### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>Ancillary Service</td>
</tr>
<tr>
<td>BES</td>
<td>Balancing Energy Service</td>
</tr>
<tr>
<td>DBES</td>
<td>Down Balancing Energy Service</td>
</tr>
<tr>
<td>DRS</td>
<td>Down Regulation Service</td>
</tr>
<tr>
<td>LBE</td>
<td>Local Balancing Energy</td>
</tr>
<tr>
<td>MCPC</td>
<td>Market Clearing Price for Capacity</td>
</tr>
<tr>
<td>MCPE</td>
<td>Market Clearing Price for Energy</td>
</tr>
<tr>
<td>NSRS</td>
<td>Non-Spinning Reserve Service</td>
</tr>
<tr>
<td>OOMC</td>
<td>Out of Merit Capacity</td>
</tr>
<tr>
<td>OOME</td>
<td>Out of Merit Energy</td>
</tr>
<tr>
<td>QSE</td>
<td>Qualified Scheduling Entity</td>
</tr>
<tr>
<td>RMR</td>
<td>Reliability Must Run</td>
</tr>
<tr>
<td>RPRS</td>
<td>Replacement Reserve Service</td>
</tr>
<tr>
<td>RRS</td>
<td>Responsive Reserve Service</td>
</tr>
<tr>
<td>UBES</td>
<td>Up Balancing Energy Service</td>
</tr>
<tr>
<td>URS</td>
<td>Up Regulation Service</td>
</tr>
</tbody>
</table>
Grid Operation

Daily Peak Demand

Peak Demand for the Month: 7/17/06 16:30 61704

13 Month Review of Peak Demand

Peak Demand is Peak Interval Demand
Daily Average Temperature in Five Congestion Management Zones

Relative Activity Capacity Purchases-RMR, OOMC, RPRS

Note: 1 Unit-Day = 1 unit procured during any time period within one trade day.

Total Number of Day of Local Congestion Management

Contingency | Congestion Element | # of Days
--- | --- | ---
Marion-Zorn & Clear Springs 345kV | Seguin-Seguin West 138kV | 18
Odessa 345/138kV xfrmr 2 | Odessa 345/138kV xfrmr 1 | 11
Mt. Enterprise-Trinidad & Martin Lake-Styker Creek 345kV | Nacogdoches SE 345/138kV xfrmr | 10
Roanoke SW-Parker-Eagle Mt 345kV | Rhone-Chisolm 138kV | 9
Gibbons Creek-Greens Prairie & Gibbons Creek-East 138kV | Dansby-Atkins 138kV | 7
Duke-SE Edinburg 138kV | N Edinburg-MVEC NW Edinburg 138kV | 6
Morgan Creek 345/138kV xfrmr 1 | Morgan Creek 345/138kV xfrmr 2 | 6
Collin 345/138kV xfrmr 1 | Plano Custer-Lebanon 138kV | 4
Gibbons Creek-Greens Prairie & Gibbons Creek-East 138kV | Robertson-Watson Chapel 138kV | 4
Lyton Spring-Zorn & Austrop-Zorn 345kV | Canyon-Rohr 138kV | 4
Comanche Peak units 1 & 2 | Uvalde-Asphalt Mines 138kV | 3
Comanche Peak SES-Decordova & Wolf Hollow-Rocky Creek 345 | Concord 345/138kV xfrmr | 3
Garfield 345/138kV xfrmr 2 | Garfield 345/138kV xfrmr 1 | 3
Morgan Creek-China Grove Switch 138kV | Morgan Creek 138/96kV xfrmr | 3
Ciglo Park-Highway 9 138kV | Nueces Bay-Morris 138kV | 2
Holly-Barney Davis 138kV | Cabaniss-Westside 138kV | 2
Holly-Barney Davis 138kV | Airline-Cabaniss 138kV | 2
Royse Switch 345/138kV xfrmr 1 | Forney Switch-Forney West 138kV | 3
Valley 345/138kV xfrmr | Commerce Switch-Wolf City 138kV | 2

Note: 1 Unit-Day = 1 unit procured during any time period within one trade day. Total numbers of 1 day or less of local congestion are not shown in the graph. Occurrences of 1 day or less are not listed in table but are totaled in graph. Indicates congestion affected by outages.
Instances of CSC Congestion

Notable Events

New Procedures/ Forms/ Operations Bulletins

<table>
<thead>
<tr>
<th>Date</th>
<th>Subject</th>
<th>Bulletin</th>
</tr>
</thead>
<tbody>
<tr>
<td>07/31/06</td>
<td>Frequency Control Desk-Relief of Non-Spin Obligation 0405</td>
<td>274</td>
</tr>
<tr>
<td>07/31/06</td>
<td>Transmission &amp; Security Desk-Relief of Non-Spin Obligation 0405</td>
<td>273</td>
</tr>
</tbody>
</table>

Significant Communication Problems

OCN, Advisory, Alert, Emergency Notice and Major Disturbances

- 7/6/2006 16:30-17:30 Transmission Alert: Loss of San Miguel 138/69 kV Auto overloads Derby to Pearsall 69 kV line.
- 7/17/2006 13:00-14:00 Transmission Alert: Loss of San Miguel 138/69 kV overloads Derby - Pearsall 69 kV.
- 7/17/2006 14:00-19:00 OCN: Weather/Heat Advisory for ERCOT region.
- 7/18/2006 0:15-04:00 OCN: Weather/Heat Advisory for ERCOT region.
- 7/18/2006 12:00-12:30 Transmission Alert: Loss of San Miguel 138/69 kV overloads Derby - Pearsall 69 kV.
- 7/18/2006 14:00-14:20 Transmission Alert: Loss of McCree 345/138 kV Auto overloads Brand - Ben Davis 138 kV.
- 7/19/2006 0:15-04:00 OCN: Weather/Heat Advisory for ERCOT region.
- 7/19/2006 11:00-13:00 OCN: Insufficient balancing up bids for HE 1600 to 1800.
- 7/19/2006 12:30-23:00 Transmission Alert: Loss of San Miguel 138/69 kV overloads Derby - Pearsall 69 kV.
- 7/20/2006 0:15-02:00 Transmission Alert: Adjustment Period Replacement market opened.
- 7/20/2006 11:15-12:00 Transmission Alert: Loss of San Miguel 138/69 kV overloads Derby - Pearsall 69 kV.
- 7/22/2006 0:15-01:00 Transmission Alert: Alert issued due to Adjustment Period Replacement market opened.
- 7/22/2006 0:30-08:00 OCN: OCN Insufficient Balancing Bids for Hours 16 and 17.
- 7/22/2006 13:00-14:00 Transmission Emergency: Transmission Emergency for the Laredo Area, RMR Unit Laredo #3 Forced outage.
- 7/22/2006 13:00-14:00 Transmission Emergency: Block Load Transfer Load some load at Laredo to CFE.
- 7/22/2006 13:00-14:00 Transmission Emergency: Emergency schedule from CFE over the South HVDC Tie.
- 7/23/2006 0:15-01:00 Transmission Emergency: Transmission Emergency for the Laredo Area, RMR Unit Laredo #3 Forced outage.
- 7/23/2006 0:15-01:00 Transmission Emergency: Block Load Transfer Load some load at Laredo to CFE.
- 7/23/2006 0:15-01:00 Transmission Emergency: Emergency schedule from CFE over the South HVDC Tie.
- 7/23/2006 0:00-01:00 Transmission Emergency: Transmission Emergency for the Laredo Area, RMR Unit Laredo #3 Forced outage.
- 7/23/2006 0:00-01:00 Transmission Emergency: Block Load Transfer Load some load at Laredo to CFE.
- 7/23/2006 0:00-01:00 Transmission Emergency: Emergency schedule from CFE over the South HVDC Tie.
- 7/23/2006 12:00-17:00 OCN: ERCOT issued an OCN due to actual temperatures exceeding the forecasted temperatures in several areas of the state. QSEs were requested to please check your resource plans and update as required.
- 7/23/2006 23:00 OCN: Adjustment period RPRS 23:00-23:30 for operating day 7/24/06.
<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event Type</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7/24/06</td>
<td>0:00</td>
<td>Transmission Emergency</td>
<td>Transmission Emergency for the Laredo Area, RMR Unit Laredo #3 Forced outage.</td>
</tr>
<tr>
<td>7/24/06</td>
<td>0:15</td>
<td>Transmission Emergency</td>
<td>Emergency schedule from CFE over the South HVDC Tie.</td>
</tr>
<tr>
<td>7/24/06</td>
<td>0:15</td>
<td>Transmission Emergency</td>
<td>Block Load Transfer Load some load at Laredo to CFE.</td>
</tr>
<tr>
<td>7/25/06</td>
<td>21:00</td>
<td>Transmission Emergency</td>
<td>Emergency notification posted for the Laredo Area</td>
</tr>
<tr>
<td>7/26/06</td>
<td>0:00</td>
<td>Transmission Emergency</td>
<td>Emergency notification posted for the Laredo Area - Emergency ended at midnight.</td>
</tr>
<tr>
<td>7/26/06</td>
<td>5:15</td>
<td>Transmission Emergency</td>
<td>Block load Transfer ERCOT load to CFE at Laredo due to forced outage, ended at midnight.</td>
</tr>
<tr>
<td>7/29/06</td>
<td>0:00</td>
<td>Transmission Alert</td>
<td>Transmission Alert for the loss of Abilene South - Abilene East or Abilene East 138/69kV autotransformer overloads Abilene Elmcreek - Abilene Shelton 69kV beyond first contingency limits.</td>
</tr>
<tr>
<td>7/29/06</td>
<td>0:00</td>
<td>Transmission Alert</td>
<td>Transmission Alert for the loss of Duke - SE Edinburg 138 kV overloads North Edinburg - MVEC (NW Edinburg) 138 kV beyond first contingency limits.</td>
</tr>
</tbody>
</table>

**Market Operation**

**Ancillary Services**

**Major system Voltage problems/ Load Shed incidences**
None

**Major Computer System Problems/Enhancements/Fixes**
None

**Security Alert Stage/ Threatcon/ Related issues**
None/ Yellow

**Major Weather Related Power System Problems**
None

**New SPS & RAP's**
None

**Update on New Generation**
None

**Max / Min Temperature**
Max: 107 °F North
Min: 64 °F North
Balancing Energy
Energy Purchased Through ERCOT

(PRR404: Any Balancing Energy scheduled through the ERCOT Scheduling process)
Average BES Deployed: as a Percentage of Total Energy Requirement

13 Month Review of Average BES Deployed: as A Percentage of Total Energy Requirement

Balancing Energy
Average MCPE
Balancing Energy
Average Shadow Price

13 Month Review of Average Shadow Price
Cost Summary

13 Month Review of Ancillary Service Capacity Cost

Note: There is not a price for self-arranged Ancillary Services. MCPC is used to calculate the cost for self-arrangement.
**Ancillary Service Deployment Cost**

- DRS: $1.18 Million
- Total w/DRS: $1.18 Million
- Total w/o DRS: $5.89 Million

**13 Month Review of Ancillary Service Deployment Cost**

- Jul: $15.29 Million
- Total w/DRS: $15.29 Million
- Total w/o DRS: $88.75 Million

**OOMC Cost At Final**

- OOMC Payment (Total: $1.40)
- RPRS Step 1 (Total: $1.36)
- RPRS Step 2 (Total: $0.96)

**13 Month Review of OOMC Cost At Final Settlement and True Up**

- RPRS Step 1: RPRS procured for local congestion.
- RPRS Step 2: RPRS procured for zonal congestion and capacity insufficiency.
1. Trade dates thru 7/31/06 complete with Initial Settlement data, using estimated eligible costs.

2. Trade dates thru 6/19/06 complete with Final Settlement data, using verifiable actual cost data provided by the RMR Unit owner.
Total Local Congestion Costs by the Physical Location of Instructed Units

Total Local Congestion Costs by Instruction Type (in Million $)

Total Local Congestion Cost By Instruction Type by Day
Top Ten Local Energy Deployment Cost by Local Constraints
(Does not include OOMC)

Top Ten Total: $3.98 Million

- Marion-Zorn & Clear Springs 345kv
- Marion-Hill Country & Skyline 345kv
- Marion-Hill Country & Skyline 345kv
- Bluff Creek-Oak Creek 138kv
- Mt. Enterprise-Trinidad & Martin Lake-Stryker Creek 345kv
- Trinidad-Stryker Creek & Mt. Enterprise 345kv
- Marion-Hill Country & Skyline 345kv
- Base Case Pecan Creek-Tradinghouse & Temple-Lake Creek 345kV
- Odessa Ehv 345/138kV Auto
- Seguin-Seguin West 138kv

Cost Summary

Total with DBES: $87.34
Total without DBES: $124.72

13 Month Review of Cost Summary

Total with DBES (Total: $1,513.19 Million)
Total Without DBES (Total: $1,876.41 Million)

Totals are for time range of the chart.
Note:

1. DBES cost is a credit to system costs and therefore is shown as a negative number here to differentiate it from the other types of Reliability Costs.

2. BES deployment costs include two parts: the cost for Power Balance and the cost for CSC Congestion. Due to Relaxed Balanced Schedule, the cost paid for Power Balance covers both the difference between ERCOT load forecast and QSE’s schedule and the amount of energy that QSEs intend to buy from Real-Time Energy market.

The historical data gathered from the monthly reports has been compiled into an Excel workbook which will be updated and posted along with this report at the following link:


Please contact Shuye Teng at 512-248-3998 or email at steng@ercot.com should you have any questions.