### 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>
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<tr>
<td>RRS</td>
<td>Responsive Reserve Service</td>
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<tr>
<td>UBES</td>
<td>Up Balancing Energy Service</td>
</tr>
<tr>
<td>URS</td>
<td>Up Regulation Service</td>
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</tbody>
</table>
Grid Operation
Daily Peak Demand

Peak Demand for the Month: 1/24/05  7:15  41503

13 Month Review of Peak Demand

Note: Peak Demand is Peak Interval Demand
Trend of Temperature in Five Congestion Management Zones

Relative Activity Capacity Purchases – OOMC & RMR

Note: 1 Unit-Day = 1 unit procured during any time period within one trade day.
Total Number of Days of Local Congestion Management

<table>
<thead>
<tr>
<th>Contingency</th>
<th>Congestion Element</th>
<th>Number of Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austrop - Sandow 345 kV</td>
<td>Austrop 345/138 kV Auto</td>
<td>9</td>
</tr>
<tr>
<td>North Edinburg - Bates 138 kV</td>
<td>Pharr MVEC - Polk Avenue 138 kV</td>
<td>6</td>
</tr>
<tr>
<td>Big Brown - Venus 345 kV</td>
<td>Watermill Switch to Cedar Hill Switch 345 kV</td>
<td>4</td>
</tr>
<tr>
<td>Eagle Pass - Asherton 138 kV</td>
<td>Uvalde - Asphalt 138 kV</td>
<td>3</td>
</tr>
<tr>
<td>Uvalde - Hamilton Road 138 kV</td>
<td>Asherton - West Conoco 138 kV</td>
<td>3</td>
</tr>
<tr>
<td>Bates - Frontera 138 kV</td>
<td>Pharr MVEC - Polk Avenue 138 kV</td>
<td>3</td>
</tr>
<tr>
<td>North Edinburg - Bates 138 kV</td>
<td>Pharr Magic Valley - Pharr 138 kV</td>
<td>2</td>
</tr>
<tr>
<td>Chamber - King &amp; Cedar Bayou - North Belt</td>
<td>Cedar Bayou Auto AT2</td>
<td>2</td>
</tr>
<tr>
<td>Fredericksburg - Gillespie 138 kV</td>
<td>Fredericksburg AT2 Auto</td>
<td>2</td>
</tr>
<tr>
<td>Heights - Freeway Park 138 kV</td>
<td>PH Robinson - Heights 138 kV</td>
<td>2</td>
</tr>
<tr>
<td>Holly - Airline 138 kV</td>
<td>Port Aransas - Mustang Island 69 kV</td>
<td>2</td>
</tr>
<tr>
<td>Río Hondo 345 /138 Auto Transformer</td>
<td>Río Hondo - La Palma 138 kV</td>
<td>2</td>
</tr>
<tr>
<td>Vernon-Lake Pauline 138 kV</td>
<td>Vernon-Chillicothe 69 kV</td>
<td>2</td>
</tr>
</tbody>
</table>

Note: 1 day= units procured during any time period within one trade day. Total numbers of 1 day or less of local congestion management are not shown in the graph. Occurrences of 1 day or less are not listed in table but are totaled in graph.
Instances of CSC Congestion

![Bar chart showing instances of CSC congestion over time. The x-axis represents different days of the month, and the y-axis represents the number of intervals. The chart uses different colors to represent different regions: EN (yellow), SN (blue), NH (pink), SH (green), WN (cyan), and NW (red).]
Notable Events

New Procedures/ Forms/ Operations Bulletins

1/13/05  Ercot Power Operations Bulletin 134  Transmission & Security Desk V3R30
1/18/05  Ercot Power Operations Bulletin 140  Day Ahead Desk V3R17
1/18/05  Ercot Power Operations Bulletin 139  Day Ahead Desk V3R16
1/18/05  Ercot Power Operations Bulletin 138  Transmission & Security Desk V3R33
1/18/05  Ercot Power Operations Bulletin 137  Temporary Change - Frequency Control Desk CN#193
1/18/05  Ercot Power Operations Bulletin 136  Temporary Change - Frequency Control Desk CN#191
1/18/05  Ercot Power Operations Bulletin 135  Temporary Change - Frequency Control Desk CN#192
1/19/05  Ercot Power Operations Bulletin 144  Frequency Control Desk V3R14 - CN#169
1/19/05  Ercot Power Operations Bulletin 143  Frequency Control Desk V3R14 - CN#168
1/19/05  Ercot Power Operations Bulletin 142  Day Ahead Desk V3R17
1/19/05  Ercot Power Operations Bulletin 141  Frequency Control Desk V3R14 - CN#195
1/20/05  Ercot Power Operations Bulletin 145  Procedure to cancel OOMEs

Security Alert Stage/ Threatcon/ Related issues

None/Yellow

EECP Occurrence

None

Major Weather Related Power System Problems

None

Major system Voltage problems

High voltages on the 138 system in the McCamey area for a short duration following loss of two 138 line and multiple generation units. One line tripped and reclosed. The second remained out of service due to damaged structures. Ten units either ran back or tripped totaling 460 MW. Most of these units were consuming a significant amount of MVAR and voltages of 1.09 pu were observed in the area for a few seconds following the unit trips.

1/12/05  13:38

Significant Communication Problems

1/2/05  11:45  Held Interval. SPD failed to solve for this interval
1/16/05  03:45  Held Interval. SPD failed to solve for this interval
1/18/05  19:45-20:00  Balancing Energy market held
1/24/05  12:30  Held interval until 13:30. Deployments not being sent
1/24/05  12:30-13:30  Balancing Energy market held
1/24/05  15:35-15:50  Portal not functioning
1/25/05  Regulation not deploying as expected. Adjusted gains in AGC at 17:00

Load Shed incidences

None
New SPS & RAP’s
None

Major Computer System Problems/Enhancements/Fixes

1/5/05  07:40   CAM trails commenced
1/5/05  13:20   CAM trials terminated

1/8/05  15:29
ERCOT opened a second A/S market. A QSE submitted bids in error and could not provide the services. Every award was doubled in the second market. The doubling was observed on the portal but it is not known if the XML message reflected the doubled values. The software problem has been turned in to EMMS and groundwork is being done on designs for a future enhancement. In the interim, the problem is being corrected through procedure changes.

1/31/05  23:00   Recalled 589 MW of Down Regulation with no ramp

OCN, Advisory, Alert, Emergency Notice and Major Disturbances

1/1/05  13:53   Alert Issued. Insufficient Down Regulation
1/5/05  10:12   Advisory Issued. Gas curtailments beginning 18:00
1/5/05  18:00-22:00   OCN Issued. Capacity shortage due to projected fuel shortages
1/5/05  22:00   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/6/05  00:00-10:00   Advisory Issued for gas curtailments
1/6/05  00:15-13:45   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/6/05  00:30-13:45   Transmission Alert. Loss of Menard Try loads Ft. Mason-Mason
1/7/05  02:00-04:15   Alert Issued for capacity shortage 08:00-10:00
1/10/05  06:30-08:30   Transmission Alert. Apollo Tr 1 loading under multiple contingencies
1/10/05  16:00-21:30   Transmission Alert. Loss of Bates-Frontera loads Pharr MVEC-Polk Ave
1/13/05  17:15-13:00/19:00-24:00   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/16/05  18:00-22:00   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/16/05  19:00   OCN Issued. Capacity shortage 1/17/08:00-10:00
1/17/05  00:30   Alert Issued. Capacity shortage 08:00-10:00. Alert cancelled at 08:00
1/18/05  15:35-24:00   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/30/05  17:20-13:01 12:00   Transmission Alert. Loss of Uvalde-Hamilton loads Asherton-W Conoco
1/30/05  16:30   OCN Issued. Insufficient Balancing bid for intervals 19:00-24:00
1/31/05  12:00   OCN Issued. Insufficient Balancing bid for intervals 18:00-21:00 & 23:00

Update on New Generation

115 MW Wind Farm in West Zone
90 MW Wind Farm in West Zone

Max / Min Temperature

Max:  82.4°F   SW
Min:  19°F   NW
Market Operation

Ancillary Services
Average Hourly Procurement by Ancillary Service

13 Month Review of Average Hourly Procurement by Ancillary Service
Average MCPC by Ancillary Service

13 Month Review of Average MCPC by Ancillary Service
13 Month Review of Average Deployment by Ancillary Service
Balancing Energy

Average Balancing Energy Deployed
Balancing Energy
% of Total ERCOT Energy Requirement
Balancing Energy
Average MCPE
13 Month Review of MCPE

The image shows a bar chart titled "13 Month Review of MCPE." The chart compares the values of different categories (MCPE_H, MCPE_N, MCPE_S, MCPE_W, MCPE_NE) over a 13-month period from January to January. The x-axis represents the months, and the y-axis represents the value in $/MW. Each category is represented by a different color, allowing for easy comparison over the months.
Trend of Average Fuel Index

Balancing Energy
Average Shadow Price
Ancillary Service Capacity Cost

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.
3 Month Review of Ancillary Service Deployment Cost

Total w DRS: $1.44 Million  Total w/o DRS: $5.60 Million
13 Month Review of OOMC Cost At Final Settlement and True Up

- **Total OOMC Payment (Total: $79.62 Million)**
  - Totals are for time range of the chart.

**OMMC Cost At Final**

- **Start-Up Payment (Total: $0.58 Million)**
- **Total OOMC Payment (Total: $1.51 Million)**
RMR Net Cost (Initial Settlement)

Total Net Cost $6.47 Million
Verified Actual RMR Cost*

RMR Net Cost: $126.00

*Note:

1. Trade dates 1/1/04 thru 1/21/05 complete with Final Resettlement data, using verifiable actual cost data provided by the RMR Unit owner.

2. Trade date 1/22/05 thru 1/31/05 complete with Initial Resettlement data, using estimated eligible costs.
Total Local Congestion Costs by Area

Total: $3.22 Million

- Austin: $0.08
- Corpus: $0.00
- Houston: $0.43
- San Antonio: $0.01
- North: $0.58
- South: $0.54
- Valley: $0.87
- West: $0.36
- DFW: $0.34
- Wind: $0.00

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

- LBE-operate at or below a level: $0.69
- LBE-operate at or above a level: $1.51
- LBE-hold at a level: $0.26
- Manual OOME DN: $0.35
- Manual OOME UP: $0.41
Local Congestion Cost for Energy

Total $1.7 Million

- DN Payment for Aggregated Units for Both Manual and LBE Deployment
- UP Payment for Aggregated Units for Both Manual and LBE Deployment
- DN Payment for LBE Deployment without Market Solution
- UP Payment for LBE Deployment without Market Solution
- DN Payment for Manual OOME Deployment
- UP Payment for Manual OOME Deployment
- DN Payment for LBE Deployment with Market Solution
- UP Payment for LBE Deployment with Market Solution
Cost Summary

13 Month Review of Cost Summary

- Total with DBES: $123.69
- Total without DBES: $136.47

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 difference between QSE’s Relaxed scheduled load and the load it would schedule should RBS were not allowed. The cost for Power Balance is not further divided accordingly because currently we do not have a way to differentiate these two types of Power Balance costs.

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