

**National Load Despatch Centre  
Total Transfer Capability for July 2017**

Issue Date: 21st July 2017

Issue Time: 1500 hrs

Revision No. 14

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 2017 to 31st July 2017	00-06	2500	500	2000	55	1945			
		06-18				65	1935			
		18-24				55	1945			
WR-NR*	1st July 2017 to 4th July 2017	00-24	9050	500	8550	7951	599			
	5th July 2017 and 6th July 2017	00-530	9050	500	8550	7951	599			
		530-14	7750	500	7250	7951	0			
		14-24	9050	500	8550	7951	599			
	7th July 2017	00-0730'	9050	500	8550	7951	599			
		0730-24	8550	500	8050	7951	99			
	8th July 2017 to 14th July 2017	00-24	8550	500	8050	7951	99			
	15th July 2017 to 18th July 2017	00-24	9050	500	8550	7951	599			
	19th July 2017	00-24	7550	500	7050	7951	0			
	20th July 2017 to 21st July 2017	00-24	7550	500	7050	7951	0			
22nd July 2017 to 23rd July 2017	00-24	7550	500	7050	7951	0	-1500	Revised due to forced outage of HVDC Champa-Kurukshetra Pole-1		
24th July 2017 to 31st July 2017	00-24	9050	500	8550	7951	599				
NR-ER*	1st July 2017 to 31st July 2017	00-06	2000	200	1800	193	1607			
		06-18'	2000		1800	303	1497			
		18-24	2000		1800	193	1607			
ER-NR*	1st July 2017 to 31st July 2017	00-24	4500	300	4200	2983	1217			
W3-ER	1st July 2017 to 31st July 2017	00-24	No limit is being specified.							
ER-W3	1st July 2017 to 31st July 2017	00-24	No limit is being specified.							
WR-SR	1st July 2017	00-05	4350	500	3850	3888	0			
		05-22	4350		3850		0			
		22-24	4350		3850		0			
	2nd July 2017	00-05	4350	500	3850	3888	0			
		05-0730	4350		3850		0			
		0730-22	2950		2450		0			
	22-24	22-24	2950		2450		0			
		3rd July 2017 to 17th July 2017	00-05	4350	500	3850	3888	0		
			05-22	4350		3850		0		
	22-24		4350	3850		0				
	18th July 2017 and 19th July 2017	00-05	4350	500	3850	3888	0			
		05-09	4350		3850		0			
		09-14	3550		3050		0			
		14-22	4350		3850		0			
	22-24	22-24	4350		3850		0			
		20th July 2017	00-05	4350	500	3850	3888	0		
			05-22	4350		3850		0		
	22-24		4350	3850		0				
	21st July 2017	00-05	4350	500	3850	3888	0			
		05-0830	4350		3850		0			
		0830-14	3350		2850		0			
		14-22	4350		3850		0			
	22-24	22-24	4350		3850		0			
		22nd July 2017	00-05	4350	500	3850	3888	0		
05-22			4350	3850		0				
22-24	4350		3850	0						
23rd July 2017	00-05	4350	500	3850	3888	0				
	05-06	4350		3850		0				
	06-22	2950		2450		0	-1400			
	22-24	2950		2450		0	-1400			
24th July 2017 to 31st July 2017	00-05	4350	500	3850	3888	0				
	05-22	4350		3850		0				
	22-24	4350		3850		0				
SR-WR *	1st July 2017 to 31st July 2017	00-24	No limit is being Specified.							

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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
ER-SR	1st July 2017 to 8th July 2017	00-06	3450	250	3200	3061	139		
		06-18'				3146	54		
		18-24				3061	139		
	09th July 2017	00-06	3450	250	3200	3061	139		
		06-0830'				3146	54		
		0830-18				2850	0		
		18-24				3200	3061		
	ER-SR	10th July 2017 to 13th July 2017	00-06	3450	250	3200	3061	139	
06-18'			3146				54		
18-24			3061				139		
14th July 2017 to 31st July 2017		00-06	3450	250	3200	2618	582		
		06-18'				2703	497		
		18-24				2618	582		
SR-ER *	1st July 2017 to 31st July 2017	00-24	No limit is being Specified.						
ER-NER	1st July 2017 to 4th July 2017	00-17	1035	45	990	225	765		
		17-23	1010		965		740		
		23-24	1035		990		765		
	5th July 2017	00-08	1035	45	990	225	765		
		08-16	790		745		520		
		16-17	1035		990		765		
		17-23	1010		965		740		
		23-24	1035		990		765		
	6th July 2017 to 31st July 2017	00-17	1035	45	990	225	765		
		17-23	1010		965		740		
		23-24	1035		990		765		
	NER-ER	1st July 2017 to 4th July 2017	00-17	1180	45	1135	0	1135	
17-23			1050	1005		1005			
23-24			1180	1135		1135			
5th July 2017		00-08	1180	45	1135	0	1135		
		08-16	930		885		885		
		16-17	1180		1135		1135		
		17-23	1050		1005		1005		
		23-24	1180		1135		1135		
6th July 2017 to 31st July 2017		00-17	1180	45	1135	0	1135		
		17-23	1050		1005		1005		
		23-24	1180		1135		1135		
W3 zone Injection		1st July 2017 to 31st July 2017	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).

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.



SR	1st July 2017	00-05	7800	750	7050	6949	101		
		05-06	7800		7050	6949	101		
		06-18	7800		7050	7034	16		
		18-22	7800		7050	6949	101		
		22-24	7800		7050	6949	101		
	2nd July 2017	00-05	7800	750	7050	6949	101		
		05-06	7800		7050	6949	101		
		06-0730	7800		7050	7034	16		
		0730-18	6400		5650	7034	0		
		18-22	6400		5650	6949	0		
		22-24	6400		5650	6949	0		
	3rd July 2017 to 8th July 2017	00-05	7800	750	7050	6949	101		
		05-06	7800		7050	6949	101		
		06-18	7800		7050	7034	16		
		18-22	7800		7050	6949	101		
		22-24	7800		7050	6949	101		
	09th July 2017	00-05	7800	750	7050	6949	101		
		05-06	7800		7050	6949	101		
		06-0830	7800		7050	7034	16		
		0830-18	7450		6700	7034	0		
		18-22	7800		7050	6949	101		
		22-24	7800		7050	6949	101		
	10th July 2017 to 13th July 2017	00-05	7800	750	7050	6949	101		
		05-06	7800		7050	6949	101		
		06-18	7800		7050	7034	16		
		18-22	7800		7050	6949	101		
		22-24	7800		7050	6949	101		
	14th July 2017 to 17th July 2017	00-05	7800	750	7050	6506	544		
		05-06	7800		7050	6506	544		
		06-18	7800		7050	6591	459		
		18-22	7800		7050	6506	544		
		22-24	7800		7050	6506	544		
	18th July 2017 and 19th July 2017	00-05	7800	750	7050	6506	544		
		05-06	7800		7050	6506	544		
		06-09	7800		7050	6591	459		
		09-14	7000		6250	6591	0		
		14-18	7800		7050	6591	459		
		18-22	7800		7050	6506	544		
	20th July 2017	22-24	7800	750	7050	6506	544		
		00-05	7800		7050	6506	544		
		05-06	7800		7050	6506	544		
		06-18	7800		7050	6591	459		
		18-22	7800		7050	6506	544		
	21st July 2017	22-24	7800	750	7050	6506	544		
		00-05	7800		7050	6506	544		
		05-06	7800		7050	6506	544		
		06-0830	7800		7050	6591	459		
		0830-14	6800		6050	6591	0		
14-18		7800	7050		6591	459			
18-22		7800	7050		6506	544			
22-24	7800	7050	6506	544					
22nd July 2017	00-05	7800	750	7050	6506	544			
	05-06	7800		7050	6506	544			
	06-18	7800		7050	6591	459			
	18-22	7800		7050	6506	544			
	22-24	7800		7050	6506	544			
23rd July 2017	00-05	7800	750	7050	6506	544			
	05-06	7800		7050	6506	544			
	06-18	6400		5650	6591	0	-1400	Revised due to shutdown of 765kV Sholapur-Raichur-1 and 2(One at a time)	
	18-22	6400		5650	6506	0	-1400		
	22-24	6400		5650	6506	0	-1400		
00-05	7800	750	7050	6506	544				
05-06	7800		7050	6506	544				
06-18	7800		7050	6591	459				
18-22	7800		7050	6506	544				
24th July 2017 to 31st July 2017	22-24	7800	750	7050	6506	544			
	00-05	7800		7050	6506	544			
	05-06	7800		7050	6506	544			
	06-18	7800		7050	6591	459			

\* 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).

\* 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 2017 to 31st July 2017	00-06	4500	700	3800	248	3552			
		06-18'			3800	368	3432			
		18-24			3800	248	3552			
NER	1st July 2017 to 4th July 2017	00-17	1180	45	1135	0	1135			
		17-23	1050		1005		1005			
		23-24	1180		1135		1135			
	5th July 2017	00-08	1180	45	1135	0	1135			
		08-16	930		885		885			
		16-17	1180		1135		1135			
		17-23	1050		1005		1005			
	6th July 2017 to 31st July 2017	23-24	1180	45	1135	0	1135			
		00-17	1180		1135		1135			
		17-23	1050		1005		1005			
	WR									
SR *	1st July 2017 to 31st July 2017	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	All
WR-NR	(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C.	All
	(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C and restriction on power flow of HVDC Vindhychal from WR to NR.	Rev 8 - 14
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	All
ER-NR	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c and high availability of Hydro power	All
WR-SR & ER-SR	(n-1) contingency of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	Rev 0
	(n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	Rev 1-4, Rev 6-8, 10, 13
	(n-1) contingency of other ckt of 765kV Raichur-Sholapur will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	Rev 5
	(n-1) contingency of One pole will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C and one unit at simhadri-i is under annual maintenance)	Rev 9
	(n-1) contingency of ICT # 2 at Nizamabad will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C and one unit at simhadri-i is under annual maintenance)	Rev 11-12
	Low Voltage at Gazuwaka (East) Bus.	All
ER-NER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
NER-ER	(n-1) contingency of 400 kV Byrnihat - Bongaigaon line High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
W3 zone Injection	---	

**Limiting Constraints (Simultaneous)**

			Applicable Revisions
NR	Import	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/C and high availability of Hydro power	All
		(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C.	All
		(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C and restriction on power flow of HVDC V'chal from WR to NR.	Rev 8-14
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	All
		(n-1) contingency of 400 kV Saranath-Pusauli	All
NER	Import	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
	Export	(n-1) contingency of 400 kV Byrnihat - Bongaigaon line High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
SR	Import	(n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	Rev 0
		(n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	Rev 1-4, Rev 6-8, 10, 13
		(n-1) contingency of other ckt of 765kV Raichur-Sholapur will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna	Rev 5,14
		(n-1) contingency of One pole will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C and one unit at simhadri-i is under annual maintenance)	Rev 9
		(n-1) contingency of ICT # 2 at Nizamabad will lead to 874MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C and one unit at simhadri-i is under annual maintenance)	Rev 11-12
		Low Voltage at Gazuwaka (East) Bus	All

**National Load Despatch Centre  
Total Transfer Capability for July 2017**

<b>Revision No</b>	<b>Date of Revision</b>	<b>Period of Revision</b>	<b>Reason for Revision</b>	<b>Corridor Affected</b>
1	27th April 2017	Whole month	STOA Margins revised due to change in LTA / MTOA approved by CTU	ER - NR / Import of NR
			Revised considering commissioning of one pole of HVDC Champa - Kurukshetra, the present load generation balance and change in LTA/MTOA approved by CTU	WR - NR / Import of NR
			Revised considering the commissioning of 765 kV Durg - Wardha D/C, second ICT at Vemagiri, 765 kV Wardha - Nizamabad D/C, two ICTs at Nizamabad, and 400 kV Nizamabad-Dichipally D/C.	WR - SR / ER - SR / Import of SR
2	5th May 2017	Whole month	Revised considering the latest LTA/MTOA granted by CTU	WR - SR / ER - SR / Import of SR
3	9th May 2017	Whole month	Revised considering the latest LTA/MTOA granted by CTU	WR - SR / Import of SR
4	23rd May 2017	Whole month	Revised considering present Inter-regional flow pattern	Import of NR
5	01st July 2017	02nd July 2017	Revised due to shutdown of 765kV Raichur-Sholapur-1	WR - SR / Import of SR
6	03rd July 2017	05th July 2017	Revised due to day-time shutdown of 400/220 kV ICT-II at Misa Substation	ER - NER / NER - ER
7	04th July 2017	05th & 06th July 2017	Due to Shutdown of Champa-Kurukshetra pole-1 for testing of Pole-2	WR-NR/ NR Import
8	06th July 2017	07th to 14 July 2017	Revised due to shutdown of HVDC Rihand Dadri Pole-1	WR-NR/ NR Import
9	7th July 2017	9th July 2017	Revised due to shutdown of 400kV Rengali-Indravati S/C	ER-SR/SR Import
10	13th July 2017	14th July to 31st July 2017	Revised STOA margins due to planned shutdown of Unit#4 of Talcher Stg-II for 45 days	ER-SR/SR Import
11	17th July 2017	18th and 19th July 2017	Revised Due to Shutdown of one ICT at Nizamabad SS	WR-SR/SR Import
12	18th July 2017	19th July 2017	Revised due to forced outage of HVDC Champa-Kurukshetra Pole-1	WR-NR/ NR Import
13	19th July 2017	20th July 2017 and 21st July 2017	Revised due to forced outage of HVDC Champa-Kurukshetra Pole-1	WR-NR/ NR Import
		21st July 2017	Revised due to Black start Mock Drill exercise at HVDC Bhadravati and Ramagundam	WR-SR/SR Import
14	21st July 2017	22nd July 2017 to 23rd July 2017	Revised due to forced outage of HVDC Champa-Kurukshetra Pole-1	WR-NR/ NR Import
		23rd July 2017	Revised due to shutdown of 765kV Sholapur-Raichur-1 and 2(One at a time)	WR-SR/SR Import



ASSUMPTIONS IN BASECASE					
					Month : July'17
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	10671	9480	4285	4302
2	Haryana	8203	8052	1533	1533
3	Rajasthan	8264	9534	4458	4458
4	Delhi	5767	6332	940	940
5	Uttar Pradesh	14322	14317	10032	10036
6	Uttarakhand	1869	1634	985	962
7	Himachal Pradesh	1184	1068	921	863
8	Jammu & Kashmir	2359	1498	920	930
9	Chandigarh	327	300	0	0
10	ISGS/IPPs	27	27	19979	18386
	Total NR	52992	52241	44053	42410
II	EASTERN REGION				
1	Bihar	3920	2608	238	238
2	Jharkhand	1193	836	397	337
3	Damodar Valley Corporation	2961	2554	4468	3768
4	Orissa	4173	3199	3342	2325
5	West Bengal	8359	5800	5216	4148
6	Sikkim	88	89	0	0
7	Bhutan	245	245	982	982
8	ISGS/IPPs	560	567	11255	8518
	Total ER	21469	15868	25869	20286
III	WESTERN REGION				
1	Maharashtra	14940	11898	9694	7279
2	Gujarat	12432	10131	9835	7466
3	Madhya Pradesh	7044	5925	3569	3099
4	Chattisgarh	3353	3104	1915	2461
5	Daman and Diu	286	279	0	0
6	Dadra and Nagar Haveli	740	717	0	0
7	Goa-WR	399	296	0	0
8	ISGS/IPPs	2701	2844	32655	29850
	Total WR	41896	35194	57668	50154
IV	SOUTHERN REGION				
1	Andhra Pradesh	7900	7330	6080	5500
2	Telangana	7305	5815	4523	3329
3	Karnataka	8717	7530	5689	4314
4	Tamil Nadu	14750	12574	8145	6750
5	Kerala	3450	1780	1499	283
6	Pondy	395	395	0	0
7	Goa-SR	89	89	0	0
8	ISGS/IPPs	0	0	11044	9692
	Total SR	42606	35513	36980	29868
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	143	89	0	0
2	Assam	1227	1069	240	200
3	Manipur	150	76	0	0
4	Meghalaya	268	200	214	164
5	Mizoram	95	69	8	8
6	Nagaland	122	83	22	16
7	Tripura	254	157	75	75
8	ISGS/IPPs	100	60	2030	1888
	Total NER	2359	1803	2589	2351
	Total All India	161566	140864	168142	146052