

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

Issue Date: 30/11/2011

Issue Time: 1400 hrs

Revision No. 0

| 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 February 2012 to 29th February 2012 | 00-24             | 1900                            | 200                | 1700                                | 286  | 1414   |          |
| WR-NR    | 1st February 2012 to 29th February 2012 | 00-24             | 2000                            | 200                | 1800                                | 0  | 1800   |          |
| NR-ER    | 1st February 2012 to 29th February 2012 | 00-17             | 800                             | 200                | 600                                 | 0  | 600  |          |
|          |   | 23-24             | 900                             |                    | 700                                 |  | 700  |          |
| ER-NR    | 1st February 2012 to 29th February 2012 | 00-17             | 3100                            | 300                | 2800                                | 977  | 1823   |          |
|          |   | 23-24             | 3400                            |                    | 3100                                |  | 2123   |          |
| WR-ER    | 1st February 2012 to 29th February 2012 | 00-17             | 900                             | 300                | 600                                 | 0  | 600  |          |
|          |   | 23-24             | 1000                            |                    | 700                                 |  | 700  |          |
| ER-WR    | 1st February 2012 to 29th February 2012 | 00-24             | 900                             | 300                | 600                                 | 430  | 170  |          |
| WR-SR    | 1st February 2012 to 29th February 2012 | 00-24             | 800                             | 0                  | 800                                 | 800  | 0  |          |
| SR-WR    | 1st February 2012 to 29th February 2012 | 00-24             | 850                             | 0                  | 850                                 | 0  | 850  |          |
| ER-SR    | 1st February 2012 to 29th February 2012 | 00-05 10-19       | 330                             | 0                  | 330                                 | 330  | 0  |          |
|          |   | 05-10 19-24       | 830                             |                    | 830                                 |  | 500  |          |
| SR-ER    | 1st February 2012 to 29th February 2012 | 00-17             | 700                             | 0                  | 700                                 | 197  | 503  |          |
|          |   | 23-24             | 800                             |                    | 800                                 |  | 603  |          |
| ER-NER   | 1st February 2012 to 29th February 2012 | 00-17             | 500                             | 50                 | 450                                 | 204  | 246  |          |
|          |   | 23-24             |                                 |                    |                                     | 208  | 242  |          |
| NER-ER   | 1st February 2012 to 29th February 2012 | 00-24             | 570                             | 100                | 470                                 | 0  | 470  |          |
| S1-S2    | 1st February 2012 to 29th February 2012 | 00-24             | 5000                            | 100                | 4900                                | 3100   | 1800   |          |

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

## Limiting Constraints

| Corridor      | Constraint  |
|---------------|---|
| <b>NR-WR</b>  | (n-1) contingency of 400kV Bina(PG)-Bina(MP)  |
| <b>WR-NR</b>  | (n-1) contingency of 400kV Bina-Gwalior one circuit leading to over loading of the other circuit of 400 kV Bina-Gwalior and 400kV Soja-Zerda S/C                                  |
| <b>NR-ER</b>  | (n-1) contingency of 400 kV Maithon-Jamshedpur  |
| <b>ER-NR</b>  | (n-1) contingency of 400 kV Farakka-Malda   |
| <b>WR-ER</b>  | (n-1) contingency of 400 kV Farakka-Malda and Maithon-Kahalgao  |
| <b>ER-WR</b>  | High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni<br>(n-1) contingency of 400kV Maithon-Jamshedpur                              |
| <b>WR-SR</b>  | High loading of 400 kV Raipur-Bhadravati T/C and Bhilai-Bhadrawati S/C<br>(n-1) contingency of 400 kV Vijaywada-Nellore*  |
| <b>SR-WR</b>  | (n-1) contingency of Chandrapur-Parli   |
| <b>ER-SR</b>  | (n-1) contingency of 400 kV Vijaywada-Nellore*<br>Low Voltage in Chennai Area*  |
| <b>SR-ER</b>  | (n-1) contingency of 400 kV Farakka-Malda and Maithon-Kahalgao<br>(n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur   |
| <b>ER-NER</b> | (n-1) contingency of 400 kV Farakka-Malda<br>High Loading of 220 kV BTPS-Agia<br>High Loading of 220 kV Balipara-Samaguri<br>High Loading of 400/220 kV 315 MVA ICT at Misa       |
| <b>NER-ER</b> | (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>High Loading of 400/220 kV 315 MVA ICT at Misa |
| <b>S1-S2</b>  | (n-1) contingency of 400 kV Hosur-Salem   |

\*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>  | 1st February 2012 to 29th February 2012 | 00-17<br>23-24    | 4800                            | 500                | 4300                                | 977  | 3323   |          |
|            |   | 17-23             | 5100                            |                    | 4600                                |  | 3623   |          |
| <b>NER</b> | 1st February 2012 to 29th February 2012 | 00-17<br>23-24    | 500                             | 50                 | 450                                 | 204  | 246  |          |
|            |   | 17-23             |                                 |                    |                                     | 208  | 242  |          |
| <b>WR</b>  |   |                   |                                 |                    |                                     |  |  |          |
| <b>SR</b>  | 1st February 2012 to 29th February 2012 | 00-05<br>10-19    | 1130                            | 0                  | 1130                                | 1130   | 0  |          |
|            |   | 05-10<br>19-24    | 1630                            |                    | 1630                                |  | 500  |          |

**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 |
|------------|---|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|----------|
| <b>ER</b>  |   |                   |                                 |                    |                                     |  |  |          |
| <b>NR</b>  | 1st February 2012 to 29th February 2012 | 00-24             | 2300                            | 500                | 1800                                | 286  | 1514   |          |
| <b>NER</b> | 1st February 2012 to 29th February 2012 | 00-24             | 570                             | 100                | 470                                 | 0  | 470  |          |
| <b>WR</b>  |   |                   |                                 |                    |                                     |  |  |          |
| <b>SR</b>  | 1st February 2012 to 29th February 2012 | 00-17<br>23-24    | 1550                            | 0                  | 1550                                | 197  | 1353   |          |
|            |   | 17-23             | 1650                            |                    | 1650                                |  | 1453   |          |

## Limiting Constraints

|            |               |   |
|------------|---------------|---|
| <b>NR</b>  | <b>Import</b> | (n-1) contingency of 400 kV Farakka-Kahalgaon   |
|            | <b>Export</b> | (n-1) contingency of 400 kV Kahalgaon-Maithon   |
| <b>NER</b> | <b>Import</b> | High Loading of 220 kV BTPS-Agia<br>High Loading of 220 kV Balipara-Samaguri<br>High Loading of 400/220 kV 315 MVA ICT at Misa<br>(n-1) contingency of 400 kV Farakka-Malda*          |
|            | <b>Export</b> | High Loading of 220 kV BTPS-Agia<br>High Loading of 220 kV Balipara-Samaguri<br>High Loading of 400/220 kV 315 MVA ICT at Misa<br>(n-1) contingency of 400 kV Binaguri-Bongaigaon*    |
| <b>SR</b>  | <b>Import</b> | High loading of 400 kV Raipur-Bhadravati T/C and Bhilai-Bhadrawati S/C<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 Farakka-Kahalgaon and 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                      | 5182           | 3499               | 2668          | 2287          |
| 2          | Haryana                     | 4728           | 3718               | 2963          | 2963          |
| 3          | Rajasthan                   | 6057           | 5461               | 3605          | 3577          |
| 4          | Delhi                       | 3749           | 3121               | 1174          | 1174          |
| 5          | Uttar Pradesh               | 8069           | 8116               | 3565          | 3585          |
| 6          | Jammu & Kashmir             | 1688           | 1442               | 325           | 145           |
| 7          | Uttarakhand                 | 1151           | 1015               | 538           | 308           |
| 8          | Himachal Pradesh            | 1013           | 895                | 222           | 64            |
| 9          | Chandigarh                  | 253            | 155                | 0             | 0             |
| 10         | ISGS                        |                |                    | 15214         | 10686         |
|            | <b>Total NR</b>             | <b>31890</b>   | <b>27420</b>       | <b>30273</b>  | <b>24789</b>  |
| <b>II</b>  | <b>EASTERN REGION</b>       |                |                    |               |               |
| 1          | West Bengal                 | 5700           | 4750               | 4617          | 3942          |
| 2          | Jharkhand                   | 850            | 700                | 390           | 390           |
| 3          | Orissa                      | 3150           | 2250               | 2707          | 2092          |
| 4          | Bihar                       | 1700           | 1400               | 130           | 130           |
| 5          | Damodar Valley Corporation  | 2000           | 1800               | 1551          | 1551          |
| 6          | Sikkim                      | 60             | 60                 | 0             | 0             |
| 7          | Bhutan                      | 110            | 110                | 1400          | 1400          |
| 8          | ISGS                        |                |                    | 5370          | 4950          |
|            | <b>Total ER</b>             | <b>13570</b>   | <b>11070</b>       | <b>16165</b>  | <b>14455</b>  |
| <b>III</b> | <b>WESTERN REGION</b>       |                |                    |               |               |
| 1          | Chattisgarh                 | 2890           | 2343               | 3509          | 2836          |
| 2          | Madhya Pradesh              | 6991           | 4680               | 4212          | 2677          |
| 3          | Maharashtra                 | 15000          | 12000              | 13232         | 10112         |
| 4          | Gujarat                     | 9915           | 7575               | 8984          | 6595          |
| 5          | Goa                         | 400            | 283                | 0             | 0             |
| 6          | Daman and Diu               | 226            | 221                | 0             | 0             |
| 7          | Dadra and Nagar Haveli      | 505            | 460                | 0             | 0             |
| 8          | ISGS                        |                |                    | 9964          | 9754          |
|            | <b>Total WR</b>             | <b>35927</b>   | <b>27562</b>       | <b>39901</b>  | <b>31974</b>  |
| <b>IV</b>  | <b>SOUTHERN REGION</b>      |                |                    |               |               |
| 1          | Andhra Pradesh              | 9500           | 8054               | 5731          | 4205          |
| 2          | Tamil Nadu                  | 9400           | 8190               | 5125          | 4335          |
| 3          | Karnataka                   | 5955           | 5045               | 4082          | 3198          |
| 4          | Kerala                      | 2645           | 1890               | 1892          | 1081          |
| 5          | Pondy                       | 260            | 260                |               |               |
| 6          | Goa                         | 75             | 75                 |               |               |
| 7          | ISGS                        |                |                    | 7843          | 7357          |
|            | <b>Total SR</b>             | <b>27835</b>   | <b>23514</b>       | <b>24673</b>  | <b>20176</b>  |
| <b>V</b>   | <b>NORTH-EASTERN REGION</b> |                |                    |               |               |
| 1          | Manipur                     | 120            | 70                 | 0             | 0             |
| 2          | Meghalaya                   | 258            | 180                | 120           | 70            |
| 3          | Mizoram                     | 70             | 40                 | 0             | 0             |
| 4          | Nagaland                    | 70             | 60                 | 15            | 15            |
| 5          | Assam                       | 950            | 700                | 240           | 220           |
| 6          | Tripura                     | 180            | 100                | 105           | 100           |
| 7          | Arunachal Pradesh           | 70             | 55                 | 0             | 0             |
| 8          | ISGS                        |                |                    | 1292          | 682           |
|            | <b>Total NER</b>            | <b>1718</b>    | <b>1205</b>        | <b>1772</b>   | <b>1087</b>   |
|            | <b>Total All India</b>      | <b>110940</b>  | <b>90771</b>       | <b>112784</b> | <b>92481</b>  |