

National Load Despatch Centre
Total Transfer Capability for August 2020

Issue Date: 28th May 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 August 2020 to 31st August 2020	00-06	2500	500	2000	195	1805		Revision in STOA margin due to operationalization of MTOA from Rajasthan Solar to Maharashtra and MP
		06-18				1223	777		
		18-24				195	1805		
WR-NR*	1st August 2020 to 31st August 2020	00-06	17200	500	16700	10219	6481		
			16250**			15750**			
		06-18	17200	500	16700	10608	6092		
			16250**		15750**	9658**			
	18-24	17200	500	16700	10219	6481			
		16250**			15750**	9269**			
NR-ER*	1st August 2020 to 31st August 2020	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st August 2020 to 31st August 2020	00-24	5250	300	4950	4050	900		
W3-ER	1st August 2020 to 31st August 2020	00-24	No limit is being specified.						
ER-W3	1st August 2020 to 31st August 2020	00-24	No limit is being specified.						
WR-SR [^]	1st August 2020 to 31st August 2020	00-05	6950	500	6450	4035	2415		
		05-22	6950		6450		2415		
		22-24	6950		6450		2415		
SR-WR *	1st August 2020 to 31st August 2020	00-24	4600	400	4200	550	3650		
ER-SR [^]	1st August 2020 to 31st August 2020	00-06	5950	250	5700	2663	3037		
		06-18				2748	2952		
		18-24				2663	3037		
SR-ER *	1st August 2020 to 31st August 2020	00-24	No limit is being Specified.						
ER-NER*	1st August 2020 to 31st August 2020	00-02	1020	45	975	289	686		
		02-07	1020		975	289	686		
		07-12	1080		1035	334	701		
		12-17	1060		1015	334	681		
		17-23	1000		955	289	666		
		23-24	1020		975	289	686		
NER-ER*	1st August 2020 to 31st August 2020	00-02	2400	45	2355	0	2355		
		02-07	2400		2355		2355		
		07-12	2450		2405		2405		
		12-17	2341		2296		2296		
		17-23	2621		2576		2576		
		23-24	2400		2355		2355		

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W3 zone Injection	1st August 2020 to 31st August 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 - Vindhychal 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 August 2020 to 31st August 2020	00-06	22450 21500**	800	21650 20700**	14269 13319**	7381		
		06-09	22450 21500**		21650 20700**	14658 13708**	6992		
		09-17	22450 21500**		21650 20700**	14658 13708**	6992		
		17-18	22450 21500**		21650 20700**	14658 13708**	6992		
		18-24	22450 21500**		21650 20700**	14269 13319**	7381		
		00-02	1020		45	975	289	686	
02-07	1020	975	289	686					
07-12	1080	1035	334	701					
12-17	1060	1015	334	681					
17-23	1000	955	289	666					
23-24	1020	975	289	686					
WR*									
SR**	1st August 2020 to 31st August 2020	00-06	12900	750	12150	6698	5452		
		06-18	12900		12150	6783	5367		
		18-24	12900		12150	6698	5452		
* 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 August 2020 to 31st August 2020	00-06	4500	700	3800	388	3412		Revision in STOA margin due to operationalization of MTOA from Rajasthan Solar to Maharashtra and MP
		06-18			3800	1526	2274		
		18-24	4500		3800	388	3412		
NER*	1st August 2020 to 31st August 2020	00-02	2400	45	2355	0	2355		
		02-07	2400		2355		2355		
		07-12	2450		2405		2405		
		12-17	2341		2296		2296		
		17-23	2621		2576		2576		
		23-24	2400		2355		2355		
WR*									
SR*^	1st August 2020 to 31st August 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-Pusauli		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 Samaguri-Sonabil S/C (200 MW)		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.	Rev- 0 to 1
		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.	
Export	(n-1) contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT		Rev- 0 to 1
	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.		
	(n-1) contingency of 400 kV Saranath-Pusauli		
NER	Import	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Samaguri-Sonabil S/C (200 MW)	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	
		Low Voltage at Gazuwaka (East) Bus	
Export	N-1 contingency of one ckt of 400 kV Kolhapur-PG - Kolhapur-MS D/C will overload of the other ckt		Rev- 0 to 1
	N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs		

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Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	28th May 2020	Whole Month	Revision in STOA margin due to operationalization of MTOA from Rajasthan Solar to Maharashtra and MP	NR-WR/Export of NR

ASSUMPTIONS IN BASECASE					
				Month : August'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	10228	9530	4580	4618
2	Haryana	9146	9428	2953	2953
3	Rajasthan	10205	11428	6168	6168
4	Delhi	5674	6558	753	753
5	Uttar Pradesh	18102	15529	9903	9908
6	Uttarakhand	2144	1981	1060	1015
7	Himachal Pradesh	1562	1558	859	854
8	Jammu & Kashmir	3049	1686	1075	1017
9	Chandigarh	375	303	0	0
10	ISGS/PPs	23	23	20932	19626
	Total NR	60510	58023	48283	46912
II	EASTERN REGION				
1	Bihar	5380	4412	99	110
2	Jharkhand	1637	1024	425	421
3	Damodar Valley Corporation	3028	2466	4980	4180
4	Orissa	4823	3995	3952	2615
5	West Bengal	8541	7006	5659	4956
6	Sikkim	114	43	0	0
7	Bhutan	171	168	1474	1444
8	ISGS/PPs	-171	-168	11907	10404
	Total ER	23523	18947	28495	24128
III	WESTERN REGION				
1	Maharashtra	16912	14197	12996	9886
2	Gujarat	13683	8433	10325	6208
3	Madhya Pradesh	8253	5455	4058	2863
4	Chattisgarh	3890	3168	2239	2230
5	Daman and Diu	297	153	0	0
6	Dadra and Nagar Haveli	781	550	0	0
7	Goa-WR	513	326	0	0
8	ISGS/PPs	4640	3609	33397	25451
	Total WR	48969	35891	63015	46638

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	9316	6695	6310	5934
2	Telangana	9937	9870	5913	4863
3	Karnataka	8351	4343	6606	3257
4	Tamil Nadu	14738	12867	8660	7460
5	Kerala	3683	2236	1649	423
6	Pondy	298	246	0	0
7	Goa-SR	58	48	0	0
8	ISGS/IPPs	0	0	14970	12179
	Total SR	46381	36305	44109	34117
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	111	70	18	16
2	Assam	1707	1346	295	245
3	Manipur	183	82	0	0
4	Meghalaya	269	198	237	142
5	Mizoram	99	66	68	42
6	Nagaland	120	75	22	16
7	Tripura	259	154	76	75
8	ISGS/IPPs	159	81	2385	2242
	Total NER	2907	2073	3101	2778
	Total All India	182131	151157	187003	154572