

National Load Despatch Centre
Total Transfer Capability for July 2018

Issue Date: 01st July 2018

Issue Time: 0930 hrs

Revision No. 5

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 2018 to 31st July 2018	00-06	2500	500	2000	55	1945			
		06-18				65	1935			
		18-24				55	1945			
WR-NR*	1st July 2018 to 2nd July 2018	00-730	12000	500	11500	9179	2321			
			11050**		10550**	8229**	2321**			
		730-24	11000		10500	9179	1321			
	3rd July 2018 to 31st July 2018		10050**	9550**	8229**	1321**				
		00-24	12000	11500	9179	2321				
			11050**	10550**	8229**	2321**				
NR-ER*	1st July 2018 to 31st July 2018	00-06	2000	200	1800	193	1607			
		06-18	2000		1800	303	1497			
		18-24	2000		1800	193	1607			
ER-NR*	1st July 2018 to 31st July 2018	00-24	5250	300	4950	3413	1537			
W3-ER	1st July 2018 to 31st July 2018	00-24	No limit is being specified.							
ER-W3	1st July 2018 to 31st July 2018	00-24	No limit is being specified.							
WR-SR	1st July 2018	00-630	5150	500	4650	4515	135			
		630-22	4900		4400		0			
		22-24	4900		4400		0			
	02nd July 2018 to 31st July 2018	00-05	5150	500	4650	4515	135			
		05-22	5150		4650		135			
		22-24	5150		4650		135			
SR-WR *	1st July 2018 to 31st July 2018	00-24	No limit is being Specified.							
ER-SR	1st July 2018	00-06	4350	250	4100	3262	838			
		06-18				3347	753			
		18-24				3262	838			
	2nd July 2018 to 3rd July 2018	00-06	4350	250	4100	3262	838		Revised due to shutdown of 400kV Jeypore-Gazuwaka-1 and 2 respectively	
		06-630	4350		4100	3347	753			
		630-18	4050		3800	3347	453	-300		
		18-24	4050		3800	3262	538	-300		
	4th July 2018 to 31st July 2018	00-06	4350	250	4100	3262	838			
		06-18				3347	753			
		18-24				3262	838			
	SR-ER *	1st July 2018 to 31st July 2018	00-24	No limit is being Specified.						
	ER-NER	1st July 2018 to 31st July 2018	00-17	1250	45	1205	225	980		
17-23			1110	1065		840				
23-24			1250	1205		980				
NER-ER	1st July 2018 to 31st July 2018	00-17	1760	45	1715	0	1715			
		17-23	1780		1735		1735			
		23-24	1760		1715		1715			

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W3 zone Injection	1st July 2018 to 31st July 2018	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) 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 July 2018 to 02nd July 2018	00-730	17100	800	16300	12592	3708		
			16150**		15350**		3708**		
		730-18	15700		14900		2308		
			14750**		13950**		2308**		
		18-23	14100		13300		708		
			13150**		12350**		708**		
	23-24	15700	14900	2308					
	3rd July 2018 to 31st July 2018	00-18	17100	16300	3708				
			16150**	15350**	3708**				
		18-23	15400	14600	2008				
			14450**	13650**	2008**				
		23-24	17100	16300	3708				
16150**			15350**	3708**					
NER	1st July 2018 to 31st July 2018	00-17	1250	45	1205	225	980		
		17-23	1110		1065		840		
		23-24	1250		1205		980		
WR									
SR	1st July 2018	00-06	9500	750	8750	7777	973		
			9500		8750	7862	888		
		06-630	9250		8500	7862	638		
			9250		8500	7777	723		
	02nd July 2018 to 03rd July 2018	00-06	9500	750	8750	7777	973		
			9500		8750	7862	888		
		06-630	9200		8450	7862	588	-300	
			9200		8450	7777	673	-300	
	4th July 2018 to 31st July 2018	00-06	9500	750	8750	7777	973		
		06-18	9500		8750	7862	888		
		18-24	9500		8750	7777	973		

* 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 July 2018 to 31st July 2018	00-06	4500	700	3800	248	3552		
		06-18			3800	368	3432		
		18-24	4500		3800	248	3552		
NER	1st July 2018 to 31st July 2018	00-17	1760	45	1715	0	1715		
		17-23	1780		1735		1735		
		23-24	1760		1715		1715		
WR									
SR *	1st July 2018 to 31st July 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)

Corridor	Constraint	Applicable Revisions
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	Rev-0 to 5
WR-NR	(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.	Rev-0
	(n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev- 1 to 5
	Frequent outage of HVDC Champa - Kurukshetra poles	Rev- 3-5
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-0 to 5
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 5
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-0 to 5
	Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 5
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 5
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 5
W3 zone Injection	---	Rev-0 to 5

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 5
		(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.	Rev-0
		(n-1) Contingency of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-1 to 5
	Export	Frequent outage of HVDC Champa - Kurukshetra poles	Rev-3-5
		(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 5
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 5
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 5
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 5
		Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 5

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Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	26th April 2018	Whole Month	Revised considering (a) newly commissioned 765kV Jabalpur-Orai D/C, Orai-Aliagarh D/C, LILo 765kV Satna-Gwalior-1 S/C at Orai, 2*1000MVA 765/400kV Orai ICTs, 400kV Orai PG- Orai UP D/C, LILo of 765kV Kanpur-Jhatikara S/C at Aligarh, LILo of 765kV Agra-Greater Noida at Aligarh and (b) due to restriction on power order of HVDC Mundra - Mahindragarh bipole due to low generation at APL Mundra	WR-NR / ER-NR / Import of NR
2	11th May 2018	Whole Month	Revised STOA margins due to operationalization of 174 MW LTA from Teesta-III HEP to UP discoms w.e.f. 12th May 2018	ER- NR/Import of NR
3	27th May 2018	Whole Month	Revised considering (a) Restoration of power order on HVDC Mundra-Mahindragarh due to revival of generation at APL and CGPL plants, b) Frequent outage of HVDC Champa - Kurukshetra poles	WR-NR / Import of NR
4	29th June 2018	01st July 2018 and 02nd July 2018	Revised due to shutdown of 765kV Phagi-Gwalior-2	WR-NR / Import of NR
		01st July 2018	Revised due to shutdown of 765kV Nizamabad-Maheshwaram-2	WR-SR / Import of SR
5	01st July 2018	02nd July 2018 and 3rd July 2018	Revised due to shutdown of 400kV Jeypore-Gazuwaka-1 and 2 respectively	ER-SR / Import of SR

ASSUMPTIONS IN BASECASE					
				Month : July'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	9930	10215	4966	4979
2	Haryana	8382	8543	2582	2582
3	Rajasthan	10604	11049	6919	6890
4	Delhi	5892	6206	968	968
5	Uttar Pradesh	15757	15580	9652	9570
6	Uttarakhand	2000	1785	1034	921
7	Himachal Pradesh	1463	1398	775	747
8	Jammu & Kashmir	2450	1808	1171	1161
9	Chandigarh	341	278	0	0
10	ISGS/IPPs	24	25	21264	19125
	Total NR	56842	56888	49331	46943
II	EASTERN REGION				
1	Bihar	4118	2870	310	200
2	Jharkhand	1180	879	364	227
3	Damodar Valley Corporation	2946	2686	5264	4211
4	Orissa	4042	3213	2539	2192
5	West Bengal	8671	5746	5360	4272
6	Sikkim	85	85	0	0
7	Bhutan	214	220	1592	1393
8	ISGS/IPPs	264	258	11393	8908
	Total ER	21519	15957	26822	21403
III	WESTERN REGION				
1	Maharashtra	18078	13981	12207	9821
2	Gujarat	14438	9108	7871	6560
3	Madhya Pradesh	9530	6420	4533	3587
4	Chattisgarh	4003	3591	2999	2675
5	Daman and Diu	320	278	0	0
6	Dadra and Nagar Haveli	810	724	0	0
7	Goa-WR	505	331	0	0
8	ISGS/IPPs	3712	3407	37104	29370
	Total WR	51396	37840	64714	52013

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	8636	8636	5505	4512
2	Telangana	9615	7115	3735	2937
3	Karnataka	9463	5196	7213	3381
4	Tamil Nadu	14700	12900	8860	7491
5	Kerala	3675	2150	1502	216
6	Pondy	376	376	0	0
7	Goa-SR	85	85	0	0
8	ISGS/PPs	0	0	13591	11248
	Total SR	46548	36458	40406	29785
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	133	74	0	0
2	Assam	1308	1173	258	136
3	Manipur	166	87	0	0
4	Meghalaya	278	195	192	66
5	Mizoram	99	69	8	8
6	Nagaland	128	86	22	16
7	Tripura	220	147	162	168
8	ISGS/PPs	160	100	2092	2022
	Total NER	2492	1931	2734	2416
	Total All India	179241	149469	185705	154048