

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

Issue Date: 26/07/2012

Issue Time: 1200 hrs

Revision No. 11

| 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# | 27th July 2012 | 00-08' | 1900 | 200 | 1700 | 286 | 1414 | Revised for upgradation from 400 kV to 765 kV at Bina-Gwalior-Agra |
| | | 08-24' | 1600 | | 1400 | | 1114 | |
| | 28th July 2012 | 00-24 | 1600 | | 1400 | | 1114 | |
| | | 00-19 | 1600 | | 1400 | | 1114 | |
| | 29th July 2012 | 19-24 | 1900 | | 1700 | | 1414 | |
| 00-08' | | 2400 | 200 | 2200 | 260 | 1940 | | |
| 27th July 2012 | 08-24' | 2000 | | 1800 | | 1540 | | |
| | 28th July 2012 | 00-24 | | 2000 | | 1800 | 1540 | |
| 29th July 2012 | | 00-19 | | 2000 | | 1800 | 1540 | |
| | | | | 19-24 | | 2400 | 2200 | |
| NR-ER | 11th July 2012 to 31st July 2012 | 00-17 23-24 | 800 | 200 | 600 | 0 | 600 | |
| | | 17-23 | 900 | | 700 | | 700 | |
| ER-NR | 11th July 2012 to 31st July 2012 | 00-24 | 4500 | 300 | 4200 | 1032 | 3168 | |
| WR-ER | 11th July 2012 to 31st July 2012 | 00-17 23-24 | 900 | 300 | 600 | 0 | 600 | |
| | | 17-23 | 1000 | | 700 | | 700 | |
| ER-WR | 11th July 2012 to 31st July 2012 | 00-24 | 1000 | 300 | 700 | 565 | 135 | |
| WR-SR | 11th July 2012 to 31st July 2012 | 00-24 | 1000 | 0 | 1000 | 992 | 8 | |
| SR-WR | 11th July 2012 to 31st July 2012 | 00-24 | 900 | 0 | 900 | 0 | 900 | |
| ER-SR | 24th July 2012 to 31st July 2012 | 00-05, 10-13, 17-19 | 900 | 0 | 900 | 170 | 730 | |
| | | 05-10, 19-24 | 900 | | 900 | | 730 | |
| | | 13-17 | 900 | | 900 | | 730 | |
| SR-ER | 11th July 2012 to 31st July 2012 | 00-17 23-24 | 700 | 0 | 700 | 148 | 552 | |
| | | 17-23 | 800 | | 800 | | 652 | |
| ER-NER# | 11th July 2012 to 13th July 2012 | 00-17 23-24 | 600 | 35 | 565 | 200 | 365 | |
| | | 17-23 | 600 | | 565 | | 365 | |
| | 14th July 2012 to 31st July 2012 | 00-24 | 600 | 35 | 565 | 200 | 365 | |
| NER-ER# | 11th July 2012 to 13th July 2012 | 00-17 23-24 | 550 | 100 | 450 | 0 | 450 | |
| | | 17-23 | 550 | | 450 | | 450 | |
| | 14th July 2012 to 31st July 2012 | 00-24 | 550 | | 450 | | 450 | |
| S1-S2 | 11th July 2012 to 31st July 2012 | 00-10 | 5800 | 100 | 5700 | 3800 | 1900 | |
| 10-24' | | 5500 | 5400 | | 1600 | | | |
| Import of Punjab | 11th July 2012 to 31st July 2012 | 00-24 | 5400 | 300 | 5100 | 3243 | 1857 | |
| JPL Complex | 11th July 2012 to 31st July 2012 | 00-24 | 1030 | 0 | 1030 | 0 | 1030 | |
| Import TTC for DD&DNH | 11th July 2012 to 31st July 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 | Low voltage at Gwalior on outage of 400 kV Bina-Gwalior |
| NR-ER | (n-1) contingency of 400 kV Pusauli-Biharsharif |
| ER-NR | (n-1) contingency of 400 kV Purnea-Muzaffarpur |
| WR-ER | (n-1) contingency of 400 kV Maithon-Kahalgaon 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 (n-1) contingency of 400kV Roerkela-Jamshedpur |
| WR-SR | Link capacity of HVDC Bhadrawati B/B (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* (n-1) contingency of 400 kV Talcher-Rourkela* 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 High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri High Loading of 400/220 kV 315 MVA ICT at Balipara* |
| NER-ER | (n-1) contingency of 400 kV Purnea-Muzaffarpur High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri* |
| S1-S2 | (n-1) contingency 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 | 11th July 2012 to 31st July 2012 | 00-24 | 6200 | 500 | 5700 | 1032 | 4668 | |
| NER# | 11th July 2012 to 13th July 2012 | 00-17 | 600 | 35 | 565 | 200 | 365 | |
| | | 23-24 | 600 | | 565 | | 365 | |
| | 14th July 2012 to 31st July 2012 | 00-24 | 600 | 35 | 565 | 200 | 365 | |
| WR | | | | | | | | |
| SR | 24th July 2012 to 31st July 2012 | 00-05, 10-13, 17-19 | 1900 | 0 | 1900 | 1162 | 738 | |
| | | 05-10, 19-24 | 1900 | | 1900 | | 738 | |
| | | 13-17 | 1900 | | 1900 | | 738 | |

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 | 11th July 2012 to 31st July 2012 | 00-24 | 2300 | 500 | 1800 | 286 | 1514 | |
| NER | 11th July 2012 to 13th July 2012 | 00-17 | 550 | 100 | 450 | 0 | 450 | |
| | | 23-24 | 550 | | 450 | | 450 | |
| | 14th July 2012 to 31st July 2012 | 00-24 | 550 | | 450 | | 450 | |
| WR | | | | | | | | |
| SR | 11th July 2012 to 31st July 2012 | 00-17 | 1600 | 0 | 1600 | 148 | 1452 | |
| | | 23-24 | 1700 | | 1700 | | 1552 | |

Limiting Constraints

| | | |
|------------|---------------|--|
| NR | Import | (n-1) contingency of 400 kV Purnea Muzaffarpur* Low voltage in Punjab, Haryana, Western UP Low voltage at Bina on outage of 400 kV 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 High Loading of 400/220 kV 315 MVA ICT at Balipara* (n-1) contingency of 400 kV Binaguri-Bongaigaon |
| | Export | High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri* (n-1) contingency of 400 kV Purnea-Muzaffarpur* |
| SR | Import | Link capacity of HVDC Bhadrawati B/B 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 | 7331 | 6200 | 2784 | 2484 |
| 2 | Haryana | 5337 | 5469 | 3043 | 3043 |
| 3 | Rajasthan | 5900 | 6710 | 3403 | 3343 |
| 4 | Delhi | 4453 | 4000 | 1416 | 1416 |
| 5 | Uttar Pradesh | 9500 | 10000 | 4614 | 4636 |
| 6 | Jammu & Kashmir | 2073 | 1925 | 668 | 675 |
| 7 | Uttarakhand | 1479 | 1100 | 881 | 825 |
| 8 | Himachal Pradesh | 1030 | 970 | 745 | 745 |
| 9 | Chandigarh | 288 | 237 | 0 | 0 |
| 10 | ISGS | | | 17938 | 16840 |
| | Total NR | 37391 | 36611 | 35491 | 34005 |
| II | EASTERN REGION | | | | |
| 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 | | | 5770 | 5150 |
| | Total ER | 13570 | 11070 | 16565 | 14655 |
| III | WESTERN REGION | | | | |
| 1 | Chattisgarh | 2442 | 2025 | 3048 | 2920 |
| 2 | Madhya Pradesh | 4769 | 4546 | 3448 | 2663 |
| 3 | Maharashtra | 15064 | 13390 | 11287 | 8946 |
| 4 | Gujarat | 10598 | 6155 | 8246 | 6944 |
| 5 | Goa | 310 | 334 | 0 | 0 |
| 6 | Daman and Diu | 262 | 278 | 0 | 0 |
| 7 | Dadra and Nagar Haveli | 575 | 566 | 0 | 0 |
| 8 | ISGS | | | 11144 | 10493 |
| | Total WR | 34021 | 27294 | 37173 | 31966 |
| IV | SOUTHERN REGION | | | | |
| 1 | Andhra Pradesh | 9350 | 8496 | 6558 | 5538 |
| 2 | Tamil Nadu | 10050 | 9973 | 5125 | 4335 |
| 3 | Karnataka | 6500 | 4450 | 4082 | 3198 |
| 4 | Kerala | 2500 | 1610 | 1892 | 1081 |
| 5 | Pondy | 286 | 200 | | |
| 6 | Goa | 60 | 60 | | |
| 7 | ISGS | | | 9743 | 9057 |
| | Total SR | 28746 | 24789 | 27400 | 23209 |
| V | NORTH-EASTERN REGION | | | | |
| 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 |
| | Total NER | 1718 | 1205 | 1772 | 1087 |
| | Total All India | 115446 | 100969 | 118401 | 104922 |