



Operations and Planning Report

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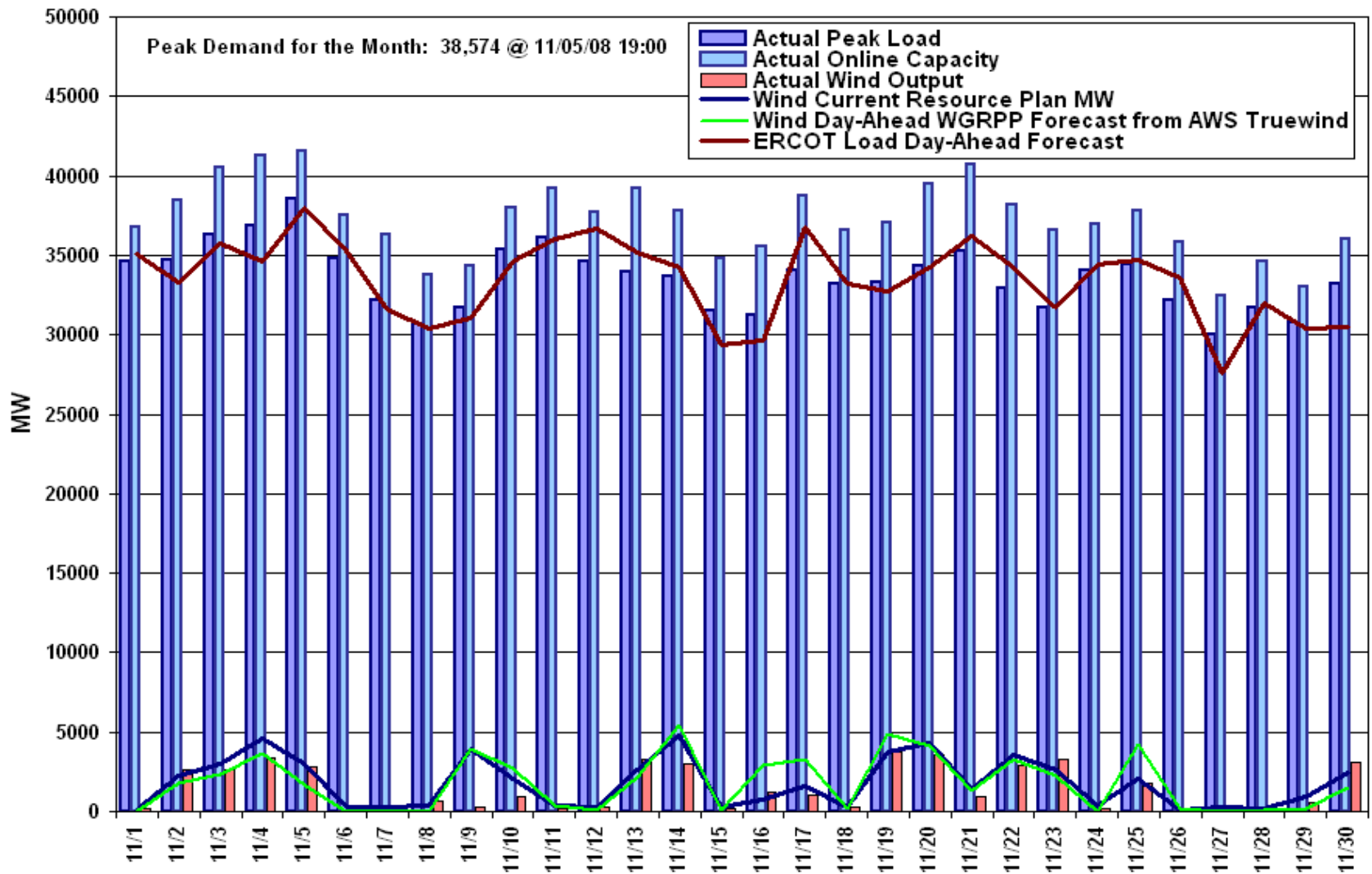
ERCOT Board of Directors Meeting
January 20, 2009

- **Summary**
- **For November, 2008**
 - 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 Purchases
 - Zonal Congestion
 - Significant System Incidents
 - Advisories, Alerts and EECs
 - Other Items
- **Planning Activities**
- **Wind Capacity**

- **The peak demand of 38,574 MW on November 5th was more than the forecast of 38,016 MW for November.**
- **Day-ahead load forecast error for November was 2.60%.**
- **One Alert for Adjusted Responsive Reserve below 2500 MW**
- **No EECF events**
- **254 active generation interconnect requests totaling over 106,000 MW**
- **8,005 MW Wind Capacity on line December 31, 2008**

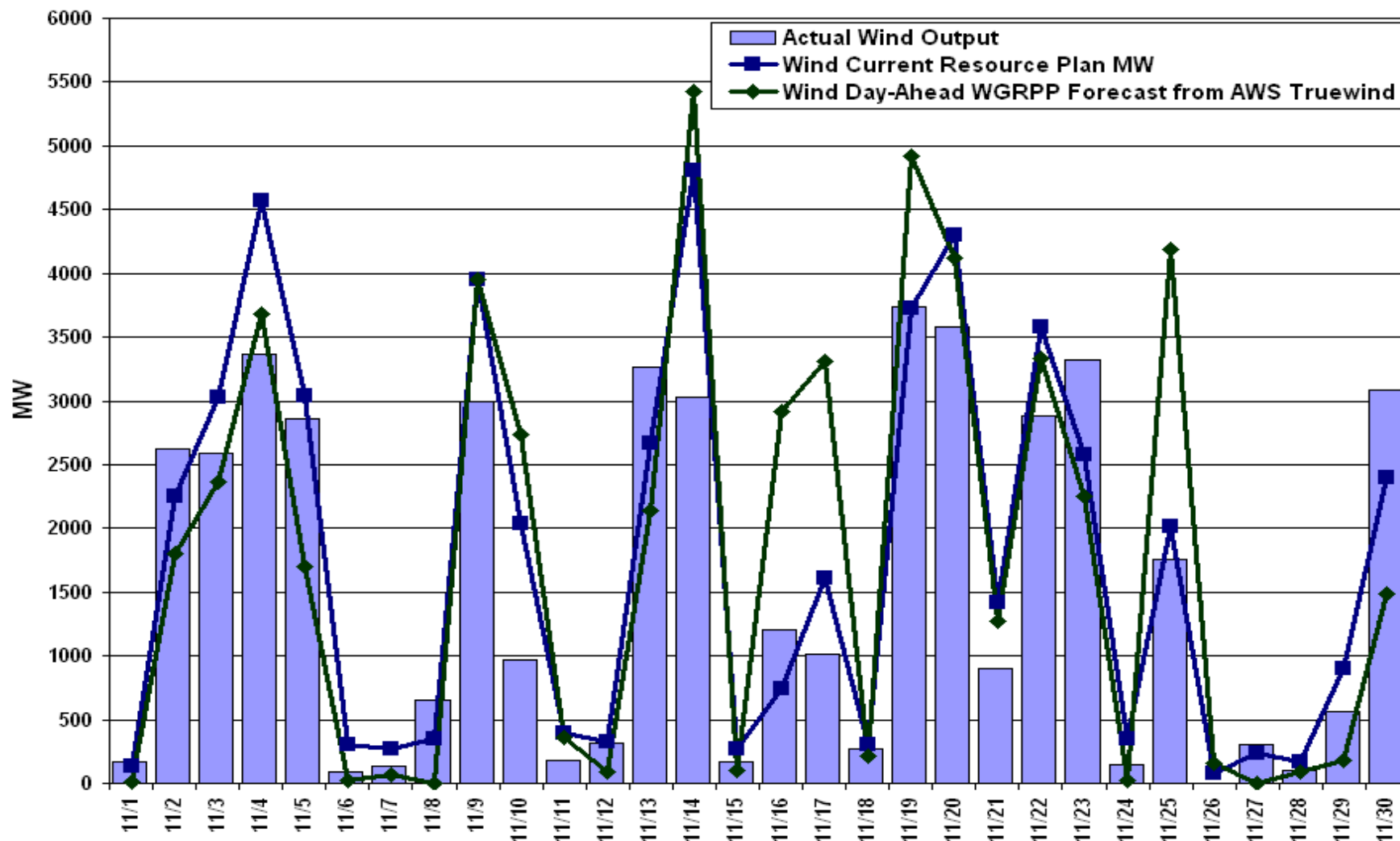
Daily Peak Demand: Hourly Average Actual vs Forecast

Resource Plan: On-line Capacity at Peak

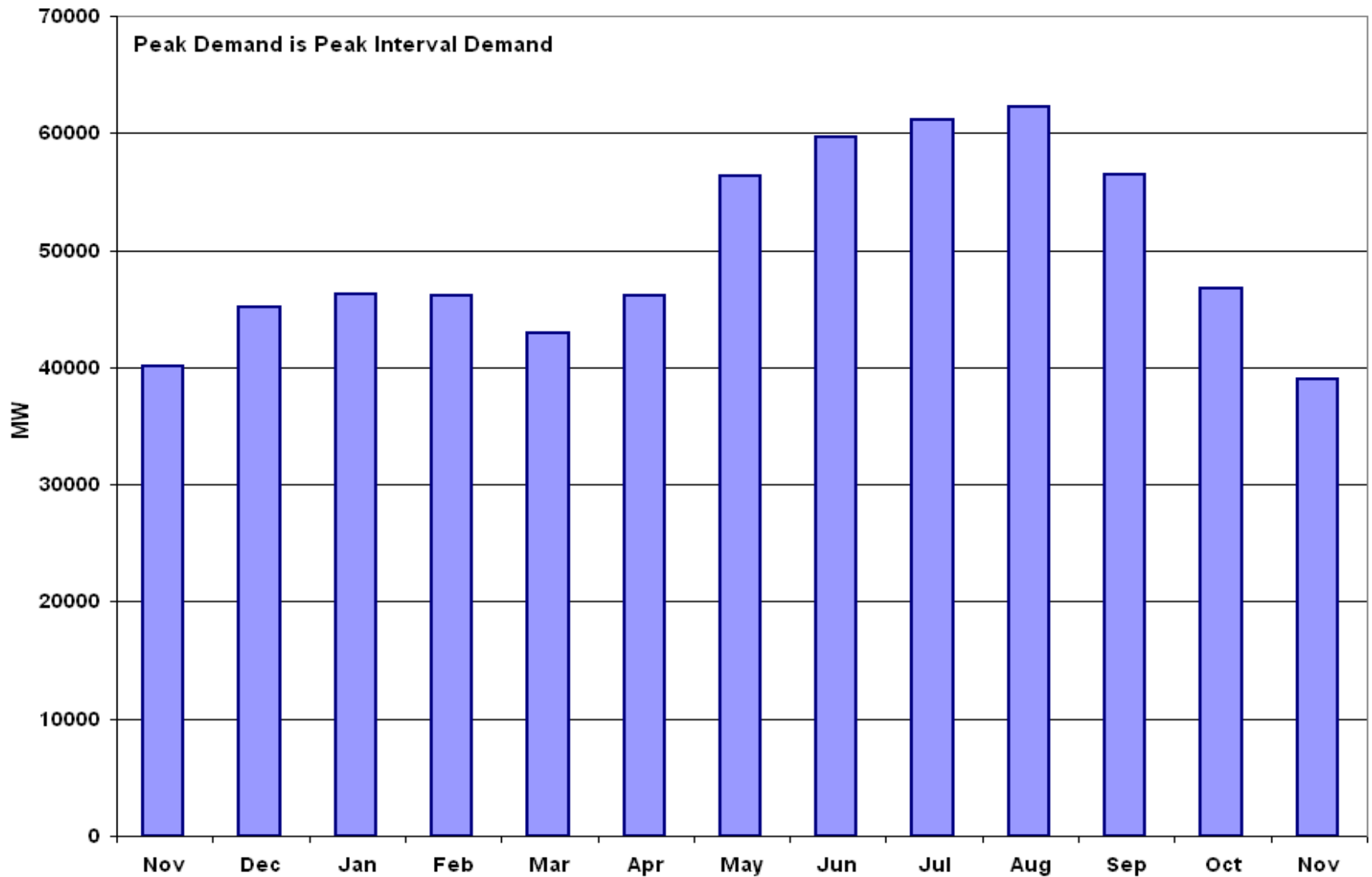


Note: All data are hourly averages during the peak load hour obtained from Resource Plans, EMMS, and AWS Truewind Wind Forecast.

Actual Wind Output Vs Wind Current Resource Plan & Wind Day-Ahead AWS Forecast at Peak Load



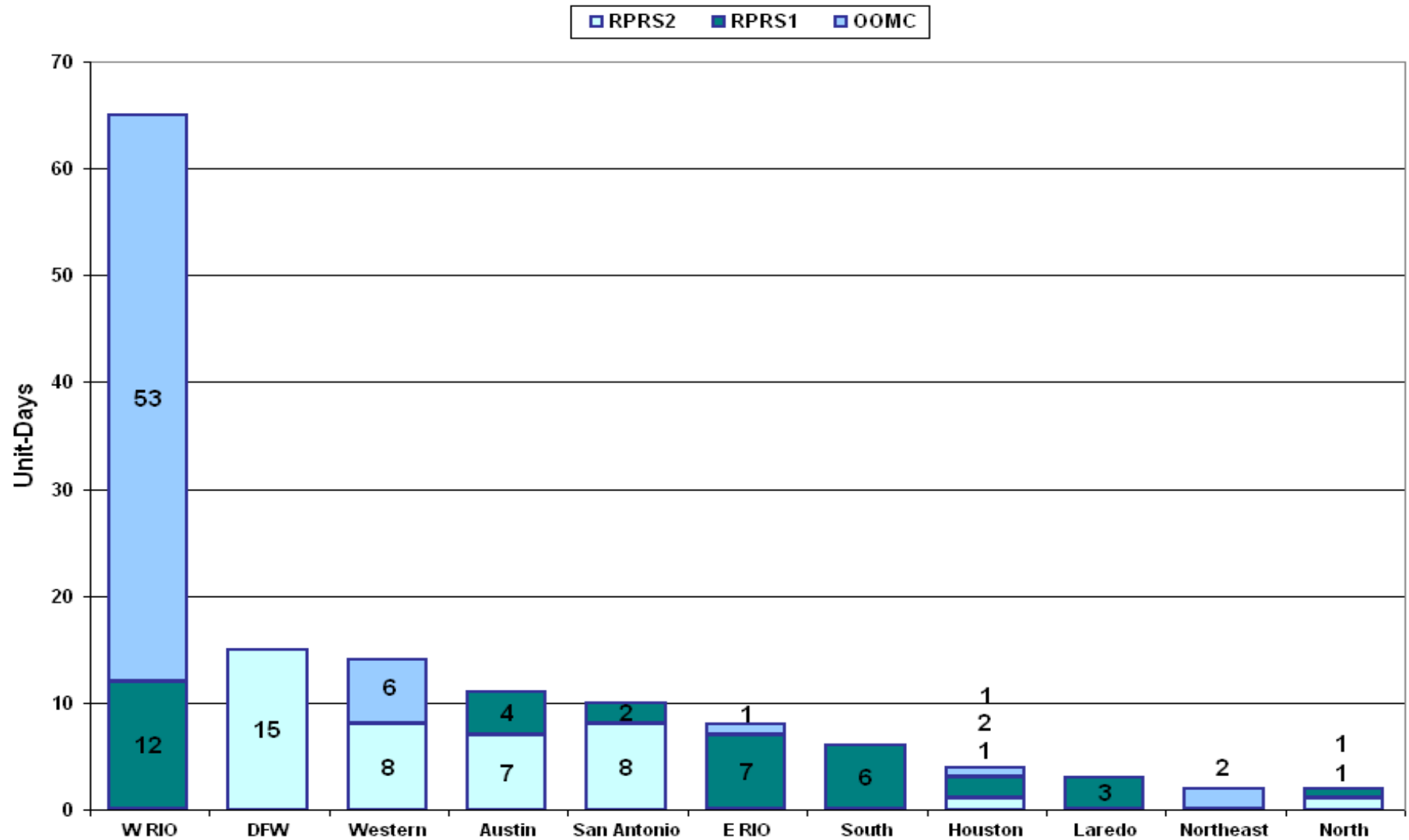
Monthly Peak Demand: Actual



Day-Ahead Load Forecast Performance in November 2008

	Mean Absolute Percent Error (MAPE) for ERCOT Mid-Term Load Forecast (MTLF) Run at 16:00 Day Ahead				
	2005 MAPE	2006 MAPE	2007 MAPE	2008 MAPE (YTD)	November 2008 MAPE
Average Annual MAPE	4.53	3.28	2.95	3.18	2.60

Capacity Purchases of RMR, OOMC & RPRS to Manage Local Congestion in November 2008



Zonal Congestion

CSC	Nov 07 Days	Sept 08 Days	Oct 08 Days	November 08 Days	Last 12 Months Total Days (Nov 07 – Nov 08)
North – Houston	13	6	15	1 Nov – 2	84
North – West	1	1	0	1 Nov – 1	46
West – North	10	0	13	17 Nov – 2-6,9,13,14,19-26,30	177
South – North	1	1	0	0	37
North - South	N/A	7	0	0	110

- **November 10th**
 - 18:58 - Held the deployments for IE 18:45 and resumed with the deployments for IE 20:00 due to lack of space on drive for I/O files. There were a total of 4 held intervals.

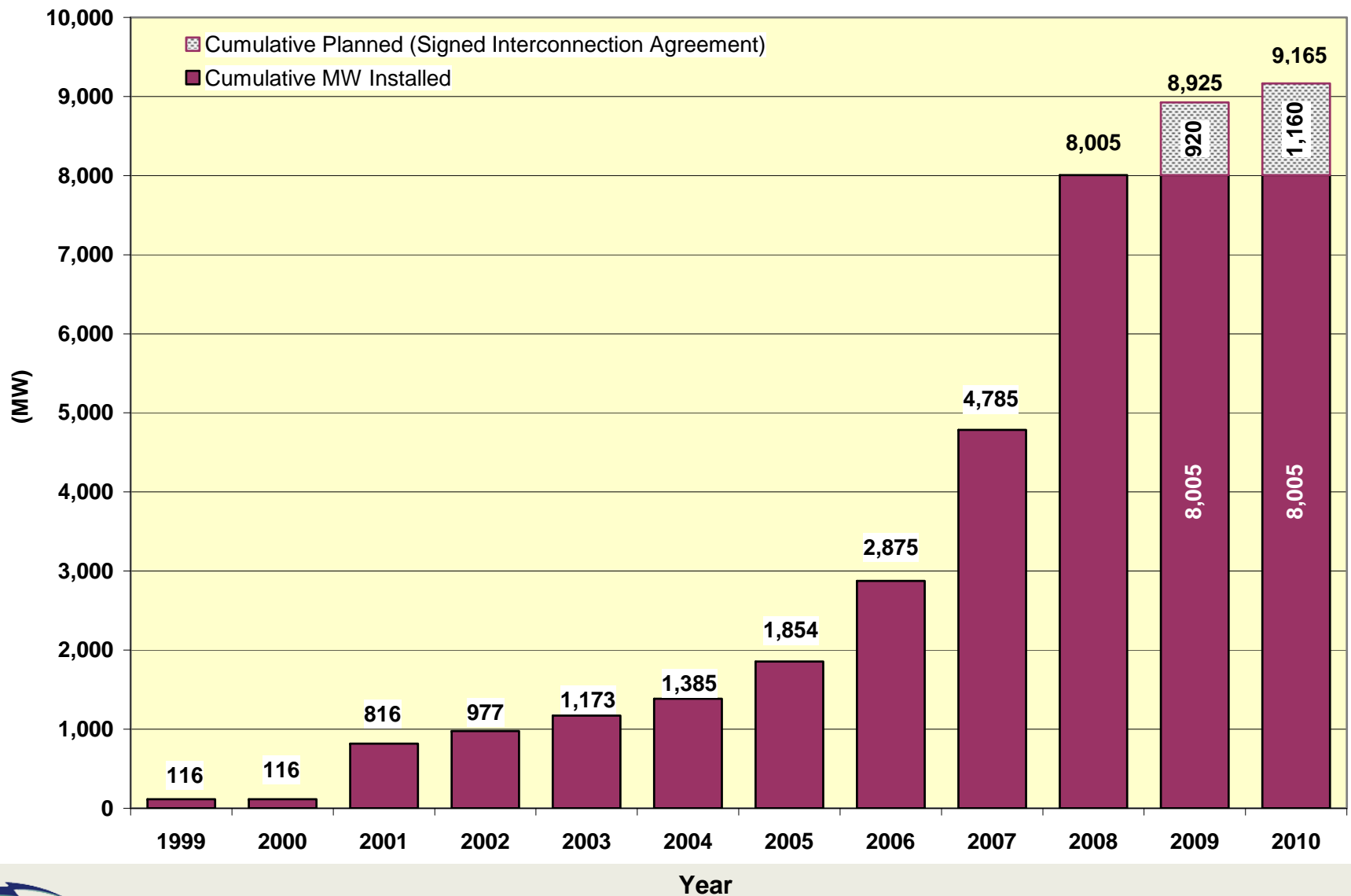
- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
 - Issued 18 Days.
- **Alert issued November 30 for ARR below 2500 MW.**
- **Transmission Emergency (operation above single contingency limits):**
 - 11/27 Emergency Notice issued for the Valley Import limit, 100 MW of emergency energy received from CFE through the Railroad DC-Tie from 13:00 – 16:00.
- **No EECs in November 2008**

- **November 11th**
 - Held interval ending 18:15 balancing energy deployments due to short term load forecast error.
- **November 11th**
 - Emergency Notice issued for RPRS Market not being approved by the 18:00 required timeline.
- **November 17th**
 - Emergency Notice issued for RPRS Market failed to solve for 11/18/08 not meeting the 18:00 required timeline.
- **November 20th**
 - Held interval ending 11:15 balancing energy deployments.

- **ERCOT is currently tracking 254 active generation interconnect requests totaling over 106,000 MW. This includes almost 52,000 MW of wind generation**
- **93 MW of new generation began commercial operation in December, bringing the currently installed total of wind power capacity to 8,005 MW.**
- **Regional Planning is reviewing proposed transmission improvements with a total estimated cost of \$766 million**
- **All projects (in engineering, routing, licensing and construction) total \$4.1 billion**
- **Transmission Projects approved in 2008 totaled \$255 million**
- **Transmission projects completed in 2008 totaled \$453 million**

ERCOT Wind Capacity

Wind Capacity Installed by Year



Questions ?