National Load Despatch Centre

Total Transfer Capability for July 2021

Issue Date: 02nd July, 2021 Issue Time: 1730 hrs Revision No. 7

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 July 2021 to 31st July 2021	00-06	2500	500	2000	253	1747		
		06-18				1339	661		
		18-24				253	1747		
WR-NR*	1st July 2021 to 31st July 2021	00-06	18450 17500**	500	17950 17000**	11010 10060**	6940		
		06-18	18450 17500**	500	17950 17000**	11399 10449**	6551		
		18-24	18450 17500**	500	17950 17000**	11010 10060**	6940		
NR-ER*	1st July 2021 to 31st July 2021	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	603	1197		
		18-24	2000		1800	193	1607		
ER-NR*	1st July 2021 to 31st July 2021	00-24	6850	300	6550	4280	2270		
W3-ER	1st July 2021 to 31st July 2021	00-24	No limit is being specified.						
ER-W3	1st July 2021 to 31st July 2021	00-24	No limit is being specified.						
WR-SR^	1st July 2021 to 02nd July 2021	00-05	9350	650	8700	3896	4804		
		05-22	9350		8700		4804		
		22-24	9350		8700		4804		
WR-SR^	3rd July 2021	00-09	9350	650	8700	3896	4804		
		09-22	8600		7950		4054		
		22-24	8600		7950		4054		
WR-SR^	4th July 2021	00-08	9350	650	8700	3896	4804		
		08-16	6700		6050		2154	-2650	Revised TTC/ATC due to testing of HVDC Raigarh Pugalur Bipole 2
		16-24	9350		8700		4804		
WR-SR^	5th July 2021 to 31st July 2021	00-05	9350	650	8700	3896	4804		
		05-22	9350		8700		4804		
		22-24	9350		8700		4804		
SR-WR *	1st July 2021 to 31st July 2021	00-24	4600	400	4200	769	3431		
ER-SR^	1st July 2021 to 02nd July 2021	00-06	5750	350	5400	2673	2727		
		06-18	5750		5400	2758	2642		
		18-24	5750		5400	2673	2727		
ER-SR^	3rd July 2021	00-06	5750	350	5400	2673	2727		
		06-09	5750		5400	2758	2642		
		09-18	5550		5200	2758	2442		
		18-24	5550		5200	2673	2527		
ER-SR^	4th July 2021 to 31st July 2021	00-06	5750	350	5400	2673	2727		
		06-18	5750		5400	2758	2642		
		18-24	5750		5400	2673	2727		
SR-ER *	1st July 2021 to 31st July 2021	00-24	No limit is being Specified.						

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ER-NER*	1st July 2021 to 31st July 2021	00-02	1850	45	1805	474	831		
		02-07	1850		1805	474	831		
		07-12	1850		1805	474	831		
		12-18	1850		1805	474	831		
		18-22	1600		1555	474	581		
		22-24	1850		1805	474	831		
NER-ER*	1st July 2021 to 31st July 2021	00-02	2900	45	2855	83	3272		
		02-07	2900		2855	83	3272		
		07-12	2900		2855	83	3272		
		12-18	2900		2855	83	3272		
		18-22	2860		2815	83	3232		
		22-24	2900		2855	83	3272		
W3 zone Injection	1st July 2021 to 31st July 2021	00-24	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 willl 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 appropiate measures like SPS implemetation.

^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 appropiate 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 Paricha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Paricha TPS.

ER-NER TTC has been increased by 500MW after reversal of HVDC BNC-APD-Agra to avoid violation in ER-NER corridor due to BNC-Agra power direction from BNC to Agra. 500MW again subtracted along with LTA/MTOA from ATC to keep STOA marging unchanged in ER-NER/NER Import

NER-ER TTC has been decreased by 500MW after reversal of HVDC BNC-APD-Agra and 500MW again added after subtracting LTA/MTOA from ATC to keep STOA marging unchanged in NER-ER/NER export.

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 July 2021 to 31st July 2021	00-06	25300 24350**	800	24500 23550**	15289 14339**	9211		
		06-09	25300 24350**		24500 23550**	15678 14728**	8822		
		09-17	25300 24350**		24500 23550**	15678 14728**	8822		
		17-18	25300 24350**		24500 23550**	15678 14728**	8822		
		18-24	25300 24350**		24500 23550**	15289 14339**	9211		
NER*	1st July 2021 to 31st July 2021	00-02	1350	45	1305	474	831		
		02-07	1350		1305	474	831		
		07-12	1350		1305	474	831		
		12-18	1350		1305	474	831		
		18-22	1100		1055	474	581		
		22-24	1350		1305	474	831		
WR*									
SR*#	1st July 2021 to 02nd July 2021	00-06	15100	1000	14100	6570	7530		
		06-18	15100		14100	6655	7445		
		18-24	15100		14100	6570	7530		
SR*#	3rd July 2021	00-06	15100	1000	14100	6570	7530		
		06-09	15100		14100	6655	7445		
		09-18	14150		13150	6655	6495		
		18-24	14150		13150	6570	6580		
SR*#	4th July 2021	00-06	15100	1000	14100	6570	7530		Revised TTC/ATC due to testing of HVDC Raigarh Pugalur Bipole 2
		06-08	15100		14100	6655	7445		
		08-16	12450		11450	6655	4795	-2650	
		16-18	15100		14100	6655	7445		
		18-24	15100		14100	6570	7530		
SR*#	5th July 2021 to 31st July 2021	00-06	15100	1000	14100	6570	7530		
		06-18	15100		14100	6655	7445		
		18-24	15100		14100	6570	7530		

* 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 appropiate measures like SPS implemetation.
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 appropiate measures.
WR-NR/Import of NR TTC has been calculated considering generation at Paricha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Paricha 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 July 2021 to 31st July 2021	00-06	4500	700	3800	446	3354		
		06-18			3800	1942	1858		
		18-24	4500		3800	446	3354		
NER*	1st July 2021 to 31st July 2021	00-02	3400	45	3355	83	3272		
		02-07	3400		3355	83	3272		
		07-12	3400		3355	83	3272		
		12-18	3400		3355	83	3272		
		18-22	3360		3315	83	3232		
		22-24	3400		3355	83	3272		
WR*									
SR*^	1st July 2021 to 31st July 2021	00-24	3700	400	3300	1489	1811		

* 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)

Corridor	Constraint	Applicable Revisions
WR-NR	N-1 contingency of 1500 MVA, 765/400 kV ICT at Agra will overload the other ICT	Rev- 0 to 2
	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev- 3 to 7
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev- 0 to 7
ER-NR	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. Inter-regional flow pattern towards NR	Rev- 0 to 2
	Inter-regional flow pattern towards NR	Rev- 3 to 7
WR-SR and ER-SR	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT	Rev- 0 to 7
	N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit	
	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 7
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 7
NER-ER	a) N-1 contingency of 220 kV Salakati - Alipurduar I or II b) High Loading of 220 kV Salakati - Alipurduar II or I	Rev- 0 to 7
W3 zone Injection	---	Rev- 0 to 7

Limiting Constraints (Simultaneous)

		Constraint	Applicable Revisions
NR	**Import**	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. Inter-regional flow pattern towards NR	Rev- 0 to 2
		Inter-regional flow pattern towards NR	Rev- 3 to 7
		N-1 contingency of 1500 MVA, 765/400 kV ICT at Agra will overload the other ICT	Rev- 0 to 2
		N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev- 3 to 7
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	Rev- 0 to 7
		(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 Salakati - BTPS D/C	Rev- 0 to 7
	Export	a) N-1 contingency of 220 kV Salakati - Alipurduar I or II b) High Loading of 220 kV Salakati - Alipurduar II or I	Rev- 0 to 7
SR	**Import**	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT	Rev- 0 to 7
		N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit	
		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 7
		N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs	

National Load Despatch Centre
Total Transfer Capability for July 2021

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	28th April 2021	Whole month	Revised STOA margin due to change in LTA allocations	WR-NR/NR Import
			Revised STOA margin due to change in LTA allocations	WR-SR/ SR Import
			Revised STOA margin due to change in LTA allocations	SR-WR/SR Export
2	28th May 2021	Whole month	1) Revised STOA margin due to increase in LTA allocations by 13 MW (77 MW to 90 MW) from AWEK1L to UPPCL.	WR-NR/NR Import
			2) Revised STOA margin due to LTA allocations of 13 MW from AWEK1L to Chandigarh.	
			3) Revised STOA margin due to decrease in LTA allocation by 38 MW (100 MW to 62 MW) from BETAM to UP (NR).	SR-WR/SR Export
3	4th June 2021	Whole month	a) Reversal in HVDC APD-Agra power flow	WR-NR, ER-NR & NR Import
			b) Commissioning of 765kV Ajmer-Phagi D/C and 765kV G.Noida-Fatehabad S/C	
4	28th June 2021	Whole month	a) Revised STOA margin due to decrease in LTA allocations by 5 MW (90 MW to 85 MW) from AWEK1L to UPPCL b) Revised STOA margin due to increase in LTA allocations by 21 MW (19 MW to 40 MW) from AWEK1L to Chandigarh	WR-NR/NR Import
			Revised STOA margin due to increase in LTA allocations by 10 MW (65 MW to 75 MW) from AWEKTL-WR to KSEB	WR-SR/ SR Import
			Revised STOA margin due to increase in LTA allocation by 4 MW (62 MW to 68 MW) from BETAM to UP (NR)	SR-WR
			Revised STOA margin due to increase in LTA allocation from BETAM to UP (NR) & Odisha each by 4 MW (62 MW to 8MW)	SR Export
5	29th June 2021	Whole month	Change in Load-Generation pattern in NER	NER Import/Export
6	01st July 2021	3rd July 2021	Revised TTC/ATC due to shutdown of 765KV/400KV MAHESHWARAM_PG-ICT-2	WR-SR,ER-SR/ SR Import
7	2nd July 2021	4th July 2021	Revised TTC/ATC due to testing of HVDC Raigarh Pugalur Bipole 2	WR-SR/ SR Import

ASSUMPTIONS IN BASECASE					
				Month : July 2021	
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	8870	8570	4131	4093
2	Haryana	10956	8109	7616	2701
3	Rajasthan	10391	10864	6738	7490
4	Delhi	5570	5669	809	796
5	Uttar Pradesh	21017	19125	10234	10142
6	Uttarakhand	2022	1844	1109	1066
7	Himachal Pradesh	1544	1273	759	752
8	Jammu & Kashmir	2799	2009	1010	935
9	Chandigarh	333	233	0	0
10	ISGS/IPPs	48	47	21601	19435
	Total NR	63550	57741	54007	47410
II	EASTERN REGION				
1	Bihar	6537	5467	357	351
2	Jharkhand	1958	1452	513	504
3	Damodar Valley Corporation	2985	2632	5876	4211
4	Orissa	4513	4165	4011	3817
5	West Bengal	9704	8176	7056	6240
6	Sikkim	119	112	0	0
7	Bhutan	180	174	2365	2325
8	ISGS/IPPs	810	810	15824	11588
	Total ER	26807	22988	36002	29036
III	WESTERN REGION				
1	Maharashtra	20891	16233	13424	7750
2	Gujarat	16875	13083	11324	6911
3	Madhya Pradesh	9583	6057	3721	2720
4	Chattisgarh	4913	3406	3075	2498
5	Daman and Diu	371	294	0	0
6	Dadra and Nagar Haveli	936	843	0	0
7	Goa-WR	594	458	0	0
8	ISGS/IPPs	4322	1998	39810	35909
	Total WR	58484	42373	71354	55788

IV	SOUTHERN REGION				
1	Andhra Pradesh	9726	6764	6156	5259
2	Telangana	7749	6397	5460	3885
3	Karnataka	11026	6642	7563	6044
4	Tamil Nadu	16436	14080	8074	7041
5	Kerala	3750	2270	1617	458
6	Pondy	263	193	0	0
7	Goa-SR	41	40	0	0
8	ISGS/IPPs	9	9	16819	9897
	Total SR	49000	36395	45689	32584
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	136	81	119	62
2	Assam	1682	1449	573	519
3	Manipur	203	78	106	100
4	Meghalaya	310	258	311	241
5	Mizoram	153	56	54	28
6	Nagaland	151	109	65	29
7	Tripura	425	243	305	300
8	ISGS/IPPs	0	0	2403	1922
	Total NER	3060	2275	3936	3201
	Total All India	200902	161773	210988	168019