

**National Load Despatch Centre
Total Transfer Capability for September 2019**

Issue Date: 20th September 2019

Issue Time: 1100 hrs

Revision No. 9

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 September 2019 to 2nd September 2019	00-06	2500	500	2000	195	1805		
		06-18				250	1750		
		18-24				195	1805		
	3rd September 2019 to 30th September 2019	00-06	2500	500	2000	771	1229		
		06-18				826	1174		
		18-24				771	1229		
WR-NR*	1st September 2019 to 05th September 2019	00-24	13500	500	13000	10067	2933		
	06th September 2019	00-830	12550**	500	12050**	9117**	2933**		
		830-24	11300	10800	10067	733			
			10350**	9850**	9117**	733**			
	07th September 2019 to 13th September 2019	00-24'	11300	500	10800	10067	733		
			10350**	500	9850**	9117**	733**		
	14th September 2019 to 20th September 2019	00-24'	12400	500	11900	10067	1833		
		11450**	500	10950**	9117**	1833**			
21st September 2019 to 23rd September 2019	00-24	12400	500	11900	10067	1833	-2500	Revised due to extension of 765 Agra-Jhatikara Line shutdown	
		11450**	500	10950**	9117**	1833**			
24th September 2019 to 30th September 2019	00-24	14900	500	14400	10067	4333			
		13950**	500	13450**	9117**	4333**			
NR-ER*	1st September 2019 to 30th September 2019	00-06	2000	200		1800	1607		
		06-18	2000			1800	1497		
		18-24	2000			1800	1607		
ER-NR*	1st September 2019 to 5th September 2019	00-24	5250	300	4950	4044	906		
	6th September 2019 to 30th September 2019	00-24	5250	300	4950	4050	900		
W3-ER	1st September 2019 to 30th September 2019	00-24	No limit is being specified.						
ER-W3	1st September 2019 to 30th September 2019	00-24	No limit is being specified.						
WR-SR	1st September 2019 to 2nd September 2019	00-05	5550	500		5050	3888	1162	
		05-22	5550			5050		1162	
		22-24	5550			5050		1162	
	3rd September 2019 to 30th September 2019	00-05	5550	500		5050	4888	162	
		05-22	5550			5050		162	
		22-24	5550			5050		162	
SR-WR *	1st September 2019 to 30th September 2019	00-24	No limit is being Specified.						
ER-SR	1st September 2019 to 30th September 2019	00-06	4950	250	4700	2748	1952		
		06-18				2833	1867		
		18-24				2748	1952		

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SR-ER *	1st September 2019 to 30th September 2019	00-24	No limit is being Specified.							
ER-NER	1st September 2019 to 11th September 2019	00-17	1090	45	1045	310	735			
		17-23	970		925		615			
		23-24	1090		1045		735			
	12th September 2019 to 13th September 2019	00-07'	1090	45	1045	310	735			
		07-17'	960		915		605			
		17-23	870		825		515			
		23-24	960		915		605			
	14th September 2019 to 20th September 2019	00-17	1090	45	1045	310	735			
		17-23	970		925		615			
		23-24	1090		1045		735			
	21st September 2019	00-07	1090	45	1045	310	735		Revised due to shutdown of 400kV Bongaigaon-Azara line.	
		07-17	930		885		575	-160		
		17-23	840		795		485	-130		
	22nd September 2019 to 30th September 2019	00-17	1090	45	1045	310	735			
		17-23	970		925		615			
		23-24	1090		1045		735			
	NER-ER	1st September 2019 to 11th September 2019	00-17	2870	45	2825	0	2825		
			17-23	2845		2800		2800		
			23-24	2870		2825		2825		
		12th September 2019 to 13th September 2019	00-07'	2870	45	2825	0	2825		
			07-17'	2550		2505		2505		
17-23			2450	2405		2405				
23-24			2550	2505		2505				
14th September 2019 to 20th September 2019		00-17	2870	45	2825	0	2825			
		17-23	2845		2800		2800			
		23-24	2870		2825		2825			
21st September 2019		00-07	2870	45	2825	0	2825		Revised due to shutdown of 400kV Bongaigaon-Azara line.	
		07-17	2570		2525		2525	-300		
		17-23	2480		2435		2435	-365		
22nd September 2019 to 30th September 2019		00-17	2870	45	2825	0	2825			
		17-23	2845		2800		2800			
	23-24	2870	2825		2825					
W3 zone Injection	1st September 2019 to 30th September 2019	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) KWPC, 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.

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				
ER													
NR	1st September 2019 to 05th September 2019	00-06	18500	800	17700	14111	3589						
			17550**		16750**		3589**						
		06-09	19850		19050		4939						
			18900**		18100**		4939**						
	09-17	18500	17700		3589								
		17550**	16750**		3589**								
	17-24	18000	17200		3089								
		17050**	16250**		3089**								
	06th September 2019	00-06	18500		800		17700			14117	3583		
			17550**				16750**				3583**		
		06-830	19850				19050				4933		
			18900**				18100**				4933**		
830-09		16600	15800	1683									
		15650**	14850**	1683**									
09-17	15500	14700	583										
	14550**	13750**	583**										
07th September 2019 to 13th September 2019	00-06	15500	800	14700	14117	583							
		14550**		13750**		583**							
	06-09	16600		15800		1683							
		15650**		14850**		1683**							
09-17	15500	14700	583										
	14550**	13750**	583**										
17-24	15050	14250	133										
	14100**	13300**	133**										

NR	14th September 2019 to 20th September 2019	00-06	17000	800	16200	14117	2083			
			16050**		15250**		2083**			
		06-09	18250		17450		3333			
			17300**		16500**		3333**			
		09-17	17000		16200		2083			
	16050**		15250**	2083**						
	17-24	16550	15750	1633						
		15600**	14800**	1633**						
	21st September 2019 to 23rd September 2019	00-06	17000	800	16200	14117	2083	-3400		Revised due to extension of 765 Agra-Jhatikara Line shutdown
			16050**		15250**		2083**			
		06-09	18250		17450		3333	-3650		
			17300**		16500**		3333**			
		09-17	17000		16200		2083	-3400		
	16050**		15250**	2083**						
	17-24	16550	15750	1633	-3300					
		15600**	14800**	1633**						
24th September 2019 to 30th September 2019	00-06	20400	800	19600	14117	5483				
		19450**		18650**		5483**				
	06-09	21900		21100		6983				
		20950**		20150**		6983**				
	09-17	20400		19600		5483				
19450**		18650**	5483**							
17-24	19850	19050	4933							
	18900**	18100**	4933**							
NER	1st September 2019 to 11th September 2019	00-17	1090	45	1045	310	735			
		17-23	970		925		615			
		23-24	1090		1045		735			
	12th September 2019 to 13th September 2019	00-07'	1090	45	1045	310	735			
		07-17'	960		915		605			
		17-23	870		825		515			
		23-24	960		915		605			
	14th September 2019 to 20th September 2019	00-17	1090	45	1045	310	735			
		17-23	970		925		615			
		23-24	1090		1045		735			

NER	21st September 2019	00-07	1090	45	1045	310	735		Revised due to shutdown of 400kV Bongaigaon-Azara line.
		07-17	930		885		575	-160	
		17-23	840		795		485	-130	
		23-24	930		885		575	-160	
	22nd September 2019 to 30th September 2019	00-17	1090	45	1045	310	735		
		17-23	970		925		615		
		23-24	1090		1045		735		
WR									
SR	1st September 2019 to 2nd September 2019	00-06	10500	750	9750	6636	3114		
		06-18	10500		9750	6721	3029		
		18-24	10500		9750	6636	3114		
	3rd September 2019 to 30th September 2019	00-06	10500	750	9750	7636	2114		
		06-18	10500		9750	7721	2029		
		18-24	10500		9750	7636	2114		

* 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 = $A * C/(B+C)$

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 September 2019 to 2nd September 2019	00-06	4500	700	3800	388	3412		
		06-18			3800	553	3247		
		18-24			3800	388	3412		
	3rd September 2019 to 30th September 2019	00-06	4500	700	3800	964	2836		
		06-18			3800	1129	2671		
		18-24			3800	964	2836		
NER	1st September 2019 to 11th September 2019	00-17	2870	45	2825	0	2825		
		17-23	2845		2800		2800		
		23-24	2870		2825		2825		
	12th September 2019 to 13th September 2019	00-07'	2870	45	2825	0	2825		
		07-17'	2550		2505		2505		
		17-23	2450		2405		2405		
		23-24	2550		2505		2505		
	14th September 2019 to 20th September 2019	00-17	2870	45	2825	0	2825		
		17-23	2845		2800		2800		
		23-24	2870		2825		2825		
	21st September 2019	00-07	2870	45	2825	0	2825		
		07-17	2570		2525		2525	-300	Revised due to shutdown of 400kV Bongaigaon-Azara line.
		17-23	2480		2435		2435	-365	
		23-24	2570		2525		2525	-300	
	22nd September 2019 to 30th September 2019	00-17	2870	45	2825	0	2825		
		17-23	2845		2800		2800		
		23-24	2870		2825		2825		
	WR								
SR *	1st September 2019 to 30th September 2019	00-24	No limit is being Specified.						

* 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).

Limiting Constraints (Corridor wise)

Corridor	Constraint	Applicable Revisions
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Bhanpura-Modak	Rev-0 to 9
WR-NR	n-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overloading of 765 kV Aligarh - Gr. Noida Line	Rev-0 to 9
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-0 to 9
ER-NR	1. N-1 contingencies of 400 kv Mejia-Maithon A S/C 2. N-1 contingencies of 400 kv Kahalgaon-Banka S/C 3. N-1 contingencies of 400kV MPL- Maithon S/C	Rev-0 to 9
WR-SR and ER-SR	n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev-0 to 9
	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 9
	Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 9
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 3
	a) N-1 contingency of 400 kV Bongaigaon- Azara line b) High Loading of 220 kV Salakati-BTPS D/C(200 MW)	Rev - 4 to 8
	a) N-1 contingency of 400 kV Bongaigaon- Byrnihat line b) High Loading of 220 kV Salakati-BTPS D/C(200 MW)	Rev - 9
	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 3
NER-ER	a) N-1 contingency of 400 kV Silchar-Azara line b) High Loading of 400 kV Killing-Bongaigaon line.	Rev - 4 to 8
	a) N-1 contingency of 400 kV Bongaigaon- Byrnihat line b) High Loading of 220 kV Sonabil-Samaguri S/C	Rev - 9
	---	Rev-0 to 9
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Limiting Constraints (Simultaneous)

		Applicable Revisions	
NR	Import	1. N-1 contingencies of 400 kv Mejia-Maithon A S/C 2. N-1 contingencies of 400 kv Kahalgaon-Banka S/C 3. N-1 contingencies of 400kV MPL- Maithon S/C	Rev-0 to 9
		n-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overloading of 765 kV Aligarh - Gr. Noida Line	Rev-0 to 9
	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 9
NER	Import	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 3
		a) N-1 contingency of 400 kV Bongaigaon- Azara line b) High Loading of 220 kV Salakati-BTPS D/C(200 MW)	Rev-04 to 8
		a) N-1 contingency of 400 kV Bongaigaon- Byrnihat line b) High Loading of 220 kV Salakati-BTPS D/C(200 MW)	Rev - 9
		(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 3
	Export	a) N-1 contingency of 400 kV Silchar-Azara line b) High Loading of 400 kV Killing-Bongaigaon line.	Rev-04 to 6
		a) N-1 contingency of 400 kV Silchar-Azara line b) High Loading of 220kV Sonabil-Samaguri S/C	Rev-7 to 8
		a) N-1 contingency of 400 kV Bongaigaon- Byrnihat line b) High Loading of 220 kV Sonabil-Samaguri S/C	Rev - 9
		n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev-0 to 9
SR	Import	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 9
		Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 9

**National Load Despatch Centre
Total Transfer Capability for September 2019**

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	25th June 2019	Whole Month	Revised STOA margin due to: (a) Revision in MTOA quantum from KSK to Andhra Pradesh from 340 MW to 38.5 MW	WR-SR/Import of SR
2	28th June 2019	Whole Month	a) Change in Load Generation Balance in NER b) Operationalization of 30 MW LTA from Green Infra Wind Energy Ltd. (GIWEL-Bhuj) to Assam.	ER-NER/NER-ER/Import and Export of NER
			a) Revision in LTA quantum from RPL-SECI-II (RE) to Punjab from 23.2 MW to 41.6 MW. b) Revision in LTA quantum from RPL-SECI-II (RE) to UP from 23.2 MW to 41.6 MW.	WR-NR/Import of NR
3	28th July 2019	Whole Month	A) Revision in TTC/ATC due to commissioning of 765 kV Banaskantha – Chittorgarh – Ajmer – Bikaner corridor. B) Revised STOA margin due to the following:- a) Revision in LTA quantum from RPL-SECI-II to Punjab- from 41.6 MW to 47.2 MW b) Revision in LTA quantum from RPL-SECI-II to UPPCL- from 41.6 MW to 47.2 MW c) Revision in LTA quantum from MAHINDRA RUMS to DMRC- from 7.75 MW to 7.8 MW d) Operationalization of 49 MW MTOA from GIWEL-SECI-III to Punjab e) Revision in LTA quantum from KSK Mahanadi to UPPCL from 820 MW to 1000 MW	WR-NR/Import of NR
			Revision in LTA quantum from KSK Mahanadi to TN from 440 MW to 500 MW	WR-SR/Import of SR
4	28th August 2019	Whole Month	Revised STOA margin due to the following:- a) Revision in LTA quantum from RPL-SECI-II to Punjab- from 47.2 MW to 50.4 MW b) Revision in LTA quantum from RPL-SECI-II to UPPCL- from 47.2 MW to 50.4 MW	WR-NR / NR Import
			Revised STOA margin due to operationalization of 65 MW LTA from NPGC to UP	ER-NR/ NR Import
			Revised STOA margin due to completion of 14 MW MTOA from NSPCL to SAIL (Salem), TN	WR-SR/Import of SR
			Revision in TTC/ACT due to the following:- a) Change in Load Generation Balance in NER b) Charging of new elements (400/220 kV, 500 MVA ICT -3 at Misa , 220 kV Rangia - BTPS D/C and 220/132 kV, 2X100 MVA ICT at Rangia)	ER-NER/NER-ER/Import and Export of NER
5	2nd September 2019	3rd Sep to 30th Sep 2019	Revised STOA margin due to the reallocation of 575.8 MW Dadri stg-II Power to Andhra Pradesh	NR-WR/NR EXPORT
			Revised STOA margin due to the reallocation of Dadri stag-II (575.8 MW) & Mauda stg-I (212.6 MW) & Mauda stg-II (211.6 MW) Power to Andhra Pradesh	WR-SR /SR IMPORT
6	05th September 2019	06th Sep to 20th Sep 2019	Revised due to shutdown of 765kV Agra-Jhatikara line on continuous basis	WR-NR/Import of NR
		06th Sep to 30th Sep 2019	Revised STOA Margin due to allocation of additional 6 MW from Nabinagar STPP to Uttar Pradesh	ER-NR/Import of NR
7	10th September 2019	12th Sep 2019 to 13th Sep 2019	Revised due to shutdown of 400 kV Bongaigaon - Byrnihat Line.	ER-NER/NER-ER/Import and Export of NER
8	13th September 2019	14th Sep 2019 to 30th Sep 2019	Revised considering Load Generation balance and HVDC set points as per present system conditions	WR-NR/Import of NR
9	20th September 2019	21st Sep 2019 to 23rd Sep 2019	Revised due to extension of 765 Agra-Jhatikara Line shutdown	WR-NR/Import of NR
	20th September 2019	21st Sep 2019	Revised due to shutdown of 400kV Bongaigaon-Azara line.	ER-NER/NER-ER/Import and Export of NER

ASSUMPTIONS IN BASECASE					
				Month : September'19	
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	9698	9517	4169	4168
2	Haryana	7972	7269	1804	1804
3	Rajasthan	10912	11558	6950	6950
4	Delhi	5804	5003	819	819
5	Uttar Pradesh	15592	16146	8351	8194
6	Uttarakhand	2247	2285	1153	1156
7	Himachal Pradesh	1576	1359	849	822
8	Jammu & Kashmir	2978	2206	1222	1208
9	Chandigarh	340	244	0	0
10	ISGS/IPPs	29	29	20822	19096
	Total NR	57149	55616	46139	44217
II	EASTERN REGION				
1	Bihar	4676	3241	218	168
2	Jharkhand	1360	907	409	324
3	Damodar Valley Corporation	2853	2730	5347	3710
4	Orissa	4514	3363	3406	2135
5	West Bengal	8786	6299	6226	4638
6	Sikkim	103	89	0	0
7	Bhutan	194	194	1502	1539
8	ISGS/IPPs	631	605	11689	9561
	Total ER	23118	17453	28796	21910
III	WESTERN REGION				
1	Maharashtra	17370	16627	10888	11545
2	Gujarat	16587	14271	10858	9773
3	Madhya Pradesh	9501	8249	5768	4775
4	Chattisgarh	3772	4127	2089	2089
5	Daman and Diu	275	307	0	0
6	Dadra and Nagar Haveli	793	759	0	0
7	Goa-WR	485	339	0	0
8	ISGS/IPPs	4571	2734	38745	20998
	Total WR	53353	49331	68347	65187

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	8270	7937	6301	5003
2	Telangana	12455	10424	5600	4761
3	Karnataka	8368	4847	7464	4462
4	Tamil Nadu	14955	12787	9108	6612
5	Kerala	3739	2370	1556	406
6	Pondy	352	340	0	0
7	Goa-SR	69	67	0	0
8	ISGS/IPPs	0	0	13625	12028
	Total SR	48209	38772	43654	33272
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	141	65	0	0
2	Assam	1641	1363	255	192
3	Manipur	187	92	0	0
4	Meghalaya	275	208	259	233
5	Mizoram	99	68	56	40
6	Nagaland	128	82	22	12
7	Tripura	237	178	73	75
8	ISGS/IPPs	156	99	2307	2352
	Total NER	2864	2153	2972	2833
	Total All India	184692	163325	189908	167418