### National Load Despatch Centre Total Transfer Capability for October 2015

Issue Date: 26/08/2015 Issue Time: 1545 hrs Revision No. 2

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 Oct 2015 to 31st Oct 2015	00-24	2500	500	2000	706	1294			
WR-NR*	1st Oct 2015 to 31st Oct 2015	00-24	6400	500	5900	5638	262	1300	Revised due to commissioning of 765kV Gwalior Ckt-1&2, 765kV Phagi-Bhiwani S/C and STOA margin revised due to operationalization of MTOA.	
		00-06	2000		1800	293	1507	1		
NR-ER*	1st Oct 2015 to	06-18'	2000	200	1800	358	1442		1	
MK-EK	31st Oct 2015	18-24	2000	200	1800	293	1507		+	
ER-NR*&	1st Oct 2015 to 31st Oct 2015	00-24	4800	300	4500	2431	2069			
	31st Oct 2013									
\$	1st Oct 2015 to	00.24				No limit i	s being specified.			
W3-ER <sup>\$</sup>	31st Oct 2015	00-24		No Re-routing is allowed via W3-ER-NR.						
ER-W3	1st Oct 2015 to 31st Oct 2015	00-24	1000	300	700	874	0			
						1				
WR-SR	1st Oct 2015 to 31st Oct 2015	00-24	2300	750	1550	1550	0			
SR-WR*	1st Oct 2015 to 31st Oct 2015	00-24				No limit i	s being Specified.			
	I	00-06				I		1		
ER-SR	1st Oct 2015 to	18-24		0	2650	2585	65			
EK-SK	31st Oct 2015	06-18'	2030	U	2030	2650	0		-	
SR-ER*	1st Oct 2015 to	00-18					s being Specified.	l		
SK-EK	31st Oct 2015	00-24				140 mmt 1	s being specified.			
S1-S2	1st Oct 2015 to 31st Oct 2015	00-24	S	1-S2 corridor	TTC/ATC is u	ploaded on NLDC	website under Intr	a-Regional	Section in Monthly ATC.	
		00.15								
ER-NER	1st Oct 2015 to	00-17 23-24	1390	45	1345	210	1135			
EK-NEK	31st Oct 2015	17-23	1135	43	1090	210	880			
		00-17								
NER-ER	1st Oct 2015 to	23-24	1415	45	1370	0	1370			
	31st Oct 2015	17-23	1250	45	1205		1205			
		00.15								
W3 zone	1st Oct 2015 to	00-17	9400	200	9200	7576	1624		STOA Margin revised due to	
Injection	31st Oct 2015	23-24 17-23	9900	200	9700	7576	2124		Operationalization of LTA.	
		17-23	9900		9700		2124			

<sup>\*</sup> 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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S1-S2 Corridor: Any revision in S1-S2 TTC/ATC from Rev-0, would be uploaded under Intra-Regional Section on NLDC website.

\$ As per Simulations, predominant direction of flow is on West to North Corridor. Hence, in case injection point is in Western Region (W1,W2,W3), STOA/PX transactions from West to North on West-East-North corridor shall not be allowed as such transaction increases congestion in the West to North Corridor. & ER-NR TTC is independent of WR-NR corridor flow

- 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
- $f)\ BALCO,\ g)\ Sterlite\ (\#1,3,4),\ h)\ NSPCL,\ i)\ Korba,\ j)\ Sipat,\ k)\ KSK\ Mahanadi,\ L)DB\ Power,\ m)\ KWPCL,\ n)Vandana\ Vidyut$

# 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.

#### **Limiting Constraints**

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
WR-NR	High Loading of 400kV Singrauli-Anpara & High loading of 765 kV Agra-Gwalior (1400 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and Loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	N-1 contingency of 400 kV Biharshariff- Lakhisarai S/C
ER-W3	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular Octaration between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
WR-SR &	1. (n-1) of 400 kV Wardha – Parli will lead to 30 degrees angular Octaration between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
ER-SR	3. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would emerge.
ER-NER	(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
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
W3 zone	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular Octaration between Wardha and Parli.
Injection	2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)

<sup>\*</sup>Primary constraints

## **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									
	1st Oct 2015 to 31st Oct 2015	00-05	9100	800	8300	8069	231	1800	Revised due to
NR*		05-08'	9600		8800		731	2300	commissioning of 765kV Gwalior Ckt-1&2, 765kV Phagi-Bhiwani S/C and STOA margin revised due to operationalization of MTOA.
NK*		08-19'	9100		8300		231	1800	
		19-24	8500		7700		0	1200	
NER	1st Oct 2015 to 31st Oct 2015	00-17 23-24	1390	45	1345	210	1135		
	31st Oct 2013	17-23	1135		1090		880		
WR									
SR	1st Oct 2015 to	00-06 18-24	4950	750	4200	4135	65		
	31st Oct 2015	06-18'	4950		4200	4200	0		

<sup>\*</sup> 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).

#### **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 Oct 2015 to 31st Oct 2015	00-06 06-18'	4500	700	3800 3800	999 1064	2801 2736			
		18-24	4500		3800	999	2801			
NER	1st Oct 2015 to 31st Oct 2015	00-17 23-24	1415	45	1370	0	1370			
		17-23	1250	45	1205		1205			
WD										
WR										
SR *	1st Oct 2015 to 31st Oct 2015	00-24		No limit is being Specified.						

<sup>\*</sup> 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**

Constraints	
	(n-1) contingency of 400 kV Biharshariff- Lakhisarai S/C
Import	High loading of 765 kV Agra-Gwalior (1400 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop
Import	flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra
	D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
Evnont	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
Export	(n-1) contingency of 400 kV Saranath-Pusauli
Import	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA
Export	ICT at Misa
	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular separation between Wardha and Parli.
	2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
Import	3. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-
	2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would
	emerge.
	Import Export Import Export

<sup>\*</sup>Primary constraints

# National Load Despatch Centre Total Transfer Capability for October 2015

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	7/20/2015	Whole Month	STOA Margin revised considering CERC order dated 03-07-2015 in petition No- 92/MP/2015 which is under implementation by CTU. Pending this any margins would be released for short term transactions on day ahead basis.	ER-SR
2	8/26/2015	Whole Month	Revised due to commissioning of 765kV Gwalior Ckt-1&2, 765kV Phagi-Bhiwani S/C and STOA margin revised due to operationalization of MTOA.	WR-NR/ Import of NR
		Wonth	STOA Margin revised due to Operationalization of LTA.	W3 Zone Injection

ASSU	MPTIONS IN BASECASE				
				Month : October '15	
S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (N	MW) Peak (MW)	Off Peak (MW)
I	NORTHERN REGION				
1	Punjab	7657	6004	4196	4242
2	Haryana	7576	6766	3317	3317
3	Rajasthan	9178	9897	6114	6110
4	Delhi	4449	2882	1156	1156
5	Uttar Pradesh	12168	10933	5913	5851
6	Uttarakhand	1573	1277	556	404
7	Himachal Pradesh	1253	978	418	435
8	Jammu & Kashmir	2244	1746	240	232
9	Chandigarh	238	147	0	0
10	ISGS/IPPs	0	0	18220	12306
	Total NR	46336	40630	40130	34053
II	EASTERN REGION				
1	Bihar	2686	1884	240	120
2	Jharkhand	995	793	552	300
3	Damodar Valley Corporation	2487	2030	3831	3261
4	Orissa	3593	2796	3378	2483
5	West Bengal	7396	6253	5086	4000
6	Sikkim	99	59	0	0
7	Bhutan	338	337	1490	1150
8	ISGS/IPPs	610	566	11062	9925
	Total ER	18204	14717	25639	21239
III	WESTERN REGION				
1	Maharashtra	20077	12639	14900	8194
	Gujarat	14392	8618	11287	5509
	Madhya Pradesh	8008	5948	4832	3049
	Chattisgarh	3838	3825	2611	2851
	Daman and Diu	310	237	0	0
6	Dadra and Nagar Haveli	784	581	0	0
	Goa-WR	521	298	0	0
8	ISGS/IPPs	1056	1055	23713	21264
	Total WR	48986	33200	57341	40867

IV	SOUTHERN REGION				
1	Andhra Pradesh	5870	5494	5192	4701
2	Telangana	7082	6346	3246	2362
	Karnataka	7654	5943	7091	5422
4	Tamil Nadu	12244	10949	6990	5376
5	Kerala	3271	2218	1782	820
6	Pondy	323	278	0	0
7	Goa-SR	86	76	0	0
8	ISGS/IPPs	0	0	9622	9622
	Total SR	36530	31304	33923	28303
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	107	44	0	0
2	Assam	969	719	265	195
3	Manipur	113	69	0	0
4	Meghalaya	295	197	214	163
5	Mizoram	76	44	4	4
6	Nagaland	95	70	16	6
7	Tripura	260	162	105	105
8	ISGS/IPPs	7	7	1313	856
	Total NER	1922	1312	1917	1329
	Total All India	151979	121164	158951	125791