# National Load Despatch Centre Total Transfer Capability for October 2017

Issue Date: 29th September 2017 Issue

Issue Time: 1500 hrs

Revision No. 4

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
	1st October	00-06				55	1945		
NR-WR*	2017 to 31st	06-18	2500	500	2000	65	1935		
	October 2017	18-24				55	1945		
WR-NR*	1st October 2017 to 31st October 2017	00-24	10050	500	9550	8368	1182	1000	Revised TTC due to commissioning and commercial operation of HVDC Champa Kurukshetra pole II and revised STOA margins due change in LTA/MTOA approved by CTU
	1st October	00-06	2000		1800	193	1607		
NR-ER*	2017 to 31st	06-18	2000	200	1800	303	1497	+	
	October 2017	18-24	2000	200	1800	193	1607	4	
	1st October	10 21	2000		1000	175	1007		
ER-NR*	2017 to 31st	00-24	4500	300	4200	3030	1170		
	October 2017								
	1st October								
W3-ER	2017 to 31st	00-24				No limit i	s being specified.		
	October 2017						C I		
ED W2	1st October	00-24				No limit i	s being specified.		
ER-W3	2017 to 31st	00-24					s being specified.		
	1st October	00-05	4700		4200		491		
WR-SR	2017 to 31st	05-22	4700	500	4200	3709	491		Revised STOA margins to change in
WK-SK	October 2017	22-24	4700		4200		491		LTA/MTOA approved by CTU
SR-WR *	1st October 2017 to 31st October 2017	00-24				No limit is	s being Specified.		
		00.06				2946	654		Design 1 STO A second in the de
	1st October	00-06				2846	654	4	Revised STOA margin due to planned outage of Talcher StgII U#3
	2017 to 24th	06-18'	3750	250	3500	2931	569		and change in LTA/MTOA
ER-SR	October 2017	18-24				2846	654	1	approved by CTU
	24th October	00-06				3289	211		Revised STOA margins due to
	2017 to 31st	06-18'	3750	250	3500	3374	126	4	change in LTA/MTOA approved by
	October 2017	18-24	0700	200	0000	3289	211	1	CTU
	1st October								
SR-ER *	2017 to 31st	00-24				No limit is	s being Specified.		
	October 2017								
	1st October	00-17	1100		1055		830		
ER-NER	2017 to 31st	17-23	1000	45	955	225	730	1	
	October 2017	23-24	1100		1055		830	1	
	1st October	00-17	1330		1285		1285		
NER-ER	2017 to 31st	17-23	1240	45	1195	0	1195	ļ	
	October 2017	23-24	1330		1285		1285		
W3 zone Injection	1st October 2017 to 31st October 2017	00-24		C I	•				xport would be revised accordingly) on NLDC website under Intra-
	ction in Monthly		or, import of	ss(inci dia),	import of I u	njao and import		apioaucu	on allow website under fiftha-

#### National Load Despatch Centre Total Transfer Capability for October 2017

Issue Date: 29th September 2017			Issue Time: 1500 hrs			Revision No. 4				
	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

\* 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) KWPCL, 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 commissionned 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**

Corrido r	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									
		00-05	14350		13550		2152	1450	Revised due to
	1st October	05-08	14350		13550		2152	1450	commissioning and commercial operation of
NR	2017 to 31st	08-18	14350	800	13550	11398	2152	1450	HVDC Champa Kurukshetra pole II and change in LTA/MTOA
	October 2017	18-23	13050	-	12250		852	1450	
		23-24	14350		13550		Ę	approved by CTU	
	1st October	00-17	1100	1055		830			
NER	2017 to 31st	17-23	1000	45	955	225	730		
	October 2017	23-24	1100		1055		830		
WR									
		00-05	8450		7700	6555	1145		Revised STOA margin due
	1st October	05-06	8450		7700	6555	1145		to planned outage of
	2017 to 24th	06-18	8450	750	7700	6640	1060		Talcher StgII U#3 and change in
	October 2017	18-22	8450		7700	6555	1145		LTA/MTOA approved by
SR		22-24	8450		7700	6555	1145		CTU
		00-05	8450		7700	6998	702		Revised STOA margins
	24th October	05-06	8450		7700	6998	702		due to change in
	2017 to 31st	06-18	8450	750	7700	7083	617		LTA/MTOA approved by
	October 2017	18-22	8450		7700	6998	702		CTU
		22-24	8450		7700	6998	702		

\* 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

Date	Time Period (hrs)		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
1st October	00-06	4500		3800	248	3552		
2017 to 31st	06-18'	.000	700	3800	368	3432		
October 2017	18-24	4500		3800	248	3552		
1st October	00-17	1330		1285		1285		
2017 to 31st	17-23	1240	45	1195	0	1195		
October 2017	23-24	1330				1285		
1st October								
2017 to 31st	00-24				No limit is be	ing Specified.		
	1st October 2017 to 31st October 2017 1st October 2017 to 31st October 2017 	Date         Period (hrs)           1st October         00-06           2017 to 31st         06-18'           October 2017         18-24           1st October         00-17           2017 to 31st         17-23           October 2017         23-24           1st October         2017           2017 to 31st         17-23           October 2017         23-24           1st October         00-17           2017 to 31st         17-23           0ctober 2017         23-24	DateTime Period (hrs)Transfer Capability (TTC)1st October00-0645002017 to 31st06-18'4500October 201718-2445001st October00-1713302017 to 31st17-231240October 201723-241330October 201723-241330Ist October00-171320Ist October00-171240October 201723-24100-14Ist October00-24100-24	DateTime Period (hrs)Transfer Capability (TTC)Reliability Margin1st October00-064500	DateTime Period (hrs)Transfer Capability (TTC)Reliability MarginTransfer Capability (ATC)1st October00-06450070038002017 to 31st06-18'70038000ctober 201718-24450070038001st October00-1713304500112852017 to 31st17-2312404511950ctober 201723-24133012852017 to 31st700128512850ctober 201723-24133012851st October00-24100-24100-24	DateTime Period (hrs)Total Transfer Capability (TTC)Reliability MarginAvailable Transfer Capability (ATC)Access (LTA)/ Medium Term Open Access (MTOA)1st October00-06 06-18'450038002482017 to 31st06-18'7003800368October 201718-24450010238002481st October00-171330128502017 to 31st17-2312404511950October 201723-241330128501st October23-241330128501st October00-2400-24100128501st October00-241001001001001st October00-241001001001001st October00-24100100100100	DateTime Period (hrs)Total Transfer Capability (TTC)Reliability MarginAvailable Transfer Capability (ATC)Access (LTA)/ Medium Term Open Access (MTOA)Available for Short Term Open Access (STOA)1st October00-06 (hrs)4500700380024835522017 to 31st06-18'38003683432October 201718-244500380024835521st October00-171330128512852017 to 31st17-23124045119501195October 201723-241330128512851st October128512851st October128512851st October00-241st October00-241st October00-24	DateTime Period (hrs)Iotal Transfer Capability (TTC)Reliability MarginAvailable Transfer Capability (ATC)Access (LTA)/ Medium Term Open Access (MTOA)Available for Short Term Open Access (STOA)in TTC w.r.t. Last Revision1st October00-06 06-18' $4500$ $700$ $3800$ $248$ $3552$ $1666666666666666666666666666666666666$

\* 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
Corrido r	Constraint	
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	All
WR-NR	1. (n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. 2.High Loading of 400kV Singrauli-Anpara S/C.	All
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	All
WR-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)	1-2
SR	<ul> <li>a. (n-1) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading (874 MW) on 400 kV Vemagiri - Gazuwaka S/C</li> <li>b. N-1 contingency of 765/400 kV 2x1500 MVA Maheswaram (PG) ICTs results in high loading of other ICT</li> </ul>	3-4
	Low Voltage at Gazuwaka (East) Bus.	All
EK-NEK	<ul> <li>a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa</li> <li>b. High loading of 220 kV Balipara-Sonabil line(200 MW)</li> </ul>	All
	(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	All
W3 zone Injection		All

# Limiting Constraints (Simultaneous)

			<b>Applicable Revisions</b>
Import NR		<ul> <li>(n-1) contingencies of N.Ranchi - Chandawa S/c &amp; (n-1) contingencies of 400kV MPL- Maithon S/c.</li> <li>1. (n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.</li> <li>2.High Loading of 400kV Singrauli-Anpara S/C.</li> </ul>	All
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. (n-1) contingency of 400 kV Saranath-Pusauli	All
NED	Import	<ul><li>a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa</li><li>b. High loading of 220 kV Balipara-Sonabil line(200 MW)</li></ul>	All
NER	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.	All
		(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	1-2
SR	Import	<ul> <li>a. (n-1) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading (874 MW) on 400 kV</li> <li>Vemagiri - Gazuwaka S/C</li> <li>b. N-1 contingency of 765/400 kV 2x1500 MVA Maheswaram (PG) ICTs results in high loading of other ICT</li> </ul>	3-4
		Low Voltage at Gazuwaka (East) Bus.	All

Revision No	Date of Revision	Period of Revision	<b>Reason for Revision</b>	Corridor Affected
1	28th July 2017	Whole month	Revised STOA margins due to change in LTA / MTOA figures approved by CTU	WR- NR/Import of NR
2	31st July 2017	Whole month	Revised STOA margins due to change in LTA / MTOA figures approved by CTU	WR- NR/Import of NR
3	20th September 2017	Whole month	Revised considering commissioning and commercial operation of 765 kV Nizamabad - Maheswaram D/C, 765/400 kV 2x1500 MVA ICTs at Maheswaram, 400 kV Maheswaram(PG) - Maheswaram D/C, 400/220 kV 1x500 MVA ICTs at Maheswaram, 400 kV Maheswaram(PG) - Kurnool S/C and 400 kV Maheswaram - Ghanapur S/C (LILO of 400 kV Ghanapur - Kurnool S/C)	ER-SR / WR- SR / Import of SR
		Whole month	Revised TTC due to COD of HVDC Champa Kurukshetra pole liand revised STOA margins due to change in LTA/MTOA approved by CTU	WR- NR/Import of NR
4	29th September 2017	1st October to 24th October 2017	Revised STOA margin due to planned outage of Talcher StgII U#3 and change in LTA/MTOA approved by CTU	WR-SR / ER- SR / Import
		24th October to 31st October 2017	Revised STOA margin due to change in LTA/MTOA approved by CTU	-

#### National Load Despatch Centre Total Transfer Capability for October 2017

ASSUN	MPTIONS IN BASECASE				
				Month : October'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	8029	6646	3099	3145
2	Haryana	7627	5298	1701	1701
3	Rajasthan	8833	8881	5381	5411
4	Delhi	5072	4174	805	805
5	Uttar Pradesh	14985	14821	9097	9093
6	Uttarakhand	1804	1369	890	693
7	Himachal Pradesh	1275	1043	387	344
8	Jammu & Kashmir	2378	1099	696	503
9	Chandigarh	266	181	0	0
10	ISGS/IPPs	26	27	18406	10653
	Total NR	50296	43538	40462	32348
11	EASTERN REGION				
1	Bihar	4034	2465	202	178
2	Jharkhand	1332	915	187	187
3	Damodar Valley Corporation	3138	2664	4808	3850
4	Orissa	4286	3262	3382	2210
5	West Bengal	7050	5900	5309	4270
6	Sikkim	89	50	0	0
7	Bhutan	212	216	1434	1434
8	ISGS/IPPs	267	263	11697	9325
	Total ER	20406	15737	27019	21454
	WESTERN REGION				
	Maharashtra	18356	14979	12498	11221
	Gujarat	13916	12128	10311	8731
	Madhya Pradesh	9586	7408	4172	4547
	Chattisgarh	3889	2800	2510	2090
	Daman and Diu	325	288	0	0
	Dadra and Nagar Haveli	698	769	0	0
7		571	281	0	0
8	ISGS/IPPs	3986	3664	34817	30704
	Total WR	51326	42317	64308	57293

/	SOUTHERN REGION				
1	Andhra Pradesh	8439	6388	5847	4612
2	2 Telangana	8741	7000	5877	3753
	Karnataka	9896	8233	6319	4457
2	Tamil Nadu	14068	11864	7403	5878
5	Kerala	3652	2312	1300	283
6	Pondy	387	395	0	0
7	Goa-SR	87	89	0	0
8	ISGS/IPPs	0	0	13865	11425
	Total SR	45271	36282	40611	30407
/	NORTH-EASTERN REGION				
1	Arunachal Pradesh	122	63	0	0
2	Assam	1158	1012	230	180
3	3 Manipur	162	87	0	0
2	Meghalaya	246	178	191	130
5	Mizoram	93	69	8	8
6	Nagaland	119	83	16	6
7	Tripura	270	195	82	82
8	ISGS/IPPs	98	60	1882	1471
	Total NER	2268	1749	2409	1877
	Total All India	169567	139623	174809	143380