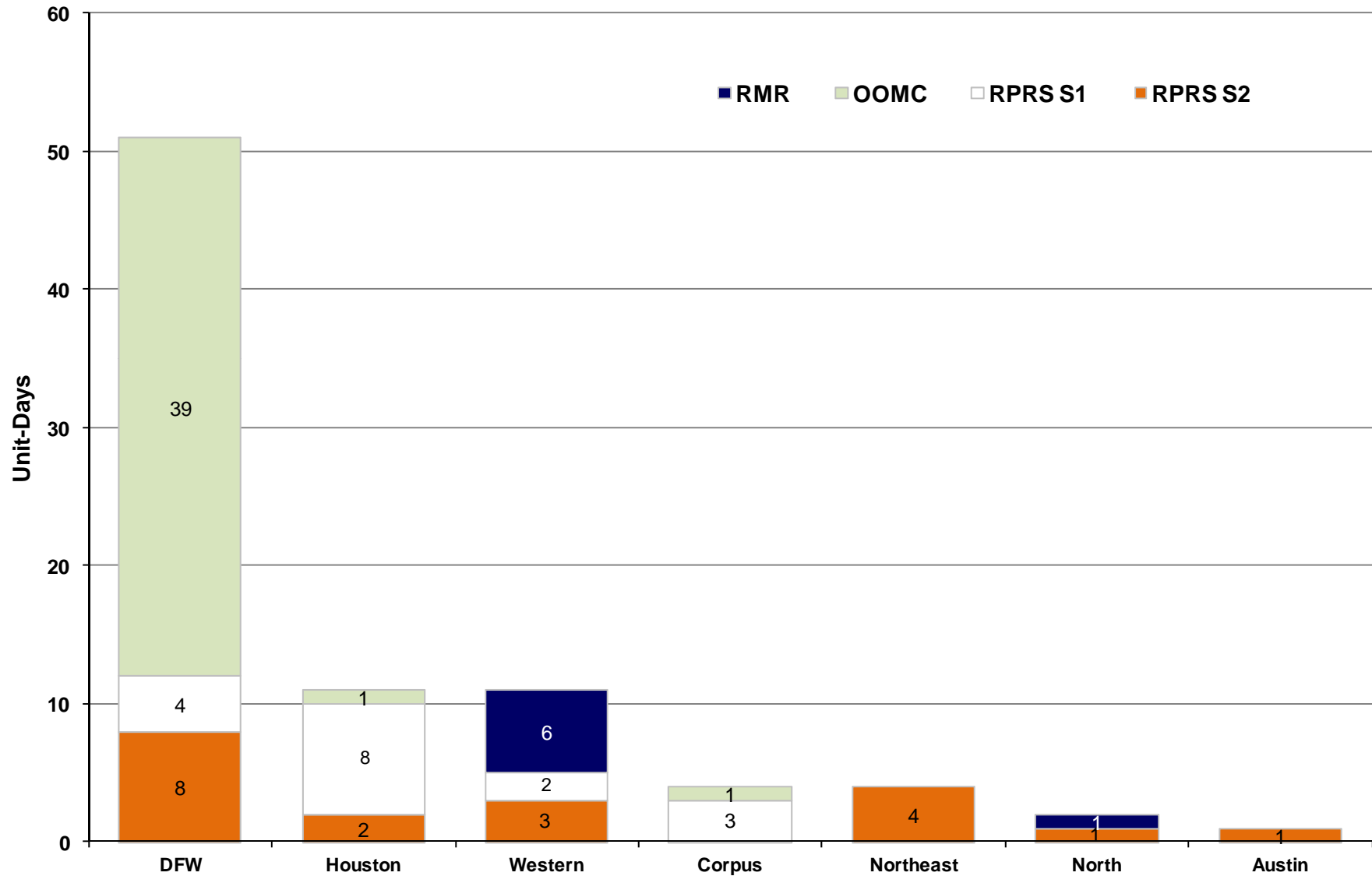


# Day-Ahead Load Forecast Performance in July 2010

	<b>Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF) Run at 16:00 Day Ahead</b>				
	<b>2007 MAPE</b>	<b>2008 MAPE</b>	<b>2009 MAPE</b>	<b>2010 MAPE (YTD)</b>	<b>July 2010 MAPE</b>
<b>Average Annual MAPE</b>	3.55	3.30	3.11	2.88	2.39



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



# Zonal Congestion

<b>CSC</b>	July 09 Days	May 10 Days	June 10 Days	<b>July10 Days</b>	<b>Last 12 Months Total Days</b> (July 09 – July 10)
<b>North – Houston</b>	7	10	11	<b>6</b> July–(4, 15, 23, 24, 29, 30)	57
<b>North – West</b>	0	0	0	<b>0</b>	0
<b>West – North</b>	9	19	19	<b>11</b> July– (3, 4, 11, 14, 21-24, 28, 30, 31)	158
<b>South – North</b>	0	0	0	<b>0</b>	4
<b>North - South</b>	1	0	0	<b>0</b>	8

# Operating System Incidents in July 2010

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- **July 01<sup>st</sup>**
  - Market Emergency Notice issued for Replacement Reserve Service market delay of 23 minutes due to an incorrect load schedule issues.

# Advisories and Watches in July 2010

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- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
  - Issued 4 days.
- **Watches issued for Adjusted Responsive Reserve (ARR) below 2500 MW.**
  - None.
- **Transmission Watches**
  - July 6<sup>th</sup> - 7<sup>th</sup> ERCOT issued a Transmission Watch due to a forced outage at Gails substation. Implemented Block Load Transfer up to 2 MW from ERCOT (Gails substation) to SPP (Draw substation).
- **Energy Emergency Alerts**
  - None.

## Other Items

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- **July 5<sup>th</sup>**
  - ERCOT sent emergency energy to CFE across the Railroad DC-Tie (150 MW).
- **July 22<sup>nd</sup>**
  - ERCOT sent emergency energy to CFE during their local area blackout across the Laredo DC-Tie (100 MW) and Eagle Pass DC-Tie (30MW).

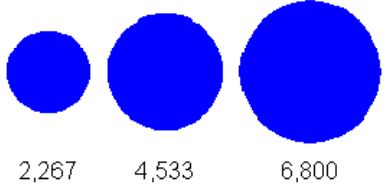
# Planning Summary

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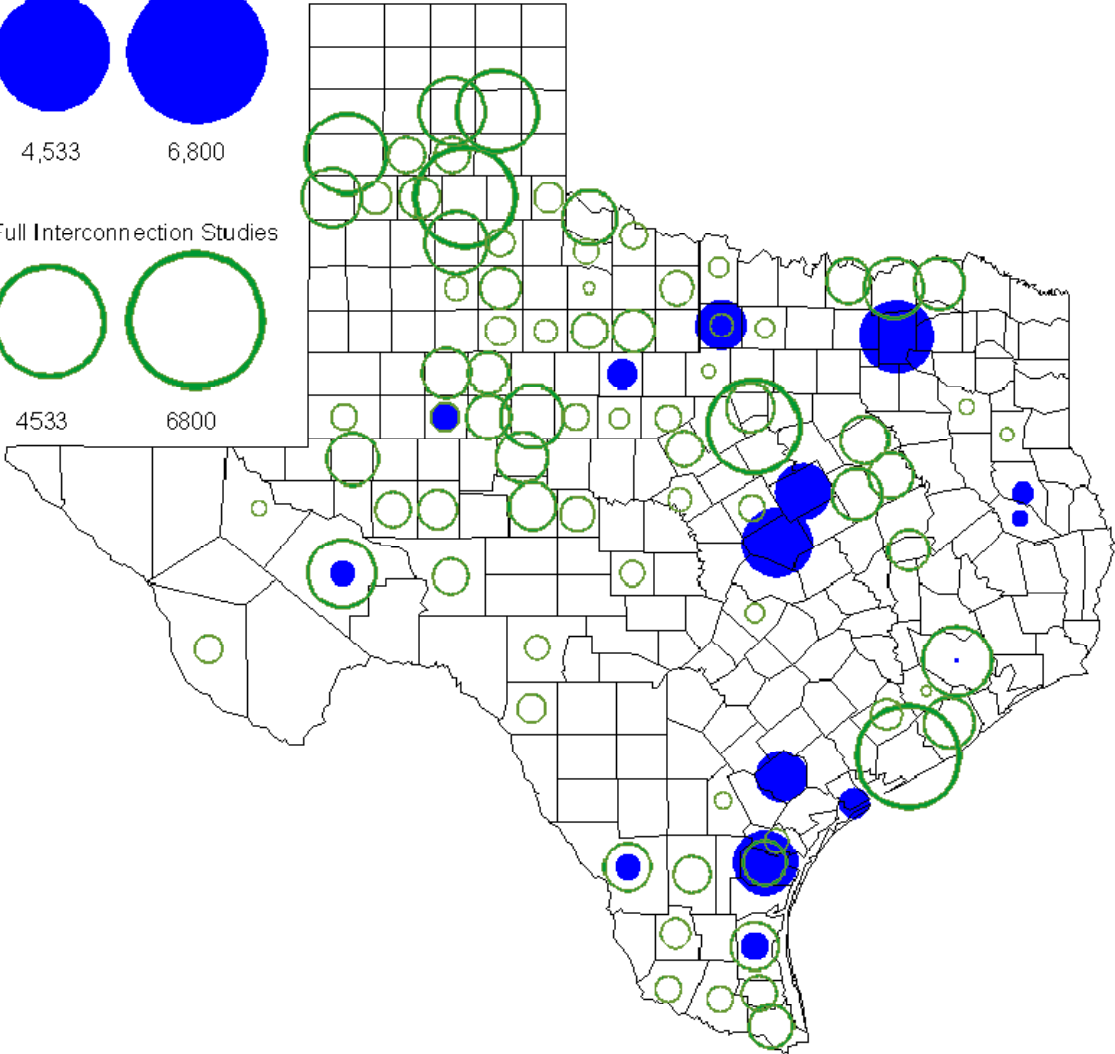
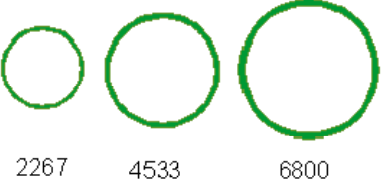
- **ERCOT is currently tracking 208 active generation interconnection requests totaling over 69,000 MW. This includes over 41,000 MW of wind generation.**
- **Mid-Term Planning is currently reviewing proposed transmission improvements with a total cost of \$255.8 Million**
- **Transmission Projects approved in 2010 total \$55.4 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) July 2010

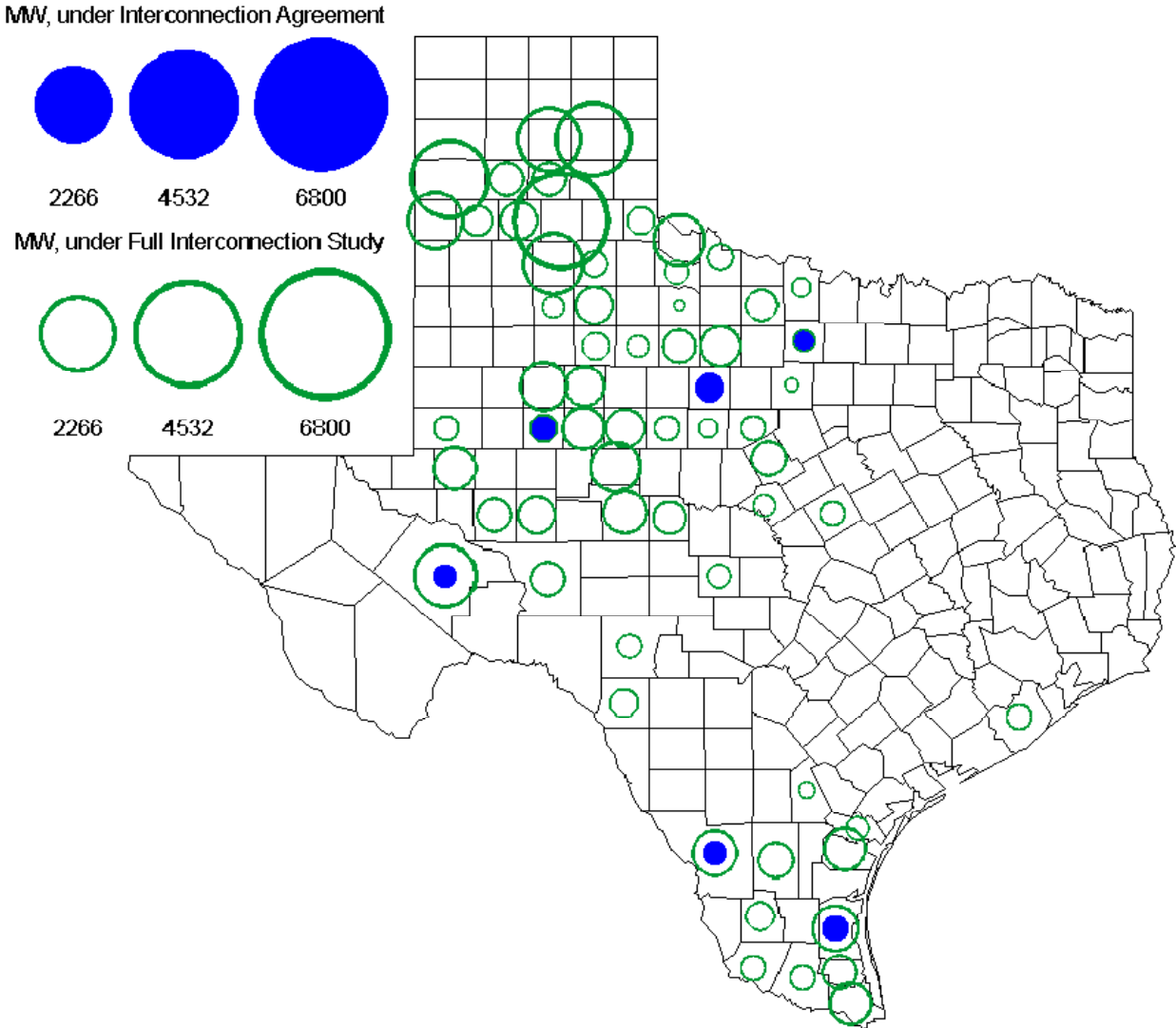
MW under Interconnection Agreements



MW under Full Interconnection Studies

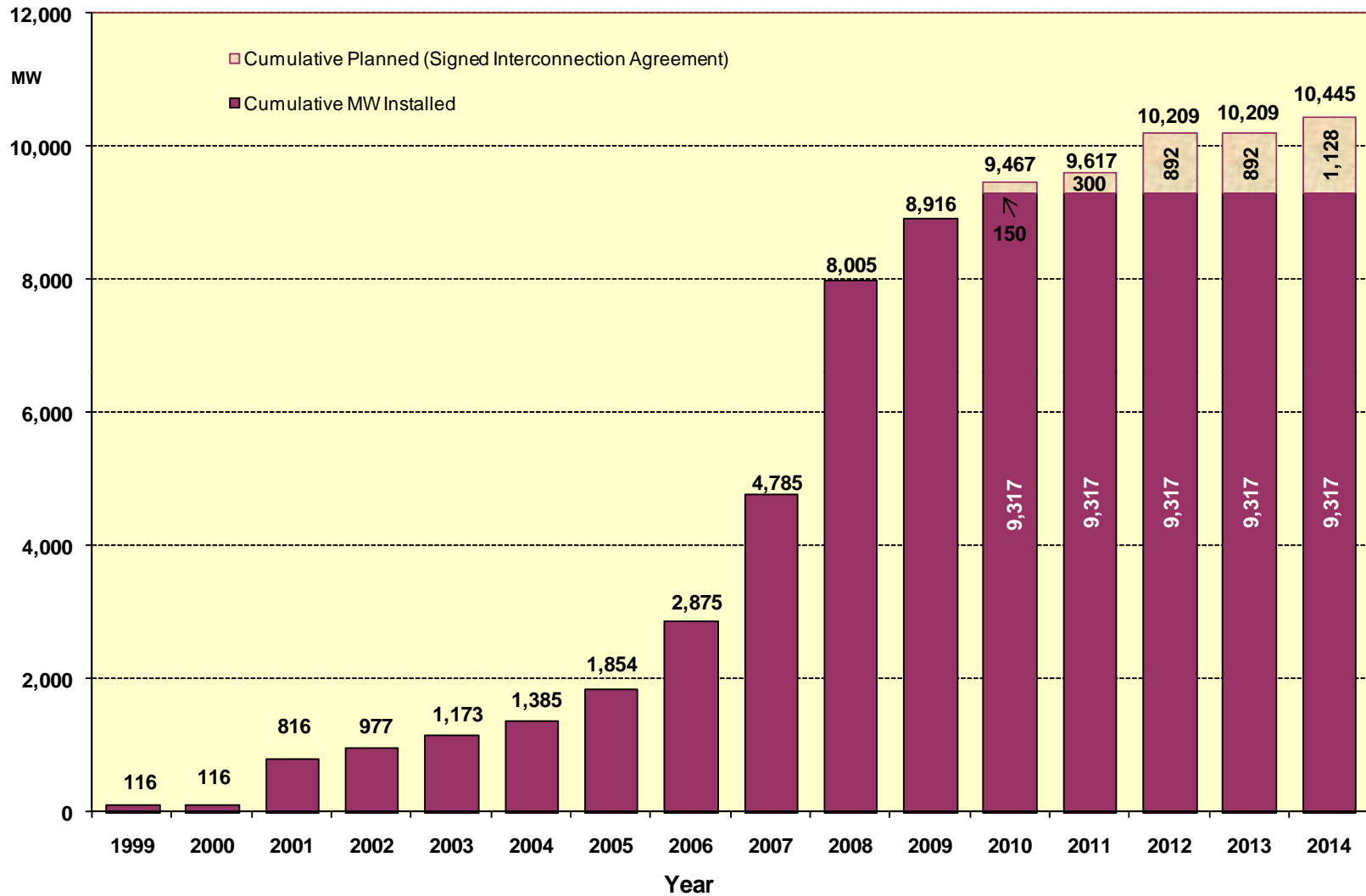


# County Location of Planned Generation with Interconnection Requests (Wind) July 2010



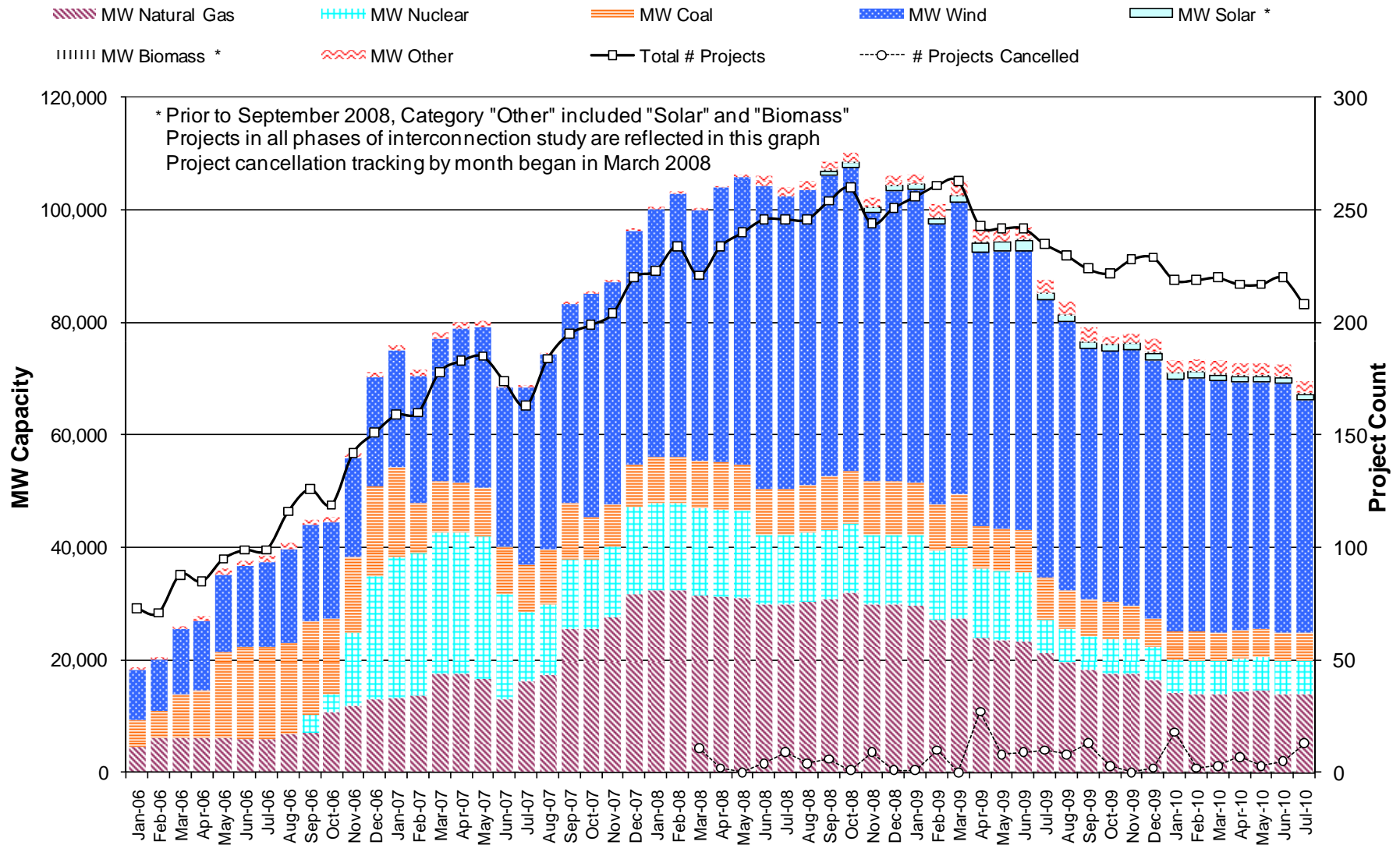


# Wind Generation



as of July 31, 2010

# Generation Interconnection Activity by Fuel



# Generation Interconnection Activity by Project Phase

