



Grid Operations and Planning Report

ERCOT Board of Directors
October 20, 2009

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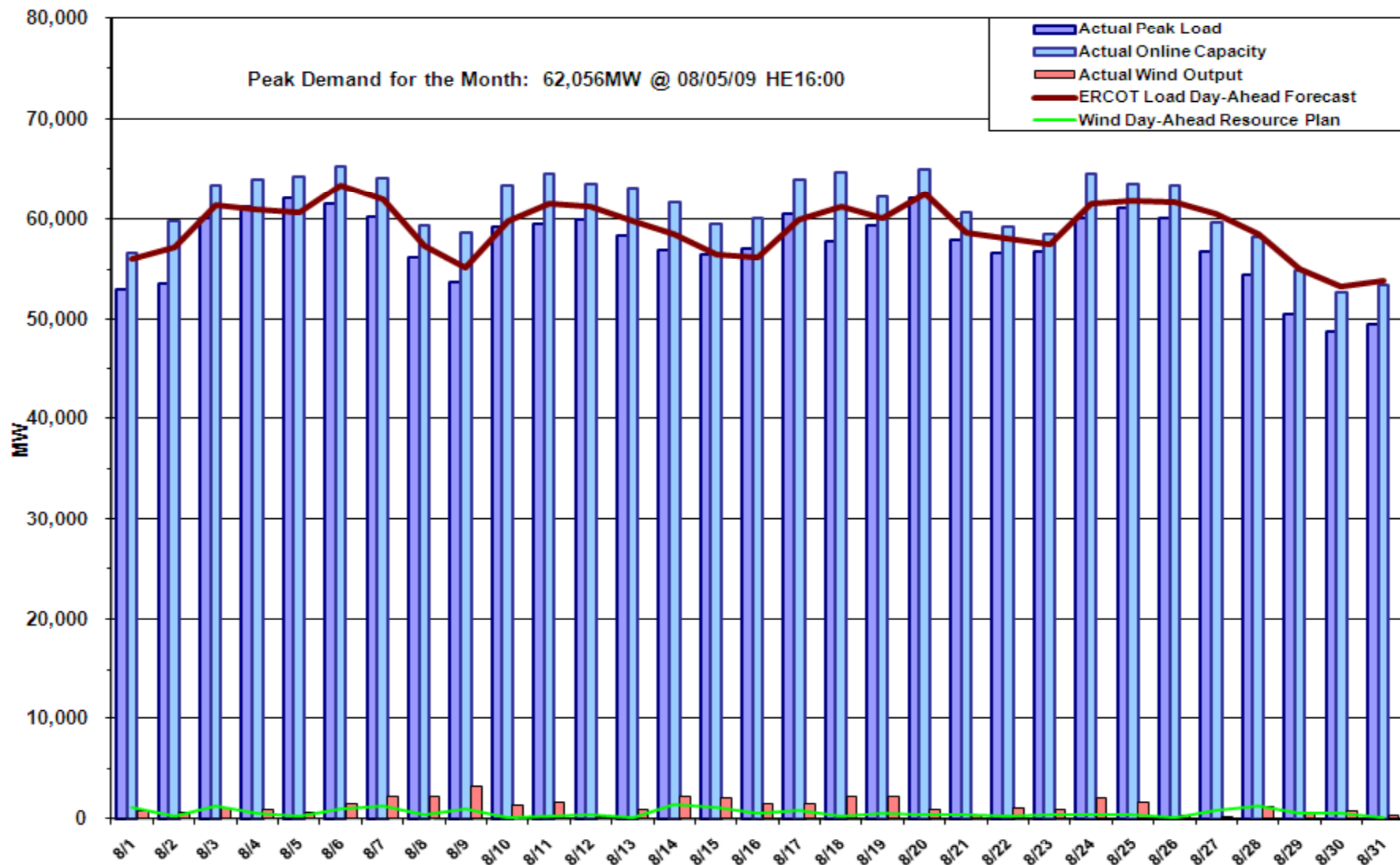
Summary

- **August 2009 Operations**

- The peak demand of 62,056 MW on August 5th was 1,397 MW lower than the previous all time peak demand of 63,453 MW set on July 13, 2009 and less than the forecasted peak of 63,356 MW.
- Day-ahead load forecast error for August was 3.07%.
- Nine Advisories for Adjusted Responsive Reserve (ARR) below 3000 MW. No Watches for ARR under 2500 MW or Energy Emergency Alert (EEA) events.
- Seven transmission watches

- **September 2009 peak demand on September 3rd of 55,210 MW**
- **224 active generation interconnect requests totaling over 79,000 MW as of September 30, 2009. Six requests and 7,000 MW less than August 31.**
- **8,515 MW wind capacity on line September, 2009. 180 MW increase from August**
- **RMR contract executed with Luminant for Permian 6 effective October 1, 2009 through December 31, 2009**

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

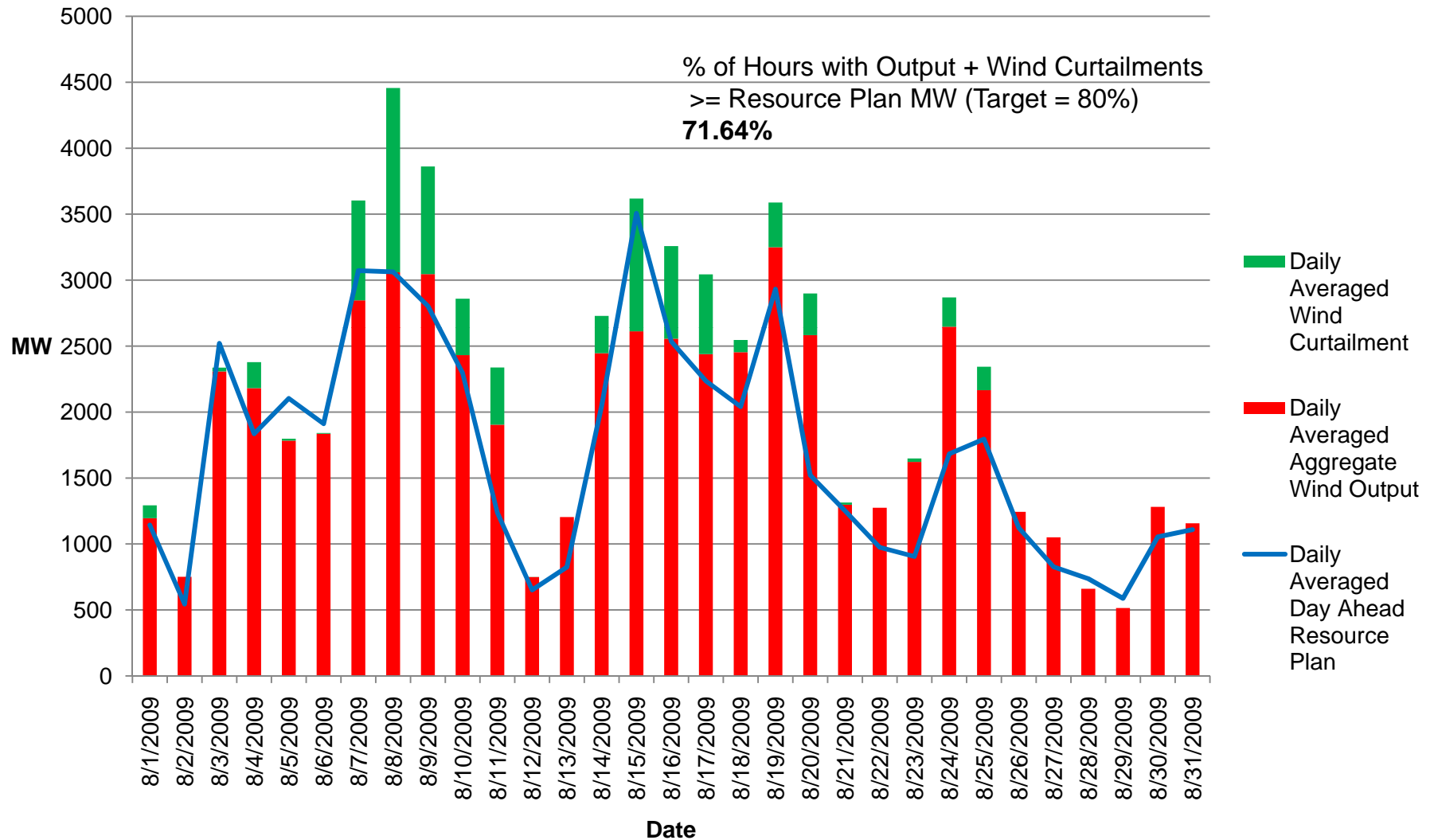


Note: All data are hourly averages during the peak load hour obtained from Resource Plans, and EMMS.

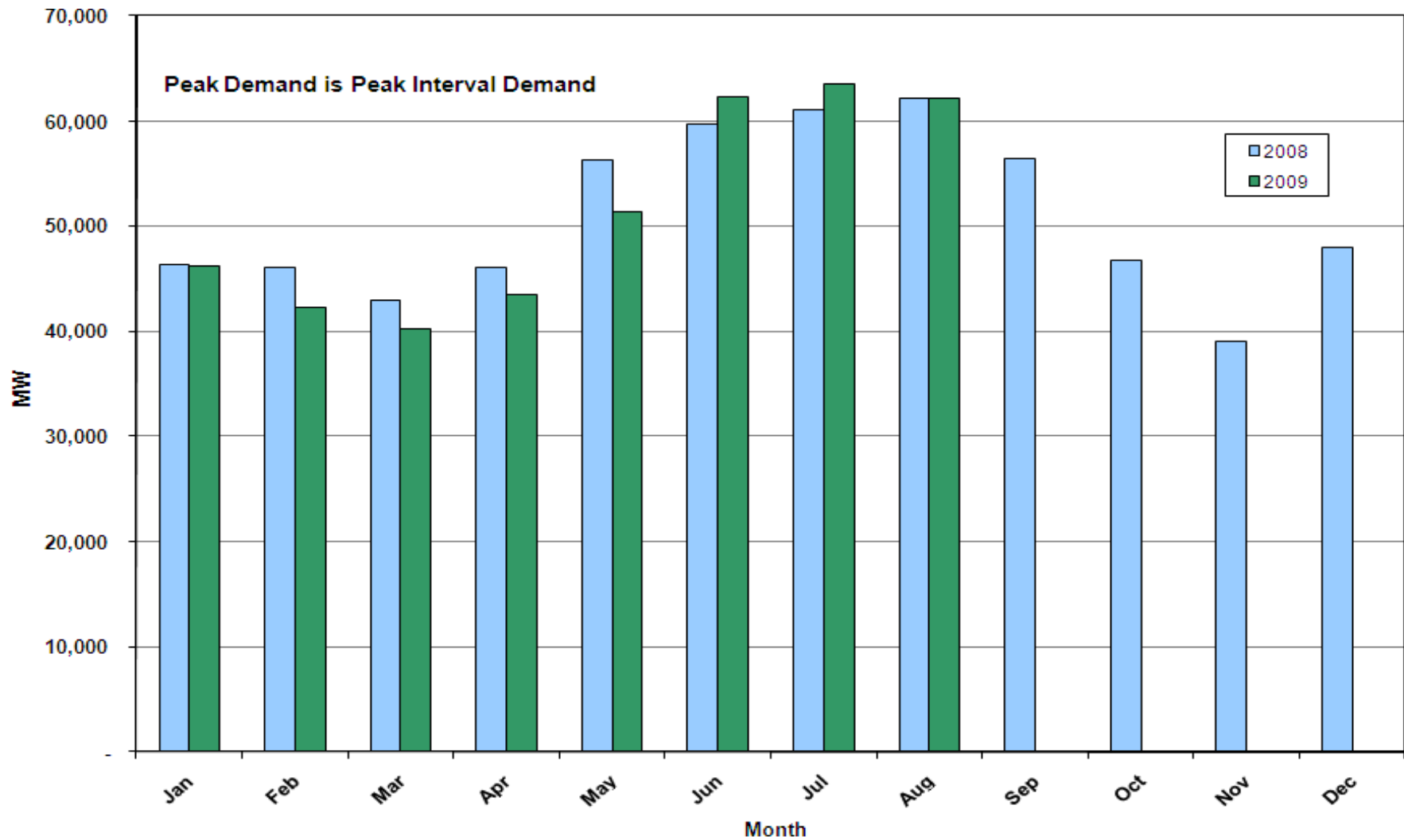


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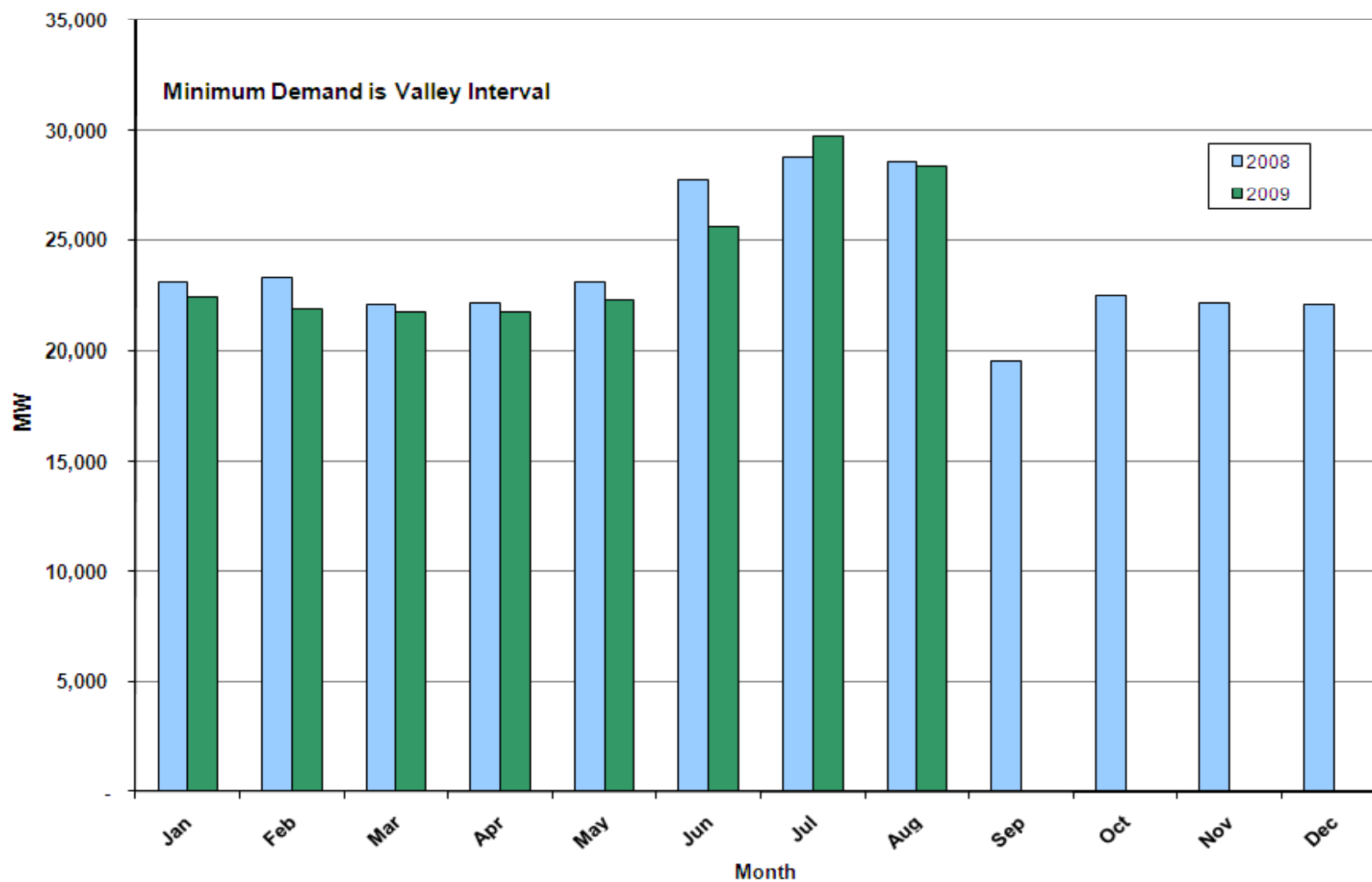
Actual Wind Output w/ Curtailment Added Back Vs Wind Day-Ahead Resource Plan Based on AWS Forecast for All Hours



Monthly Peak Demand: Actual



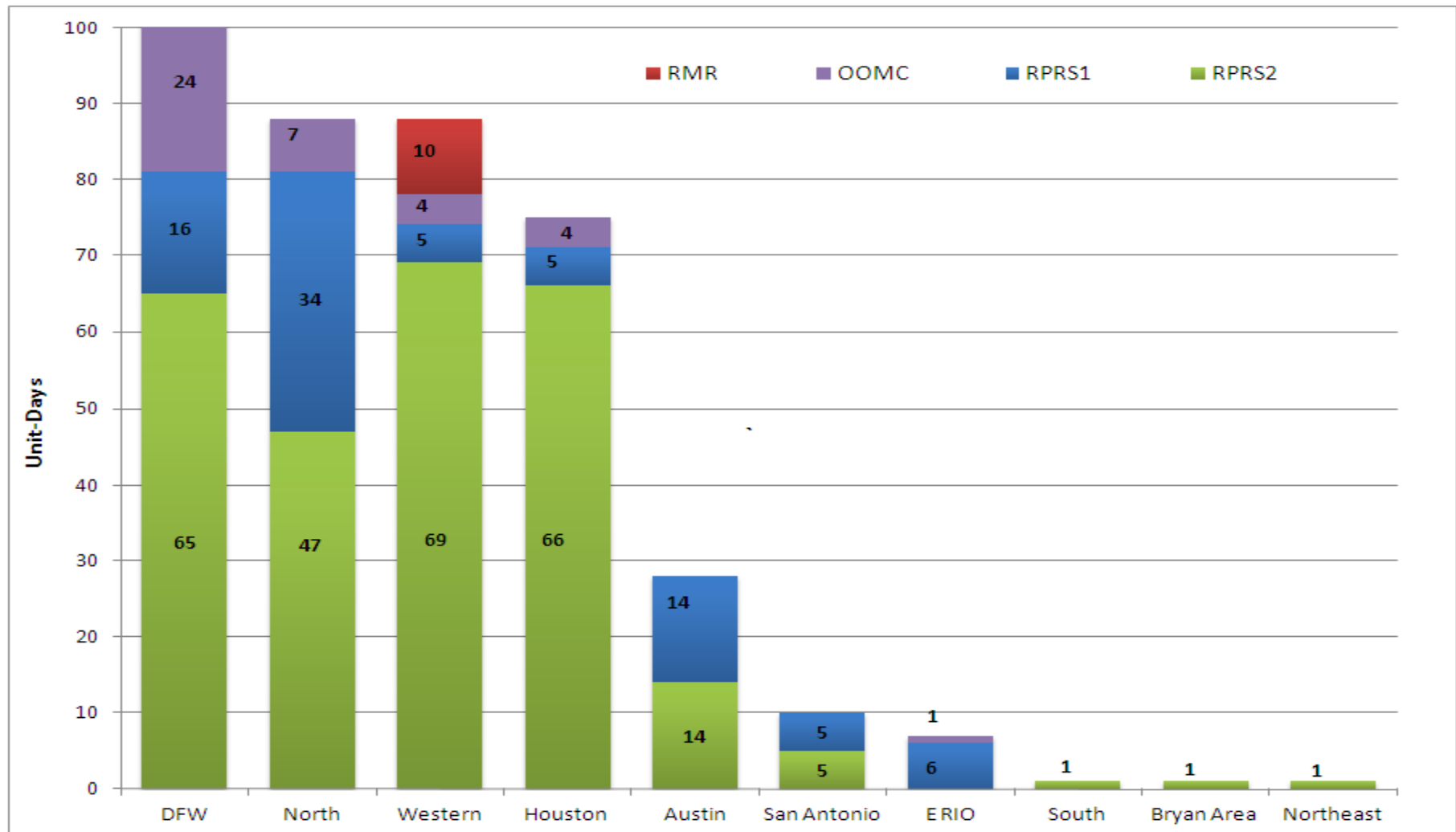
Monthly Minimum Demand: Actual



Day-Ahead Load Forecast Performance in August 2009

	Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF) Run at 16:00 Day Ahead				
	2006 MAPE	2007 MAPE	2008 MAPE	2009 MAPE (YTD)	August 2009 MAPE
Average Annual MAPE	3.79	3.55	3.30	3.14	3.07

Capacity Purchases of RMR, OOMC & RPRS to Manage Local Congestion in August 2009



Zonal Congestion

CSC	Aug 08 Days	Jun 09 Days	July 09 Days	Aug 09 Days	Last 12 Months Total Days (Aug 08 – Aug 09)
North – Houston	1	7	7	4 August – 1, 14, 15, 21	58
North – West	1	0	0	0	6
West – North	2	14	9	11 August – 4, 7-11, 15, 19, 20, 23, 24	170
South – North	0	0	0	0	7
North - South	3	16	1	0	44

Significant System Incidents in August 2009

- **August 6th and 7th**
 - ERCOT EMS System down due to network traffic error. August 6 for 29 minutes, August 7 for 36 minutes
- **August 9th**
 - Loss of three 138 kV lines in South Texas due to relay mis-operation.
- **August 31**
 - Ancillary Service Market delayed 18 minutes due to operator error.

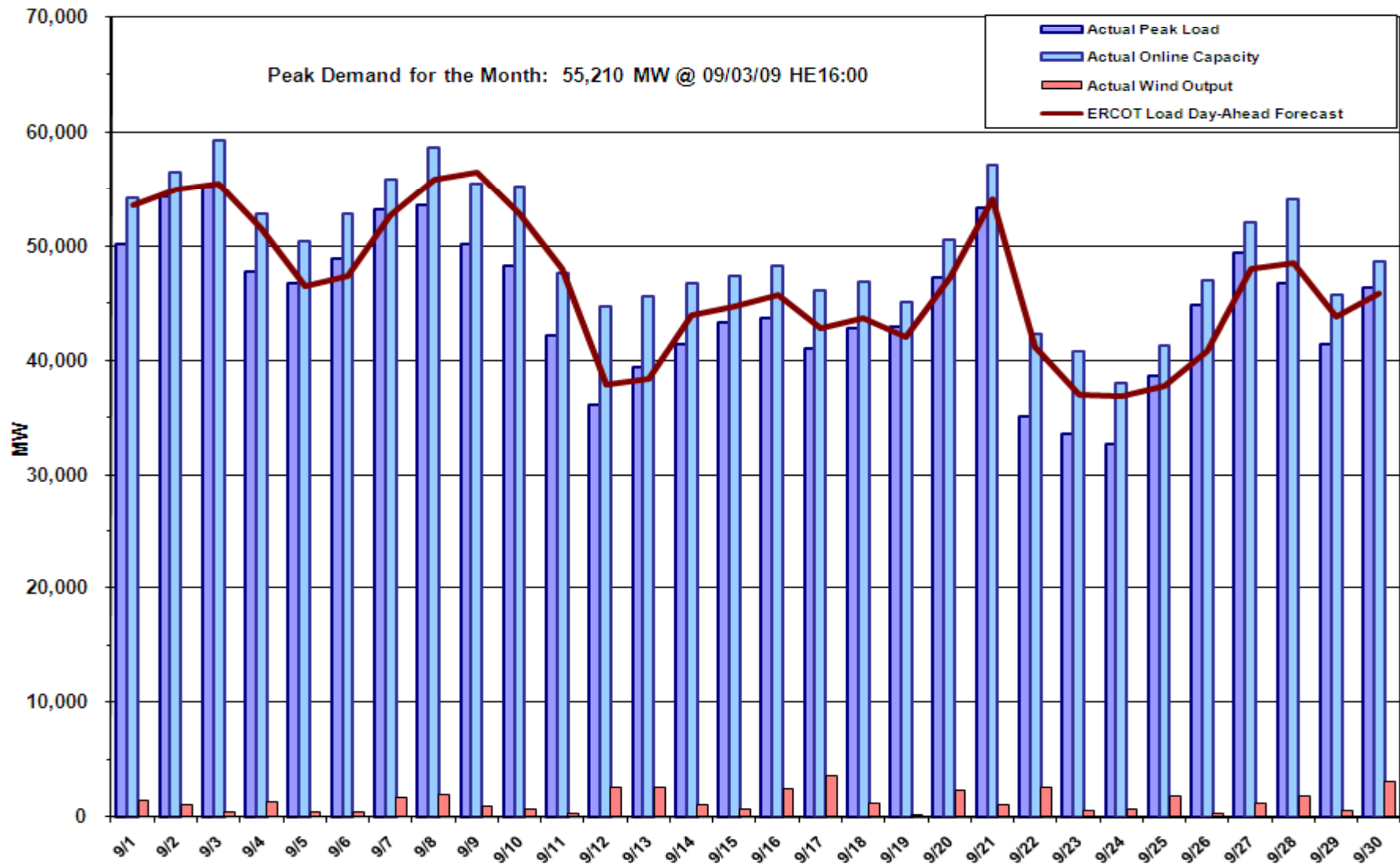
Advisories and Watches in August 2009

- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
 - Issued 9 days.
- **No Watches issued for ARR below 2500 MW in August 2009.**
- **Transmission Watches**
 - August 4th, 5th - Due to a generation forced outage, the post contingency loss of Dilley Switch - San Miguel 138KV overloads Derby - Pearsall 69KV. ERCOT received emergency energy from CFE across the Laredo VFT.
 - August 13th - Due to a generation forced outage, the post contingency loss of Dilley Switch - North Laredo 138KV overloads North Laredo - Asherton 138KV. ERCOT received emergency energy from CFE across the Laredo VFT and Eagle Pass DC Tie.
 - August 20th - Issued for the Willow Valley Switch - Lamesa area due to a planned outage. A block load transfer of up to 2 MW of ERCOT load to Southwest Power Pool (SPP) was performed.
 - August 20th - Due to a planned transmission outage, the loss of the San Angelo College Hills 138/69KV autotransformer overloads San Angelo Concho 138/69KV autotransformer.
 - August 24th - Due to a transmission forced outage, the post contingency loss of Hicross - Pilot Knob & Garfield 138KV overloads Grove - Advance 138KV and Advance - Burleson AEN 138KV.
 - August 24th - Due to a transmission forced outage, the post contingency loss of Austrop - Daffin & Decker 138KV overloads Decker - Sprinkle 138KV.
- **No EEA's in August 2009**

Other Items

- **August 26th**
 - Held Real-time Balancing deployments for interval ending 22:30 through interval ending 22:45 due to failure of software to solve. Resumed normal deployments with interval ending 23:00.
- **August 27th**
 - Held Real-time Balancing deployments for interval ending 14:45 through interval ending 15:15 due to deployments being sent late. Resumed normal deployments with interval ending 15:30.

September 2009 Daily Peak Demand: Hourly Average Actual vs Forecast, Resource Plan & On-line Capacity at Peak

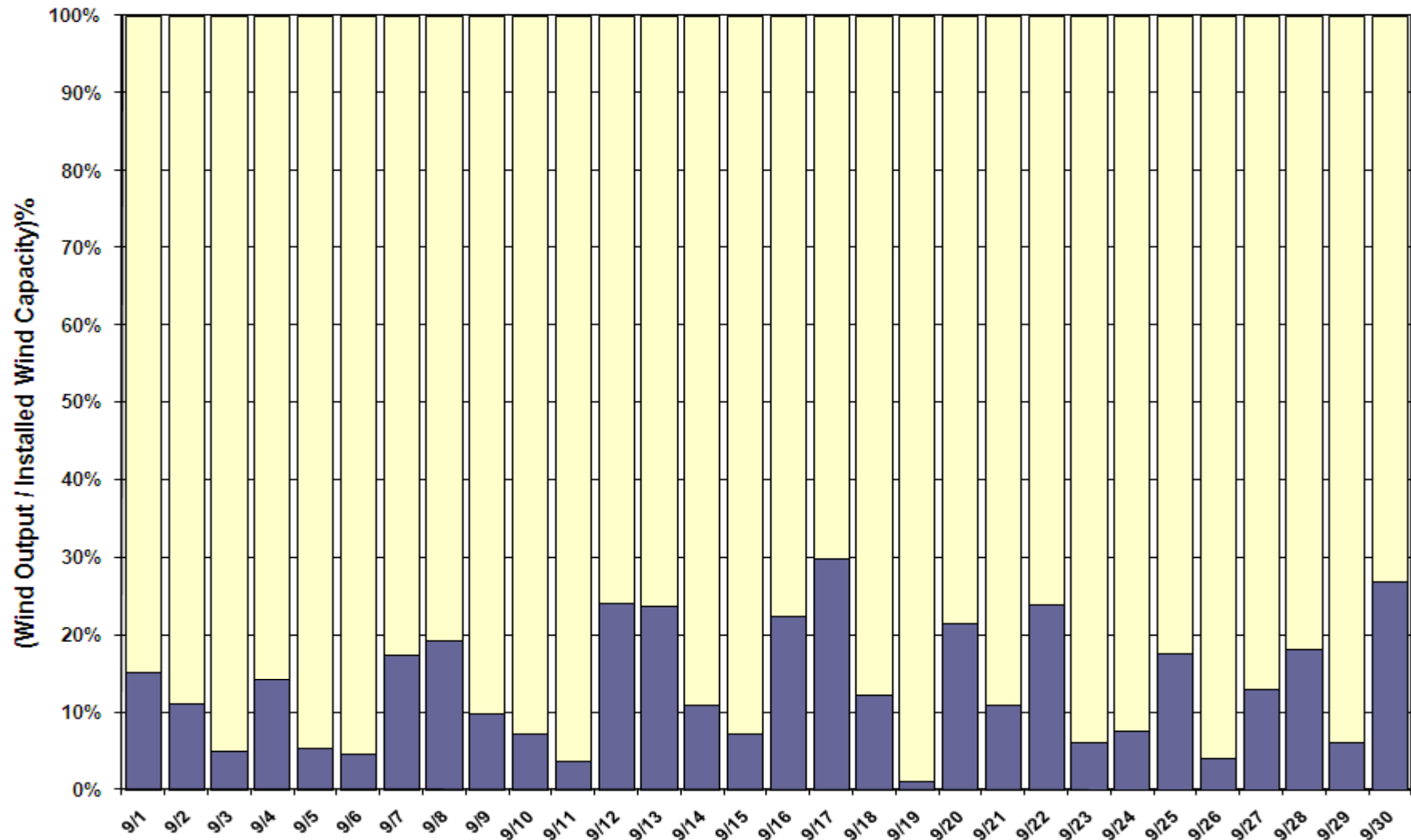


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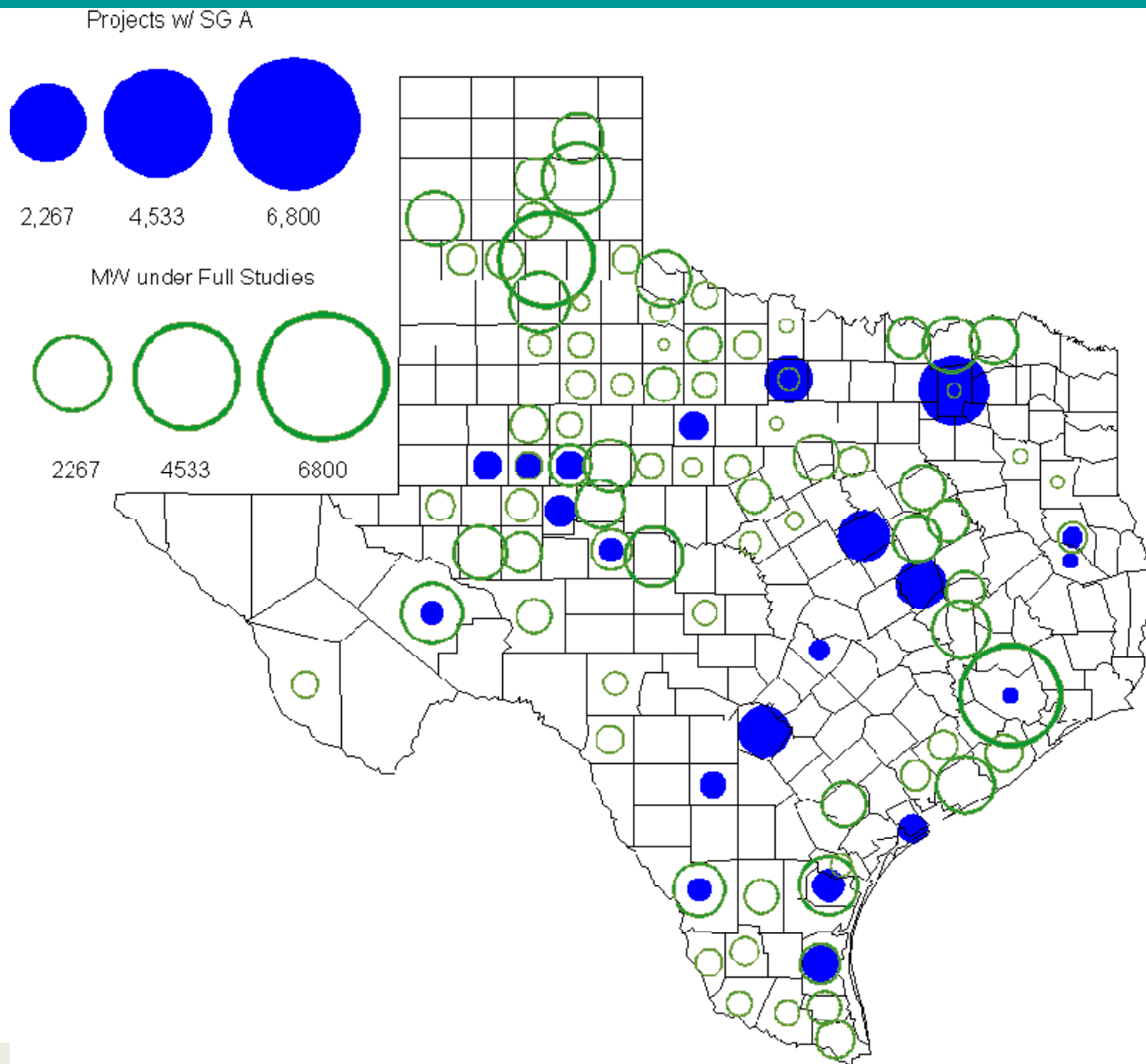
September 2009 Actual Wind Output as a Percentage of the Total Installed Wind Capacity at Peak



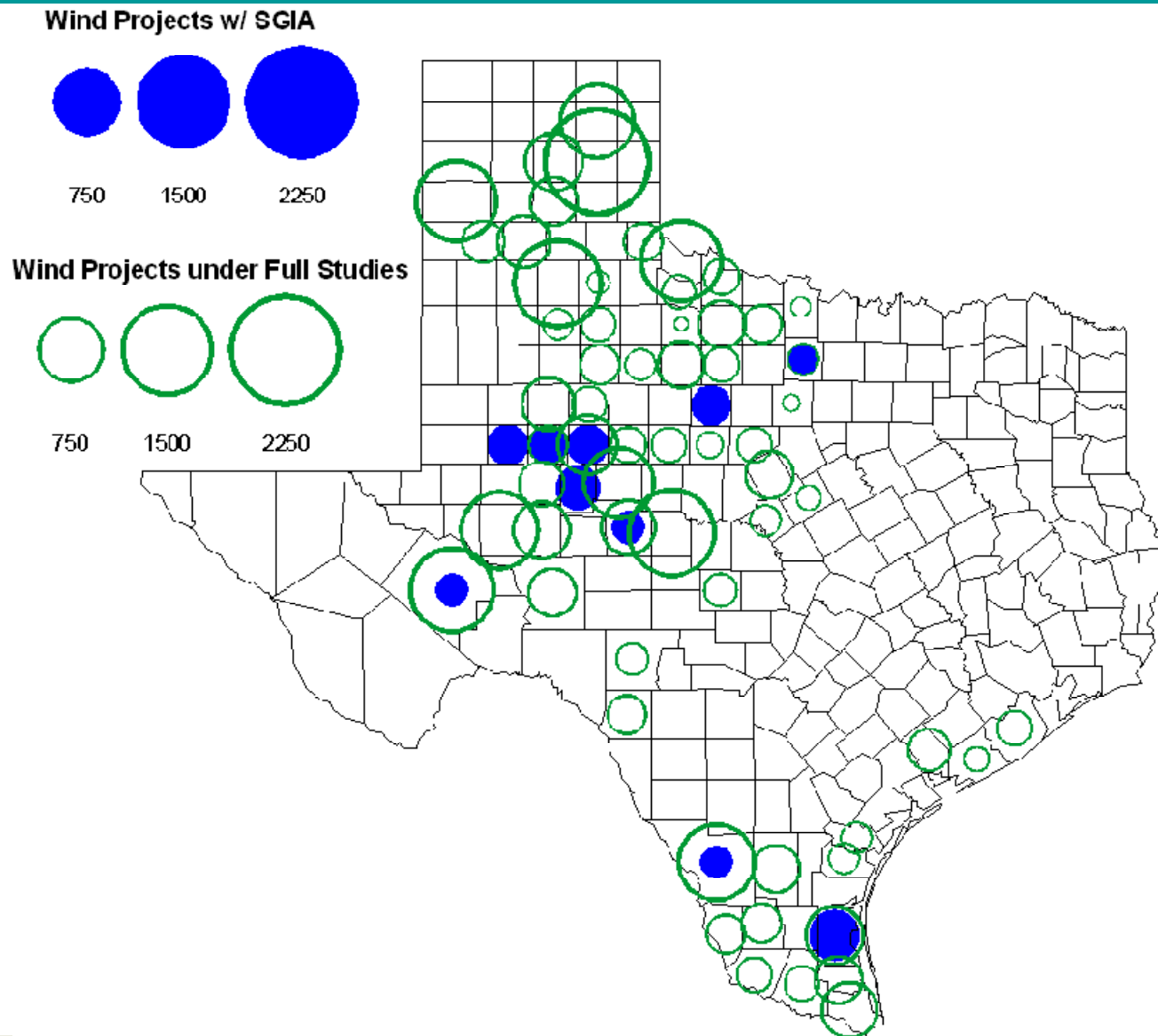
Planning Summary

- **ERCOT is currently tracking 224 active generation interconnection requests totaling over 79,000 MW. This includes almost 45,000 MW of wind generation.**
- **Regional Planning is currently reviewing proposed transmission improvements with a total cost of \$1,038.6 Million**
- **Transmission Projects approved in 2009 total \$257.8 Million**
- **All projects (in engineering, routing, licensing and construction) total approximately \$9.2 Billion**
- **Transmission Projects energized in 2009 total about \$416 Million**

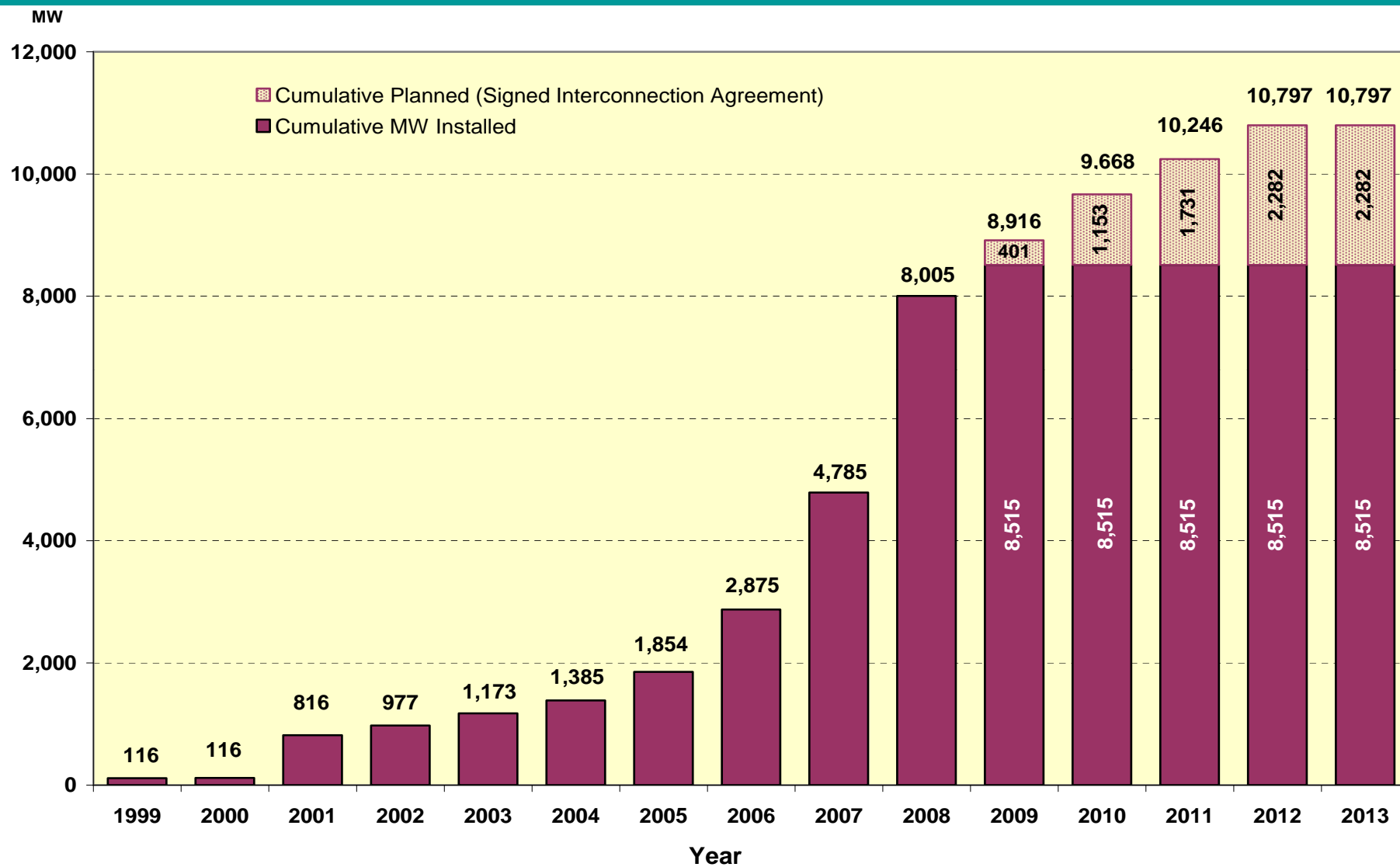
County Location of Planned Generation with Interconnection Requests (all fuels) September 2009



County Location of Planned Generation with Interconnection Requests (Wind) September 2009

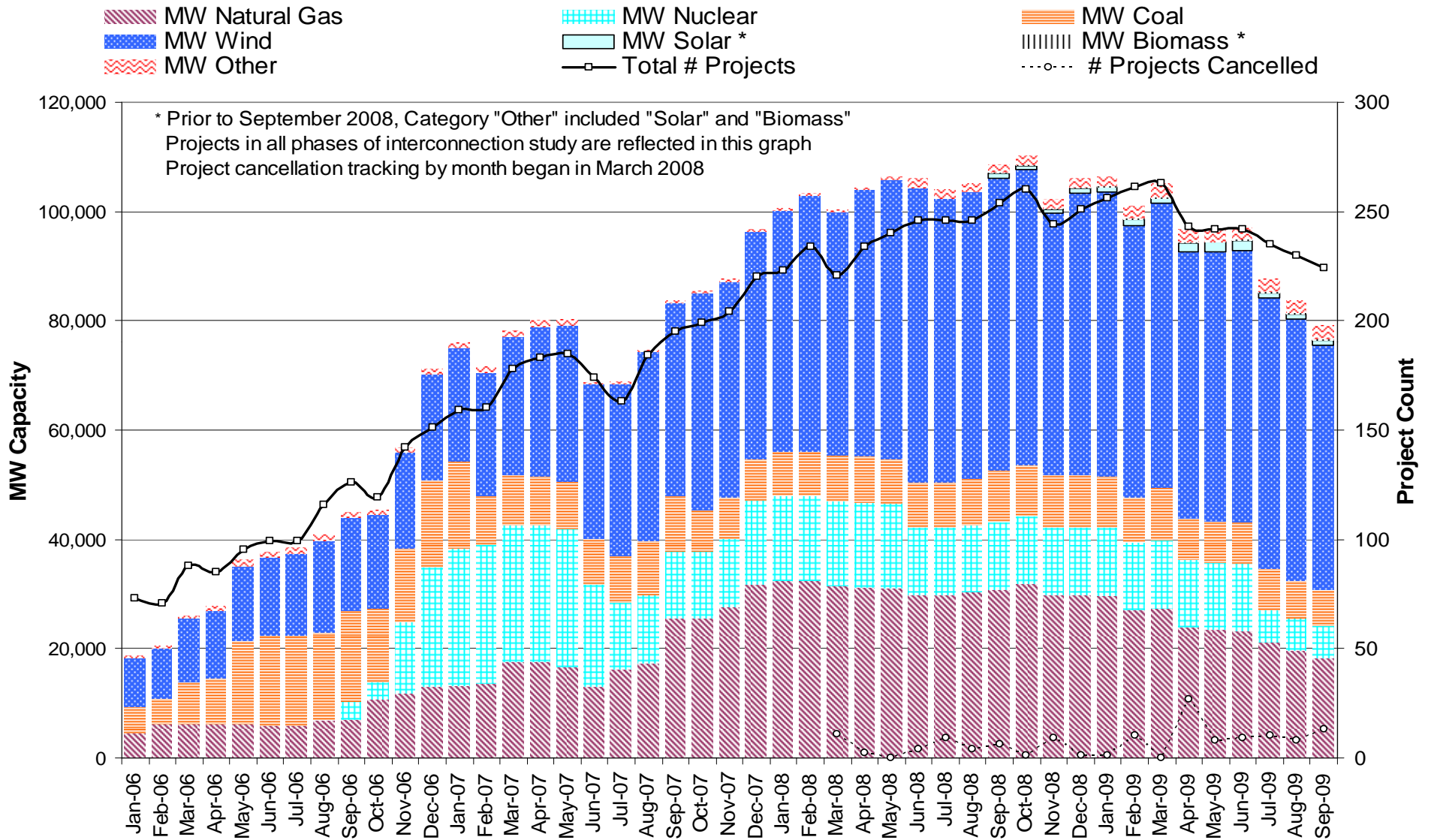


Wind Generation



(as of September 30, 2009)

Generation Interconnection Activity by Fuel



Generation Interconnection Activity by Project Phase

