## National Load Despatch Centre

## Total Transfer Capability for November 2018

Issue Date: 19th November 2018
Issue Time: 1200 hrs
Revision No. 6

| Corridor | Date | Time Period (hrs) | Total <br> Transfer <br> Capability <br> (TTC) | Reliability Margin | Available <br> Transfer <br> 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 November 2018 to 30th November 2018 | 00-06 | 2500 | 500 | 2000 | 195 | 1805 |  |  |
|  |  | 06-18 |  |  |  | 250 | 1750 |  |  |
|  |  | 18-24 |  |  |  | 195 | 1805 |  |  |
| WR-NR* | 1st November 2018 | 00-24 | $\begin{gathered} 12250 \\ 11775^{* *} \end{gathered}$ | 500 | $\begin{gathered} 11750 \\ 11275^{* *} \end{gathered}$ | $\begin{gathered} 8610 \\ 8135^{* *} \end{gathered}$ | $\begin{gathered} 3140 \\ 3140^{* *} \end{gathered}$ |  |  |
|  | 2nd November 2018 to 5th November 2018 | 00-24 | $\begin{gathered} 12250 \\ 11775^{* *} \end{gathered}$ | 500 | $\begin{gathered} 11750 \\ 11275^{* *} \end{gathered}$ | $\begin{gathered} 8760 \\ 8285^{* *} \end{gathered}$ | $\begin{gathered} 2990 \\ 2990^{* *} \end{gathered}$ |  |  |
|  | 6th November <br> 2018 to 16th <br> November 2018 | 00-24 | $\begin{gathered} 12250 \\ 11300^{* *} \end{gathered}$ | 500 | $\begin{gathered} 11750 \\ 10800^{* *} \end{gathered}$ | $\begin{gathered} 9235 \\ 8285^{* *} \end{gathered}$ | $\begin{gathered} 2515 \\ 2515^{* *} \end{gathered}$ |  |  |
|  | 17th November 2018 to 30th November 2018 | 00-24 | $\begin{gathered} 12250 \\ 11300^{* *} \end{gathered}$ | 500 | $\begin{gathered} 11750 \\ 10800^{* *} \end{gathered}$ | $\begin{gathered} 9255 \\ 8305^{* *} \end{gathered}$ | $\begin{gathered} 2495 \\ 2495^{* *} \end{gathered}$ |  |  |
|  |  |  |  |  |  |  |  |  |  |
| NR-ER* | 1st November 2018 to 30th November 2018 | 00-06 | 2000 | 200 | 1800 | 193 | 1607 |  |  |
|  |  | 06-18 | 2000 |  | 1800 | 303 | 1497 |  |  |
|  |  | 18-24 | 2000 |  | 1800 | 193 | 1607 |  |  |
| ER-NR* | 1st November 2018 to 30th November 2018 | 00-24 | 5250 | 300 | 4950 | 3892 | 1058 |  |  |
| W3-ER | 1st November 2018 to 30th November 2018 | 00-24 | No limit is being specified. |  |  |  |  |  |  |
| ER-W3 | 1st November 2018 to 30th November 2018 | 00-24 | No limit is being specified. |  |  |  |  |  |  |
| WR-SR | 1st November2018 | 00-630 | 5150 | 500 | 4650 | 4535 | 115 |  |  |
|  |  | 630-24 | 4450 |  | 3950 |  | 0 |  |  |
|  | $\begin{aligned} & \text { 2nd November } \\ & 2018 \end{aligned}$ | 00-930 | 5150 | 500 | 4650 | 4535 | 115 |  |  |
|  |  | 930-24 | 4900 |  | 4400 |  | 0 |  |  |
|  | 3rd November 2018 to 16th November 2018 | 00-24 | 5150 | 500 | 4650 | 4535 | 115 |  |  |
|  | 17th November 2018 to 30th November 2018 | 00-24 | 5200 | 500 | 4700 | 4535 | 165 |  |  |

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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) 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



| SR | 1st November 2018 | 00-06 | 9500 | 750 | 8750 | 7297 | 1453 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 06-630 | 9500 |  | 8750 | 7382 | 1368 |  |  |
|  |  | 630-18 | 8800 |  | 8050 | 7382 | 668 |  |  |
|  |  | 18-24 | 8800 |  | 8050 | 7297 | 753 |  |  |
|  | 2nd November 2018 | 00-06 | 9500 | 750 | 8750 | 7297 | 1453 |  |  |
|  |  | 06-930 | 9500 |  | 8750 | 7382 | 1368 |  |  |
|  |  | 930-18 | 9250 |  | 8500 | 7382 | 1118 |  |  |
|  |  | 18-24 | 9250 |  | 8500 | 7297 | 1203 |  |  |
|  | 3rd November 2018 to 16th November 2018 | 00-06 | 9500 | 750 | 8750 | 7297 | 1453 |  |  |
|  |  | 06-18 | 9500 |  | 8750 | 7382 | 1368 |  |  |
|  |  | 18-24 | 9500 |  | 8750 | 7297 | 1453 |  |  |
|  | 17th November <br> 2018 to 30th <br> November 2018 | 00-06 | 10000 | 750 | 9250 | 7297 | 1953 | 500 |  |
|  |  | 06-18 | 10000 |  | 9250 | 7382 | 1868 |  |  |
|  |  | 18-24 | 10000 |  | 9250 | 7297 | 1953 |  |  |

* 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.

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* 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 \(=\mathrm{A}\)
WR-NR ATC \(=B\)
ER-NR ATC = C
Margin for WR-NR applicants \(=\mathrm{A} * \mathrm{~B} /(\mathrm{B}+\mathrm{C})\)
Margin for ER-NR Applicants \(=\mathrm{A} * \mathrm{C} /(\mathrm{B}+\mathrm{C})\)
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## Simultaneous Export Capability

| Corridor | Date | Time Period (hrs) | Total Transfer Capability (TTC) | Reliability 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* | $\begin{array}{\|c\|} \hline \text { 1st November } \\ 2018 \text { to 30th } \\ \text { November 2018 } \\ \hline \end{array}$ | 00-06 | 4500 | 700 | 3800 | 388 | 3412 |  |  |
|  |  | 06-18 |  |  | 3800 | 553 | 3247 |  |  |
|  |  | 18-24 | 4500 |  | 3800 | 388 | 3412 |  |  |
| NER | 1st November2018 | 00-17 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 17-23 | 1890 |  | 1845 |  | 1845 |  |  |
|  |  | 23-24 | 1620 |  | 1575 |  | 1575 |  |  |
|  | $\begin{gathered} \text { 2nd November } \\ 2018 \end{gathered}$ | 00-08 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 08-17 | 1410 |  | 1365 |  | 1365 |  |  |
|  |  | 17-23 | 1470 |  | 1425 |  | 1425 |  |  |
|  |  | 23-24 | 1410 |  | 1365 |  | 1365 |  |  |
|  | 3rd November <br> 2018 to 07 th <br> November 2018 | 00-17 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 17-23 | 1890 |  | 1845 |  | 1845 |  |  |
|  |  | 23-24 | 1620 |  | 1575 |  | 1575 |  |  |
|  | $\begin{aligned} & \text { 08th November } \\ & 2018 \end{aligned}$ | 00-10 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 10-17' | 1410 |  | 1365 |  | 1365 |  |  |
|  |  | 17-23 | 1470 |  | 1425 |  | 1425 |  |  |
|  |  | 23-24 | 1410 |  | 1365 |  | 1365 |  |  |
|  | $\begin{aligned} & \hline \text { 09th November } \\ & 2018 \text { to } 11 \text { th } \\ & \text { November } 2018 \\ & \hline \end{aligned}$ | 00-17 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 17-23 | 1890 |  | 1845 |  | 1845 |  |  |
|  |  | 23-24 | 1620 |  | 1575 |  | 1575 |  |  |
|  | $\begin{gathered} \text { 12th November } \\ 2018 \end{gathered}$ | 00-08 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 08-17' | 1400 |  | 1355 |  | 1355 |  |  |
|  |  | 17-23 | 1630 |  | 1585 |  | 1585 |  |  |
|  |  | 23-24 | 1400 |  | 1355 |  | 1355 |  |  |
|  | 13th November 2018 to 19th <br> November 2018 | 00-17 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 17-23 | 1890 |  | 1845 |  | 1845 |  |  |
|  |  | 23-24 | 1620 |  | 1575 |  | 1575 |  |  |
|  | 20th November2018 \&21st November2018 | 00-08 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 08-17 | 1410 |  | 1365 |  | 1365 | -210 | Revised due to Shutdown of |
|  |  | 17-23 | 1470 |  | 1425 |  | 1425 | -420 | 400 kV Byrnihat-Bongaigoan |
|  |  | 23-24 | 1410 |  | 1365 |  | 1365 | -210 |  |
|  | 22nd November 2018 to 30th <br> November 2018 | 00-17 | 1620 | 45 | 1575 | 0 | 1575 |  |  |
|  |  | 17-23 | 1890 |  | 1845 |  | 1845 |  |  |
|  |  | 23-24 | 1620 |  | 1575 |  | 1575 |  |  |
| WR |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| SR * | 1st November <br> 2018 to 30th <br> November 2018 | 00-24 | No limit is being Specified. |  |  |  |  |  |  |

[^0] transactions (Bilateral \& First Come First Serve).

## Limiting Constraints (Corridor wise)



## Limiting Constraints (Simultaneous)

|  |  |  | Applicable Revisions |
| :---: | :---: | :---: | :---: |
| NR | Import | 1. N-1 contingencies of 400 kv Mejia-Maithon A S/c <br> 2. N-1 contingencies of 400 kv Kahalgaon-Banka S/c <br> 3. $\mathrm{N}-1$ contingencies of 400 kV MPL- Maithon $\mathrm{S} / \mathrm{c}$ | Rev-0-6 |
|  |  | (n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765 kV Aligarh-Greater Noida. | Rev-0-6 |
|  |  | Frequent tripping of HVDC Champa - Kurukshetra poles | Rev-0-6 |
|  | Export | ( $\mathrm{n}-1$ ) contingency of 400 kV Zerda-Bhinmal and ( $\mathrm{n}-1$ ) contingency of 220 kV Badod-Modak. | Rev-0-6 |
|  |  | (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-0-6 |
|  | Export | ( $\mathrm{n}-1$ ) contingency of $400 / 220 \mathrm{kV}, 2 \times 315$ MVA ICTs at Misa results in high loading of other ICT at Misa | Rev-0-6 |
| SR | Import | $\mathrm{n}-1$ contingency of $2 \times 315$ MVA, $400 / 220 \mathrm{kV}$ ICTs at Maradam will lead to overloading of the second ICT | Rev-6 |
|  |  | Low Voltage at Gazuwaka (East) Bus. | Rev-0-6 |
|  |  | $\mathrm{n}-1$ contingency of 2 x 1500 MVA, $765 / 400 \mathrm{kV}$ ICTs at Vemagiri (PG) will lead to overloading of the second ICT | Rev-0-6 |

National Load Despatch Centre Total Transfer Capability for November 2018

| Revision No | Date of Revision | Period of Revision | Reason for Revision/Comment | Corridor Affected |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{array}{\|c\|} \hline \text { 31st October } \\ 2018 \end{array}$ | 01st <br> November 18 | Revised due to shutdwon of 765kV Wardha-Nizamabad-2 line | WR-SR/ <br> SR Import |
|  |  | 02nd <br> November 18 | Revised due to shutdwon of 765kV Nizamabad-Maheswaram-2 line |  |
|  |  | Whole Month | Revised STOA margins considering 55 MW LTA/allocation from Solar which is not available during night hours | NR-WR/ <br> Export of NR |
|  |  |  | Revised STOA margins due to <br> (a) change in LTA from BRBCL to Northern railways (UP) <br> (b) Relinquisment of MTOA from JITPL to Northern Railways (UP) | ER-NR/Import of NR |
|  |  |  | Revised due to change in load generation balance and network conditions and change in pattern of inter-regional flow towards NR | WR-NR/ <br> Import of NR |
|  |  | $\begin{array}{\|c\|} \hline \text { 1st Nov to 5th } \\ \text { Nov } 2018 \\ \hline \end{array}$ | Revised STOA margin due to outage of Rihand-III \#1 on account of AMP work | WR-NR/ Import of NR |
| 2 | $\begin{gathered} \text { 31st October } \\ 2018 \end{gathered}$ | 2nd Nov to 30th Nov 2018 | Revised STOA margin due to operationalization of <br> (a) 50 MW LTA from Green Infra Energy Limited to Delhi and <br> (b) 99.9 MW LTA from Green Infra Energy Limited to UP | WR-NR/ Import of NR |
|  |  | 2nd Nov 2018 | Revised due to day time shutdown of 400 kV Bongaigaon Azara S/C | ER-NER/ <br> NER-ER/ Import/Export of NER |
| 3 | $\begin{gathered} \text { 07th Nov } \\ 2018 \end{gathered}$ | 08th Nov 2018 | Revised due to day time shutdown of 400 kV Bongaigaon Azara S/C | ER-NER/ <br> NER-ER/ Import/Export of NER |
| 4 | $\begin{gathered} \text { 11th Nov } \\ 2018 \end{gathered}$ | 12th Nov 2018 | Revised due to shutdown of 400kV ICT-1 at Misa SS. | ER-NER/ NER-ER/ Import/Export of NER |
| 5 | 16th <br> November 2018 | 17th Nov to 30th Nov | Revised considering recent commissioning of 765 kV Jharsuguda - Dharamjaygarh 3\&4, 765 kV Gadarwara Warora PS D/C, 765 kV Warora PS - Parli D/C, LILO of Kurnool - Thirvualam D/C at Cuddapah, 400 kV CuddapahHindupur D/C, Salem PS - Madhugiri PS S/C, 765 kV Dharamjaigarh - Champa S/C, 765 kV Champa-Raigarh S/C and 765 kV Sipat-Bilaspur ckt-3 and some other 400 kV lines | WR-SR/ER-SR/SR import |
|  |  |  | Revised STOA margin due to 20 MW LTA from OKWPL to UP discom | $\begin{gathered} \text { WR-NR/ } \\ \text { Import of NR } \end{gathered}$ |
| 6 | $\begin{gathered} \text { 19th Nov } \\ 2018 \end{gathered}$ | 20th \& 21st <br> Nov 2018 | Revised due to Shutdown of 400 kV Byrnihat-Bongaigoan Line | ER-NER/ <br> NER-ER/ <br> Import/Export of NER |


| ASSUMPTIONS IN BASECASE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Month : November'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 | 10175 | 4396 | 5400 | 4359 |
| 2 | Haryana | 8175 | 5351 | 2445 | 2002 |
| 3 | Rajasthan | 9622 | 12045 | 5693 | 6935 |
| 4 | Delhi | 5939 | 2568 | 1099 | 1266 |
| 5 | Uttar Pradesh | 15505 | 14154 | 9367 | 7242 |
| 6 | Uttarakhand | 2232 | 1347 | 1189 | 540 |
| 7 | Himachal Pradesh | 1509 | 629 | 1028 | 160 |
| 8 | Jammu \& Kashmir | 2368 | 884 | 708 | 152 |
| 9 | Chandigarh | 332 | 117 | 0 | 0 |
| 10 | ISGS/IPPs | 24 | 56 | 19834 | 8850 |
|  | Total NR | 55882 | 41547 | 46764 | 31507 |
|  |  |  |  |  |  |
| 11 | EASTERN REGION |  |  |  |  |
| 1 | Bihar | 4184 | 2318 | 310 | 170 |
| 2 | Jharkhand | 1187 | 771 | 364 | 215 |
| 3 | Damodar Valley Corporation | 2915 | 2651 | 5294 | 3861 |
| 4 | Orissa | 4090 | 2874 | 2539 | 1972 |
| 5 | West Bengal | 8580 | 5123 | 5360 | 4357 |
| 6 | Sikkim | 84 | 79 | 0 | 0 |
| 7 | Bhutan | 211 | 216 | 1592 | 534 |
| 8 | ISGS/IPPs | 266 | 259 | 11400 | 8320 |
|  | Total ER | 21517 | 14291 | 26859 | 19428 |
|  |  |  |  |  |  |
| III | WESTERN REGION |  |  |  |  |
| 1 | Maharashtra | 17589 | 13426 | 13337 | 8562 |
| 2 | Gujarat | 15434 | 11514 | 8167 | 8072 |
| 3 | Madhya Pradesh | 10267 | 9187 | 4753 | 4821 |
| 4 | Chattisgarh | 4217 | 2817 | 2527 | 2152 |
| 5 | Daman and Diu | 339 | 273 | 0 | 0 |
| 6 | Dadra and Nagar Haveli | 807 | 713 | 0 | 0 |
| 7 | Goa-WR | 538 | 337 | 0 | 0 |
| 8 | ISGS/IPPs | 4299 | 3587 | 39544 | 30019 |
|  | Total WR | 53490 | 41854 | 68326 | 53625 |


| 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 | 8899 | 6252 | 6724 | 4534 |
| 2 | Telangana | 10437 | 7449 | 5619 | 3806 |
| 3 | Karnataka | 8701 | 4475 | 6370 | 4543 |
| 4 | Tamil Nadu | 14253 | 11312 | 8893 | 5818 |
| 5 | Kerala | 3788 | 2263 | 1573 | 242 |
| 6 | Pondy | 372 | 382 | 0 | 0 |
| 7 | Goa-SR | 84 | 86 | 0 | 0 |
| 8 | ISGS/IPPs | 0 | 0 | 11366 | 10353 |
|  | Total SR | 46533 | 32219 | 40545 | 29297 |
|  |  |  |  |  |  |
| V | NORTH-EASTERN REGION |  |  |  |  |
| 1 | Arunachal Pradesh | 131 | 83 | 0 | 0 |
| 2 | Assam | 1512 | 1082 | 318 | 162 |
| 3 | Manipur | 175 | 95 | 0 | 0 |
| 4 | Meghalaya | 271 | 235 | 301 | 91 |
| 5 | Mizoram | 100 | 68 | 8 | 8 |
| 6 | Nagaland | 127 | 78 | 22 | 12 |
| 7 | Tripura | 222 | 138 | 59 | 74 |
| 8 | ISGS/IPPs | 172 | 84 | 1940 | 1473 |
|  | Total NER | 2710 | 1862 | 2648 | 1820 |
|  |  |  |  |  |  |
|  | Total All India | 180571 | 132162 | 186841 | 136247 |


[^0]:    * Fifty Percent ( $50 \%$ ) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced

