Acronyms

Grid Operation
Daily Peak Demand
13 Month Review of Peak Demand
Trend of Temperature in Five Congestion Management Zones
Relative Activity Capacity Purchases – OOMC & RMR
Total Number of Days of Local Congestion Management
Instances of CSC Congestion
Notable Events

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
Average Deployment by Ancillary Service
13 Month Review of Average Deployment by Ancillary Service

Balancing Energy
Average Balancing Energy Deployed
Average UBES Deployment in Five Zones
Average DBES Deployment in Five Zones
13 Month Review of UBES Deployment
13 Month Review of DBES Deployment

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

Average MCPE
Average MCPE in Five Zones
Average MCPE at Each Interval for Five Zones
13 Month Review of MCPE
Trend of Average Fuel Index

Average Shadow Price
Average Shadow Price
13 Month Review of Average Shadow Price

Cost Summary
Ancillary Service Capacity Cost
13 Month Review of Ancillary Service Capacity Cost
Ancillary Service Deployment Cost
13 Month Review of Ancillary Service Deployment Cost
OOMC Cost At Final
13 Month Review of OOMC Cost At Final Settlement and True Up
RMR Cost (Initial Settlement)
RMR Net Cost (Initial Settlement)
Verified Actual RMR Cost*
Total Local Congestion Costs by Area
Total Local Congestion Costs by Instruction Type (in Million $)
Local Congestion Cost for Energy
Cost Summary
13 Month Review of Cost Summary
<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>
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<tr>
<td>MCPC</td>
<td>Market Clearing Price for Capacity</td>
</tr>
<tr>
<td>MCPE</td>
<td>Market Clearing Price for Energy</td>
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<tr>
<td>NSRS</td>
<td>Non-Spinning Reserve Service</td>
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<tr>
<td>OOMC</td>
<td>Out of Merit Capacity</td>
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<tr>
<td>OOME</td>
<td>Out of Merit Energy</td>
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<tr>
<td>QSE</td>
<td>Qualified Scheduling Entity</td>
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<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>
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</tbody>
</table>
Daily Peak Demand

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>
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<tbody>
<tr>
<td>Heights Sub - Freeway Park</td>
<td>Heights - PH Robinson</td>
<td>15</td>
</tr>
<tr>
<td>Uvalde - Hamilton</td>
<td>Asherton - West Conoco</td>
<td>12</td>
</tr>
<tr>
<td>Celanese Bishop - Barney Davis</td>
<td>Aransas Pass - Naval base</td>
<td>7</td>
</tr>
<tr>
<td>Austrop - Sanford</td>
<td>Austrop Tr</td>
<td>7</td>
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<tr>
<td>Midland East - Odessa</td>
<td>Odessa - Sw Moss</td>
<td>7</td>
</tr>
<tr>
<td>N Edinburg - Bates</td>
<td>Pharrr MVEC - Polk</td>
<td>5</td>
</tr>
<tr>
<td>Rio Hondo Tr</td>
<td>Rio Hondo - La Palma</td>
<td>4</td>
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<tr>
<td>Calaveras- Skyline/Walzem Rd</td>
<td>Five Points - West Side</td>
<td>3</td>
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<tr>
<td>Cico - Helotes</td>
<td>Gilles - Wolf Creek</td>
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<tr>
<td>Military Highway T1</td>
<td>Military Highway T2</td>
<td>3</td>
</tr>
<tr>
<td>Dilley Switch - San Miguel</td>
<td>Bigfoot Tr</td>
<td>2</td>
</tr>
<tr>
<td>Hearne Tr</td>
<td>Booneville - Sutton</td>
<td>2</td>
</tr>
<tr>
<td>Sargent - Watermill</td>
<td>Cedar Hill - Watermill</td>
<td>2</td>
</tr>
<tr>
<td>Clear Springs - Marion/Zorn</td>
<td>Cico - Comfort</td>
<td>2</td>
</tr>
<tr>
<td>Zorn - Hayes</td>
<td>Comfort - Cico</td>
<td>2</td>
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<tr>
<td>Forney Elkton - Tricorner</td>
<td>Flynn - Fairmont</td>
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<tr>
<td>Morgan Creek - Odessa</td>
<td>General Tire - Rexall</td>
<td>2</td>
</tr>
<tr>
<td>La Palma - Rio Hondo</td>
<td>Haine Dr - La Palma</td>
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<tr>
<td>Holt Switch - Andrews North</td>
<td>Holt Sw T1</td>
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<tr>
<td>Big Lake - Friend Ranch</td>
<td>Midway Lane - Ozona</td>
<td>2</td>
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<tr>
<td>Asherton - Eagle Pass</td>
<td>Uvalde - Asphalt Mines</td>
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</tr>
<tr>
<td>Big Brown - Venus Switch</td>
<td>Watermill - Cedar Hill Switch</td>
<td>2</td>
</tr>
<tr>
<td>Austrop - Lost Pines</td>
<td>Winchester - Fayetteville</td>
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</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

- EN
- SN
- NH
- SH
- WN

Number of intervals

Notable Events

New Procedures/ Forms/ Operations Bulletins

12/06/04  Ercot Power Operations Bulletin 121  Verbal Dispatch Exception
12/06/04  Ercot Power Operations Bulletin 122  Verbal Dispatch Exception
12/09/04  Ercot Power Operations Bulletin 123  Procedures when DC Tie is over scheduled
12/09/04  Ercot Power Operations Bulletin 124  Failure to clear Day Ahead A/S Market
12/09/04  Ercot Power Operations Bulletin 125  Update of QSE list
12/09/04  Ercot Power Operations Bulletin 126  Update of QSE list
12/09/04  Ercot Power Operations Bulletin 127  Managing Maintenance Level 2 and 3 outages TCN#176
12/09/04  Ercot Power Operations Bulletin 128  Extending TCN#138  TCN#178
12/09/04  Ercot Power Operations Bulletin 129  Monitoring West Texas Generation TCN#183
12/09/04  Ercot Power Operations Bulletin 130  Granting VDE’s TCN#178
12/09/04  Ercot Power Operations Bulletin 131  Managing Maintenance Level 2 and 3 outages TCN#172
12/09/04  Ercot Power Operations Bulletin 132  Verification of Dynamic Ratings TCN#183
12/20/04  Ercot Market Operations Bulletin 20  SPD Price Administration Process
12/21/04  Ercot Power Operations Bulletin 133  OOME for CT’s
12/21/04  Ercot Market Operations Bulletin 21  Shadow Price Calculations for 5 Zone, 6 CSC model for 2005

Security Alert Stage/ Threatcon/ Related issues

  None/Yellow

EECP Occurrence

  None

Major Weather Related Power System Problems

  None

Major system Voltage problems

  None

Significant Communication Problems

  12/1/04  01:45-02:00  Held interval. OC1 inadvertently activated
  12/3/04  02:15-03:30  Held interval. One QSE experienced a Portal failure and scheduling issues.

Major Computer System Problems/Fixes

  None

Load Shed incidences

  None

New SPS & RAP’s

  None
### OCN, Advisory, Alert, Emergency Notice and Major Disturbances

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/1/04</td>
<td>02:00-04:30</td>
<td>OCN issued. Capacity shortage 08:00 - 10:00</td>
</tr>
<tr>
<td>12/1/04</td>
<td>04:00-04:30</td>
<td>Alert issued. Capacity shortage 08:00 - 10:00</td>
</tr>
<tr>
<td>12/9/04</td>
<td>09:20-11:20</td>
<td>OCN issued. Capacity shortage 18:00 – 20:00</td>
</tr>
<tr>
<td>12/9/04</td>
<td>14:40-20:00</td>
<td>OCN issued. Capacity shortage 19:00 – 20:00</td>
</tr>
<tr>
<td>12/21/04</td>
<td>07:30-24:00</td>
<td>OCN issued. Cold temperatures and freezing precipitation forecasted.</td>
</tr>
<tr>
<td>12/21/04</td>
<td>10:00-17:00</td>
<td>Transmission Alert. Loss of Holt Sw – N Andrews loads Holt Tr.</td>
</tr>
<tr>
<td>12/22/04</td>
<td>00:00-24:00</td>
<td>OCN issued. Cold temperatures and freezing precipitation forecasted.</td>
</tr>
<tr>
<td>12/23/04</td>
<td>19:00-22:45</td>
<td>Transmission Alert. Loss of Barney Davis – Celanese Bishop results in islanding in South Corpus Christie area.</td>
</tr>
<tr>
<td>12/24/04</td>
<td>06:00-14:30</td>
<td>Transmission Alert. Loss of Uvalde – Hamilton loads Asherton – W Monaco.</td>
</tr>
<tr>
<td>12/24/04</td>
<td>08:15-12/25 15:00</td>
<td>Transmission Alert. Loss of Barney Davis U2 loads Port Aransas – Mustang Island.</td>
</tr>
<tr>
<td>12/24/04</td>
<td>00:00 – 12/25 15:00</td>
<td>Advisory issued for low temperatures and strong winds.</td>
</tr>
<tr>
<td>12/25/04</td>
<td>05:30-12:00</td>
<td>Transmission Alert. Loss of Uvalde Hamilton loads Asherton – W Conoco.</td>
</tr>
<tr>
<td>12/26/04</td>
<td>06:45-12:30</td>
<td>Transmission Alert. Loss of Bates U1 loads Bates T1.</td>
</tr>
<tr>
<td>12/27/04</td>
<td>03:15-05:00</td>
<td>OCN issued for 08:00 capacity shortage.</td>
</tr>
<tr>
<td>12/30/04</td>
<td>14:30-16:00</td>
<td>OCN issued for 19:00 capacity shortage.</td>
</tr>
<tr>
<td>12/31/04</td>
<td>16:30</td>
<td>OCN issued for 1/1/05. Insufficient Down Reg for HE 06,23, &amp; 24.</td>
</tr>
</tbody>
</table>

### Update on New Generation

None

### Max / Min Temperature

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Max</td>
<td>84.6°F</td>
<td>S</td>
</tr>
<tr>
<td>Min</td>
<td>13°F</td>
<td>N</td>
</tr>
</tbody>
</table>
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
Balancing Energy

Average Balancing Energy Deployed
Balancing Energy
% of Total ERCOT Energy Requirement
Balancing Energy

Average MCPE
13 Month Review of MCPE

Trend of Average Fuel Index

Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Balancing Energy
Average Shadow Price
Average Shadow Price

13 Month Review of Average Shadow Price
Cost Summary
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

Total w DRS: $ 1.47 Million  Total w/o DRS: $5.76 Million

13 Month Review of Ancillary Service Deployment Cost
13 Month Review of OOMC Cost At Final Settlement and True Up

- **Total OOMC Payment (Total: $91.82 Million)**
  - Up to date as of 1/1/2005
RMR Cost (Initial Settlement)

RMR Net Cost (Initial Settlement)

Total Net Cost $9.69 Million
Verified Actual RMR Cost*

*Note:

1. Trade dates 1/1/04 thru 11/21/04 complete with Final Resettlement data, using verifiable actual cost data provided by the RMR Unit owner.

2. Trade date 11/22/04 thru 12/31/04 complete with Initial Resettlement data, using estimated eligible costs.
Total Local Congestion Costs by Area

Austin
$0.20

Corpus
$0.80

DFW
$0.77

Houston
$0.31

San Antonio
$0.18

South
$1.10

Valley
$0.80

West
$2.70

Wind
$0.00

Total: $7.56 Million

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

- LBE-operate at or below a level: $0.83
- LBE-operate at or above a level: $0.54
- LBE-hold at a level: $0.93
- Manual OOME DN: $0.93
- Manual OOME UP: $1.43
- OOMC: $3.82
- Other: $0.00
Local Congestion Cost for Energy

Total $3.7 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
(Total w/ DBES: $109.24 Total w/o DBES: $122.30)

13 Month Review of Cost Summary
- Total with DBES (Total: $964.47 Million)
- Total Without DBES (Total: $1,211.04 Million)
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.