

National Load Despatch Centre
Total Transfer Capability for September 2018

Issue Date: 1st August 2018

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
NR-WR*	1st September 2018 to 30th September 2018	00-06	2500	500	2000	100	1900		Revised STOA margins due to: (a) 40 MW allocation to MP from NR ISGS (b) 100 MW allocation to Chattisgarh from Kishanganga NR
		06-18				250	1750		
		18-24				100	1900		
WR-NR*	1st September 2018 to 30th September 2018	00-24	12000	500	11500	9034	2466	-250	Revised due to: (a) Frequent outage of Champa Kurukshetra single pole and (b) Restoration of power order on HVDC Mundra-Mahindragarh due to revival of generation at APL and CGPL plants. (c) Change in STOA margin due to change in LTA/MTOA
			11050**		10550**	8084**	2466**		
NR-ER*	1st September 2018 to 30th September 2018	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st September 2018 to 30th September 2018	00-24	5250	300	4950	3867	1083		Revised STOA margins due to change in LTA/MTOA
W3-ER	1st September 2018 to 30th September 2018	00-24	No limit is being specified.						
ER-W3	1st September 2018 to 30th September 2018	00-24	No limit is being specified.						
WR-SR	1st September 2018 to 30th September 2018	00-05	5150	500	4650	4535	115		Revised STOA margin due to change in allocation to Telangana from WR plants
		05-22	5150		4650		115		
		22-24	5150		4650		115		
SR-WR *	1st September 2018 to 30th September 2018	00-24	No limit is being Specified.						
ER-SR	1st September 2018 to 30th September 2018	00-06	4350	250	4100	2762	1338		Revised STOA margins due to revocation of 500 MW LTA from Ind-bharat
		06-18				2847	1253		
		18-24				2762	1338		
SR-ER *	1st September 2018 to 30th September 2018	00-24	No limit is being Specified.						
ER-NER	1st September 2018 to 30th September 2018	00-17	1240	45	1195	225	970		
		17-23	1170		1125		900		
		23-24	1240		1195		970		
NER-ER	1st September 2018 to 30th September 2018	00-17	1740	45	1695	0	1695		
		17-23	1830		1785		1785		
		23-24	1740		1695		1695		

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W3 zone Injection	1st September 2018 to 30th September 2018	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 - 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) 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.

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 2018 to 30th September 2018	00-18	17100 16150**	800	16300 15350**	12901 11951**	3399 3399**	-400	Revised due to: (a) Frequent outage of Champa Kurukshetra single pole and (b) Restoration of power order on HVDC Mundra-Mahindragarh due to revival of generation at APL and CGPL plants. (c) Change in STOA margin due to change in MTOA
		18-23	15400 14450**		14600 13650**		1699 1699**	-300	
		23-24	17100 16150**		16300 15350**		3399 3399**	-400	
NER	1st September 2018 to 30th September 2018	00-17	1240	45	1195	225	970		
		17-23	1170		1125		900		
		23-24	1240		1195		970		
WR									
SR	1st September 2018 to 30th September 2018	00-05	9500	750	8750	7297	1453		Revised STOA margins due to: (a) Change in LTA/MTOA towards ER-SR corridor (b) Change in allocation to Telangana from WR plants
		05-06	9500		8750	7297	1453		
		06-18	9500		8750	7382	1368		
		18-22	9500		8750	7297	1453		
		22-24	9500		8750	7297	1453		

* 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 2018 to 30th September 2018	00-06	4500	700	3800	248	3552		
		06-18			3800	368	3432		
		18-24	4500		3800	248	3552		
NER	1st September 2018 to 30th September 2018	00-17	1740	45	1695	0	1695		
		17-23	1830		1785		1785		
		23-24	1740		1695		1695		
WR									
SR *	1st September 2018 to 30th September 2018	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)

		Applicable Revisions
Corridor	Constraint	
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	Rev-1
WR-NR	(n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-0
	High loading of 400 kV Bhachau-Versana D/C line	Rev-1
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-1
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-1
WR-SR and ER-SR	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-1
	Low Voltage at Gazuwaka (East) Bus.	Rev-1
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-1
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-1
W3 zone Injection	---	Rev-1

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-1
		(n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-1
		High loading of 400 kV Bhachau-Versana D/C line	Rev-1
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	Rev-1
(n-1) contingency of 400 kV Saranath-Pusauli			
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-1
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-1
SR	Import	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-1
		Low Voltage at Gazuwaka (East) Bus.	Rev-1

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Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
0	28th May 2018	Whole Month	TTC declared considering restriction on power order of HVDC Mundra - Mahindragarh bipole due to low generation at APL Mundra	WR-NR / Import of NR
1	1st Aug 2018	Whole Month	Revised STOA margins due to: (a) 40 MW allocation to MP from NR ISGS (b) 100 MW allocation to Chattisgarh from Kishanganga NR	NR-WR
			Revised due to: (a) Frequent outage of Champa Kurukshetra single pole and (b) Restoration of power order on HVDC Mundra- Mahindragarh due to revival of generation at APL and CGPL plants. (c) Change in STOA margin due to change in LTA/MTOA	WR-NR / Import of NR
			Revised STOA margins due to change in LTA/MTOA	ER-NR
			Revised STOA margins due to: (a) Change in LTA/MTOA towards ER-SR corridor (b) Change in allocation to Telangana from WR plants	ER-SR /WR- SR/ Import of SR

ASSUMPTIONS IN BASECASE					
				Month : September'18	
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	10474	9326	5458	5426
2	Haryana	8627	7492	2765	2445
3	Rajasthan	9370	9169	5305	5784
4	Delhi	5806	5589	1075	1099
5	Uttar Pradesh	15893	14651	9512	9412
6	Uttarakhand	2117	1848	1083	1145
7	Himachal Pradesh	1503	1203	1107	883
8	Jammu & Kashmir	2799	1692	1514	785
9	Chandigarh	344	220	0	0
10	ISGS/IPPs	24	24	20279	15055
	Total NR	56958	51211	48099	42035
II	EASTERN REGION				
1	Bihar	4087	2852	310	200
2	Jharkhand	1171	873	364	225
3	Damodar Valley Corporation	2925	2668	5264	4225
4	Orissa	4009	3194	2539	2192
5	West Bengal	8603	5717	5360	4272
6	Sikkim	84	84	0	0
7	Bhutan	212	218	1592	1526
8	ISGS/IPPs	265	259	11202	8824
	Total ER	21357	15866	26631	21464
III	WESTERN REGION				
1	Maharashtra	16834	13516	11885	9571
2	Gujarat	14542	13186	7379	7074
3	Madhya Pradesh	9729	7523	4011	3862
4	Chattisgarh	4171	3477	2999	2383
5	Daman and Diu	333	295	0	0
6	Dadra and Nagar Haveli	804	728	0	0
7	Goa-WR	516	373	0	0
8	ISGS/IPPs	4170	3476	39160	31931
	Total WR	51098	42575	65434	54821

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	8103	6984	5903	3947
2	Telangana	8305	8102	4447	4177
3	Karnataka	9352	5764	6477	4630
4	Tamil Nadu	14096	12115	8411	7493
5	Kerala	3673	2434	1564	283
6	Pondy	373	371	0	0
7	Goa-SR	84	84	0	0
8	ISGS/IPPs	0	0	11055	9542
	Total SR	43986	35853	37857	30072
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	123	74	0	0
2	Assam	1318	1292	307	196
3	Manipur	171	95	0	0
4	Meghalaya	267	194	313	214
5	Mizoram	99	68	8	8
6	Nagaland	129	78	22	12
7	Tripura	205	117	61	59
8	ISGS/IPPs	159	131	1963	1784
	Total NER	2471	2049	2674	2273
	Total All India	176311	147947	182392	152286