### National Load Despatch Centre Total Transfer Capability for September 2021

Issue Date: 4th June, 2021 Issue Time: 1600 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
	1st September	00-06				253	1747		
NR-WR*	2021 to 30th	06-18	2500	500	2000	1339	661		
	September 2021	18-24				253	1747		
		00-06	18450 17500**	500	17950 17000**	10994 10044**	6956	600	a) Reversal in HVDC APD-Agra flow
WR-NR*	1st September 2021 to 30th September 2021	06-18	18450 17500**	500	17950 17000**	11383 10433**	6567	600	b) Commissioning of 765kV Ajmer-Phagi D/C and 765kV G.Noida-Fatehabad S/C
		18-24	18450 17500**	500	17950 17000**	10994 10044**	6956	600	
	Lat Cantamban	00.06	2000		1000	102	1.07	ı	
NR-ER*	1st September 2021 to 30th	00-06 06-18	2000 2000	200	1800 1800	193 603	1607 1197		
- 1.22	September 2021	18-24	2000		1800	193	1607		
ER-NR*	1st September 2021 to 30th September 2021	00-24	6850	300	6550	4280	2270	1350	a) Reversal in HVDC APD-Agra flow b) Commissioning of 765kV Ajmer-Phagi D/C and 765kV G.Noida-Fatehabad S/C
W3-ER	1st September 2021 to 30th September 2021	00-24					No limit is being	g specified.	
ER-W3	1st September 2021 to 30th September 2021	00-24					No limit is being	g specified.	
	1st September	00-05	9350		8700		4810		
WR-SR	2021 to 30th	05-22	9350	650	8700	3890	4810		
	September 2021	22-24	9350		8700		4810		
SR-WR *	1st September 2021 to 30th September 2021	00-24	4600	400					
	1		4000	400	4200	765	3435		
	1.46	00-06	4000	400	4200	765 2672	3435		
ER-SR <sup>^</sup>	1st September 2021 to 30th	00-06 06-18	5750	350	4200 5400				
ER-SR <sup>^</sup>		06-18				2672 2757	2728 2643		
ER-SR <sup>^</sup>	2021 to 30th					2672	2728	g Specified.	
	2021 to 30th September 2021 1st September 2021 to 30th	06-18 18-24 00-24	5750		5400	2672 2757 2672	2728 2643 2728 No limit is being	g Specified.	
	2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24	5750		5400	2672 2757 2672	2728 2643 2728 No limit is being	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24	5750	350	5400	2672 2757 2672	2728 2643 2728 No limit is being	g Specified.	
	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th	06-18 18-24 00-24 00-02 02-07 07-12 12-18	730 730 730 810 740		5400 685 685 765 695	2672 2757 2672 474 474 474 474 474	2728 2643 2728  No limit is being 211 211 291 221	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22	730 730 810 740 590	350	5400 685 685 765 695 545	2672 2757 2672 474 474 474 474 474 474	2728 2643 2728  No limit is being 211 211 291 221 71	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22 22-24	730 730 730 810 740 590 730	350	5400 685 685 765 695 545 685	2672 2757 2672 474 474 474 474 474 474 474	2728 2643 2728  No limit is being 211 211 291 221 71 211	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22 22-24 00-02	730 730 730 810 740 590 730 3500	350	5400 685 685 765 695 545 685 3455	2672 2757 2672 474 474 474 474 474 474 474 83	2728 2643 2728  No limit is being 211 211 291 221 71 211 3372	g Specified.	
SR-ER*  ER-NER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22 22-24 00-02 02-07	730 730 730 810 740 590 730 3500 3500	350	5400 685 685 765 695 545 685 3455 3455	2672 2757 2672 474 474 474 474 474 474 474 83 83 83	2728 2643 2728  No limit is being 211 211 291 221 71 211 3372 3372	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22 22-24 00-02 02-07 07-12	730 730 730 810 740 590 730 3500 3500 3490	350	5400 685 685 765 695 545 685 3455	2672 2757 2672 474 474 474 474 474 474 474 474 83 83 83 83	2728 2643 2728  No limit is being 211 211 291 221 71 211 3372 3372 3362	g Specified.	
SR-ER*	2021 to 30th September 2021 1st September 2021 to 30th September 2021 1st September 2021 to 30th September 2021	06-18 18-24 00-24 00-02 02-07 07-12 12-18 18-22 22-24 00-02 02-07	730 730 730 810 740 590 730 3500 3500	350	5400 685 685 765 695 545 685 3455 3455 3445	2672 2757 2672 474 474 474 474 474 474 474 83 83 83	2728 2643 2728  No limit is being 211 211 291 221 71 211 3372 3372	g Specified.	

### National Load Despatch Centre Total Transfer Capability for September 2021

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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
W3 zone Injection	1st September 2021 to 30th September 2021	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 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 Pariccha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Pariccha TPS.

#### Simultaneous Import Capability Long Term Margin Changes **Total** Available Time Access (LTA)/ Available for in TTC Reliability Transfer Transfer Corridor Date Period **Medium Term** Short Term w.r.t. **Comments** Capability Margin Capability (hrs) **Open Access Open Access** Last (TTC) (ATC) (MTOA) (STOA) Revision 25300 24500 15273 00-06 9227 1950 24350\*\* 23550\*\* 14323\*\* 25300 24500 15662 06-09 8838 1950 a) Reversal in HVDC APD-Agra flow 24350\*\* 23550\*\* 14712\*\* 1st September 25300 24500 15662 b) Commissioning of 765kV Ajmer-Phagi NR 2021 to 30th 800 1950 09-17 8838 D/C and 765kV G.Noida-Fatehabad S/C September 2021 23550\*\* 14712\*\* 24350\*\* 25300 24500 15662 17-18 8838 1950 24350\*\* 23550\*\* 14712\*\* 25300 24500 15273 18-24 9227 1950 24350\*\* 23550\*\* 14323\*\* 730 00-02 685 474 211 730 02-07 685 474 211 1st September 07-12 810 765 474 291 45 NER\* 2021 to 30th 12-18 740 695 474 221 September 2021 18-22 590 545 474 71 22-24 730 685 474 211 $WR^*$

6562

6647

6562

7538

7453

7538

14100

14100

14100

Margin in Simultaneous import of NR = A

1st September

2021 to 30th

September 2021

00-06

06-18

18-24

15100

15100

15100

1000

WR-NR ATC =B

 $SR^{*\#}$ 

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 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 appropiate 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.

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.

<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:

Simultane	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	
	1st September	00-06	4500		3800	446	3354			
NR*	2021 to 30th	06-18	4500	700	3800	1942	1858			
	September 2021	18-24	4500		3800	446	3354			
	1st September 2021 to 30th September 2021	00-02	3500	- 45	3455	83	3372			
		02-07	3500		3455	83	3372			
NIED*		07-12	3490		3445	83	3362			
NER*		12-18	3440		3395	83	3312			
		18-22	3390		3345	83	3262			
		22-24	3500		3455	83	3372			
WR*										
SR*^	1st September 2021 to 30th September 2021	00-24	3700	400	3300	1477	1823			

<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).

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 1500 MVA, 765/400 kV ICT at Agra will overload the other ICT	Rev- 0
VV IX-11IX	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev- 1
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev- 0 to 1
ER-NR	<ol> <li>N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt.</li> <li>Inter-regional flow pattern towards NR</li> </ol>	Rev- 0
	Inter-regional flow pattern towards NR	Rev- 1
WR-SR	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT	
and ER-	N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit	Rev- 0 to 1
SK	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
DD MED	<ul> <li>a) N-1 contingency of 400 kV Bongaigaon - Azara line</li> <li>b) High Loading of 220 kV Salakati - BTPS D/C</li> </ul>	Rev- 0 to 1
NER-ER	<ul> <li>a) N-1 contingency of 220 kV Salakati - Alipurduar I or II</li> <li>b) High Loading of 220 kV Salakati - Alipurduar II or I</li> </ul>	Rev- 0 to 1
W3 zone Injection		Rev- 0 to 1

# **Limiting Constraints (Simultaneous)**

		(Simulatives)	Applicable Revisions		
	T	N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt.     Inter-regional flow pattern towards NR	Rev- 0		
NR	Import	Inter-regional flow pattern towards NR	Rev- 1		
NK.		N-1 contingency of 1500 MVA, 765/400 kV ICT at Agra will overload the other ICT	Rev- 0		
		N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT	Rev- 1		
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	Rev- 0 to 1		
		(n-1) contingency of 400 kV Saranath-Pusauli	Kev- 0 to 1		
NER	Import	<ul><li>a) N-1 contingency of 400 kV Bongaigaon - Azara line</li><li>b) High Loading of 220 kV Salakati - BTPS D/C</li></ul>	Rev- 0 to 1		
NEK	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 1		
		N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT			
	Import	N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit	Rev- 0 to 1		
SR		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 N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs	Rev- 0 to 1		

## National Load Despatch Centre Total Transfer Capability for September 2021

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	4th June 2021	Whole month	a) Reversal in HVDC APD-Agra flow	WR-NR, ER-NR & NR Import
			b) Commissioning of 765kV Ajmer-Phagi D/C and 765kV	
_			Commissioning of 765kV Ajmer-Phagi D/C and 765kV     G.Noida-Fatehabad S/C	NR

ASSUM	IPTIONS IN BASECASE					
				Month: September 202		
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	10744	10867	3971	3971	
2	Haryana	9492	9088	2701	2701	
3	Rajasthan	10485	9635	8259	8259	
4	Delhi	5321	5152	796	795	
5	Uttar Pradesh	20631	20099	10623	10689	
6	Uttarakhand	2124	1886	928	939	
7	Himachal Pradesh	1354	1114	783	769	
8	Jammu & Kashmir	2363	1962	884	883	
9	Chandigarh	313	249	0	0	
10	ISGS/IPPs	48	48	21958	20013	
	Total NR	62875	60100	50903	49019	
Ш	EASTERN REGION					
1	Bihar	6537	5617	356	349	
2	Jharkhand	1958	1503	511	501	
3	Damodar Valley Corporation	2985	2723	5856	4190	
4	Orissa	4513	4310	3998	3798	
5	West Bengal	9704	8401	7033	6210	
6	Sikkim	119	116	0	0	
7	Bhutan	181	181	2325	2325	
8	ISGS/IPPs	810	810	15771	11533	
	Total ER	26808	23662	35850	28906	
	WEOTERN DECICAL					
III	WESTERN REGION	47.405	40500	44004	40700	
1	Maharashtra	17405	16509	11624	10789	
2	Gujarat	13918	11320	8601	7246	
3	Madhya Pradesh	9254	8534	3596	3845	
4	Chattisgarh	4309	3965	2531	2835	
5	Daman and Diu	276	236	0	0	
6	Dadra and Nagar Haveli	744	870	0	0	
7	Goa-WR	534	420	0	0	
8	ISGS/IPPs	1784	3263	36712	32338	
	Total WR	48224	45117	63064	57053	

IV	SOUTHERN REGION				
1	Andhra Pradesh	8024	7220	6268	5204
2	Telangana	9100	8117	5196	5078
3	Karnataka	8396	6654	6023	4850
4	Tamil Nadu	15210	13068	7256	6376
5	Kerala	3778	2349	1614	961
6	Pondy	264	264	0	0
7	Goa-SR	82	82	0	0
8	ISGS/IPPs	37	37	14805	14794
	Total SR	44891	37791	41162	37263
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	140	95	118	118
2	Assam	1849	1588	615	574
3	Manipur	207	86	105	103
4	Meghalaya	315	255	302	229
5	Mizoram	150	55	60	60
6	Nagaland	173	155	96	93
7	Tripura	435	260	300	300
8	ISGS/IPPs	0	0	2371	2370
	Total NER	3269	2494	3967	3847
	Total All India	186067	169164	194946	176088