## National Load Despatch Centre

## Total Transfer Capability for April 2018

Issue Date: 23rd March 2018
Issue Time: 1800 hrs
Revision No. 4


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| Corridor | Date | Time <br> Period <br> (hrs) | Total <br> Transfer <br> Capability <br> (TTC) | Reliability <br> Margin | Available <br> Transfer <br> Capability <br> (ATC) | Long Term <br> Access (LTA)/ <br> Medium Term <br> Open Access <br> (MTOA) \# | Margin <br> Available for <br> Short Term <br> Open Access <br> (STOA) | Changes <br> in TTC <br> w.r.t. <br> Last <br> Revision |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

* 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 :
3) The TTC value will be revised to normal values after restoration of shutdown.
4) 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 <br> Period <br> (hrs) | Total Transfer Capability (TTC) | Reliability <br> Margin | Available Transfer Capability (ATC) | Long Term Access (LTA)/ Medium Term Open Access (MTOA) | Margin Available for Short Term Open Access (STOA) | Changes <br> in TTC <br> w.r.t. <br> Last <br> Revision | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ER |  |  |  |  |  |  |  |  |  |
| NR | $\begin{gathered} \text { 1st April } 2018 \\ \text { to 30th April } \\ 2018 \end{gathered}$ | 00-05 | 14350 | 800 | 13550 | 12319 | 1231 |  |  |
|  |  | 05-08 | 14350 |  | 13550 |  | 1231 |  |  |
|  |  | 08-18 | 14350 |  | 13550 |  | 1231 |  |  |
|  |  | 18-23 | 13050 |  | 12250 |  | 0 |  |  |
|  |  | 23-24 | 14350 |  | 13550 |  | 1231 |  |  |
| NER | 1st April 2018 to 30th April 2018 | 00-17 | 1370 | 45 | 1325 | 225 | 1100 |  |  |
|  |  | 17-23 | 1310 |  | 1265 |  | 1040 |  |  |
|  |  | 23-24 | 1370 |  | 1325 |  | 1100 |  |  |
| WR |  |  |  |  |  |  |  |  |  |
| SR | $\begin{gathered} \text { 1st April } 2018 \\ \text { to 30th April } \\ 2018 \end{gathered}$ |  |  | 750 |  |  |  |  | Revised STOA margin on basis of inter-regional LTA uilisation/allocation |
|  |  | 00-05 | 9500 |  | 8750 | 6977 | 1773 |  |  |
|  |  | 05-06 | 9500 |  | 8750 | 6977 | 1773 |  |  |
|  |  | 06-18 | 9500 |  | 8750 | 7062 | 1688 |  |  |
|  |  | 18-22 | 9500 |  | 8750 | 6977 | 1773 |  |  |
|  |  | 22-24 | 9500 |  | 8750 | 6977 | 1773 |  |  |

* 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).

[^0]
## Simultaneous Export Capability

| Corridor | Date | Time Period (hrs) | Total Transfer Capability (TTC) | Reliability <br> Margin | Available <br> Transfer <br> Capability <br> (ATC) | Long Term Access (LTA)/ Medium Term Open Access (MTOA) | Margin Available for Short Term Open Access (STOA) | Changes <br> in TTC <br> w.r.t. <br> Last <br> Revision | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NR* | $\begin{gathered} \text { 1st April } 2018 \\ \text { to 30th April } \\ 2018 \\ \hline \end{gathered}$ | 00-06 | 4500 | 700 | 3800 | 248 | 3552 |  |  |
|  |  | 06-18 |  |  | 3800 | 368 | 3432 |  |  |
|  |  | 18-24 | 4500 |  | 3800 | 248 | 3552 |  |  |
| NER | 1st April 2018 to 30th April 2018 | 00-17 | 1460 | 45 | 1415 | 0 | 1415 |  |  |
|  |  | 17-23 | 1420 |  | 1375 |  | 1375 |  |  |
|  |  | 23-24 | 1460 |  | 1415 |  | 1415 |  |  |
| WR |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| SR * | 1st April 2018 to 30th April 2018 | 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)

|  |  | Applicable Revisions |
| :---: | :---: | :---: |
| Corridor | Constraint |  |
| NR-WR | ( $\mathrm{n}-1$ ) contingency of 400 kV Zerda-Bhinmal and ( $\mathrm{n}-1$ ) contingency of 220 kV Badod-Modak | Rev-0 to 4 |
| WR-NR | 1. (n-1) Contingnecy of 765 kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. | Rev-0 to 4 |
| NR-ER | (n-1) contingency of 400 kV Saranath-Pusauli | Rev-0 to 4 |
| ER-NR | ( $\mathrm{n}-1$ ) contingencies of N.Ranchi - Chandawa S/c \& (n-1) contingencies of 400kV MPL- Maithon S/c | Rev-0 to 4 |
| $\begin{gathered} \text { WR-SR } \\ \text { and ER- } \\ \text { SR } \end{gathered}$ | a. ( $\mathrm{n}-1$ ) contingency of one ckt of 765 kV Wardha-Nizamabad D/C will lead to 874 MW loading on 400kV Vemagiri(PG)Gazuwaka (When 400kV Vemagiri(PG)-Nunna S/C is not in service) <br> b. ( $\mathrm{n}-1$ ) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading ( 874 MW ) on 400 kV Vemagiri - Gazuwaka S/C (When 400 kV Vemagiri(PG) - Nunna S/C in kept in service) | Rev-0 to 3 |
|  | Low Voltage at Gazuwaka (East) Bus. | Rev-0 to 4 |
|  | n -1 contingency of $2 \times 1500 \mathrm{MVA}, 765 / 400 \mathrm{kV} \mathrm{ICTs}$ at Vemagiri (PG) will lead to overloading of the second ICT | Rev-4 |
| ER-NER | a. ( $\mathrm{n}-1$ ) contingency of $400 / 220 \mathrm{kV}, 2 \times 315$ MVA ICTs at Misa <br> b. High loading of 220 kV Balipara-Sonabil line( 200 MW ) | Rev-0 to 4 |
| NER-ER | (n-1) contingency of 400/220 kV, $2 \times 315$ MVA ICTs at Misa results in high loading of 220 kV Samaguri - Sonabil line | Rev-0 to 4 |
| W3 zone Injection | --- | Rev-0 to 4 |

## 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. | Rev-0 to 4 |
|  |  | 1. (n-1) Contingnecy of 765 kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. 2.High Loading of 400 kV Singrauli-Anpara S/C. |  |
|  | Export | ( $\mathrm{n}-1$ ) contingency of 400 kV Zerda-Bhinmal and ( $\mathrm{n}-1$ ) contingency of 220 kV Badod-Modak. | Rev-0 to 4 |
|  |  | ( $\mathrm{n}-1$ ) contingency of 400 kV Saranath-Pusauli |  |
| NER | Import | a. ( $\mathrm{n}-1$ ) contingency of $400 / 220 \mathrm{kV}, 2 \times 315$ MVA ICTs at Misa <br> b. High loading of 220 kV Balipara-Sonabil line ( 200 MW ) | Rev-0 to 4 |
|  | Export | (n-1) contingency of $400 / 220 \mathrm{kV}, 2 \times 315$ MVA ICTs at Misa results in high loading of 220 kV Samaguri Sonabil line | Rev-0 to 4 |
| SR | Import | a. ( $\mathrm{n}-1$ ) contingency of one ckt of 765 kV Wardha-Nizamabad D/C will lead to 874 MW loading on 400 kV Vemagiri(PG)-Gazuwaka (When 400 kV Vemagiri(PG)-Nunna S/C is not in service) <br> b. ( $\mathrm{n}-1$ ) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading ( 874 MW ) on 400 kV Vemagiri - Gazuwaka S/C (When 400 kV Vemagiri(PG) - Nunna S/C in kept in service) | Rev-0 to 3 |
|  |  | Low Voltage at Gazuwaka (East) Bus. | Rev-0 to 4 |
|  |  | n -1 contingency of $2 \times 1500$ MVA, $765 / 400 \mathrm{kV}$ ICTs at Vemagiri (PG) will lead to overloading of the second ICT | Rev-4 |

## National Load Despatch Centre Total Transfer Capability for April 2018

| $\begin{gathered} \text { Revision } \\ \text { No } \end{gathered}$ | Date of Revision | Period of Revision | Reason for Revision | Corridor Affected |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{gathered} \text { 22nd Jan } \\ 2018 \end{gathered}$ | Whole month | Revised STOA margin due to (i) allocation of 125 MW and 200 MW power from NTPC WR to Telangana \& Karnataka respectively and (ii) 50 MW of power from NTPC ER to Telangana | WR-SR/ERSR/Import of SR |
| 2 | 3rd Feb 2018 | Whole month | Revised STOA margins due to change in Talcher Stg-II DC | ER- SR/Import of SR |
| 3 | $\begin{gathered} \text { 26th Feb } \\ 2018 \end{gathered}$ | Whole month | Revised STOA margin due to (a) 50 MW allocation to Karnataka from NTPC WR plants (b) 5 MW allocation to Telangana from NTPC WR plants | WR- <br> SR/Import of SR |
| 4 | $\begin{gathered} \text { 23rd March } \\ 2018 \end{gathered}$ | Whole month | 1. Revised due to commissioning/ reconfugration of following lines: <br> (a) Commissioning of 400 kV Vijaywada(PG)-Vemagiri (PG) <br> Ckt 2 \& 3 <br> (b) Commissioning of 400 kV Vemagiri (PG)-Vemagiri (AP) 1 \& 2 <br> (c) Vemagiri (AP) end of 400 kV Simhadri II - Vemagiri (AP)ckt $1 \& 2$ moved to 400 kV Vemagiri (PG) <br> 2. With the commissioning/ reconfugration of above lines, TTC/ATC for Import of SR remains unchanged however the relative sensitivity of ER-SR and WR-SR to net import of SR has changed. The limiting constraint which was earlier ( $\mathrm{n}-1$ ) contingency of one ckt of 765 kV Wardha-Nizamabad D/C and ( $\mathrm{n}-1$ ) contingency of 400 kV Vemagiri - Vijaywada S/C has also shifted to $\mathrm{n}-1$ contingency of $2 \times 1500 \mathrm{MVA}$, 765/400 kV ICTs at Vemagiri (PG). | $\begin{gathered} \text { ER-SR / WR- } \\ S R \end{gathered}$ |
|  |  |  | Revised STOA margin on basis of inter-regional LTA uilisation/allocation | ER- SR/Import of SR |


| ASSUMPTIONS IN BASECASE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Month : April'18 |  |
| S.No. | Name of State/Area | Load |  | Generation |  |
|  |  | Peak Load (MW) | Off Peak Load (MW) | Peak (MW) | Off Peak (MW) |
| 1 | NORTHERN REGION |  |  |  |  |
| 1 | Punjab | 7292 | 6644 | 3354 | 3234 |
| 2 | Haryana | 6516 | 6006 | 1283 | 1283 |
| 3 | Rajasthan | 8713 | 8271 | 4971 | 4941 |
| 4 | Delhi | 5224 | 4967 | 664 | 664 |
| 5 | Uttar Pradesh | 14753 | 13787 | 8154 | 8178 |
| 6 | Uttarakhand | 1679 | 1271 | 691 | 579 |
| 7 | Himachal Pradesh | 1471 | 1100 | 602 | 404 |
| 8 | Jammu \& Kashmir | 2555 | 2050 | 1148 | 839 |
| 9 | Chandigarh | 232 | 168 | 0 | 0 |
| 10 | ISGS/IPPs | 25 | 25 | 19298 | 14451 |
|  | Total NR | 48459 | 44289 | 40165 | 34573 |
|  |  |  |  |  |  |
| 11 | EASTERN REGION |  |  |  |  |
| 1 | Bihar | 3982 | 2561 | 290 | 181 |
| 2 | Jharkhand | 1198 | 860 | 374 | 210 |
| 3 | Damodar Valley Corporation | 2986 | 2649 | 4717 | 3994 |
| 4 | Orissa | 3986 | 3116 | 2975 | 2252 |
| 5 | West Bengal | 7678 | 5578 | 5372 | 4249 |
| 6 | Sikkim | 86 | 50 | 0 | 0 |
| 7 | Bhutan | 208 | 218 | 424 | 290 |
| 8 | ISGS/IPPs | 270 | 261 | 10897 | 9516 |
|  | Total ER | 20394 | 15291 | 25050 | 20692 |
|  |  |  |  |  |  |
| III | WESTERN REGION |  |  |  |  |
| 1 | Maharashtra | 19680 | 18252 | 12471 | 12257 |
| 2 | Gujarat | 14041 | 14278 | 9155 | 9155 |
| 3 | Madhya Pradesh | 8174 | 7947 | 3316 | 3446 |
| 4 | Chattisgarh | 4013 | 3793 | 2305 | 2305 |
| 5 | Daman and Diu | 309 | 304 | 0 | 0 |
| 6 | Dadra and Nagar Haveli | 733 | 745 | 0 | 0 |
| 7 | Goa-WR | 491 | 417 | 0 | 0 |
| 8 | ISGS/IPPs | 3822 | 3757 | 38254 | 37653 |
|  | Total WR | 51263 | 49493 | 65501 | 64816 |


| S.No. | Name of State/Area | Load |  | Generation |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Peak Load (MW) | Off Peak Load (MW) | Peak (MW) | Off Peak (MW) |
|  |  |  |  |  |  |
| IV | SOUTHERN REGION |  |  |  |  |
| 1 | Andhra Pradesh | 8398 | 6262 | 5740 | 3534 |
| 2 | Telangana | 9459 | 7003 | 4294 | 3914 |
| 3 | Karnataka | 10363 | 7363 | 6949 | 5564 |
| 4 | Tamil Nadu | 15027 | 13021 | 7100 | 5500 |
| 5 | Kerala | 4029 | 2694 | 1589 | 245 |
| 6 | Pondy | 366 | 262 | 0 | 0 |
| 7 | Goa-SR | 82 | 84 | 0 | 0 |
| 8 | ISGS/IPPs | 0 | 0 | 17631 | 12306 |
|  | Total SR | 47726 | 36689 | 43303 | 31062 |
|  |  |  |  |  |  |
| V | NORTH-EASTERN REGION |  |  |  |  |
| 1 | Arunachal Pradesh | 126 | 60 | 0 | 0 |
| 2 | Assam | 1123 | 843 | 224 | 112 |
| 3 | Manipur | 156 | 87 | 0 | 0 |
| 4 | Meghalaya | 270 | 192 | 135 | 58 |
| 5 | Mizoram | 95 | 66 | 8 | 8 |
| 6 | Nagaland | 103 | 78 | 12 | 8 |
| 7 | Tripura | 182 | 185 | 72 | 70 |
| 8 | ISGS/IPPs | 157 | 160 | 1829 | 1331 |
|  | Total NER | 2213 | 1669 | 2280 | 1587 |
|  |  |  |  |  |  |
|  | Total All India | 170430 | 147825 | 176777 | 153060 |


[^0]:    * For approving STOA Bilateral transactions, margin available in Simultaneous Import of NR would be apportioned on WR-NR Corridor \& ERNR Corridor in the following ratio:
    Margin in Simultaneous import of $\mathrm{NR}=\mathrm{A}$
    WR-NR ATC = B
    ER-NR ATC = C

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

