National Load Despatch Centre Total Transfer Capability for July 2020

Issue Date: 28th May 2020 Issue Time: 1800 hrs Revision No. 2

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	
		00-06				195	1805		Revision in STOA margin due to	
NR-WR*	1st July 2020 to 31st July 2020	06-18	2500	500	2000	1223	777		operationalization of MTOA from Rajasthan Solar to Maharashtra and	
		18-24				195	1805		MP	
		00-06	17200	500	16700	10219	6481			
		00 00	16250**	300	15750**	9269**	0401		_	
WR-NR*	1st July 2020 to 31st July 2020	06-18	17200 16250**	500	16700 15750**	10608 9658**	6092			
		18-24	17200	500	16700	10219	6481			
			16250**		15750**	9269**				
ND ED#	1st July 2020 to	00-06	2000	200	1800	193	1607			
NR-ER*	31st July 2020	06-18 18-24	2000 2000	200	1800 1800	303 193	1497 1607	-		
ER-NR*	1st July 2020 to 31st July 2020	00-24	5250	300	4950	4050	900			
	21300419 2020									
W3-ER	1st July 2020 to 31st July 2020	00-24		No limit is being specified.						
ER-W3	1st July 2020 to 31st July 2020	00-24				No limit i	s being specified.			
	1 . 7 1 2020	00-05	6950		6450		2415	Ι		
WR-SR	1st July 2020 to 31st July 2020	05-22	6950	500	6450	4035	2415			
		22-24	6950		6450		2415			
SR-WR *	1st July 2020 to 31st July 2020	00-24	4600	400	4200	550	3650			
		00-06				2663	3037			
ER-SR [△]	1st July 2020 to	06-18	5950	250	5700	2748	2952		-	
LIK-SIK	31st July 2020	18-24				2663	3037		-	
SR-ER *	1st July 2020 to 31st July 2020	00-24	No limit is being Specified.							
		00.05	1020		205	200				
		00-02 02-07	1030 1030		985 985	289 289	696 696			
ER-NER*	1st July 2020 to	07-12	1020	45	975	334	641			
EK-MEK.	31st July 2020	12-17	1050	43	1005	334	671			
		17-23 23-24	1010 1030		965 985	289 289	676 696			
		00-02	2330		2285	20)	2285			
	1 . 1 1 2020	02-07	2330		2285		2285			
NER-ER*	1st July 2020 to 31st July 2020	07-12 12-17	2460 2360	45	2415 2315	0	2415 2315			
	315t July 2020	17-23	2680		2635		2635			
		23-24	2330	1	2285		2285			

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W3 zone Injection	1st July 2020 to 31st July 2020	00-24	No limit is be	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) 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.

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
		00.06	22450		21650	14269	7201		
		00-06	21500**		20700**	13319**	7381		
			22450		21650	14658			
		06-09					6992		
			21500**		20700**	13708**			
\mathbf{NR}^*	1st July 2020 to	uly 2020 to	22450	800	21650	14658	6002		
NK	31st July 2020	09-17	21500**		20700**	13708**	6992		
		17-18 22450 21500**			21650	14658			
						6992			
					20700**	13708**			
		10.01	22450		21650	14269	5004		
		18-24	21500**		20700**	13319**	7381		
		00-02	1030		985	289	696		
		02-07	1030		985	289	696		
NER*	1st July 2020 to	07-12	1020	45	975	334	641		
NEK	31st July 2020	12-17	1050	43	1005	334	671		
		17-23	1010		965	289	676		
	23-	23-24	1030		985	289	696		
\mathbf{WR}^*									
		00-06	12900		12150	6698	5452		
SR*#	1st July 2020 to	06-18	12900	750	12150	6783	5367		
	31st July 2020	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).

Margin in Simultaneous import of NR = A

WR-NR ATC =B

ER-NRATC = C

 $\begin{aligned} & \text{Margin for WR-NR applicants} = A*B/(B+C) \\ & \text{Margin for ER-NR Applicants} = A*C/(B+C) \end{aligned}$

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.

^{**}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:

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
		00-06	4500	700	3800	388	3412		Revision in STOA margin due to operationalization of MTOA from Rajasthan Solar to Maharashtra and MP
NR*	1st July 2020 to 31st July 2020	06-18	4500		3800	1526	2274		
	•	18-24	4500		3800	388	3412		
		00-02	2330		2285		2285		
		02-07	2330		2285		2285		
NER*	1st July 2020 to	07-12	2460	60	2415	0	2415		
NEK.	31st July 2020	12-17	2360	45	2315	U	2315		
		17-23	2680		2635		2635		
		23-24	2330		2285		2285		
WR*									

SR*^	1st July 2020 to	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 765 kV Aligarh - Jhatikara Line will lead to overlaoding of 765 kV Aligarh - Gr. Noida Line	Rev- 0
// IX-1 (IX	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev -1 to 2
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev- 0 to 2
ER-NR	 N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt. 	Rev- 0 to 2
WR-SR	n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt	
	n-1 contingency of one ckt of 765 kV Angul - Srikakulam D/C will overload of the other ckt	Rev- 0 to 2
SK	Low Voltage at Gazuwaka (East) Bus.	
CP-W/P	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 2
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 2
NER-ER	 a) N-1 contingency of 400 kV Silchar- Azara line b) High Loading of 400 kV Silchar-Killing Line 	Rev- 0 to 2
W3 zone Injection		Rev- 0 to 2

Limiting Constraints (Simultaneous)

			Applicable Revisions
		 N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt. 	
NR	Import	n-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overlaoding of 765 kV Aligarh - Gr. Noida Line	Rev- 0
		N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev- 1 to 2
	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 to 2
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 2
	Export	a) N-1 contingency of 400 kV Silchar- Azara lineb) High Loading of 400 kV Silchar-Killing Line	Rev- 0 to 2
SR	Import	n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt 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	Rev- 0 to 2
	Export	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 2

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Revision	Date of	Period of	Reason for Revision/Comment	Corridor	
No	Revision	Revision	Reason for Revision/Comment	Affected	
			Revision in TTC/ATC after after commissioning of 400 kV	WR-NR/Import	
1	29th April 2020	Whole Month	Whole Month Aligarh (PG) - Prithala - Kadarpur - Sohna Road link and 765		of NR
			kV Bikaner - Moga D/C	OI INK	
2	28th May 2020	Whole Month	Revision in STOA margin due to operationalization of	NR-WR/Export	
2	28th May 2020	whole wonth	MTOA from Rajasthan Solar to Maharashtra and MP	of NR	

ASSUN	IPTIONS IN BASECASE					
				Month: July'2020		
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	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/IPPs	23	23	20932	19626	
	Total NR	60510	58023	48283	46912	
Ш	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/IPPs	-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/IPPs	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	