



April 2008 Grid Operations

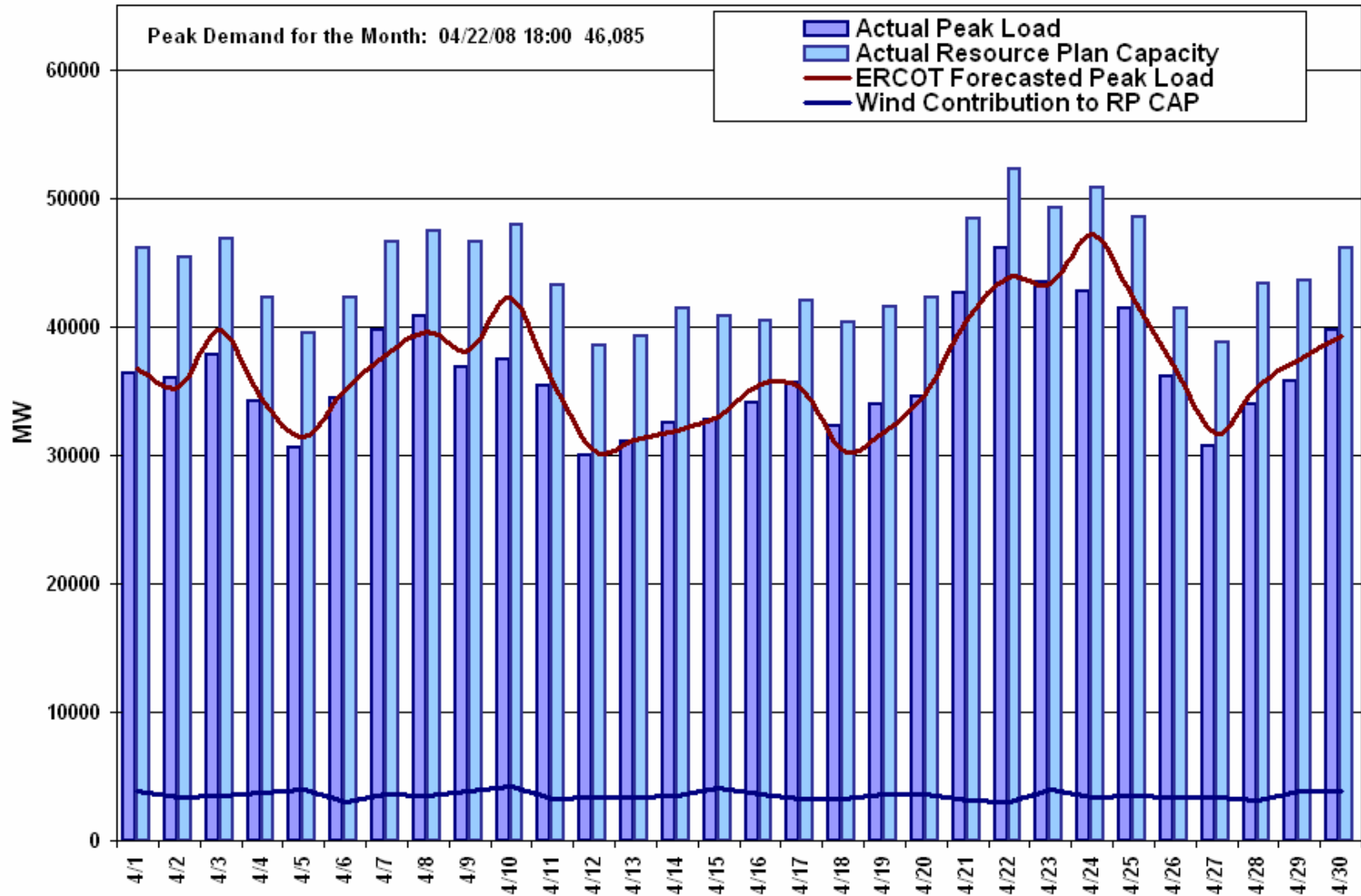
ERCOT Board of Directors
17 June 2008

Kent Saathoff

- **Peak Demands: Actual vs. Forecast**
On-line Resources: Total at Peak and Wind
- **Load Forecast Performance**
- **Out of Merit Capacity Order (OOMC) & Reliability Must Run (RMR) Purchases**
- **Zonal Congestion**
- **Significant System Incidents**
- **Advisories, Alerts and EECPs**
- **Other Items**
- **2008 ERCOT Hurricane Drill**

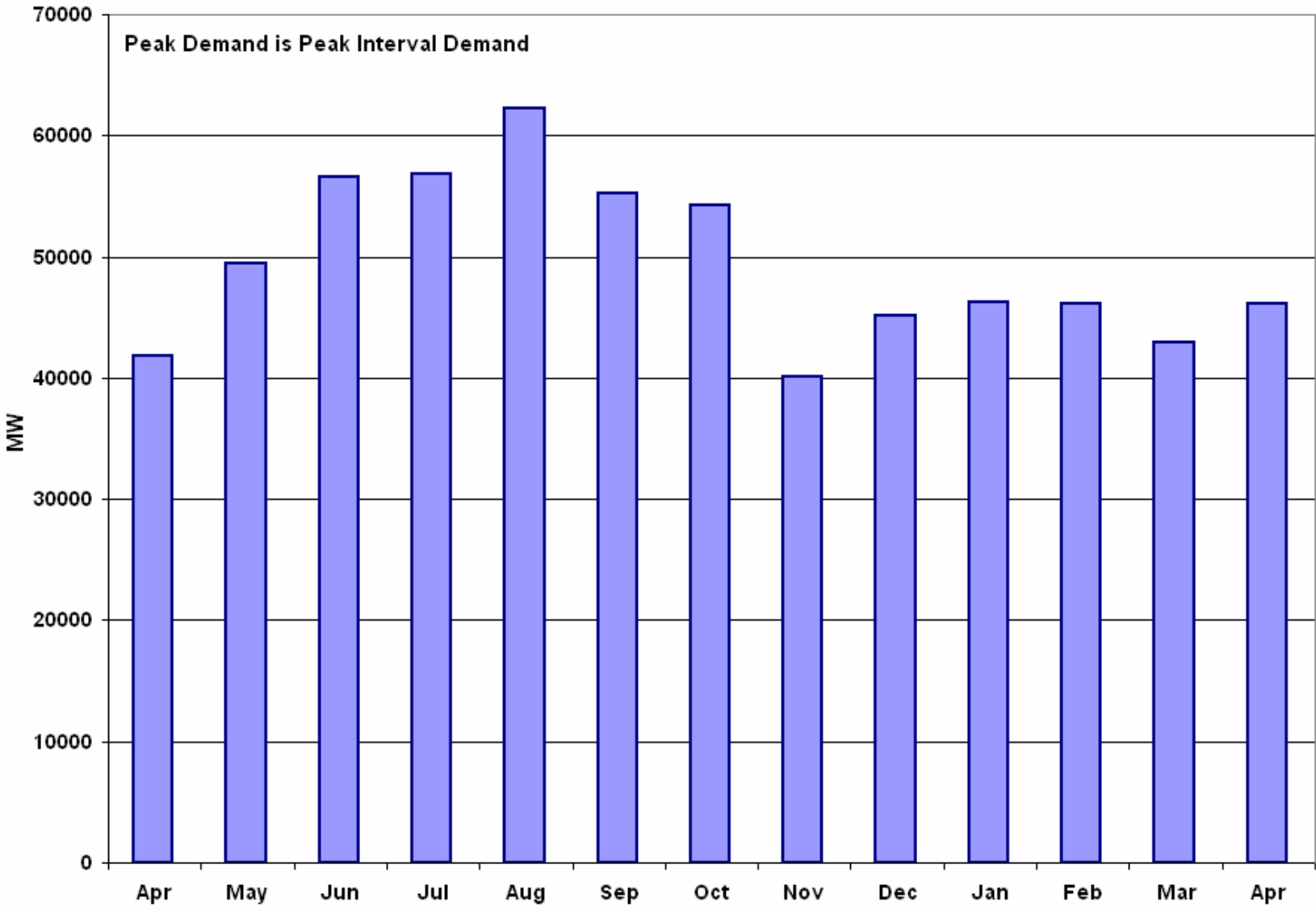
Daily Peak Demands: Hourly Average Actual vs Forecast

Resource Plan: On-line Capacity at Peak



Note: Preliminary data obtained from EMS hourly averages.

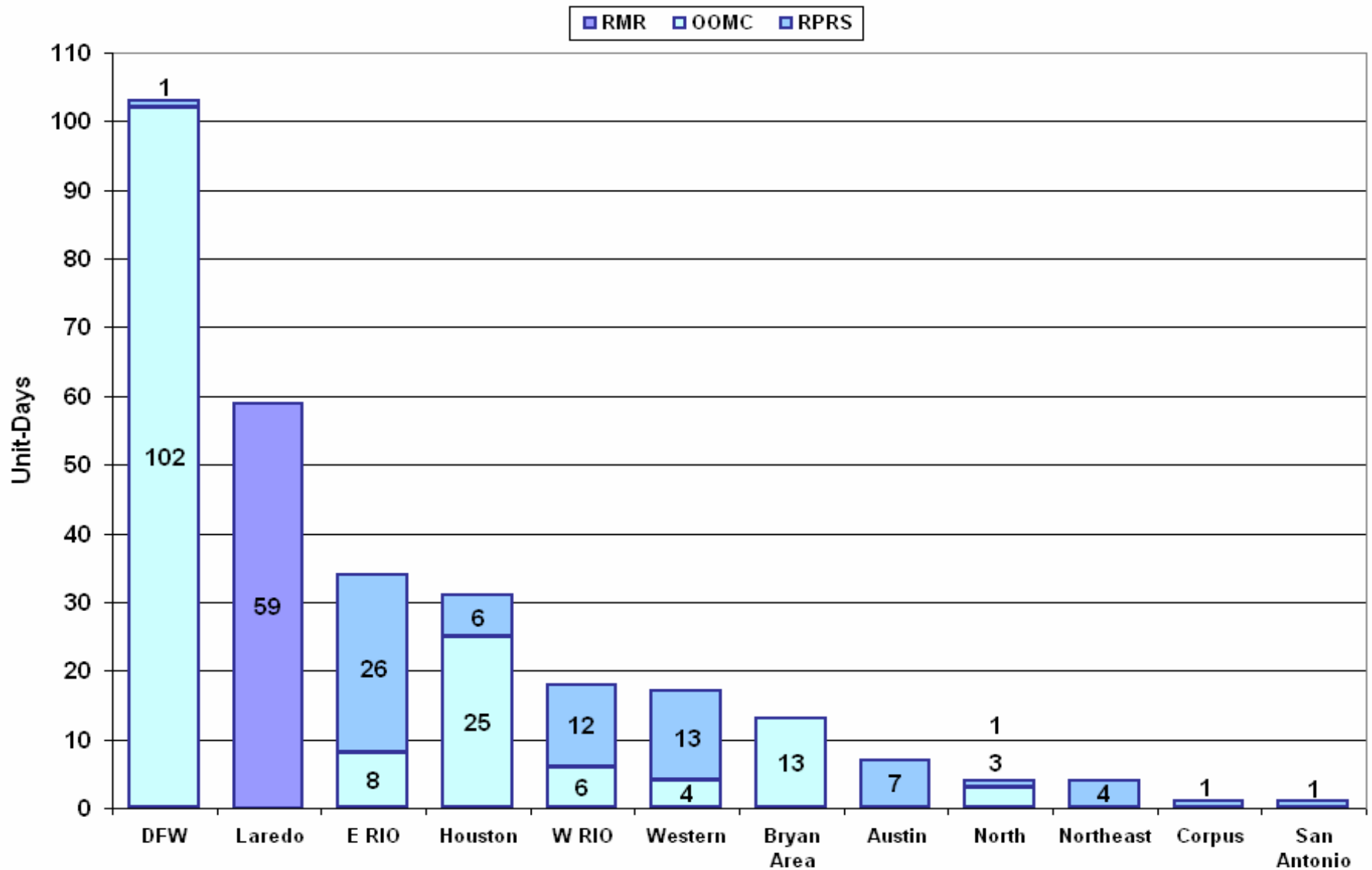
Monthly Peak Demands: Actual



Load Forecast Performance in April 2008

	Mean Absolute Percent Error (MAPE) for Mid-Term Load Forecast (MTLF) Run at 16:00 Day Ahead				
	2005 MAPE	2006 MAPE	2007 MAPE	2008 MAPE (YTD)	April 2008 MAPE
Average Annual MAPE	4.56	3.79	3.55	3.16	2.45

Capacity Purchases for RMR OOMC & RORS to Manage Local Congestion in April 2008



Zonal Congestion

CSC	April 08 Days	April 07 Days	Last 12 Months Total Days
North – Houston	15 Apr – 1-4,7-11,15,23-26,30	12	106
North – West	4 Apr – 6,12-14	0	60
West – North	26 Apr – 1,4-12,14-17,19-30	5	118
South – North	11 Apr – 1-5,14,18,25,28-30	0	34
North - South	16 Apr – 2,3,5,7,10,14,15,17,20-27	N/A	41

- **April 3rd Simultaneous loss of Oklaunion – Bowman & Abilene Mulberry Creek 345 kV lines and 345/138 kV Autotransformer (Auto) at Oklaunion**
 - Due to flashover on a contaminated insulator.
- **April 9th Simultaneous loss of Graham – Breckenridge & Leon Switch 138 kV lines and one 138/69 kV Auto at Breckenridge**
 - Due to tornado in the area.
- **April 10th DCS Event**
Simultaneous loss of one unit and the East DC Tie totaling 1083 MW, Venus #2 Bus and 345/138 kV Auto at Venus
 - Due to storms in North Texas.

- **Advisories issued for Adjusted Responsive Reserve (ARR) below 3000 MW.**
 - Issued 1 Day.
- **No alerts issued for ARR below 2500 MW.**
- **No Transmission Alerts.**
- **No EECs implemented.**

- **Held the following intervals due to interconnect errors between market databases, issues have been fixed since April 22nd:**
 - April 13th Interval Ending (IE) 08:45
 - April 14th IE 08:30
 - April 18th IE 18:15
- **April 12th**
 - Held IE 23:00 due to input error in offset calculation.
- **April 21st**
 - Held IE 08:45 – 09:15 & IE 11:00 – 12:15 due to storage array failure.
- **April 24th**
 - Held IE 16:45 due to no Energy Schedules for a QSE.

- **Conducted by the ERCOT System Operations training group on May 12 - 14 to simulate a category 4 Hurricane along the Texas coast making landfall at San Antonio Bay causing multiple transmission outages and generation shortages.**
- **ERCOT Operations along with 286 operators and energy schedulers from 16 TDSPs and 27 QSEs across the ERCOT region participated. The PUCT observed the drill from the Centerpoint control center.**
- **Backup emergency plans and communications with ERCOT were tested as well as simulated restoration activities.**
- **Overall feedback from the participants of the drill was positive. A summary will be presented to working groups of the Reliability and Operations Subcommittee to review the results and effectiveness as well as recommend changes if necessary.**
- **The next drill is the Winter Storm drill planned for the fall of 2009.**

Questions ?