# National Load Despatch Centre Total Transfer Capability for September 2018

Issue Date: 28th May 2018 Issue Time: 1600 hrs Revision No. 0

| 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 | Comments |  |
|----------|---|-------------------------|--|------------------------------|--|--|--|---|----------|--|
| NR-WR*   | 1st September<br>2018 to 30th<br>September 2018 | 00-06<br>06-18<br>18-24 | 2500                                     | 500                          | 2000   | 100<br>110<br>100  | 1900<br>1890<br>1900   |   |          |  |
| WR-NR*   | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   | 12250<br>11300**                         | 500                          | 11750<br>10800**                             | 9127<br>8177**   | 2623<br>2623**   |   |          |  |
| NR-ER*   | 1st September<br>2018 to 30th<br>September 2018 | 00-06<br>06-18<br>18-24 | 2000<br>2000<br>2000                     | 200                          | 1800<br>1800<br>1800                         | 193<br>303<br>193  | 1607<br>1497<br>1607   | -   |          |  |
| ER-NR*   | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   | 5250                                     | 300                          | 4950   | 3407   | 1543   |   |          |  |
| W3-ER    | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   |  | No limit is being specified. |  |  |  |   |          |  |
| ER-W3    | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   |  |                              |  | No limit i   | s being specified.   |   |          |  |
| WR-SR    | 1st September<br>2018 to 30th<br>September 2018 | 00-05<br>05-22<br>22-24 | 5150<br>5150<br>5150                     | 500                          | 4650<br>4650<br>4650                         | 4515   | 135<br>135<br>135  |   |          |  |
| SR-WR*   | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   |  |                              |  | No limit i   | s being Specified.   |   |          |  |
| ER-SR    | 1st September<br>2018 to 30th<br>September 2018 | 00-06<br>06-18<br>18-24 | 4350                                     | 250                          | 4100   | 3263<br>3348<br>3263   | 837<br>752<br>837  | -   |          |  |
| SR-ER *  | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   | No limit is being Specified.             |                              |  |  |  |   |          |  |
| ER-NER   | 1st September<br>2018 to 30th<br>September 2018 | 00-17<br>17-23<br>23-24 | 1240<br>1170<br>1240                     | 45                           | 1195<br>1125<br>1195                         | 225  | 970<br>900<br>970  | -   |          |  |
| NER-ER   | 1st September<br>2018 to 30th<br>September 2018 | 00-17<br>17-23<br>23-24 | 1740<br>1830<br>1740                     | 45                           | 1695<br>1785<br>1695                         | 0  | 1695<br>1785<br>1695   | -   |          |  |

# National Load Despatch Centre

**Total Transfer Capability for September 2018** 

Issue Date: 28th May 2018 Issue Time: 1600 hrs Revision No. 0

| 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 | Comments |
|----------|--|-------------------------|--|-----------------------|--|--|--|---|----------|
|          | 1 2018 to 30th 1 00-24 TNo limit is being specified (In case of any constraints appearing in the system, W 3 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.

- 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.

<sup>\*</sup> 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).

<sup>\*\*</sup>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.

#### **Simultaneous Import Capability**

| 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 | Comments |
|----------|---|-------------------------|--|-----------------------|--|--|--|---|----------|
| ER       |   |                         |  |                       |  |  |  |   |          |
|          |   | 00-18                   | 17500<br>16550**                         |                       | 16700<br>15750**                             |  | 4166<br>4166**   |   |          |
| NR       | 1st September<br>2018 to 30th<br>September 2018 | 18-23                   | 15700<br>14750**                         | 800                   | 14900<br>13950**                             | 12534<br>11584**   | 2366<br>2366**   |   |          |
|          |   | 23-24                   | 17500<br>16550**                         |                       | 16700<br>15750**                             |  | 4166<br>4166**   |   |          |
| NER      | 1st September<br>2018 to 30th<br>September 2018 | 00-17<br>17-23<br>23-24 | 1240<br>1170<br>1240                     | 45                    | 1195<br>1125<br>1195                         | 225  | 970<br>900<br>970  |   |          |
| WR       | 1   |                         |  |                       |  |  |  |   |          |
|          |   | 00-05                   | 9500                                     |                       | 8750   | 7778   | 972  |   |          |
|          | 1st September                                   | 05-06                   | 9500                                     |                       | 8750   | 7778   | 972  |   |          |
| SR       | 2018 to 30th                                    | 06-18                   | 9500                                     | 750                   | 8750   | 7863   | 887  |   |          |
|          | September 2018                                  | 18-22                   | 9500                                     |                       | 8750   | 7778   | 972  |   |          |
|          |   | 22-24                   | 9500                                     |                       | 8750   | 7778   | 972  |   |          |

<sup>\*</sup> 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-NR ATC = C

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

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

<sup>\*\*</sup>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.

<sup>\*</sup> 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**

| Corridor |   | 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 | Comments |
|----------|---|-------------------------|--|------------------------------|--|--|--|---|----------|
| NIDY     | 1st September                                   | 00-06                   | 4500                                     | 700                          | 3800   | 248  | 3552   |   |          |
| NR*      | 2018 to 30th<br>September 2018                  | 06-18<br>18-24          | 4500                                     | 700                          | 3800<br>3800                                 | 368<br>248   | 3432<br>3552   |   |          |
|          | 1st September                                   | 00-17                   | 1740                                     |                              | 1695   | 240  | 1695   |   |          |
| NER      | 2018 to 30th                                    | 17-23                   | 1830                                     | 45                           | 1785   | 0  | 1785   |   |          |
| INEK     | September 2018                                  |                         | 1740                                     | 73                           | 1695   |  | 1695   |   |          |
| WR       | Beptember 2010                                  | 25 24                   | 1740                                     |                              | 1033   |  | 1073   |   |          |
| SR *     | 1st September<br>2018 to 30th<br>September 2018 | 00-24                   |  | No limit is being Specified. |  |  |  |   |          |

<sup>\*</sup> 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)**

|                      |  | <b>Applicable Revisions</b> |
|----------------------|--|-----------------------------|
| Corridor             | Constraint   |                             |
| NR-WR                | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak  | Rev-0                       |
| WR-NR                | (n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.  High loading of 400 kV Bhachau-Versana D/C line | Rev- 0<br>Rev-0             |
| NR-ER                | (n-1) contingency of 400 kV Saranath-Pusauli   | Rev-0                       |
| 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                       |
| WR-SR<br>and ER-     | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT   | Rev-0                       |
| SR                   | Low Voltage at Gazuwaka (East) Bus.  | Rev-0                       |
| ER-NER               | a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa<br>b. High loading of 220 kV Balipara-Sonabil line(200 MW)                                  | Rev-0                       |
| 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                       |
| W3 zone<br>Injection |  | Rev-0                       |

### **Limiting Constraints (Simultaneous)**

|     |        |   | <b>Applicable Revisions</b> |
|-----|--------|---|-----------------------------|
|     | Import | N-1 contingencies of 400 kv Mejia-Maithon A S/c     N-1 contingencies of 400 kv Kahalgaon-Banka S/c     N-1 contingencies of 400kV MPL- Maithon S/c   | Rev-0                       |
| NR  |        | (n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida. High loading of 400 kV Bhachau-Versana D/C line | Rev-0<br>Rev-0              |
|     | Export | (n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. (n-1) contingency of 400 kV Saranath-Pusauli                     | Rev-0                       |
| NER | Import | a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa<br>b. High loading of 220 kV Balipara-Sonabil line(200 MW)                                 | Rev-0                       |
|     | Export | (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa  | Rev-0                       |
| SR  | Import | n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT  | Rev-0                       |
|     |        | Low Voltage at Gazuwaka (East) Bus.   | Rev-0                       |

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

| Revision<br>No | Date of<br>Revision | Period of<br>Revision | Reason for Revision/Comment                            | Corridor<br>Affected |
|----------------|---------------------|-----------------------|--|----------------------|
| 0              | 28th Mav            |                       | TTC declared considering restriction on power order of | WR-NR /              |
|                | 2018                | Whole Month           | HVDC Mundra - Mahindragarh bipole due to low           | Import of            |
|                |                     |                       | generation at APL Mundra                               | NR                   |

| ASSUM | IPTIONS IN BASECASE        |                |                    |                 |               |
|-------|----------------------------|----------------|--------------------|-----------------|---------------|
|       |                            |                | N                  | onth: September | 18            |
| 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                     | 10474          | 9326               | 5458            | 5426          |
| 2     | Haryana                    | 8627           | 7492               | 2765            | 2445          |
| 3     | Rajasthan                  | 9370           | 9169               | 5305            | 5784          |
| 4     | Delhi                      | 5806           | 5589               | 1075            | 1099          |
| 5     | Uttar Pradesh              | 15893          | 14651              | 9512            | 9412          |
| 6     | Uttarakhand                | 2117           | 1848               | 1083            | 1145          |
| 7     | Himachal Pradesh           | 1503           | 1203               | 1107            | 883           |
| 8     | Jammu & Kashmir            | 2799           | 1692               | 1514            | 785           |
| 9     | Chandigarh                 | 344            | 220                | 0               | 0             |
| 10    | ISGS/IPPs                  | 24             | 24                 | 20279           | 15055         |
|       | Total NR                   | 56958          | 51211              | 48099           | 42035         |
|       |                            |                |                    |                 |               |
| П     | EASTERN REGION             |                |                    |                 |               |
| 1     | Bihar                      | 4087           | 2852               | 310             | 200           |
| 2     | Jharkhand                  | 1171           | 873                | 364             | 225           |
| 3     | Damodar Valley Corporation | 2925           | 2668               | 5264            | 4225          |
| 4     | Orissa                     | 4009           | 3194               | 2539            | 2192          |
| 5     | West Bengal                | 8603           | 5717               | 5360            | 4272          |
| 6     | Sikkim                     | 84             | 84                 | 0               | 0             |
| 7     | Bhutan                     | 212            | 218                | 1592            | 1526          |
| 8     | ISGS/IPPs                  | 265            | 259                | 11202           | 8824          |
|       | Total ER                   | 21357          | 15866              | 26631           | 21464         |
|       |                            |                |                    |                 |               |
| Ш     | WESTERN REGION             |                |                    |                 |               |
| 1     | Maharashtra                | 16834          | 13516              | 11885           | 9571          |
| 2     | Gujarat                    | 14542          | 13186              | 7379            | 7074          |
| 3     | Madhya Pradesh             | 9729           | 7523               | 4011            | 3862          |
| 4     | Chattisgarh                | 4171           | 3477               | 2999            | 2383          |
| 5     | Daman and Diu              | 333            | 295                | 0               | 0             |
| 6     | Dadra and Nagar Haveli     | 804            | 728                | 0               | 0             |
| 7     | Goa-WR                     | 516            | 373                | 0               | 0             |
| 8     | ISGS/IPPs                  | 4170           | 3476               | 39160           | 31931         |
|       | Total WR                   | 51098          | 42575              | 65434           | 54821         |

| 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       | 8103           | 6984               | 5903       | 3947          |
| 2     | Telangana            | 8305           | 8102               | 4447       | 4177          |
| 3     | Karnataka            | 9352           | 5764               | 6477       | 4630          |
| 4     | Tamil Nadu           | 14096          | 12115              | 8411       | 7493          |
| 5     | Kerala               | 3673           | 2434               | 1564       | 283           |
| 6     | Pondy                | 373            | 371                | 0          | 0             |
| 7     | Goa-SR               | 84             | 84                 | 0          | 0             |
| 8     | ISGS/IPPs            | 0              | 0                  | 11055      | 9542          |
|       | Total SR             | 43986          | 35853              | 37857      | 30072         |
|       |                      |                |                    |            |               |
| V     | NORTH-EASTERN REGION |                |                    |            |               |
| 1     | Arunachal Pradesh    | 123            | 74                 | 0          | 0             |
| 2     | Assam                | 1318           | 1292               | 307        | 196           |
| 3     | Manipur              | 171            | 95                 | 0          | 0             |
| 4     | Meghalaya            | 267            | 194                | 313        | 214           |
| 5     | Mizoram              | 99             | 68                 | 8          | 8             |
| 6     | Nagaland             | 129            | 78                 | 22         | 12            |
| 7     | Tripura              | 205            | 117                | 61         | 59            |
| 8     | ISGS/IPPs            | 159            | 131                | 1963       | 1784          |
|       | Total NER            | 2471           | 2049               | 2674       | 2273          |
|       |                      |                |                    |            |               |
|       | Total All India      | 176311         | 147947             | 182392     | 152286        |