

National Load Despatch Centre
Total Transfer Capability for April 2019

Issue Date: 28th March 2019

Issue Time: 1800 hrs

Revision No. 4

| 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 April 2019 to 30th April 2019 | 00-06 | 2500 | 500 | 2000 | 195 | 1805 | | |
| | | 06-18 | | | | 250 | 1750 | | |
| | | 18-24 | | | | 195 | 1805 | | |
| WR-NR* | 1st April 2019 to 30th April 2019 | 00-24 | 13250 | 500 | 12750 | 9485 | 3265 | | Revised STOA margin due to operationalization of the following LTA:- a) Tuticorin - Mytrah Power to UPPCL, Uttar Pradesh - 51.84 MW |
| | | | 12300** | | 11800** | 8535** | 3265** | | |
| NR-ER* | 1st April 2019 to 30th April 2019 | 00-06 | 2000 | 200 | 1800 | 193 | 1607 | | |
| | | 06-18 | 2000 | | 1800 | 303 | 1497 | | |
| | | 18-24 | 2000 | | 1800 | 193 | 1607 | | |
| ER-NR* | 1st April 2019 to 30th April 2019 | 00-24 | 5250 | 300 | 4950 | 3979 | 971 | | |
| W3-ER | 1st April 2019 to 30th April 2019 | 00-24 | No limit is being specified. | | | | | | |
| ER-W3 | 1st April 2019 to 30th April 2019 | 00-24 | No limit is being specified. | | | | | | |
| WR-SR | 1st April 2019 to 30th April 2019 | 00-05 | 5550 | 500 | 5050 | 4435 | 615 | | |
| | | 05-22 | 5550 | | 5050 | | 615 | | |
| | | 22-24 | 5550 | | 5050 | | 615 | | |
| SR-WR * | 1st April 2019 to 30th April 2019 | 00-24 | No limit is being Specified. | | | | | | |
| ER-SR | 1st April 2019 to 30th April 2019 | 00-06 | 4950 | 250 | 4700 | 2762 | 1938 | | |
| | | 06-18 | | | | 2847 | 1853 | | |
| | | 18-24 | | | | 2762 | 1938 | | |
| SR-ER * | 1st April 2019 to 30th April 2019 | 00-24 | No limit is being Specified. | | | | | | |

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|---|-----------------------------------|-------------------|---|--------------------|-------------------------------------|--|--|-------------------------------------|--|
| ER-NER | 1st April 2019 to 30th April 2019 | 00-17 | 1420 | 45 | 1375 | 265 | 1110 | | Revised STOA margin due to allocation of 40 MW power from Mouda Stg-II to Assam. |
| | | 17-23 | 1400 | | 1355 | | 1090 | | |
| | | 23-24 | 1420 | | 1375 | | 1110 | | |
| NER-ER | 1st April 2019 to 30th April 2019 | 00-17 | 2240 | 45 | 2195 | 0 | 2195 | | |
| | | 17-23 | 2370 | | 2325 | | 2325 | | |
| | | 23-24 | 2240 | | 2195 | | 2195 | | |
| W3 zone Injection | 1st April 2019 to 30th April 2019 | 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. | | | | | | | | | |

* 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).

**Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

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 Raikhed, 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 April 2019 to 30th April 2019 | 00-06 | 17650 16700** | 800 | 16850 15900** | 13464 12514** | 3386 3386** | | Revised STOA margin due to operationalization of the following LTA:- a) Tuticorin - Mytrah Power to UPPCL, Uttar Pradesh - 51.84 MW |
| | | 06-17 | 18900 17950** | | 18100 17150** | | 4636 4636** | | |
| | | 17-24 | 17000 16050** | | 16200 15250** | | 2736 2736** | | |
| | | | | | | | | | |
| NER | 1st April 2019 to 30th April 2019 | 00-17 | 1420 | 45 | 1375 | 265 | 1110 | | Revised STOA margin due to allocation of 40 MW power from Mouda Stg-II to Assam. |
| | | 17-23 | 1400 | | 1355 | | 1090 | | |
| | | 23-24 | 1420 | | 1375 | | 1110 | | |
| WR | | | | | | | | | |
| SR | 1st April 2019 to 30th April 2019 | 00-06 | 10500 | 750 | 9750 | 7197 | 2553 | | |
| | | 06-18 | 10500 | | 9750 | 7282 | 2468 | | |
| | | 18-24 | 10500 | | 9750 | 7197 | 2553 | | |

* 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).

**Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

* 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 April 2019 to 30th April 2019 | 00-06 | 4500 | 700 | 3800 | 388 | 3412 | | |
| | | 06-18 | | | 3800 | 553 | 3247 | | |
| | | 18-24 | 4500 | | 3800 | 388 | 3412 | | |
| NER | 1st April 2019 to 30th April 2019 | 00-17 | 2240 | 45 | 2195 | 0 | 2195 | | |
| | | 17-23 | 2370 | | 2325 | | 2325 | | |
| | | 23-24 | 2240 | | 2195 | | 2195 | | |
| WR | | | | | | | | | |
| SR * | 1st April 2019 to 30th April 2019 | 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 | Rev-0 to 4 |
| WR-NR | (n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida. | Rev-0 to 1 |
| | RVO operation of HVDC Champa Kurukshetra Poles Reversal of BNC-Agra pole towards BNC & blocking of APD-Agra pole due to lean hydro period in NER | Rev-0 to 1 |
| | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Agra (PG) will lead to overloading of the second ICT | Rev-2 to 4 |
| NR-ER | (n-1) contingency of 400 kV Saranath-Pusauli | Rev-0 to 4 |
| ER-NR | 1. N-1 contingencies of 400 kv Mejia-Maithon A S/c 2. N-1 contingencies of 400 kv Kahalgaon-Banka S/c 3. N-1 contingencies of 400kV MPL- Maithon S/C | Rev-0 to 4 |
| WR-SR and ER-SR | n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT | Rev-0 to 4 |
| | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT | Rev-0 to 4 |
| | Low Voltage at Gazuwaka (East) Bus. | Rev-0 to 4 |
| ER-NER | a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW) | Rev-0 to 4 |
| NER-ER | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa | Rev-0 to 4 |
| W3 zone Injection | --- | Rev-0 to 4 |

Limiting Constraints (Simultaneous)

| | | Applicable Revisions | |
|-----|--------|--|------------|
| NR | Import | 1. N-1 contingencies of 400 kV Mejia-Maithon A S/c 2. N-1 contingencies of 400 kV Kahalgaon-Banka S/c 3. N-1 contingencies of 400kV MPL- Maithon S/c | Rev-0 to 4 |
| | | (n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida. | Rev-0 to 1 |
| | | RVO operation of HVDC Champa Kurukshetra Poles Reversal of BNC-Agra pole towards BNC & blocking of APD-Agra pole due to lean hydro period in NER | Rev-0 to 1 |
| | Export | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Agra (PG) will lead to overloading of the second ICT | Rev-2 to 4 |
| | | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220 kV Badod-Modak. (n-1) contingency of 400 kV Saranath-Pusauli | Rev-0 to 4 |
| NER | Import | a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line (200 MW) | Rev-0 to 4 |
| | Export | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa | Rev-0 to 4 |
| SR | Import | n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT | Rev-0 to 4 |
| | | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT | Rev-0 to 4 |
| | | Low Voltage at Gazuwaka (East) Bus. | Rev-0 to 4 |

National Load Despatch Centre
Total Transfer Capability for April 2019

| Revision No | Date of Revision | Period of Revision | Reason for Revision/Comment | Corridor Affected |
|-------------|------------------|--------------------|---|--------------------------|
| 1 | 4th Jan 2019 | Whole Month | Revised STOA margins due to: (i) Additional 20 MW LTA to Delhi from Ostro Kutch Wind Power Ltd (OKWPL) (ii) Operationalization of 108 MW MTOA from SKS Power Gen Ltd to Noida Power Company | WR-NR/Import of NR |
| | | | Revised TTC due to: (i) Change in load generation balance (ii) Commissioning of circuit 3 & 4 of 765 kV Angul Jharsuguda (iii) Prevailing pattern of load in downstream of 400/220 kV Maradam ICTs | ER-SR/WR-SR/Import of SR |
| 2 | 28th Jan 2019 | Whole Month | Revised TTC due to normalization of Champa Kurukshetra bipole | WR-NR/Import of NR |
| | | | Change in pattern of inter-regional flow towards NR | Import of NR |
| | | | Revised STOA margin due to termination of 100 MW MTOA from LANCO Anpara power limited to TANGEDCO | WR-SR/Import of SR |
| 3 | 07th Mar 2019 | Whole Month | Operationalization of 87 MW LTA from Teesta - III HEP to Rajasthan | ER-NR/Import of NR |
| | | | Operationalization of 50 MW LTA from Orange Sirong Wind Power Limited (OSWPPL) to Haryana | WR-NR/Import of NR |
| 4 | 28th Mar 2019 | Whole Month | Operationalization of the following LTAs:- a) Tuticorin - Mytrah Power to UPPCL, Uttar Pradesh - 51.84 MW | WR-NR/Import of NR |
| | | | Allocation of 40 MW power from Mouda Stg-II to Assam | ER-NER/Import of NER |

| ASSUMPTIONS IN BASECASE | | | | | |
|-------------------------|----------------------------|----------------|--------------------|------------------|---------------|
| | | | | Month : April'19 | |
| 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 | 7290 | 6249 | 3543 | 3588 |
| 2 | Haryana | 7873 | 7139 | 2583 | 2583 |
| 3 | Rajasthan | 10474 | 9250 | 7473 | 7473 |
| 4 | Delhi | 5387 | 4170 | 612 | 612 |
| 5 | Uttar Pradesh | 14130 | 11663 | 6246 | 6367 |
| 6 | Uttarakhand | 1784 | 1304 | 816 | 544 |
| 7 | Himachal Pradesh | 1459 | 970 | 173 | 131 |
| 8 | Jammu & Kashmir | 2387 | 1613 | 771 | 761 |
| 9 | Chandigarh | 243 | 144 | 0 | 0 |
| 10 | ISGS/PPs | 30 | 29 | 18558 | 10652 |
| | Total NR | 51057 | 42529 | 40775 | 32711 |
| II | EASTERN REGION | | | | |
| 1 | Bihar | 4534 | 3290 | 352 | 285 |
| 2 | Jharkhand | 994 | 702 | 354 | 229 |
| 3 | Damodar Valley Corporation | 3022 | 2497 | 5147 | 3743 |
| 4 | Orissa | 4128 | 3314 | 2371 | 2471 |
| 5 | West Bengal | 6921 | 4534 | 5279 | 3958 |
| 6 | Sikkim | 107 | 94 | 0 | 0 |
| 7 | Bhutan | 200 | 198 | 414 | 336 |
| 8 | ISGS/PPs | 626 | 627 | 11872 | 8472 |
| | Total ER | 20531 | 15257 | 25789 | 19494 |
| III | WESTERN REGION | | | | |
| 1 | Maharashtra | 20141 | 17026 | 16345 | 14514 |
| 2 | Gujarat | 15838 | 13877 | 10402 | 10095 |
| 3 | Madhya Pradesh | 10831 | 7721 | 5491 | 4520 |
| 4 | Chattisgarh | 4459 | 3483 | 2797 | 2985 |
| 5 | Daman and Diu | 349 | 297 | 0 | 0 |
| 6 | Dadra and Nagar Haveli | 886 | 722 | 0 | 0 |
| 7 | Goa-WR | 625 | 439 | 0 | 0 |
| 8 | ISGS/PPs | 4956 | 4343 | 40029 | 30899 |
| | Total WR | 58085 | 47909 | 75062 | 63015 |

| 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 | 8469 | 7401 | 6235 | 4544 |
| 2 | Telangana | 9553 | 8303 | 4964 | 4464 |
| 3 | Karnataka | 9353 | 6123 | 7638 | 5619 |
| 4 | Tamil Nadu | 15346 | 13709 | 8538 | 7138 |
| 5 | Kerala | 4133 | 2777 | 1574 | 716 |
| 6 | Pondy | 327 | 321 | 0 | 0 |
| 7 | Goa-SR | 73 | 72 | 0 | 0 |
| 8 | ISGS/PPs | 0 | 0 | 13098 | 11619 |
| | Total SR | 47254 | 38706 | 42049 | 34101 |
| V | NORTH-EASTERN REGION | | | | |
| 1 | Arunachal Pradesh | 66 | 54 | 0 | 0 |
| 2 | Assam | 879 | 806 | 195 | 142 |
| 3 | Manipur | 119 | 87 | 0 | 0 |
| 4 | Meghalaya | 284 | 213 | 162 | 96 |
| 5 | Mizoram | 99 | 59 | 64 | 8 |
| 6 | Nagaland | 81 | 74 | 12 | 6 |
| 7 | Tripura | 209 | 149 | 74 | 74 |
| 8 | ISGS/PPs | 153 | 83 | 1326 | 1151 |
| | Total NER | 1890 | 1525 | 1833 | 1477 |
| | Total All India | 179317 | 146360 | 185946 | 151169 |