

National Load Despatch Centre
Total Transfer Capability for August 2012

Issue Date: 24/08/2012

Issue Time: 1430 hrs

Revision No. 13

| 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 | 5th August 2012 to 31st August 2012 | 00-24 | 1000 | 200 | 800 | 286 | 514 | |
| WR-NR | 15th August 2012 to 31st August 2012 | 00-24 | 1500 | 200 | 1300 | 260 | 1040 | |
| NR-ER | 1st August 2012 to 31st August 2012 | 00-17 | 800 | 200 | 600 | 0 | 600 | |
| | | 23-24 | 900 | | 700 | | 700 | |
| ER-NR | 19th August 2012 to 31st August 2012 | 00-24 | 3600 | 200 | 3400 | 1158 | 2242 | |
| WR-ER# | 27th August 2012 to 30th August 2012 | 00-09 | 850 | 300 | 550 | 0 | 550 | Shut down of 400 kV Maithon-Kahalgaoon-I/II |
| | | 09-24^ | 1000 | | 700 | 0 | 700 | |
| | 31st August 2012 | 00-24 | 1000 | | 700 | 0 | 700 | |
| ER-WR | 1st August 2012 to 31st August 2012 | 00-24 | 1000 | 300 | 700 | 650 | 50 | |
| WR-SR | 1st August 2012 to 31st August 2012 | 00-24 | 1000 | 0 | 1000 | 992 | 8 | |
| SR-WR | 1st August 2012 to 31st August 2012 | 00-24 | 1000 | 0 | 1000 | 0 | 1000 | |
| ER-SR | 1st August 2012 to 2nd August 2012 | 00-05, 10-19 | 730 | 0 | 730 | 170 | 560 | |
| | | 05-10, 19-24 | 900 | | 900 | | 730 | |
| | 3rd August 2012 to 31st August 2012 | 00-05, 10-19 | 750 | | 750 | | 580 | |
| | | 05-10, 19-24 | 750 | | 750 | | 580 | |
| SR-ER | 1st August 2012 to 2nd August 2012 | 00-17 | 800 | 0 | 800 | 197 | 603 | |
| | | 23-24 | 900 | | 900 | | 703 | |
| | 3rd August 2012 to 31st August 2012 | 00-17 | 800 | | 800 | 148 | 652 | |
| | | 23-24 | 900 | | 900 | 752 | | |
| ER-NER | 24th August 2012 | 00-08 15-24 | 440 | 35 | 405 | 200 | 205 | |
| | | 08-15^ | 390 | | 355 | 200 | 155 | |
| | 25th August 2012 to 31st August 2012 | 00-17 | 440 | 35 | 405 | 135 | 270 | |
| | | 17-23 | 440 | | 138 | 267 | | |
| NER-ER | 7th August 2012 | 00-09 | 550 | 100 | 450 | 0 | 450 | |
| | | 09-24^ | 205 | | 105 | | 105 | |
| | 8th August 2012 to 31st August 2012 | 00-17 | 550 | 100 | 450 | 0 | 450 | |
| | | 23-24 | 310 | | 210 | | 210 | |
| S1-S2 | 1st August 2012 to 31st August 2012 | 00-24 | 4600 | 100 | 4500 | 3300 | 1200 | |
| Import of Punjab | 1st July 2012 to 31st July 2012 | 00-24 | 5400 | 300 | 5100 | 3243 | 1857 | |
| JPL Complex | 1st August 2012 to 31st August 2012 | 00-24 | 1030 | 0 | 1030 | 0 | 1030 | |
| Import TTC for DD&DNH | 1st August 2012 to 31st August 2012 | 00-24 | 980 | 0 | 980 | LTA and MTOA as per ex-pp schedule | | |

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 |
|-------------------------|---|
| NR-WR | (n-1) contingency of 400kV Bina(PG)-Bina(MP) |
| WR-NR | High loading of 400 kV Bina-Gwalior |
| NR-ER | (n-1) contingency of 400 kV Pusauli-Biharsharif |
| ER-NR | High loading of 400 kV Kahalgaon-Biharsharif |
| WR-ER | (n-1) contingency of 400 kV Maithon-Kahalgaon |
| ER-WR | Link capacity of HVDC Bhadrawati B/B (n-1) contingency of 400kV Rourkela-Jamshedpur |
| WR-SR | HVDC Bhadrawati B/B link capacity* (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 High loading of Rourkela-Talcher* Low Voltage in Chennai Area |
| SR-ER | (n-1) contingency of 400 kV Maithon-Kahalgaon* (n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur |
| ER-NER | (n-1) contingency of 400 kV Binaguri-Bongaigaon Ckt-I* High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri and 220 kV Birpara-Salakati D/C* (n-1) contingency of 400/220 kV 315 MVA ICT at Misa |
| NER-ER | (n-1) contingency of 400 kV Purnea-Muzaffarpur and 400 kV Binaguri-Bongaigaon Ckt-I* High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri and 220 kV Birpara-Salakati D/C* (n-1) contingency of 400/220 kV 315 MVA ICT at Misa* |
| S1-S2 | High loading of 400 kV Hosur-Salem |
| Import of Punjab | (n-1) contingency of 400/220 kV ICT at Moga Low voltage in Punjab 220 kV system |

*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 |
|------------|--------------------------------------|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|----------|
| ER | | | | | | | | |
| NR | 19th August 2012 to 31st August 2012 | 00-24 | 5100 | 500 | 4600 | 1418 | 3182 | |
| NER | 24th August 2012 | 00-08 | 440 | 35 | 405 | 200 | 205 | |
| | | 15-24 | | | 355 | 200 | 155 | |
| | 25th August 2012 to 31st August 2012 | 00-17 | 440 | 35 | 405 | 135 | 270 | |
| | | 23-24 | | | | 138 | 267 | |
| WR | | | | | | | | |
| SR | 1st August 2012 to 2nd August 2012 | 00-05, 10-19 | 1730 | 0 | 1730 | 1162 | 568 | |
| | | 05-10, 19-24 | 1900 | | 1900 | | 738 | |
| | 3rd August 2012 to 31st August 2012 | 00-05, 10-19 | 1750 | | 1750 | | 588 | |
| | | 05-10, 19-24 | 1750 | | 1750 | | 588 | |

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 August 2012 to 31st August 2012 | 00-24 | 1500 | 500 | 1000 | 286 | 714 | | |
| NER# | 7th August 2012 | 00-09 | 550 | 100 | 450 | 0 | 450 | | |
| | | 09-24 | 205 | | 105 | | 105 | | |
| | 8th August 2012 to 31st August 2012 | 00-17 | 550 | 100 | 450 | 0 | 450 | | |
| | | 23-24 | | | 210 | | 210 | | |
| WR | | | | | | | | | |
| SR | 1st August 2012 to 2nd August 2012 | 00-17 | 1800 | 0 | 1800 | 197 | 1603 | | |
| | | 23-24 | 1900 | | 1900 | | 1703 | | |
| | 3rd August 2012 to 31st August 2012 | 00-17 | 1800 | | 1900 | 1800 | 148 | 1652 | |
| | | 23-24 | | | | 1900 | | 1752 | |

Limiting Constraints

| | | |
|------------|---------------|--|
| NR | Import | High loading of 400 kV Kahalgaon-Biharsharif* Low voltage in Punjab, Haryana, Western UP High loading of 400kV Bina-Gwalior* |
| | Export | (n-1) contingency of 400 kV Kahalgaon-Maithon |
| NER | Import | High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri and 220 kV Birpara-Salakati D/C* (n-1) contingency of 400/220 kV 315 MVA ICT at Misa (n-1) contingency of 400 kV Binaguri-Bongaigaon ckt-I* |
| | Export | High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri and 220 kV Birpara-Salakati D/C* (n-1) contingency of 400/220 kV 315 MVA ICT at Misa (n-1) contingency of 400 kV Purnea-Muzaffarpur and 400 kV Binaguri-Bongaigaon ckt-I* |
| SR | Import | Link capacity of HVDC Bhadrawati B/B High loading of R400 kV Rourkela-Talcher* Low Voltage in Chennai Area (n-1) contingency of 400 kV Vijaywada-Nellore |
| | Export | (n-1) contingency of Chandrapur-Parli (n-1) contingency of 400 kV Maithon Kahalgaon (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) |
| I | NORTHERN REGION | | | | |
| 1 | Punjab | 7522 | 7600 | 2825 | 2665 |
| 2 | Haryana | 5743 | 5453 | 3293 | 3293 |
| 3 | Rajasthan | 5938 | 5977 | 3398 | 3357 |
| 4 | Delhi | 4474 | 4037 | 1259 | 1259 |
| 5 | Uttar Pradesh | 9714 | 9534 | 4253 | 3958 |
| 6 | Jammu & Kashmir | 1873 | 1773 | 586 | 615 |
| 7 | Uttarakhand | 1560 | 1100 | 955 | 929 |
| 8 | Himachal Pradesh | 1030 | 970 | 745 | 745 |
| 9 | Chandigarh | 279 | 203 | 0 | 0 |
| 10 | ISGS | | | 18020 | 16510 |
| | Total NR | 38133 | 36647 | 35334 | 33331 |
| II | EASTERN REGION | | | | |
| 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 |
| | Total ER | 14470 | 11400 | 17031 | 15741 |
| III | WESTERN REGION | | | | |
| 1 | Chattisgarh | 2444 | 1983 | 2646 | 1477 |
| 2 | Madhya Pradesh | 4925 | 3944 | 2991 | 2687 |
| 3 | Maharashtra | 14032 | 10167 | 10978 | 7763 |
| 4 | Gujarat | 8503 | 6100 | 7765 | 5617 |
| 5 | Goa | 280 | 176 | | |
| 6 | Daman and Diu | 206 | 209 | | |
| 7 | Dadra and Nagar Haveli | 510 | 480 | | |
| 8 | ISGS | | | 11071 | 10127 |
| | Total WR | 30901 | 23059 | 35451 | 27671 |
| IV | SOUTHERN REGION | | | | |
| 1 | Andhra Pradesh | 10612 | 9050 | 6576 | 5220 |
| 2 | Tamil Nadu | 9900 | 8700 | 4856 | 4076 |
| 3 | Karnataka | 7700 | 5200 | 5297 | 3508 |
| 4 | Kerala | 2700 | 2200 | 1890 | 1050 |
| 5 | Pondy | 290 | 230 | | |
| 6 | Goa | 80 | 60 | | |
| 7 | ISGS | | | 9800 | 8950 |
| | Total SR | 31282 | 25440 | 28419 | 22804 |
| V | NORTH-EASTERN REGION | | | | |
| 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 |
| | Total NER | 1767 | 1379 | 1772 | 1087 |
| | Total All India | 116552 | 97925 | 118007 | 100634 |