

National Load Despatch Centre
Total Transfer Capability for November 2020

Issue Date: 28th August 2020

Issue Time: 1800 hrs

Revision No. 1

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 November 2020 to 30th November 2020	00-06	2500	500	2000	195	1805		
		06-18				1281	719		
		18-24				195	1805		
WR-NR*	1st November 2020 to 30th November 2020	00-06	18150	500	17650	10268	7382	950	Revision in TTC/ATC due to commissioning of HVDC Champa - Kurukshetra Pole-4
			17200**			16700**			
		06-18	18150	500	17650	10657	6993	950	
			17200**		16700**	9707**			
	18-24	18150	500	17650	10268	7382	950		
	17200**			16700**	9318**				
NR-ER*	1st November 2020 to 30th November 2020	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st November 2020 to 30th November 2020	00-24	6250	300	5950	4066	1884	1000	Revision in TTC/ATC due to change in HVDC APD-Agra power order and load-generation balance.
W3-ER	1st November 2020 to 30th November 2020	00-24	No limit is being specified.						
ER-W3	1st November 2020 to 30th November 2020	00-24	No limit is being specified.						
WR-SR^	1st November 2020 to 30th November 2020	00-05	6950	500	6450	4073	2377		
		05-22	6950		6450		2377		
		22-24	6950		6450		2377		
SR-WR *	1st November 2020 to 30th November 2020	00-24	4600	400	4200	550	3650		
ER-SR^	1st November 2020 to 30th November 2020	00-06	5950	250	5700	2673	3027		
		06-18				2758	2942		
		18-24				2673	3027		
SR-ER *	1st November 2020 to 30th November 2020	00-24	No limit is being Specified.						
ER-NER*	1st November 2020 to 30th November 2020	00-02	1200	45	1155	474	681		Revision in STOA margin due to the following:-
		02-07	1200		1155	474	681		
		07-12	1270		1225	474	751		
		12-17	1300		1255	474	781		
		17-23	1000		955	474	481		
		23-24	1200		1155	474	681		
NER-ER*	1st November 2020 to 30th November 2020	00-02	2300	45	2255	42	2213		b) Revision in LTA/allocation from GIWEL, Bhuj (Wind) and Mangdechu HEP to Assam
		02-07	2300		2255	42	2213		
		07-12	2350		2305	42	2263		
		12-17	2330		2285	42	2243		
		17-23	2530		2485	42	2443		
		23-24	2300		2255	42	2213		

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W3 zone Injection	1st November 2020 to 30th November 2020	00-24	No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised accordingly)						
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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 - Vindhyaachal 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 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 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.

Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section

^Though 2X315 MVA, 400/220 kV ICTs at Maradam are N-1 non-compliant, the TTC of WR-SR and ER-SR corridor has not been restricted due to the same considering that this aspect will be managed by AP SLDC through appropriate measures like SPS implementation.

^In case of drawl of Karnataka beyond 3800 MW, the voltages in Bengaluru area are observed to be critically low. This issue may be taken care of by Karnataka SLDC by taking appropriate measures.

SR-WR TTC/ATC figures have been calculated considering 01 unit (800 MW) at Kudgi TPS in service. The figures are subject to change with change in generation at Kudgi TPS.

WR-NR/Import of NR TTC has been calculated considering generation at Pariccha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Pariccha TPS.

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
NR*	1st November 2020 to 30th November 2020	00-06	24400 23450**	800	23600 22650**	14334 13384**	9266	1950	a) Revision in TTC/ATC due to commissioning of HVDC Champa - Kurukshetra Pole-4 b) Revision in TTC/ATC due to change in HVDC APD-Agra power order and load-generation balance.
		06-09	24400 23450**		23600 22650**	14723 13773**	8877	1950	
		09-17	24400 23450**		23600 22650**	14723 13773**	8877	1950	
		17-18	24400 23450**		23600 22650**	14723 13773**	8877	1950	
		18-24	24400 23450**		23600 22650**	14334 13384**	9266	1950	
NER*	1st November 2020 to 30th November 2020	00-02	1200	45	1155	474	681	Revision in STOA margin due to revision in LTA/allocation from GIWEL, Bhuj (Wind) and Mangdechu HEP to Assam	
		02-07	1200		1155	474	681		
		07-12	1270		1225	474	751		
		12-17	1300		1255	474	781		
		17-23	1000		955	474	481		
		23-24	1200		1155	474	681		
WR*									
SR**	1st November 2020 to 30th November 2020	00-06	12900	750	12150	6746	5404		
		06-18	12900		12150	6831	5319		
		18-24	12900		12150	6746	5404		
* 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)									
Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section									
#Though 2X315 MVA, 400/220 kV ICTs at Maradam are N-1 non-compliant, the TTC of SR Import has not been restricted due to the same considering that this aspect will be managed by AP SLDC through appropriate measures like SPS implementation.									
In case of drawl of Karnataka beyond 3800 MW, the voltages in Bengaluru area are observed to be critically low. This issue may be taken care of by Karnataka by taking appropriate measures.									
WR-NR/Import of NR TTC has been calculated considering generation at Pariccha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Pariccha TPS.									

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 November 2020 to 30th November 2020	00-06	4500	700	3800	388	3412		
		06-18			3800	1584	2216		
		18-24			3800	388	3412		
NER*	1st November 2020 to 30th November 2020	00-02	2300	45	2255	42	2213		
		02-07	2300		2255	42	2213		
		07-12	2350		2305	42	2263		
		12-17	2330		2285	42	2243		
		17-23	2530		2485	42	2443		
		23-24	2300		2255	42	2213		
WR*									
SR*^	1st November 2020 to 30th November 2020	00-24	3700	400	3300	1150	2150		

* 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).

Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section

^SR Export TTC/ATC figures have been calculated considering 01 unit (800 MW) at Kudgi TPS in service. The figures are subject to change with change in generation at Kudgi TPS.

Limiting Constraints (Corridor wise)			Applicable Revisions
Corridor	Constraint		
WR-NR	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT		Rev 0 to 1
NR-ER	(n-1) contingency of 400 kV Saranath-Pusaui		Rev 0 to 1
ER-NR	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. 3. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt.		Rev 0 to 1
WR-SR and ER- SR	n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt		Rev 0 to 1
	n-1 contingency of one ckt of 765 kV Angul - Srikakulam D/C will overload of the other ckt		
	Low Voltage at Gazuwaka (East) Bus.		
SR-WR	a) N-1 contingency of one ckt of 400 kV Kolhapur-PG - Kolhapur-MS D/C will overload of the other ckt b) N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs		Rev 0 to 1
ER-NER	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Salakati - BTPS D/C		Rev 0 to 1
NER-ER	a) N-1 contingency of 400 kV Silchar- Azara line b) High Loading of 400 kV Silchar-Killing Line		Rev 0 to 1
W3 zone Injection	---		Rev 0 to 1
Limiting Constraints (Simultaneous)			Applicable Revisions
NR	Import	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. 3. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt.	Rev 0 to 1
		N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev 0 to 1
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. (n-1) contingency of 400 kV Saranath-Pusaui	Rev 0 to 1
NER	Import	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Salakati - BTPS D/C	Rev 0 to 1
	Export	a) N-1 contingency of 400 kV Silchar- Azara line b) High Loading of 400 kV Silchar-Killing Line	Rev 0 to 1
SR	Import	n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt	Rev 0 to 1
		n-1 contingency of one ckt of 765 kV Angul - Srikakulam D/C will overload of the other ckt	
	Export	Low Voltage at Gazuwaka (East) Bus N-1 contingency of one ckt of 400 kV Kolhapur-PG - Kolhapur-MS D/C will overload of the other ckt N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs	Rev 0 to 1

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Total Transfer Capability for November 2020**

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	28th August 2020	Whole Month	Revision in STOA margin due to the following:- a) Increase in allocation from Kameng HEP to UP, Haryana, Chhattisgarh and Goa b) Revision in LTA/allocation from GIWEL, Bhuj (Wind) and Mangdechu HEP to Assam	ER-NER/NER-ER/Import and Export of NER
			Revision in TTC/ATC due to:- a) Commissioning of HVDC Champa - Kurukshetra Pole-4 b) Change in HVDC APD-Agra power order and load-generation balance.	WR-NR/ER-NR/Import of NR

ASSUMPTIONS IN BASECASE					
				Month : November'2020	
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	6462	5238	2840	2783
2	Haryana	7055	5863	1291	1291
3	Rajasthan	10772	8591	6466	6465
4	Delhi	4390	2984	672	672
5	Uttar Pradesh	15455	15223	8388	8216
6	Uttarakhand	1586	1453	572	500
7	Himachal Pradesh	1546	1339	242	224
8	Jammu & Kashmir	1885	1674	103	0
9	Chandigarh	239	140	0	0
10	ISGS/PPs	21	20	17492	10342
	Total NR	49409	42527	38066	30493
II	EASTERN REGION				
1	Bihar	5270	3543	384	344
2	Jharkhand	1319	897	343	353
3	Damodar Valley Corporation	2778	2497	4539	3736
4	Orissa	3510	2815	2940	2400
5	West Bengal	6243	4932	4120	3510
6	Sikkim	112	44	0	0
7	Bhutan	169	167	410	310
8	ISGS/PPs	-169	-167	12601	8839
	Total ER	19231	14729	25336	19491
III	WESTERN REGION				
1	Maharashtra	15755	12169	11328	8384
2	Gujarat	14507	10549	10695	8989
3	Madhya Pradesh	8975	7585	2837	2894
4	Chattisgarh	3209	2762	1744	1675
5	Daman and Diu	312	279	0	0
6	Dadra and Nagar Haveli	777	727	0	0
7	Goa-WR	526	406	0	0
8	ISGS/PPs	4294	3129	36705	29913
	Total WR	48355	37606	63309	51855

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	8576	5276	7951	5986
2	Telangana	11920	10877	5548	4648
3	Karnataka	8486	4761	6172	3342
4	Tamil Nadu	13826	10812	6353	5252
5	Kerala	3710	2288	1623	215
6	Pondy	328	324	0	0
7	Goa-SR	51	51	0	0
8	ISGS/IPPs	0	0	13717	10412
	Total SR	46898	34388	41363	29856
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	104	65	12	8
2	Assam	1230	938	295	245
3	Manipur	181	86	0	0
4	Meghalaya	297	227	272	231
5	Mizoram	111	66	52	34
6	Nagaland	101	81	14	14
7	Tripura	238	142	73	71
8	ISGS/IPPs	145	81	2435	2194
	Total NER	2406	1686	3153	2796
	Total All India	166155	130855	171228	134491