

National Load Despatch Centre
Total Transfer Capability for August 2017

Issue Date: 31st July 2017

Issue Time: 1400 hrs

Revision No. 5

| 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) | Changes in TTC w.r.t. Last Revision | Comments |
|-------------------|--------------------------------------|-------------------|---|--------------------|-------------------------------------|--|--|-------------------------------------|--|
| NR-WR* | 1st August 2017 to 31st August 2017 | 00-06 | 2500 | 500 | 2000 | 55 | 1945 | | |
| | | 06-18 | | | | 65 | 1935 | | |
| | | 18-24 | | | | 55 | 1945 | | |
| WR-NR* | 1st August 2017 to 06th August 2017 | 00-24 | 7050 | 500 | 6550 | 8330 | 0 | | Revised STOA margins due to approval of LTA/MTOA by CTU |
| | 07th August 2017 to 31st August 2017 | 00-24 | 9050 | 500 | 8550 | 8330 | 220 | | |
| NR-ER* | 1st August 2017 to 31st August 2017 | 00-06 | 2000 | 200 | 1800 | 193 | 1607 | | |
| | | 06-18' | 2000 | | 1800 | 303 | 1497 | | |
| | | 18-24 | 2000 | | 1800 | 193 | 1607 | | |
| ER-NR* | 1st August 2017 to 31st August 2017 | 00-24 | 4500 | 300 | 4200 | 2983 | 1217 | | |
| W3-ER | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being specified. | | | | | | |
| ER-W3 | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being specified. | | | | | | |
| WR-SR | 1st August 2017 to 31st August 2017 | 00-05 | 4350 | 500 | 3850 | 3889 | 0 | | |
| | | 05-22 | 4350 | | 3850 | | 0 | | |
| | | 22-24 | 4350 | | 3850 | | 0 | | |
| SR-WR * | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being Specified. | | | | | | |
| ER-SR | 1st August 2017 to 28th August 2017 | 00-06 | 3450 | 250 | 3200 | 2604 | 596 | | Revised STOA margin due planned outage of Talcher StgII U#4, Simhadri U#3, and other generators in Southern Region |
| | | 06-18' | | | | 2689 | 511 | | |
| | | 18-24 | | | | 2604 | 596 | | |
| | 29th August 2017 to 31st August 2017 | 00-06 | 3450 | 250 | 3200 | 3047 | 153 | | |
| | | 06-18' | | | | 3132 | 68 | | |
| | | 18-24 | | | | 3047 | 153 | | |
| SR-ER * | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being Specified. | | | | | | |
| ER-NER | 1st August 2017 to 31st August 2017 | 00-17 | 1045 | 45 | 1000 | 225 | 775 | | |
| | | 17-23 | 1065 | | 1020 | | 795 | | |
| | | 23-24 | 1045 | | 1000 | | 775 | | |
| NER-ER | 1st August 2017 to 31st August 2017 | 00-17 | 1280 | 45 | 1235 | 0 | 1235 | | |
| | | 17-23 | 1240 | | 1195 | | 1195 | | |
| | | 23-24 | 1280 | | 1235 | | 1235 | | |
| W3 zone Injection | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised accordingly) | | | | | | |

Note: TTC/ATC of S1-(S2&S3) corridor, Import of S3(Kerala), Import of Punjab and Import of DD & DNH is uploaded on NLDC website under Intra-Regional Section in Monthly ATC.

**National Load Despatch Centre
Total Transfer Capability for August 2017**

Issue Date: 31st July 2017

Issue Time: 1400 hrs

Revision No. 5

| 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) | Changes in TTC w.r.t. Last Revision | Comments |
|-----------------|-------------|--------------------------|--|---------------------------|--|---|---|--|-----------------|
|-----------------|-------------|--------------------------|--|---------------------------|--|---|---|--|-----------------|

* Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

1) S1 comprises of Telangana, AP and Karnataka; S2 comprises of Tamil Nadu and Puducherry; S3 comprises Kerala

2) W3 comprises of the following regional entities :

a) Chattisgarh Sell transaction, b) Jindal Power Limited (JPL) Stage-I & Stage-II, 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, k) KSK Mahanadi, L)DB Power, m) KWPCCL, n)Vandana Vidyut o)RKM, p)GMR Raikheda, q)Ind Barath and any other regional entity generator in Chhattisgarh

The figure is based on LTA/MTOA approved by CTU and Allocation figures as per RPCs RTA/REA. In actual Operation, due to Units being on Maintenance/ Fuel shortage/New units being commissioned the LTA/MTOA utilized would vary. RLDC/NLDC would factor this situation on day-ahead basis.

In the eventuality that net schedules exceed ATC, real time curtailments might be effected by RLDCs/NLDC.

In case of TTC Revision due to any shutdown :

1) The TTC value will be revised to normal values after restoration of shutdown.

2) The TTC value will be revised to normal values if the shutdown is not being availed in real time.

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) | Changes in TTC w.r.t. Last Revision | Comments |
|------------|--------------------------------------|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|-------------------------------------|---|
| ER | | | | | | | | | |
| NR | 1st August 2017 to 6th August 2017 | 00-05 | 10100 | 800 | 9300 | 11313 | 0 | | Revised STOA margins due to approval of LTA/MTOA by CTU |
| | | 05-08 | 10100 | | 9300 | | 0 | | |
| | | 08-18 | 10100 | | 9300 | | 0 | | |
| | | 18-23 | 9050 | | 8250 | | 0 | | |
| | | 23-24 | 10100 | | 9300 | | 0 | | |
| | 7th August 2017 to 31st August 2017 | 00-05 | 12900 | 800 | 12100 | 11313 | 787 | | |
| | | 05-08 | 12900 | | 12100 | | 787 | | |
| | | 08-18 | 12900 | | 12100 | | 787 | | |
| | | 18-23 | 11600 | | 10800 | | 0 | | |
| | | 23-24 | 12900 | | 12100 | | 787 | | |
| NER | 1st August 2017 to 31st August 2017 | 00-17 | 1045 | 45 | 1000 | 225 | 775 | | |
| | | 17-23 | 1065 | | 1020 | | 795 | | |
| | | 23-24 | 1045 | | 1000 | | 775 | | |
| WR | | | | | | | | | |
| SR | 1st August 2017 to 28th August 2017 | 00-05 | 7800 | 750 | 7050 | 6493 | 558 | | |
| | | 05-06 | 7800 | | 7050 | 6493 | 558 | | |
| | | 06-18 | 7800 | | 7050 | 6578 | 473 | | |
| | | 18-22 | 7800 | | 7050 | 6493 | 558 | | |
| | | 22-24 | 7800 | | 7050 | 6493 | 558 | | |
| | 29th August 2017 to 31st August 2017 | 00-05 | 7800 | 750 | 7050 | 6936 | 115 | | |
| | | 05-06 | 7800 | | 7050 | 6936 | 115 | | |
| | | 06-18 | 7800 | | 7050 | 7021 | 30 | | |
| | | 18-22 | 7800 | | 7050 | 6936 | 115 | | |
| | | 22-24 | 7800 | | 7050 | 6936 | 115 | | |

* Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

* For approving STOA Bilateral transactions, margin available in Simultaneous Import of NR would be apportioned on WR-NR Corridor & ER-NR Corridor in the following ratio:
 Margin in Simultaneous import of NR = A
 WR-NR ATC = B
 ER-NR ATC = C

 Margin for WR-NR applicants = $A * B / (B+C)$
 Margin for ER-NR Applicants = $A * C / (B+C)$

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) | Changes in TTC w.r.t. Last Revision | Comments |
|----------|-------------------------------------|-------------------|---------------------------------|--------------------|-------------------------------------|--|--|-------------------------------------|----------|
| NR* | 1st August 2017 to 31st August 2017 | 00-06 | 4500 | 700 | 3800 | 248 | 3552 | | |
| | | 06-18' | | | 3800 | 368 | 3432 | | |
| | | 18-24 | 4500 | | 3800 | 248 | 3552 | | |
| NER | 1st August 2017 to 31st August 2017 | 00-17 | 1280 | 45 | 1235 | 0 | 1235 | | |
| | | 17-23 | 1240 | | 1195 | | 1195 | | |
| | | 23-24 | 1280 | | 1235 | | 1235 | | |
| WR | | | | | | | | | |
| | | | | | | | | | |
| SR * | 1st August 2017 to 31st August 2017 | 00-24 | No limit is being Specified. | | | | | | |

* Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

Limiting Constraints (Corridor wise)

| Corridor | Constraint | Applicable Revisions |
|-------------------|--|----------------------|
| NR-WR | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak | All |
| WR-NR | (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C. | All |
| NR-ER | (n-1) contingency of 400 kV Saranath-Pusauli | All |
| ER-NR | (n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c and high availability of Hydro power | All |
| WR-SR & ER-SR | (n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C) | All |
| ER-NER | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW) | All |
| NER-ER | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA ICT at Misa | All |
| W3 zone Injection | --- | |

Limiting Constraints (Simultaneous)

| | | | Applicable Revisions |
|-----|--------|--|----------------------|
| NR | Import | (n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/C and high availability of Hydro power | All |
| | | (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C. | All |
| | Export | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. | All |
| NER | Import | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW) | All |
| | Export | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA ICT at Misa | All |
| SR | Import | (n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C) | All |
| | | Low Voltage at Gazuwaka (East) Bus | All |

**National Load Despatch Centre
Total Transfer Capability for August 2017**

| Revision No | Date of Revision | Period of Revision | Reason for Revision | Corridor Affected |
|--------------------|-------------------------|----------------------------------|--|--------------------------|
| 1 | 5th May 2017 | Whole month | STOA margin revised considering the latest LTA/MTOA granted by CTU | WR-SR/ER-SR/Import of SR |
| 2 | 9th May 2017 | Whole month | Revised considering the latest LTA/MTOA granted by CTU | WR-SR/Import of SR |
| 3 | 23rd May 2017 | Whole month | Revised considering present Inter-regional flow pattern | Import of NR |
| 4 | 28th July 2017 | 01st August'17 to 06th August'17 | Revised due to forced outage of HVDC Mundra-Mahindragarh Bipole on Tower collapse | WR-NR / Import of NR |
| | | 07th August'17 to 31st August'17 | Revised STOA margins due to approval of LTA/MTOA by CTU | WR-NR / Import of NR |
| 5 | 31st July 2017 | Whole month | Revised STOA margins due to approval of LTA/MTOA by CTU | WR-NR / Import of NR |
| | | Whole month | Revised STOA margin due planned outage of Talcher StgII U#4, Simhadri U#3, and other generators in Southern Region | ER-SR / Import of SR |

| ASSUMPTIONS IN BASECASE | | | | | |
|-------------------------|----------------------------|----------------|--------------------|-------------------|---------------|
| | | | | Month : August'17 | |
| 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 | 10497 | 8528 | 3609 | 3397 |
| 2 | Haryana | 8596 | 8584 | 1533 | 1533 |
| 3 | Rajasthan | 9006 | 8817 | 4563 | 4520 |
| 4 | Delhi | 5341 | 5181 | 853 | 853 |
| 5 | Uttar Pradesh | 14805 | 16256 | 9962 | 9981 |
| 6 | Uttarakhand | 1908 | 1745 | 980 | 979 |
| 7 | Himachal Pradesh | 1269 | 986 | 1118 | 1107 |
| 8 | Jammu & Kashmir | 2138 | 1165 | 1034 | 1038 |
| 9 | Chandigarh | 341 | 262 | 0 | 0 |
| 10 | ISGS/IPPs | 26 | 27 | 20580 | 17730 |
| | Total NR | 53927 | 51551 | 44232 | 41138 |
| II | EASTERN REGION | | | | |
| 1 | Bihar | 4058 | 2540 | 238 | 178 |
| 2 | Jharkhand | 1324 | 897 | 187 | 187 |
| 3 | Damodar Valley Corporation | 3150 | 2572 | 4808 | 3850 |
| 4 | Orissa | 4422 | 3237 | 3382 | 2120 |
| 5 | West Bengal | 8620 | 5872 | 5753 | 4270 |
| 6 | Sikkim | 90 | 90 | 0 | 0 |
| 7 | Bhutan | 245 | 245 | 1493 | 1493 |
| 8 | ISGS/IPPs | 571 | 568 | 11250 | 8880 |
| | Total ER | 22450 | 15993 | 27052 | 20919 |
| III | WESTERN REGION | | | | |
| 1 | Maharashtra | 16411 | 11943 | 11524 | 8836 |
| 2 | Gujarat | 12600 | 9774 | 8990 | 7258 |
| 3 | Madhya Pradesh | 6788 | 5553 | 3473 | 3351 |
| 4 | Chattisgarh | 3711 | 2946 | 2656 | 2025 |
| 5 | Daman and Diu | 320 | 289 | 0 | 0 |
| 6 | Dadra and Nagar Haveli | 690 | 742 | 0 | 0 |
| 7 | Goa-WR | 562 | 319 | 0 | 0 |
| 8 | ISGS/IPPs | 3794 | 3496 | 33999 | 28312 |
| | Total WR | 44876 | 35062 | 60643 | 49781 |

| | | | | | |
|----|----------------------|--------|--------|--------|--------|
| IV | SOUTHERN REGION | | | | |
| 1 | Andhra Pradesh | 8762 | 7562 | 6412 | 5385 |
| 2 | Telangana | 7965 | 6695 | 5245 | 3519 |
| 3 | Karnataka | 9680 | 8700 | 6779 | 5232 |
| 4 | Tamil Nadu | 14600 | 12900 | 8305 | 6705 |
| 5 | Kerala | 3650 | 1950 | 1572 | 283 |
| 6 | Pondy | 395 | 395 | 0 | 0 |
| 7 | Goa-SR | 89 | 89 | 0 | 0 |
| 8 | ISGS/IPPs | 0 | 0 | 11261 | 11290 |
| | Total SR | 45141 | 38291 | 39573 | 32413 |
| V | NORTH-EASTERN REGION | | | | |
| 1 | Arunachal Pradesh | 143 | 87 | 0 | 0 |
| 2 | Assam | 1214 | 1070 | 240 | 200 |
| 3 | Manipur | 154 | 78 | 0 | 0 |
| 4 | Meghalaya | 262 | 209 | 232 | 194 |
| 5 | Mizoram | 97 | 69 | 8 | 8 |
| 6 | Nagaland | 123 | 83 | 22 | 16 |
| 7 | Tripura | 235 | 250 | 34 | 41 |
| 8 | ISGS/IPPs | 100 | 60 | 1930 | 1804 |
| | Total NER | 2328 | 1906 | 2466 | 2263 |
| | Total All India | 168967 | 143047 | 175460 | 148010 |