

National Load Despatch Centre
Total Transfer Capability for October 2017

Issue Date: 20th September 2017

Issue Time: 1800 hrs

Revision No. 3

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 October 2017 to 31st October 2017	00-06	2500	500	2000	55	1945		
		06-18				65	1935		
		18-24				55	1945		
WR-NR*	1st October 2017 to 31st October 2017	00-24	9050	500	8550	8330	220		
NR-ER*	1st October 2017 to 31st October 2017	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st October 2017 to 31st October 2017	00-24	4500	300	4200	3030	1170		
W3-ER	1st October 2017 to 31st October 2017	00-24	No limit is being specified.						
ER-W3	1st October 2017 to 31st October 2017	00-24	No limit is being specified.						
WR-SR	1st October 2017 to 31st October 2017	00-05	4700	500	4200	3483	717	350	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)
		05-22	4700		4200		717	350	
		22-24	4700		4200		717	350	
SR-WR *	1st October 2017 to 31st October 2017	00-24	No limit is being Specified.						
ER-SR	1st October 2017 to 31st October 2017	00-06	3750	250	3500	3053	447	300	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)
		06-18'				3138	362		
		18-24				3053	447		
SR-ER *	1st October 2017 to 31st October 2017	00-24	No limit is being Specified.						
ER-NER	1st October 2017 to 31st October 2017	00-17	1100	45	1055	225	830		
		17-23	1000		955		730		
		23-24	1100		1055		830		
NER-ER	1st October 2017 to 31st October 2017	00-17	1330	45	1285	0	1285		
		17-23	1240		1195		1195		
		23-24	1330		1285		1285		
W3 zone Injection	1st October 2017 to 31st October 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.

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* 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.

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 October 2017 to 31st October 2017	00-05	12900	800	12100	11360	740		
		05-08	12900		12100		740		
		08-18	12900		12100		740		
		18-23	11600		10800		0		
		23-24	12900		12100		740		
NER	1st October 2017 to 31st October 2017	00-17	1100	45	1055	225	830		
		17-23	1000		955		730		
		23-24	1100		1055		830		
WR									
SR	1st October 2017 to 31st October 2017	00-05	8450	750	7700	6536	1164	650	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)
		05-06	8450		7700	6536	1164	650	
		06-18	8450		7700	6621	1079	650	
		18-22	8450		7700	6536	1164	650	
		22-24	8450		7700	6536	1164	650	

* 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 October 2017 to 31st October 2017	00-06	4500	700	3800	248	3552		
		06-18'			3800	368	3432		
		18-24	4500		3800	248	3552		
NER	1st October 2017 to 31st October 2017	00-17	1330	45	1285	0	1285		
		17-23	1240		1195		1195		
		23-24	1330		1285		1285		
WR									
SR *	1st October 2017 to 31st October 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)

		Applicable Revisions
Corridor	Constraint	
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	All
WR-NR	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.	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 & 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)	All
	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 b. N-1 contingency of 765/400 kV 2x1500 MVA Maheswaram (PG) ICTs results in high loading of other ICT	All except 0-2
	Low Voltage at Gazuwaka (East) Bus.	All
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)	All
NER-ER	(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)

		Applicable Revisions
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)
		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 b. N-1 contingency of 765/400 kV 2x1500 MVA Maheswaram (PG) ICTs results in high loading of other ICT
		Low Voltage at Gazuwaka (East) Bus.

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Revision No	Date of Revision	Period of Revision	Reason for Revision	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

ASSUMPTIONS 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
II	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
III	WESTERN REGION				
1	Maharashtra	18356	14979	12498	11221
2	Gujarat	13916	12128	10311	8731
3	Madhya Pradesh	9586	7408	4172	4547
4	Chattisgarh	3889	2800	2510	2090
5	Daman and Diu	325	288	0	0
6	Dadra and Nagar Haveli	698	769	0	0
7	Goa-WR	571	281	0	0
8	ISGS/IPPs	3986	3664	34817	30704
	Total WR	51326	42317	64308	57293

IV	SOUTHERN REGION				
1	Andhra Pradesh	8439	6388	5847	4612
2	Telangana	8741	7000	5877	3753
3	Karnataka	9896	8233	6319	4457
4	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
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	122	63	0	0
2	Assam	1158	1012	230	180
3	Manipur	162	87	0	0
4	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