

**National Load Despatch Centre  
Total Transfer Capability for October 2012**

Issue Date: 12/10/2012

Issue Time: 1800 hrs

Revision No. 12

| Corridor                               | Date                                   | Time Period (hrs) | Total Transfer Capability (TTC) | Reliability Margin | Available Transfer Capability (ATC) | Long Term Access (LTA)/ Medium Term Open Access (MTOA) | Margin Available for Short Term Open Access (STOA) | Comments  |
|--|--|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|---|
| NR-WR                                  | 1st October 2012 to 31st October 2012  | 00-24             | 1500                            | 200                | 1300                                | 286  | 1014   |   |
| WR-NR                                  | 6th October 2012 to 31st October 2012  | 00-24             | 1700                            | 200                | 1500                                | 520  | 980  |   |
| NR-ER                                  | 1st October 2012 to 31st October 2012  | 00-17, 23-24      | 800                             | 200                | 600                                 | 0  | 600  |   |
|  |  | 17-23             | 900                             |                    | 700                                 |  | 700  |   |
| ER-NR#                                 | 13th October 2012 to 14th October 2012 | 00-08, 19-24      | 4000                            | 300                | 3700                                | 1158   | 2542   | Shut down of 400 kV Barh-Patna D/C and Patna-Balia D/C  |
|  |  | 08-19'            | 3500                            |                    | 3200                                |  | 2042   |   |
|  | 15th October 2012 to 17th October 2012 | 00-07, 20-24      | 4000                            | 300                | 3700                                | 1158   | 2542   | Shut down of 400 kV Kahalgaon-Biharshariff -III & IV  |
|  |  | 07-20'            | 2700                            |                    | 2400                                |  | 1242   |   |
|  | 18th October 2012 to 19th October 2012 | 00-08, 19-24      | 4000                            | 300                | 3700                                | 1158   | 2542   | Shut down of 400 kV Barh-Patna D/C and Patna-Balia D/C  |
|  |  | 08-19'            | 3500                            |                    | 3200                                |  | 2042   |   |
| 20th October 2012 to 31st October 2012 | 00-24                                  | 4000              | 300                             | 3700               | 1158                                | 2542   |  |   |
| WR-ER                                  | 1st October 2012 to 31st October 2012  | 00-24             | 1400                            | 300                | 1100                                | 0  | 1100   |   |
| ER-WR                                  | 1st October 2012 to 31st October 2012  | 00-24             | 900                             | 250                | 650                                 | 650  | 0  |   |
| WR-SR                                  | 2nd October 2012 to 10th October 2012  | 00-24             | 1000                            | 0                  | 1000                                | 992  | 8  |   |
|  | 11th October 2012 to 31st October 2012 | 00-24             | 900                             |                    | 900                                 | 900  | 0  |   |
| SR-WR                                  | 1st October 2012 to 31st October 2012  | 00-24             | 1000                            | 0                  | 1000                                | 0  | 1000   |   |
| ER-SR                                  | 9th October 2012 to 17th October 2012  | 00-05, 10-19      | 500                             | 0                  | 500                                 | 262  | 238  |   |
|  |  | 05-10, 19-24      | 500*                            |                    | 500*                                |  | 238*   |   |
|  | 18th October 2012 to 31st October 2012 | 00-05, 10-19      | 500                             | 0                  | 500                                 | 262  | 238  |   |
|  |  | 05-10, 19-24      | 750*                            |                    | 750*                                |  | 488*   |   |
| SR-ER                                  | 1st October 2012 to 31st October 2012  | 00-17 23-24       | 800                             | 0                  | 800                                 | 197  | 603  |   |
|  |  | 17-23             | 900                             |                    | 900                                 |  | 703  |   |
|  |  |                   |                                 |                    |                                     |  |  |   |
| ER-NER                                 | 12th October 2012 to 31st October 2012 | 00-17 23-24       | 550                             | 35                 | 515                                 | 161  | 354  |   |
|  |  | 17-23             | 510                             |                    | 475                                 | 166  | 309  |   |
| NER-ER                                 | 12th October 2012 to 31st October 2012 | 00-17 23-24       | 550                             | 100                | 450                                 | 0  | 450  |   |
|  |  | 17-23             | 340                             |                    | 240                                 |  | 240  |   |
| S1-S2                                  | 1st October 2012 to 31st October 2012  | 00-24             | 5000                            | 100                | 4900                                | 3400   | 1500   |   |
| Import of Punjab                       | 1st October 2012 to 31st October 2012  | 00-24             | 5400                            | 300                | 5100                                | 3243   | 1857   |   |
| Import TTC for DD&DNH                  | 1st October 2012 to 31st October 2012  | 00-24             | 980                             | 0                  | 980                                 | LTA and MTOA as per ex-pp schedule                     |  |   |
| W3 zone export TTC#                    | 1st October 2012 to 31st October 2012  | 00-24             | 7000                            | 200                | 6800                                | 6100   | 700  | 6100 MW corresponds to maximum effective LTA from W3. Export Margin from W3 would vary as per the maintenance schedule of generators in the zone. |

1) ER-SR TTC declared at Talcher Interconnector and Gazuwaka HVDC B/B seam

2) ^ S1 comprises of AP and Karnataka; S2 comprises of Tamil Nadu, Kerala and Pondicherry

3) W3 comprises of the following regional entities and would be operational wef 0000 hrs of 18th September 2012

a) Chattisgarh, b) Jindal Power Limited (JPL), c) Jindal Steel and Power Limited (JSPL), d) ACBL, e) LANCO Amarkantak

f) BALCO, g) Sterlite (#1,3,4), h) NSPCL, i) Korba, j) Sipat

\* additional 250 MW can be transferred to SR if injection point is South Odisha

## Limiting Constraints

| Corridor              | Constraint   |
|-----------------------|--|
| NR-WR                 | (n-1) contingency of 400kV Bina(PG)-Bina(MP)   |
| WR-NR                 | (n-1) contingency of 400kV Bina-Gwalior  |
| NR-ER                 | (n-1) contingency of 400 kV Pusauli-Biharsharif  |
| ER-NR                 | (n-1) contingency of 400 kV Kahalgaon-Biharsharif  |
| WR-ER                 | (n-1) contingency of 400 kV Maithon-Kahalgaon*<br>Highloading of 220kV Korba(E)-Raigarh  |
| ER-WR                 | High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni<br>(n-1) contingency of 400kV Rourkela-Jamshedpur                                    |
| WR-SR                 | High loading of 400 kV Raipur-Bhadrawati T/C and Bhilai-Bhadrawati S/C<br>(n-1) contingency of 400 kV Vijaywada-Nellore*   |
| SR-WR                 | (n-1) contingency of Chandrapur-Parli  |
| ER-SR                 | (n-1) contingency of 400 kV Vijaywada-Nellore*<br>(n-1) contingency of Rourkela-Talcher*<br>Low Voltage in Chennai Area  |
| SR-ER                 | (n-1) contingency of 400 kV Maithon-Kahalgaon*<br>(n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur  |
| ER-NER                | (n-1) contingency of 400 kV Binaguri-Bongaigaon*<br>High Loading of 220 kV BTPS-Agia<br>High Loading of 220 kV Balipara-Samaguri<br>(n-1) contingency of 400/220 kV 315 MVA ICT at Misa* |
| NER-ER                | (n-1) contingency of 400 kV Purnea-Muzaffarpur*<br>(n-1) contingency of 400 kV Balipara-Bongaigaon-I<br>High loading of 132 kV LTTPS – Mariani S/C*                                      |
| S1-S2                 | (n-1) contingency of 400 kV Hosur-Salem  |
| W3 Zone<br>Export TTC | High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni  |

\*Primary constraints

**Simultaneous Import Capability**

| Corridor                               | Date                                   | Time Period (hrs) | Total Transfer Capability (TTC) | Reliability Margin | Available Transfer Capability (ATC) | Long Term Access (LTA)/ Medium Term Open Access (MTOA) | Margin Available for Short Term Open Access (STOA) | Comments   |
|--|--|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|--|
| <b>ER</b>                              |  |                   |                                 |                    |                                     |  |  |  |
| <b>NR#</b>                             | 13th October 2012 to 14th October 2012 | 00-08, 19-24      | 5700                            | 300                | 5400                                | 1678   | 3722   | Shut down of 400 kV Barh-Patna D/C and Patna-Balia D/C |
|  |  | 08-19'            | 5200                            |                    | 4900                                |  | 3222   |  |
|  | 15th October 2012 to 17th October 2012 | 00-07, 20-24      | 5700                            | 300                | 5400                                | 1678   | 3722   | Shut down of 400 kV Kahalgaon-Biharshariff -III & IV   |
|  |  | 07-20'            | 4400                            |                    | 4100                                |  | 2422   |  |
|  | 18th October 2012 to 19th October 2012 | 00-08, 19-24      | 5700                            | 300                | 5400                                | 1678   | 3722   | Shut down of 400 kV Barh-Patna D/C and Patna-Balia D/C |
| 08-19'                                 |  | 5200              | 4900                            |                    | 3222                                |  |  |  |
| 20th October 2012 to 31st October 2012 | 00-24                                  | 5700              | 300                             | 5400               | 1678                                | 3722   |  |  |
| <b>NER</b>                             | 12th October 2012 to 31st October 2012 | 00-17 23-24       | 550                             | 35                 | 515                                 | 161  | 354  |  |
|  |  | 17-23             | 510                             |                    | 475                                 |  | 166  | 309  |
| <b>WR</b>                              |  |                   |                                 |                    |                                     |  |  |  |
| <b>SR</b>                              | 11th October 2012 to 17th October 2012 | 00-05, 10-19      | 1400                            | 0                  | 1400                                | 1162   | 238  |  |
|  |  | 05-10, 19-24      | 1400*                           |                    | 1400*                               |  | 238*   |  |
|  | 18th October 2012 to 30th October 2012 | 00-05, 10-19      | 1400                            | 0                  | 1400                                | 1162   | 238  |  |
|  |  | 05-10, 19-24      | 1650*                           |                    | 1650*                               |  | 488*   |  |

\* additional 250 MW can be transferred to SR if injection point is South Odisha

### Simultaneous Export Capability

| Corridor | Date                                   | Time Period (hrs) | Total Transfer Capability (TTC) | Reliability Margin | Available Transfer Capability (ATC) | Long Term Access (LTA)/ Medium Term Open Access (MTOA) | Margin Available for Short Term Open Access (STOA) | Comments |
|----------|--|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|----------|
| ER       |  |                   |                                 |                    |                                     |  |  |          |
|          |  |                   |                                 |                    |                                     |  |  |          |
| NR       | 1st October 2012 to 30th October 2012  | 00-24             | 2300                            | 500                | 1800                                | 286  | 1514   |          |
| NER      | 12th October 2012 to 31st October 2012 | 00-17             | 550                             | 100                | 450                                 | 0  | 450  |          |
|          |  | 23-24             | 340                             |                    | 240                                 |  | 240  |          |
| WR       |  |                   |                                 |                    |                                     |  |  |          |
|          |  |                   |                                 |                    |                                     |  |  |          |
| SR       | 1st October 2012 to 30th October 2012  | 00-17             | 1800                            | 0                  | 1800                                | 197  | 1603   |          |
|          |  | 23-24             | 1900                            |                    | 1900                                |  | 1703   |          |

### Limiting Constraints

|     |               |   |
|-----|---------------|---|
| NR  | <b>Import</b> | (n-1) contingency of 400 kV Purnea Muzaffarpur*<br>(n-1) contingency of 400 kV Kahalgaon-Biharsharif<br>(n-1) contingency of 400kV Bina-Gwalior   |
|     | <b>Export</b> | (n-1) contingency of 400 kV Kahalgaon-Maithon   |
| NER | <b>Import</b> | High Loading of 220 kV BTPS-Agia<br>High Loading of 220 kV Balipara-Samaguri<br>(n-1) contingency of 400/220 kV 315 MVA ICT at Misa*<br>(n-1) contingency of 400 kV Binaguri-Bongaigaon*          |
|     | <b>Export</b> | High loading of 132 kV LTPS – Mariani S/C*<br>(n-1) contingency of 400 kV Balipara-Bongaigaon-I<br>(n-1) contingency of 400 kV Purnea-Muzaffarpur*  |
| SR  | <b>Import</b> | High loading of 400 kV Raipur-Bhadravati T/C and Bhilai-Bhadrawati S/C<br>(n-1) contingency of Rourkela-Talcher*<br>Low Voltage in Chennai Area<br>(n-1) contingency of 400 kV Vijaywada-Nellore* |
|     | <b>Export</b> | (n-1) contingency of Chandrapur-Parli<br>(n-1) contingency of 400 kV Maithon Kahalgaon<br>(n-1) contingency of 400 kV Kadappa-Kolar and neyvelli- Sriperumbudur                                   |

## ASSUMPTIONS IN BASECASE

| S.No.      | Name of State/Area          | Load           |                    | Generation    |               |
|------------|-----------------------------|----------------|--------------------|---------------|---------------|
|            |                             | Peak Load (MW) | Off Peak Load (MW) | Peak (MW)     | Off Peak (MW) |
| <b>I</b>   | <b>NORTHERN REGION</b>      |                |                    |               |               |
| 1          | Punjab                      | 7551           | 7100               | 3016          | 2877          |
| 2          | Haryana                     | 5901           | 5400               | 3293          | 3293          |
| 3          | Rajasthan                   | 6100           | 5900               | 3552          | 3480          |
| 4          | Delhi                       | 4565           | 4200               | 1396          | 1396          |
| 5          | Uttar Pradesh               | 10050          | 10300              | 5166          | 4832          |
| 6          | Jammu & Kashmir             | 1900           | 1802               | 560           | 609           |
| 7          | Uttarakhand                 | 1600           | 1230               | 899           | 906           |
| 8          | Himachal Pradesh            | 1030           | 970                | 745           | 745           |
| 9          | Chandigarh                  | 282            | 231                | 0             | 0             |
| 10         | ISGS                        |                |                    | 18226         | 16779         |
|            | <b>Total NR</b>             | <b>38979</b>   | <b>37133</b>       | <b>36853</b>  | <b>34918</b>  |
| <b>II</b>  | <b>EASTERN REGION</b>       |                |                    |               |               |
| 1          | West Bengal                 | 6250           | 4930               | 4617          | 3942          |
| 2          | Jharkhand                   | 900            | 700                | 390           | 390           |
| 3          | Orissa                      | 3300           | 2400               | 2707          | 2092          |
| 4          | Bihar                       | 1650           | 1300               | 130           | 130           |
| 5          | Damodar Valley Corporation  | 2200           | 1900               | 1551          | 1551          |
| 6          | Sikkim                      | 60             | 60                 | 0             | 0             |
| 7          | Bhutan                      | 110            | 110                | 1400          | 1400          |
| 8          | ISGS                        |                |                    | 6236          | 6236          |
|            | <b>Total ER</b>             | <b>14470</b>   | <b>11400</b>       | <b>17031</b>  | <b>15741</b>  |
| <b>III</b> | <b>WESTERN REGION</b>       |                |                    |               |               |
| 1          | Chattisgarh                 | 2608           | 1983               | 2147          | 1716          |
| 2          | Madhya Pradesh              | 5223           | 4166               | 3238          | 2739          |
| 3          | Maharashtra                 | 15700          | 12000              | 12016         | 8352          |
| 4          | Gujarat                     | 9618           | 6440               | 11085         | 6815          |
| 5          | Goa                         | 300            | 197                |               |               |
| 6          | Daman and Diu               | 225            | 177                |               |               |
| 7          | Dadra and Nagar Haveli      | 439            | 477                |               |               |
| 8          | ISGS                        |                |                    | 11971         | 10595         |
|            | <b>Total WR</b>             | <b>34112</b>   | <b>25439</b>       | <b>40457</b>  | <b>30217</b>  |
| <b>IV</b>  | <b>SOUTHERN REGION</b>      |                |                    |               |               |
| 1          | Andhra Pradesh              | 10715          | 9050               | 7729          | 5978          |
| 2          | Tamil Nadu                  | 10100          | 8700               | 4423          | 3439          |
| 3          | Karnataka                   | 7200           | 5700               | 4701          | 3300          |
| 4          | Kerala                      | 2950           | 2300               | 1343          | 896           |
| 5          | Pondy                       | 325            | 250                | 0             | 0             |
| 6          | Goa                         | 80             | 80                 | 0             | 0             |
| 7          | ISGS                        |                |                    | 9700          | 8800          |
|            | <b>Total SR</b>             | <b>31370</b>   | <b>26080</b>       | <b>27896</b>  | <b>22413</b>  |
| <b>V</b>   | <b>NORTH-EASTERN REGION</b> |                |                    |               |               |
| 1          | Manipur                     | 115            | 92                 | 0             | 0             |
| 2          | Meghalaya                   | 258            | 180                | 120           | 70            |
| 3          | Mizoram                     | 70             | 40                 | 0             | 0             |
| 4          | Nagaland                    | 70             | 60                 | 15            | 15            |
| 5          | Assam                       | 950            | 824                | 240           | 220           |
| 6          | Tripura                     | 180            | 100                | 105           | 100           |
| 7          | Arunachal Pradesh           | 124            | 83                 | 0             | 0             |
| 8          | ISGS                        |                |                    | 1292          | 682           |
|            | <b>Total NER</b>            | <b>1767</b>    | <b>1379</b>        | <b>1772</b>   | <b>1087</b>   |
|            | <b>Total All India</b>      | <b>120698</b>  | <b>101431</b>      | <b>124009</b> | <b>104376</b> |