

National Load Despatch Centre
Total Transfer Capability for July 2017

Issue Date: 01st July 2017

Issue Time: 1130 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 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 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		Revised due to shutdown of 765kV Raichur-Sholapur-1
		05-0730	4350		3850		0		
		0730-22	2950		2450		0	-1400	
	3rd 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.						
ER-SR	1st July 2017 to 31st July 2017	00-06	3450	250	3200	3061	139		
		06-18'				3146	54		
		18-24				3061	139		
SR-ER *	1st July 2017 to 31st July 2017	00-24	No limit is being Specified.						
ER-NER	1st 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 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).

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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 Viduyt 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.

Limiting Constraints

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak
WR-NR	1. (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c
WR-SR & ER-SR	(n-1) contingency of 400 kV Dichipalli-Ramagundam or one ckt of 765 kV Aurangabad-Solapur D/C will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)
	Low Voltage at Gazuwaka (East) Bus.
	(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-05)
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Sonabil-Samaguri line(200 MW)
NER-ER	a. (n-1) contingency of 400 kV Byrnihat - Bongaigaon line b. High loading of 220 kV Sonabil-Samaguri line(200 MW)
W3 zone Injection	---

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 2017 to 31st July 2017	00-05	12900	800	12100	10934	1166		
		05-08	12900		12100		1166		
		08-18	12900		12100		1166		
		18-23	11600		10800		0		
		23-24	12900		12100		1166		
NER	1st July 2017 to 31st July 2017	00-17	1035	45	990	225	765		
		17-23	1010		965		740		
		23-24	1035		990		765		
WR									
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	-1400	
		18-22	6400		5650	6949	0	-1400	
	3rd July 2017 to 31st July 2017	22-24	6400	750	5650	6949	0	-1400	
		00-05	7800		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					

* 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	4500		3800	248	3552		
NER	1st July 2017 to 31st July 2017	00-17	1180	45	1135	0	1135		
		17-23	1050		1005		1005		
		23-24	1180		1135		1135		
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

NR	Import	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c. 1. (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. 2.High Loading of 400kV Singrauli-Anpara S/C.
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. (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)
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA ICT at Misa.
SR	Import	(n-1) contingency of 400 kV Dichipalli-Ramagundam or one ckt of 765 kV Aurangabad-Solapur D/C will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C) Low Voltage at Gazuwaka (East) Bus.
		(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-05)

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Total Transfer Capability for July 2017**

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
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

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