National Load Despatch Centre Total Transfer Capability for September 2017

Issue Date: 8th Sepetember 2017 Issue Time: 1100 hrs Revision No. 6

| | Date | Time Period (hrs) | 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 September 2017 to 30th eptember 2017 | 00-06 06-18 18-24 | 2500 | 500 | 2000 | 55 65 55 | 1945 1935 1945 | | |
| | 1st September 2017 to 5th eptember 2017 | 00-24 | 9050 | 500 | 8550 | 8330 | 220 | | |
| | 6th September | 00-830 | 9050 | 500 | 8550 | 8330 | 220 | | |
| | 2017 to 8th eptember 2017 | 0830-24 | 7550 | 500 | 7050 | 8330 | 0 | | |
| WD ND* | 9th September | 00-0630 | 9050 | 500 | 8550 | 8330 | 220 | | |
| | 2017 | 0630-18 | 7700 | 500 | 7200 | 8330 | 0 | -1350 | Revised due to shutdown of 765kV Agra-Gwalior-1 and 2(One by one) |
| | | 18-24 | 9050 | 500 | 8550 | 8330 | 220 | | Agra-Gwanor-1 and 2(One by one) |
| | 0th September 2017 to 30th eptember 2017 | 00-24 | 9050 | 500 | 8550 | 8330 | 220 | | |
| 1 1 | 1st September | 00-06 | 2000 | | 1800 | 193 | 1607 | I | |
| NR-ER* | 2017 to 30th | 06-18' | 2000 | 200 | 1800 | 303 | 1497 | | |
| 1 | eptember 2017 1st September | 18-24 | 2000 | | 1800 | 193 | 1607 | | |
| | 2017 to 30th eptember 2017 | 00-24 | 4500 | 300 | 4200 | 2983 | 1217 | | |
| W3-ER | 1st September 2017 to 30th eptember 2017 | 00-24 | | | | No limit | is being specified. | | |
| ER-W3 | 1st September 2017 to 30th eptember 2017 | 00-24 | | | | No limit | is being specified. | | |
| 1 1 | 1st September | 00-05 | 4350 | | 3850 | | 367 | 1 | |
| WR-SR | 2017 to 30th | 05-22 | 4350 | 500 | 3850 | 3483 | 367 | | |
| Se | eptember 2017 | 22-24 | 4350 | | 3850 | | 367 | | |
| SR-WR * | 1st September 2017 to 30th eptember 2017 | 00-24 | | | | No limit | is being Specified. | | |
| 1 | 1st September | 00-06 | | | | 3053 | 147 | I | |
| ER-SR | 2017 to 30th eptember 2017 | 06-18' 18-24 | 3450 | 250 | 3200 | 3138 3053 | 62 147 | | |
| SR-ER * | 1st September 2017 to 30th eptember 2017 | 00-24 | | | | No limit | is being Specified. | | |
| 1 | 1st September | 00-17 | 1400 | | 1355 | | 1130 | | |
| | 2017 to 7th | 17-23 | 1400 | 45 | 1355 | 225 | 1130 | | |
| H K - V H K | eptember 2017 8th September | 23-24 00-17 | 1400 1170 | | 1355 1125 | | 1130 900 | | |
| | 2017 to 30th | 17-23 | 1170 | 45 | 1125 | 225 | 900 | | |
| Se | eptember 2017 | 23-24 | 1170 | | 1125 | | 900 | | |
| NER-ER | 1st September 2017 to 30th eptember 2017 | 00-17 17-23 23-24 | 1300 1170 1300 | 45 | 1255 1125 1255 | 0 | 1255 1125 1255 | | |

National Load Despatch Centre Total Transfer Capability for September 2017

Issue Date: 8th Sepetember 2017 Issue Time: 1100 hrs Revision No. 6

| 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 |
|----------------------|---|-------------------------|--|-----------------------|--|--|--|---|----------|
| W3 zone Injection | 3 zone 1st September 2017 to 30th 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/ | 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- | | | | | | | | |

^{*} 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) KWPCL, 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 commissionned 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

| Corrido r | 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 | | | | | | | | | |
| | | 00-05 | 12900 | | 12100 | | 787 | | |
| | | 05-08 | 12900 | | 12100 | | 787 | | |
| | 1st September 2017 to 5th | 08-18 | 12900 | 800 | 12100 | 11313 | 787 | | |
| | September 2017 | | 11300 | 300 | 10500 | 11313 | 0 | | |
| | | | | | | | | | |
| | | 23-24 | 12900 | | 12100 | | 787 | | |
| | | 00-05 | 12900 | | 12100 | | 787 | | |
| | 6th September | 05-0830 | 12900 | | 12100 | | 787 | | |
| | 2017 to 07th | 0830-18 | 10800 | 800 | 10000 | 11313 | 0 | | |
| | September 2017 | 18-23 | 9450 | | 8650 | | 0 | | |
| NID | | 23-24 | 10800 | | 10000 | | 0 | | |
| NR | | 00-05 | 12900 | | 12100 | | 787 | | |
| | 08th September | 05-0830 | 12900 | | 12100 | | 787 | | |
| | 2017 | 0830-18 | 10800 | 800 | 10000 | 11313 | 0 | | |
| | 2017 | 18-23 | 9700 | | 8900 | | 0 | | |
| | | 23-24 | 10800 | | 10000 | | 0 | | |
| | | 00-0630 | 12900 | 000 | 12100 | 11313 | 787 | 1000 | 5 |
| | 09th September | 0630-08 | 11000 | | 10200 | | 11212 | 0 | |
| | 2017 | 08-18 | 11000 | 800 | 10200 | | 0 | -1900 | Agra-Gwalior-1 and 2(One by |
| | | 18-23 | 11600 | | 10800 | | 0 | | one) |
| | | 23-24 00-05 | 12900 12900 | | 12100 | | 787 787 | | |
| | 10th September | 05-08 | 12900 | | 12100 12100 | | 787 | | |
| | 2017 to 30th | 08-18 | 12900 | 800 | 12100 | 11313 | 787 | | |
| | September 2017 | | 11600 | 000 | 10800 | 11313 | 0 | | |
| | | 23-24 | 12900 | | 12100 | | 787 | | |
| | 1st September | 00-17 | 1400 | | 1355 | | 1130 | | |
| | 2017 to 7th | 17-23 | 1400 | 45 | 1355 | 225 | 1130 | | |
| NED | September 2017 | 23-24 | 1400 | | 1355 | | 1130 | | |
| NER | 8th September | 00-17 | 1170 | | 1125 | | 900 | | |
| | 2017 to 30th | 17-23 | 1190 | 45 | 1145 | 225 | 920 | | |
| | September 2017 | 23-24 | 1170 | | 1125 | | 900 | | |
| WR | | | | | | | | | |
| | | 00-05 | 7800 | | 7050 | 6536 | 514 | | |
| | 1st September | 05-06 | 7800 | | 7050 | 6536 | 514 | | |
| SR | 2017 to 30th | 06-18 | 7800 | 750 | 7050 | 6621 | 429 | | |
| | September 2017 | 18-22 | 7800 | | 7050 | 6536 | 514 | | |
| | | 22-24 | 7800 | | 7050 | 6536 | 514 | | |

^{*} 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).

Margin in Simultaneous import of NR = A

WR-NR ATC =B

ER-NRATC = C

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

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

^{*} 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:

Simultaneous Export Capability

| Corrido r | 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 |
|--------------|---|-------------------------|--|------------------------------|--|--|--|---|----------|
| NIDA | 1st September | 00-06 | 4500 | 700 | 3800 | 248 | 3552 | | |
| NR* | 2017 to 30th | 06-18' 18-24 | 4500 | 700 | 3800 3800 | 368 248 | 3432 3552 | | |
| | September 2017 1st September | 00-17 | 1300 | | 1255 | 240 | 1255 | | |
| NER | 2017 to 30th | 17-23 | 1170 | 45 | | 0 | | | |
| NEK | September 2017 | | 1300 | | 1125 1255 | ł ' ł | 1125 1255 | | |
| | September 2017 | 23-24 | 1300 | | 1233 | | 1233 | | |
| WR | | | | | | | | | |
| SR * | 1st September 2017 to 30th September 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) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C. | All |
| | (n-1) Contingnecy of HVDC Champa-Kurukshetra Pole-1 leads to 2750 MW loading on second circuit. | Rev-6 |
| 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 |
| | Low voltage at Gazuwaka (East) bus | |
| 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 | | All |

Limiting Constraints (Simultaneous)

| | | | Applicable Revisions |
|-----|--|--|-----------------------------|
| | | (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 |
| | Import second circuit. High Loading of 400kV Singrauli-Anpara S/C. (n-1) Contingnecy of HVDC Champa-Kurukshetra Pole-1 lead | | All |
| NR | | (n-1) Contingnecy of HVDC Champa-Kurukshetra Pole-1 leads to 2750 MW loading on second circuit | Rev-6 |
| | Export | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. | All |
| | | (n-1) contingency of 400 kV Saranath-Pusauli | 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 |
| NEK | 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 September 2017

| Revision No | Date of Revision | Period of Revision | Reason for Revision | Corridor Affected |
|----------------|--|--|---|-----------------------------|
| 1 | 28th July 2017 | Whole Month | Revised STOA margins due to change in LTA / MTOA figures approved by CTU | WR-NR / Import of NR |
| 2 | 31st July 2017 | Whole Month | Revised STOA margins due to change in LTA / MTOA figures approved by CTU | WR-NR / Import of NR |
| 3 | 22nd August 2017 | 01st September 2017 to 07th September 2017 | Revised due to restriction on power flow from NER-NR on HVDC BNC-Agra due to maintenance activity in gas pipeline to Palatana units and generation restriction, and Change in pattern of simultaneous import towards NR | Import of NR |
| 4 | 1st September 2017 | 01st September 2017 to 07th September 2017 | Revised considering present load generation scenario in NER, outage of units of Palatana CCGT due to maintenance of fuel-supply link, and high hydro generation in Sikkim/Bhutan | ER- NER/Import of NER |
| 5 | 5th 6th September September 2017 to 08th 2017 September 2017 | | Revised due to shutdown of HVDC Champa-Kurukshetra Pole-1 for Commissioning of Pole-2 | WR-NR / Import of NR |
| 6 | 08th September 2017 | 09th September 2017 | Revised due to shutdown of 765kV Agra-Gwalior-1 and 2(One by one) | WR-NR / Import of NR |

| ASSUN | MPTIONS IN BASECASE | | | | | |
|-------|----------------------------|----------------|---------------|------|--------------------|---------------|
| | | | | | Month : September' | 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 | 9538 | 8003 | | 3576 | 3524 |
| 2 | Haryana | 8123 | 6864 | | 2062 | 2062 |
| 3 | Rajasthan | 9628 | 9037 | | 4586 | 4602 |
| 4 | Delhi | 4955 | 4467 | | 853 | 853 |
| 5 | Uttar Pradesh | 15515 | 15586 | | 9854 | 9900 |
| 6 | Uttarakhand | 1915 | 1547 | | 1079 | 982 |
| 7 | Himachal Pradesh | 1263 | 982 | | 896 | 1013 |
| 8 | Jammu & Kashmir | 2427 | 1304 | | 1037 | 1037 |
| 9 | Chandigarh | 317 | 210 | | 0 | 0 |
| 10 | ISGS/IPPs | 27 | 27 | | 23942 | 23972 |
| | Total NR | 53708 | 48027 | | 47884 | 47944 |
| | | | | | | |
| II | EASTERN REGION | | | | | |
| 1 | Bihar | 4100 | 2319 | | 202 | 178 |
| 2 | Jharkhand | 1354 | 888 | | 187 | 187 |
| 3 | Damodar Valley Corporation | 3190 | 2586 | | 4808 | 3850 |
| 4 | Orissa | 4346 | 3151 | | 3382 | 2160 |
| 5 | West Bengal | 8640 | 5784 | | 5753 | 4270 |
| 6 | Sikkim | 90 | 89 | | 0 | 0 |
| 7 | Bhutan | 215 | 212 | | 1434 | 1434 |
| 8 | ISGS/IPPs | 522 | 521 | | 13101 | 10221 |
| | Total ER | 22457 | 15550 | | 28867 | 22300 |
| III | WESTERN REGION | | | | | |
| | Maharashtra | 19685 | 11540 | | 14102 | 8860 |
| | Gujarat | 14398 | 11862 | | 10214 | 9443 |
| | Madhya Pradesh | 8164 | 7055 | | 4500 | 4500 |
| | Chattisgarh | 3785 | 3422 | | 2710 | 2710 |
| | Daman and Diu | 328 | 289 | | 0 | 0 |
| | Dadra and Nagar Haveli | 696 | 716 | | 0 | 0 |
| | Goa-WR | 577 | 302 | | 0 | 0 |
| | ISGS/IPPs | 3299 | 4098 | | 26212 | 36388 |
| | Total WR | 50933 | 39284 | | 57738 | 61902 |

| V | SOUTHERN REGION | | | | |
|---|----------------------|--------|--------|--------|--------|
| 1 | Andhra Pradesh | 8442 | 7063 | 7236 | 5165 |
| 2 | ? Telangana | 9068 | 6607 | 5618 | 3638 |
| 3 | Karnataka | 8668 | 7785 | 5803 | 3989 |
| 4 | Tamil Nadu | 14129 | 11794 | 7641 | 6011 |
| 5 | Kerala | 3647 | 2024 | 1572 | 283 |
| 6 | Pondy | 393 | 385 | 0 | 0 |
| 7 | Goa-SR | 89 | 88 | 0 | 0 |
| 8 | ISGS/IPPs | 0 | 0 | 11434 | 11359 |
| | Total SR | 44436 | 35745 | 39304 | 30445 |
| | | | | | |
| , | NORTH-EASTERN REGION | | | | |
| 1 | Arunachal Pradesh | 142 | 88 | 0 | 0 |
| 2 | 2 Assam | 1141 | 1056 | 230 | 190 |
| 3 | Manipur | 158 | 85 | 0 | 0 |
| 4 | Meghalaya | 242 | 149 | 276 | 167 |
| 5 | Mizoram | 95 | 68 | 8 | 8 |
| 6 | Nagaland | 123 | 82 | 22 | 16 |
| 7 | 7 Tripura | 287 | 190 | 81 | 82 |
| 8 | ISGS/IPPs | 100 | 60 | 1488 | 1514 |
| | Total NER | 2288 | 1779 | 2105 | 1977 |
| | Total All India | 173823 | 140385 | 175898 | 164568 |