



Grid Operations and Planning Report

ERCOT Board of Directors
April 22, 2009

Kent Saathoff

Content

- **Summary**
- **February 2009 Operations**
 - Peak Demand: Actual vs. Forecast
 - On-line Resources: Total at Peak and Wind
 - Day-Ahead Load Forecast Performance
 - Out of Merit Capacity Order (OOMC) & Replacement Reserve (RPRS) Purchases
 - Zonal Congestion
 - Significant System Incidents
 - Advisories, Alerts and EECPS
 - Other Items
- **Planning Activities**
 - Summary
 - Generation Interconnection Requests
 - Wind Capacity

- **February 2009 Operations**

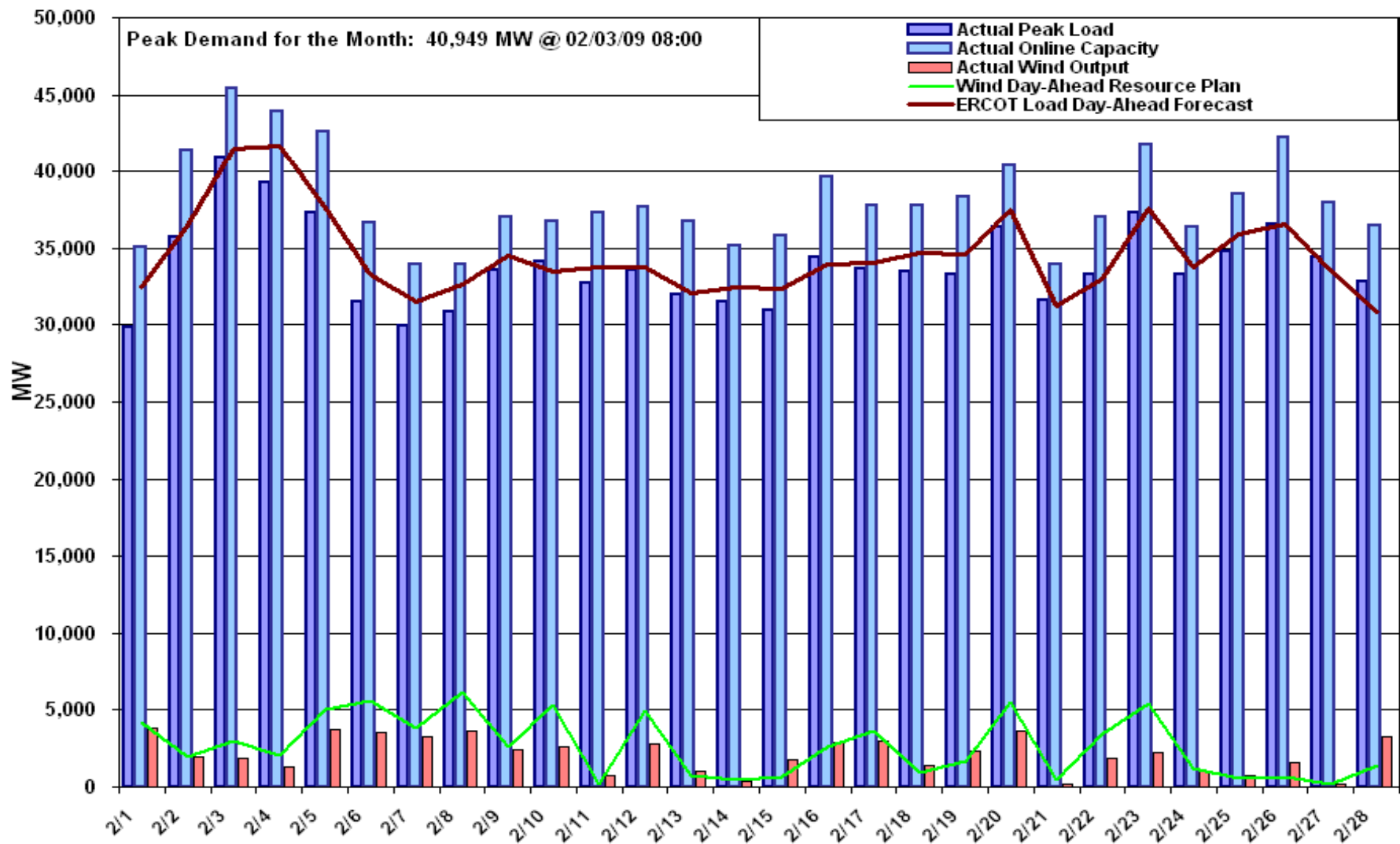
- The peak demand of 40,949 MW on February 3rd was less than the long term forecast of 45,543 MW for February.
- Day-ahead load forecast error for February was 3.49%.
- Most zonal transmission congestion in February was West to North due to wind generation
- No Alerts for Adjusted Responsive Reserve under 2500 MW, EECPP events or transmission alerts.

- **262 active generation interconnect requests totaling over 105,000 MW.**

- **Completed final RMR determination on Luminant Notice of Suspension of Operations (NSO) submission and selected Permian 5 and 6 for RMR contracts. Will continue to look for other solutions during RMR contract negotiations.**

- **8,065 MW wind capacity on line March 31, 2009. No change from January.**

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

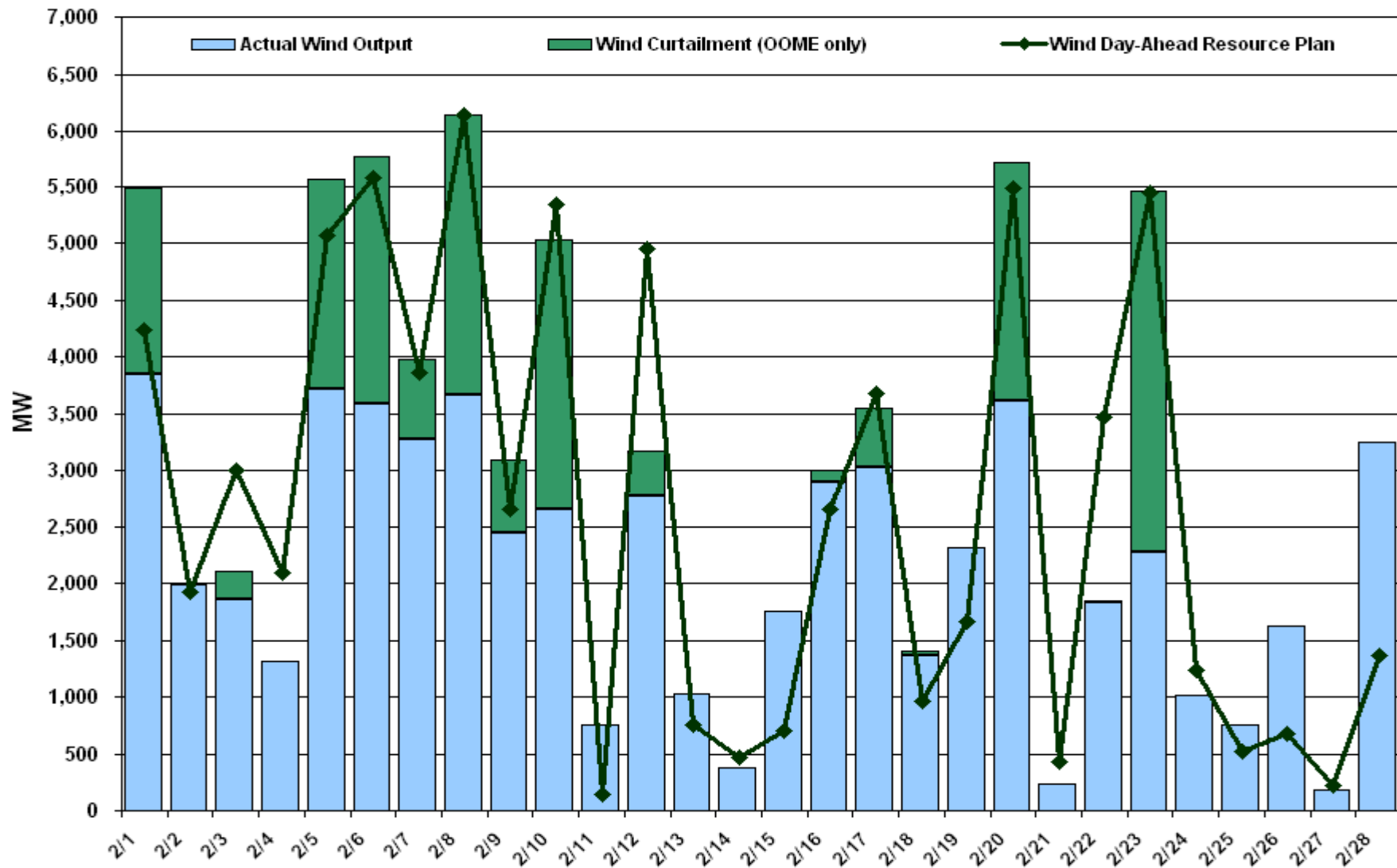


Note: All data are hourly averages during the peak load hour obtained from Resource Plans, and EMMS.

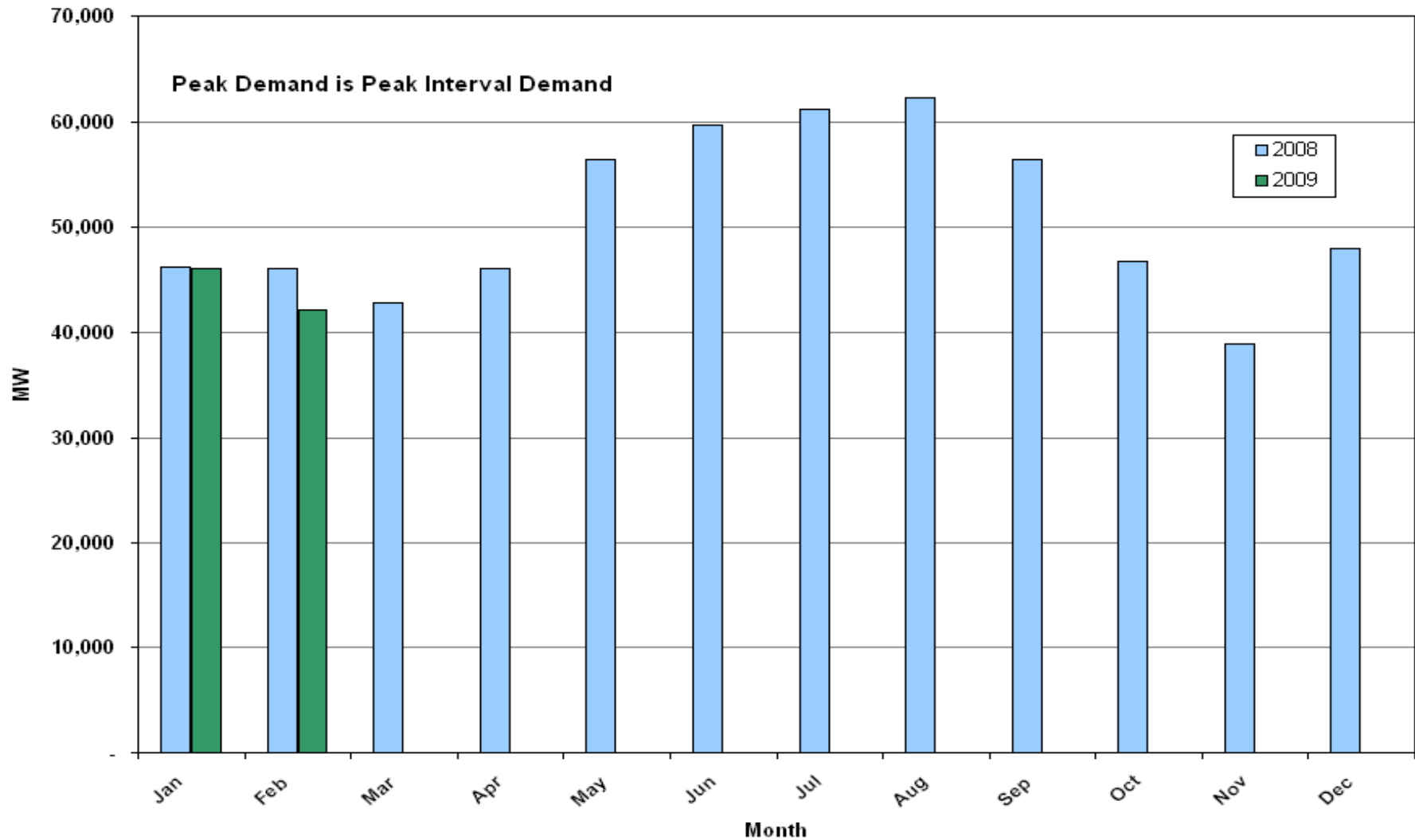


22 April 2009

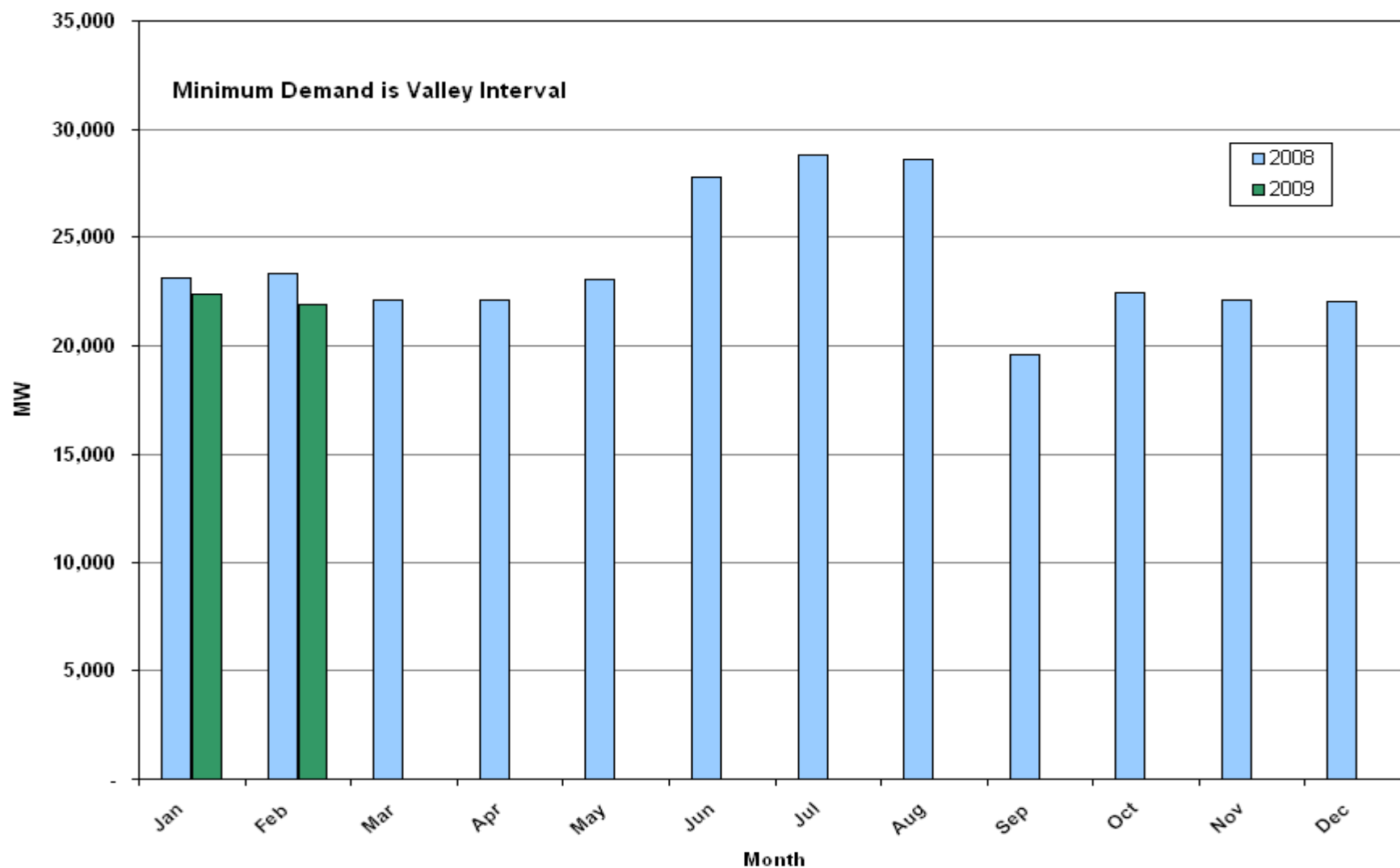
Actual Wind Output w/ Curtailment Added Back Vs Wind Day-Ahead Resource Plan Based on AWS Forecast at Peak Load Hour



Monthly Peak Demand: Actual



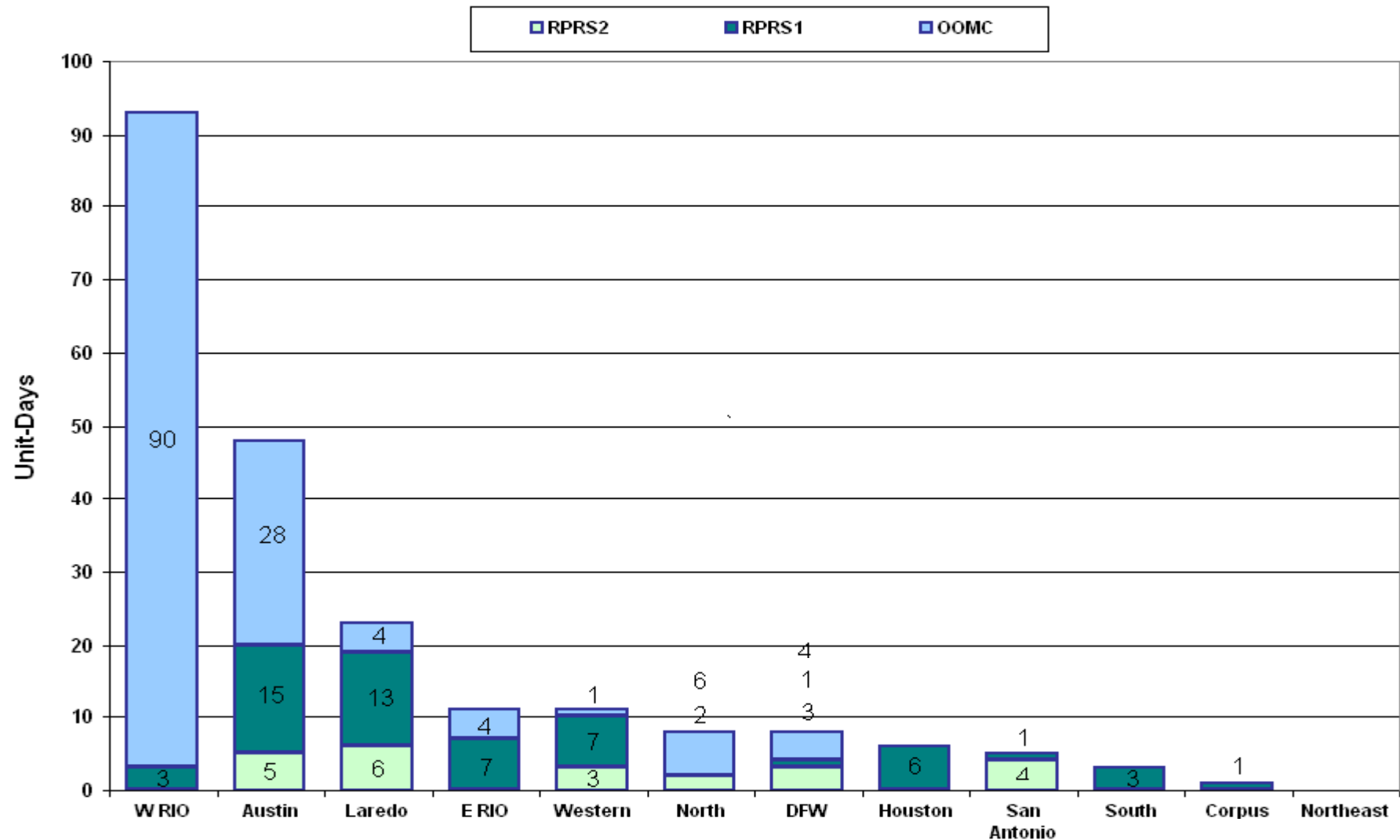
Monthly Minimum Demand: Actual



Day-Ahead Load Forecast Performance in February 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)	February 2009 MAPE
Average Annual MAPE	3.79	3.55	3.30	3.80	3.49

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



Zonal Congestion

CSC	Feb 08 Days	Dec 08 Days	Jan 09 Days	February 09 Days	Last 12 Months Total Days (Feb 08 – Feb 09)
North – Houston	0	0	0	0	71
North – West	15	0	0	1 Feb – 15	27
West – North	24	22	19	14 Feb – 4, 5, 9, 11-13, 15, 17, 18, 20-23, 27, 28	208
South – North	2	0	1	0	32
North - South	4	0	2	0	104

Significant Incidents in February 2009

- **February 16th at 13:33**
 - Emergency notice issued due to the Ancillary Service Market for 02/17/09 not meeting the Market time line.

Advisories and Alerts in February 2009

- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
 - Issued 2 Days.
- **There was no Alert issued for ARR below 2500 MW in February 2009.**
- **No Transmission Alerts in February 2009.**
- **No EECPPs in February 2009**

Other Items

- **February 4th**
 - Held IE 14:15 balancing energy deployments for IE 14:30 due to an incorrect short-term load forecast value. Resumed with deployments for IE 14:45.

Planning Summary

- **ERCOT is currently tracking 262 active generation interconnect requests totaling over 105,000 MW. This includes almost 50,000 MW of wind generation**
- **Regional Planning is reviewing proposed transmission improvements with a total estimated cost of \$1,013 million**
- **All transmission projects (in engineering, routing, licensing and construction) total \$4.1 billion**
- **Completed final RMR determination on Luminant Notice of Suspension of Operations (NSO) submission and selected Permian 5 and 6 for RMR. Will continue to look for solutions during RMR contract negotiations.**

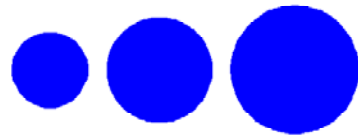
County Location of Installed Capacity and Interconnection Requests (wind) March 2009

Wind Projects MW under Full Studies

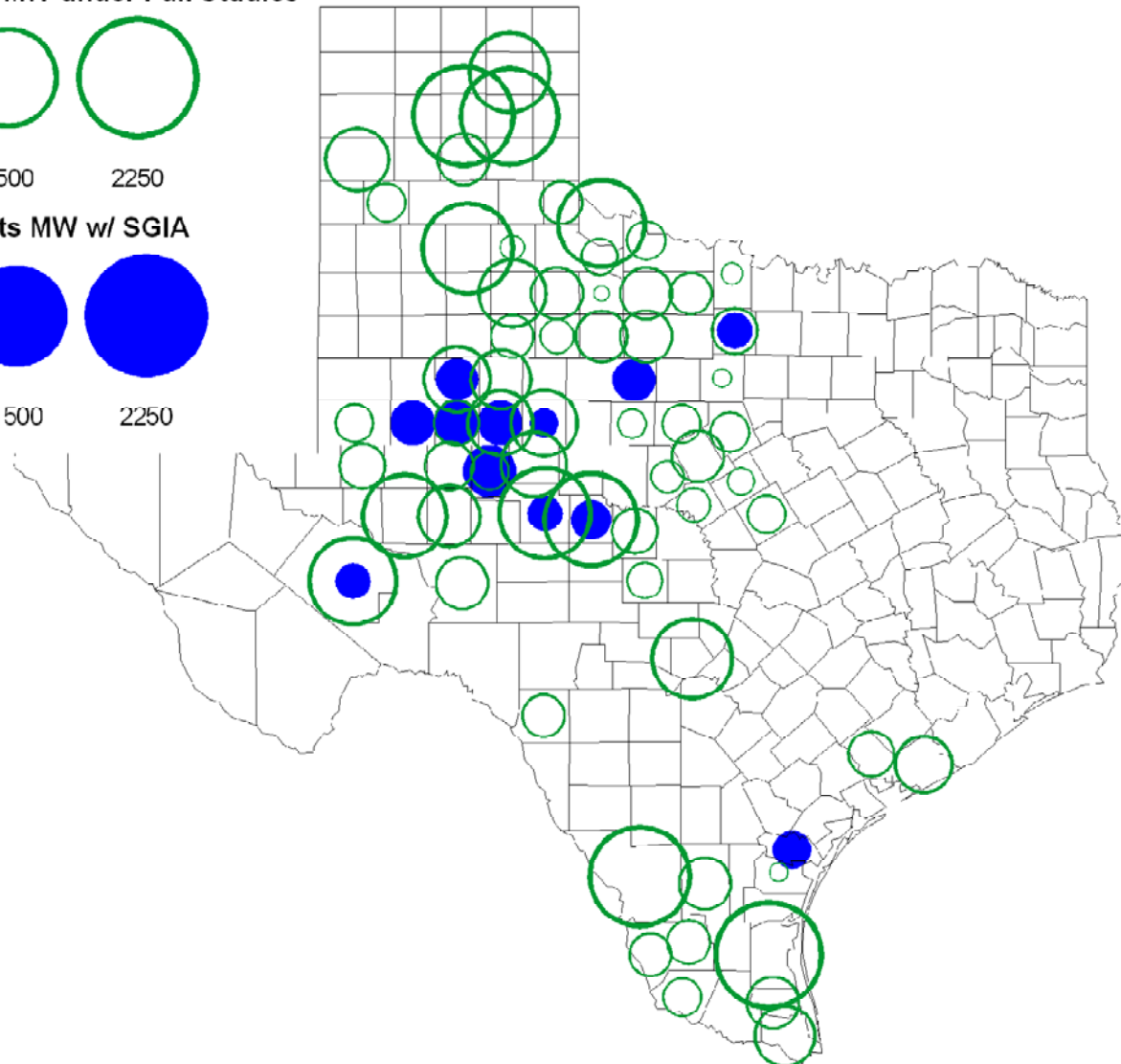


750 1500 2250

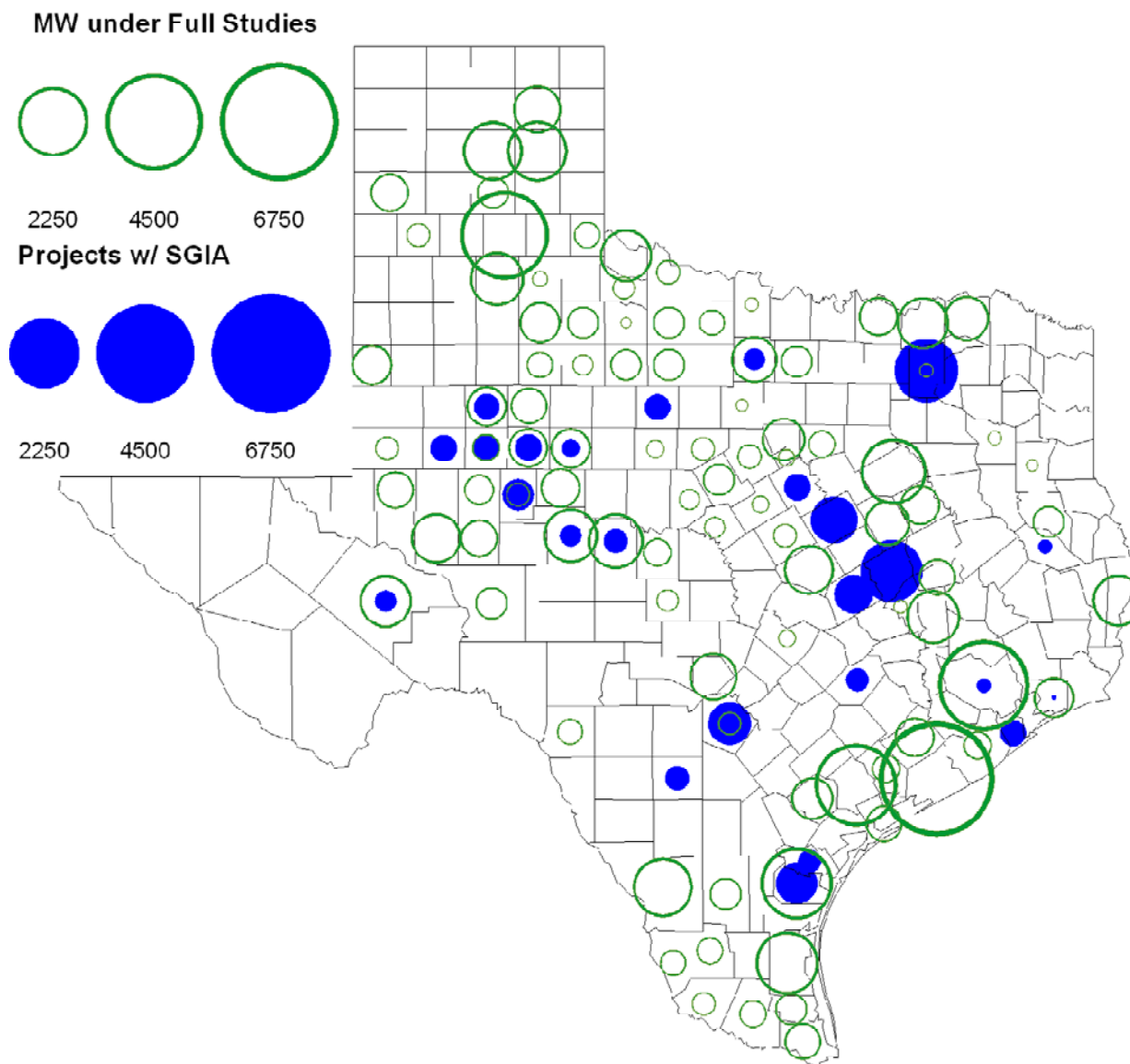
Wind Projects MW w/ SGIA



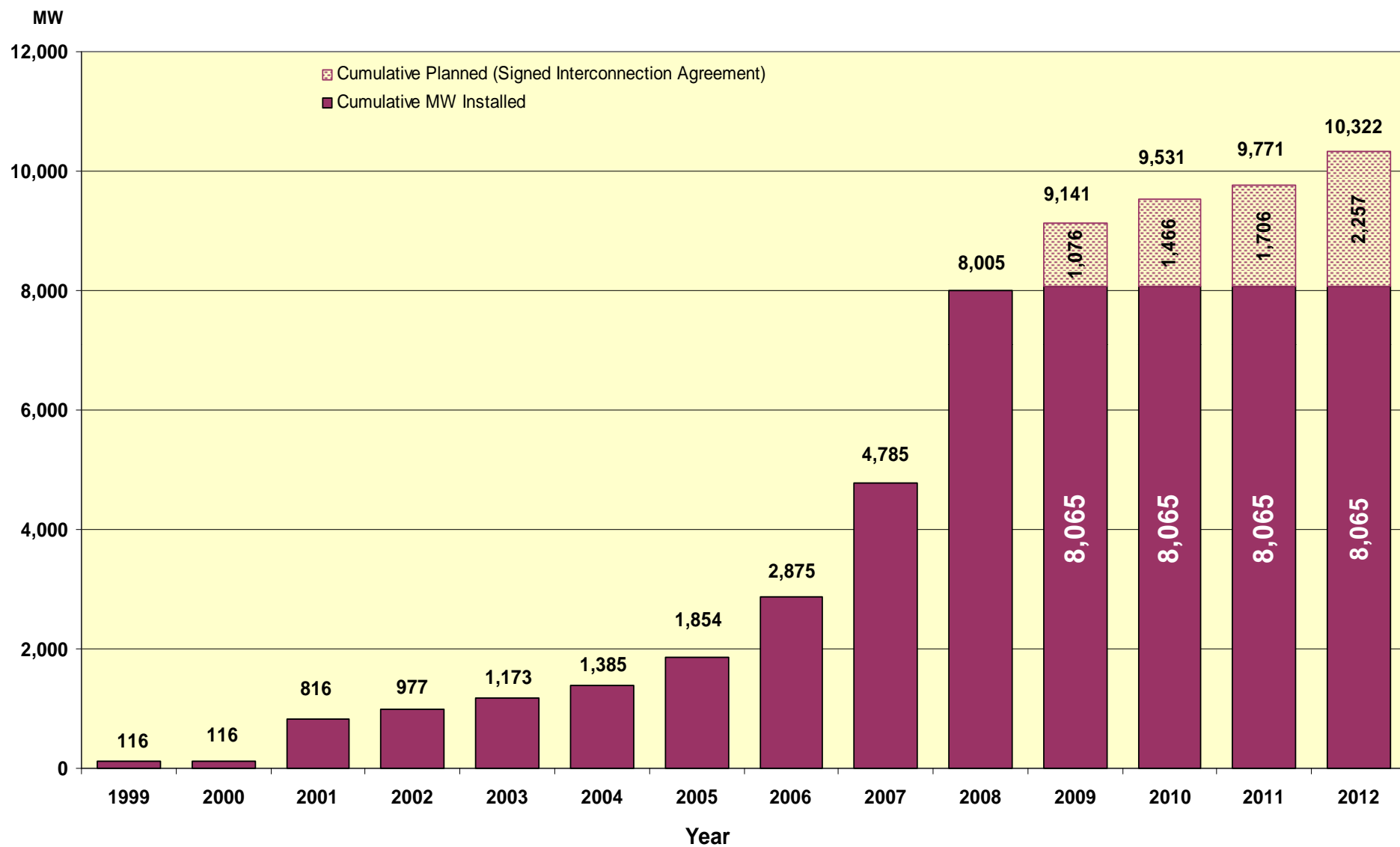
750 1500 2250



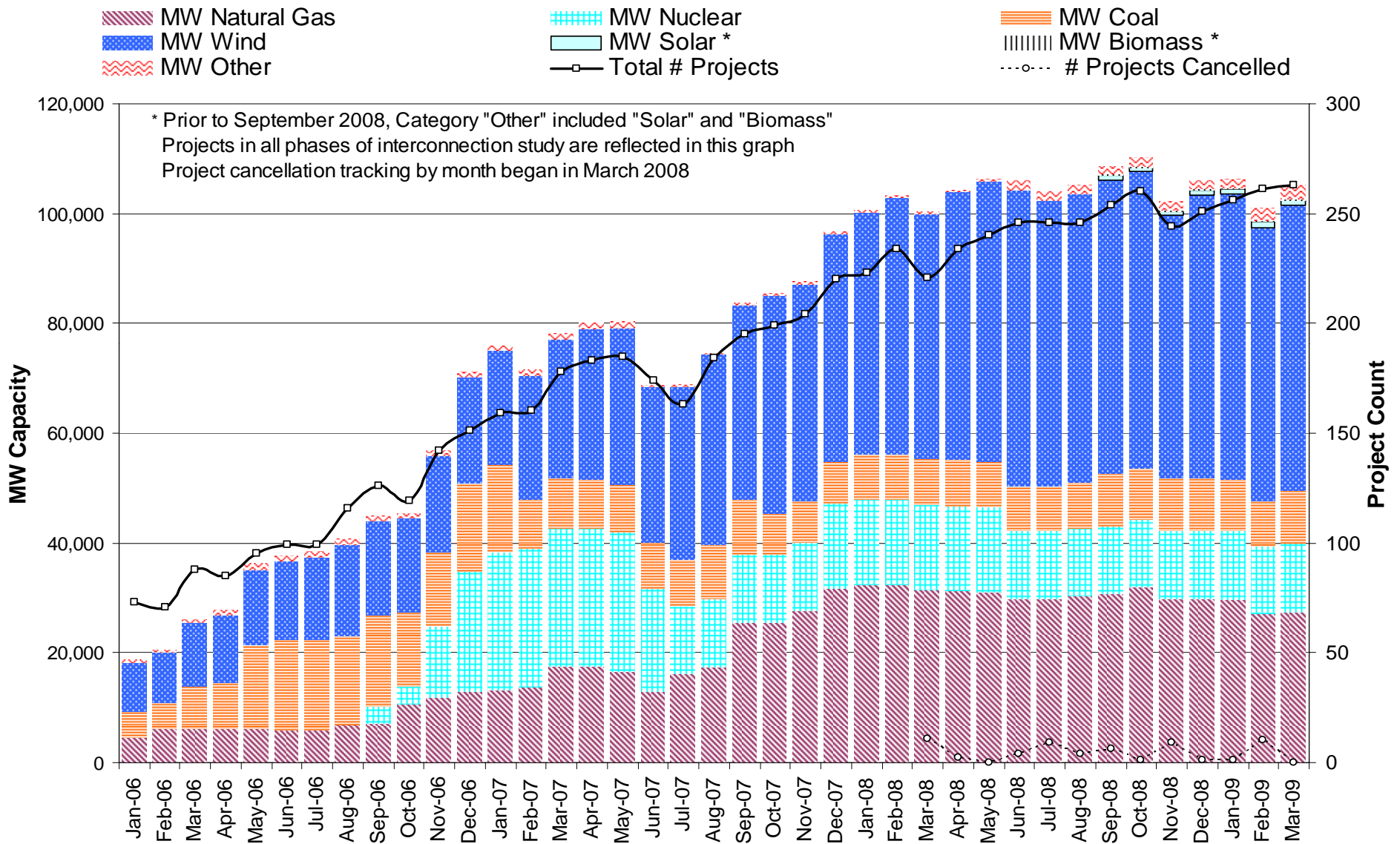
County Location of Installed Generation and Interconnection Requests (all fuels) Mar 2009



Wind Generation



Generation Interconnection Activity



Questions ?