## **National Load Despatch Centre Total Transfer Capability for May 2015**

Issue Date: 12/02/2015 Issue Time: 1645 hrs Revision No. 1

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 May 2015 to 31st May 2015	00-24	2500	500	2000	706	1294		Margin revised due to cancellation of LTA/MTOA	
WR-NR	1st May 2015 to 31st May 2015	00-17 23-24	4900	500	4400	4767	0			
	31st Way 2013	17-23	4900		4400		0			
		00-06	2000		1800	293	1507	Ī		
NR-ER*	1st May 2015 to	06-18'	2000	200	1800	358	1442			
1122 222	31st May 2015	18-24	2000		1800	293	1507			
		00-17								
ER-NR	1st May 2015 to	23-24	3100	300	2800	2431	369			
	31st May 2015	17-23	3200		2900		469			
W3-ER <sup>\$</sup>	1st May 2015 to	00-24	1800	300	1500	351	1149			
VV 3-ER	31st May 2015	00 24	1000	300	1300	331	1149			
ER-W3	1st May 2015 to	00-24	1000	300	700	874	0		Margin revised due to cancellation	
	31st May 2015	0021	1000	200	700	07.1	Ü		of LTA/MTOA	
WR-SR	1st May 2015 to 31st May 2015	00-24	2100	750	1350	1350	0			
CD IVD *	1st May 2015 to	00.24				NT - 11 14 1	- 1 1 C 1C 1			
SR-WR *	31st May 2015	00-24				No limit is	s being Specified.			
		00.06		I				Ī		
ED CD	1st May 2015 to	00-06	2650	0	2650	2585	65			
ER-SR	31st May 2015	18-24	2650	0	2650	2650	0			
	1 - 4 M 2015 4 -	06-18'				2650	0			
SR-ER *	1st May 2015 to	00-24				No limit is	s being Specified.			
	31st May 2015									
	1 . 37 . 2617	00-17			-110		100			
ER-NER	1st May 2015 to	23-24	650	40	610	210	400			
	31st May 2015	ST May 7015 -	015	720		680		470		
	1at May 2015 to	00-17		20						
NER-ER	1st May 2015 to 31st May 2015	23-24	545	30	515	0	515			
	31st Wlay 2013	17-23	450	40	410		410			
	1-+ M 2017 +									
S1-S2	1st May 2015 to	00-24	3115	300	2815	2520	295			
	31st May 2015									
Import of	1st May 2015 to	00-24	5700	300	5400	3790	1610			
Punjab Import TTC	31st May 2015									
Import TTC for DD &	1st May 2015 to	00-24	1200	0	1200	LTA and MTC	OA as per ex-pp			
DNH	31st May 2015	00-24	1200	0	1200	sche	edule			
		00-17								
W3 zone	1st May 2015 to	23-24	9400	200	9200	6862	2338			
Injection	31st May 2015	17-23	9900	200	9700	0802	2838			
		17-23	7700		7700		2030			

<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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\$ 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.

- 1) S1 comprises of Telangana, AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Puducherry
- 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 (1250 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	-ER (n-1) contingency of 400 kV Saranath-Pusauli						
ER-NR	(n-1) contingnecy of Kahalgaon-Banka S/C						
W3-ER	i. (n-1) Contingency of 400 kV MPL-Maithon S/C ii. (n-1) contingency of 400kV Sterlite-Rourkela S/C						
ER-W3	(n-1) contingency of 400kV Raigarh-Jharsuguda-Rourkela						
WR-SR & ER-SR	<ol> <li>(n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)</li> <li>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.</li> </ol>						
ER-NER	(n-1) contingnecy of Kahalgaon-Banka S/C						
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						
S1-S2	(n-1) contingency of one circuit of 400 kV Kolar-Hosur D/C						
Import of DD & DNH	(n-1) contingency of 400/220KV 315MVA ICT at VAPI						
Import of Punjab	(n-1) contingency of ICT at Dhuri and (n-1) contingnecy of 220kV Moga(PG)-Moga(PSTCL)						
W3 zone Injection	(n-1-1) contingency of 400 kV Raipur-Bhadrawati D/C section and High loading of 400kV Raipur-Wardha (850 MW SPS setting on each circuit of 400kV Raipur-Wardha)						
	*Primary constraints						

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									
NR	1st May 2015 to 31st May 2015	00-17 23-24 17-23	8000 8100	800	7200 7300	7198	2		
NER	1st May 2015 to 31st May 2015	00-17 23-24 17-23	650 720	40	610	210	400		
WR		17 28	720		000		170		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		00.06							
SR	1st May 2015 to 31st May 2015	00-06 18-24	4750	750	4000	3935	65		
	31st May 2015	06-18'	4750		4000	4000	0		

#### **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 May 2015 to 31st May 2015	06-18	4500	700	3800 3800	999 1064	2801 2736		Margin revised due to cancellation of LTA/MTOA	
	315t Way 2015	18-24	4500		3800	999	2801			
NER	1st May 2015 to	00-17 23-24	660	30	630	0	630			
	31st May 2015	17-23	675	40	635		635			
WD										
WR										
SR *	1st May 2015 to 31st May 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**

	,	
		(n-1) contingnecy of Kahalgaon-Banka S/C
	Import	High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high
NR	Import	loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV
INK		Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
	E	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
	Export	(n-1) contingency of 400 kV Saranath-Pusauli
NER	Import	(n-1) contingnecy of Kahalgaon-Banka S/C
NEK	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa
		1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
G <b>D</b>	<b>.</b>	2. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher
SR	Import	Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within
		ER would emerge.

<sup>\*</sup>Primary constraints

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

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	12-02-2015	Whole Month	Margin revised due to cancellation of LTA/MTOA	NR-WR/ER- W3

# **ASSUMPTIONS IN BASECASE**

Month: May '15

	1	IVIOTILIT . IVIAY 15							
		Loa	ad	Generation					
S.No.	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)				
ı	NORTHERN REGION								
1	Punjab	7577	6617	3463	3477				
2	Haryana	5856	5210	2202	2203				
3	Rajasthan	7738	7467	4717	4717				
4	Delhi	5200	4674	1323	1323				
5	Uttar Pradesh	12604	12834	6533	6524				
6	Jammu & Kashmir	2166	1404	443	441				
7	Uttarakhand	1638	1285	830	496				
8	Himachal Pradesh	1383	1127	704	624				
9	Chandigarh	292	194	0	0				
10	ISGS/IPPs			18480	15160				
	Total NR	44454	40812	38695	34965				
II	EASTERN REGION								
1	West Bengal	7550	6800	5200	3700				
2	Jharkhand	1070	900	470	380				
3	Orissa	3950	3200	3400	2500				
4	Bihar	2600	2140	180	0				
5	Damodar Valley Corporation	2675	2400	3800	3400				
6	Sikkim	85	50	-	-				
7	Bhutan			250	140				
8	ISGS/IPPs			10005	8325				
	Total ER	17930	15490	23305	18445				
					_				
III	WESTERN REGION								
1	Chattisgarh	3336	2801	1606	1313				
2	Madhya Pradesh	7271	6314	3649	3011				
3	Maharashtra	19250	17030	15092	12163				
4	Gujarat	13471	1238	10322	8765				
5	Goa	438	347						
6	Daman and Diu	288	264						
7	Dadra and Nagar Haveli	687	665						
8	ISGS/IPPs	1058	1058	22774	22774				
	Total WR	45799	29717	53443	48026				

## **ASSUMPTIONS IN BASECASE**

Month: May '15

		Loa	ad	Generation		
S.No.	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)	
IV	SOUTHERN REGION					
1	Telangana	5580	5568	2354	2173	
2	Andhra Pradesh	5593	5592	5077	4550	
3	Tamil Nadu	12051	10398	7068	6424	
4	Karnataka	8046	7046	7080	5576	
5	Kerala	3328	2336	1939	770	
6	Pondy	374	294			
7	Goa	89	89			
8	ISGS/IPPs			9180	9180	
	Total SR	35061	31323	32698	28673	
V	NORTH-EASTERN REGION					
1	Arunachal Pradesh	86	53	0	0	
2	Assam	753	640	215	200	
3	Manipur	83	53	0	0	
4	Meghalaya	296	211	140	92	
5	Mizoram	58	40	4	3	
6	Nagaland	76	63	16	8	
7	Tripura	244	164	110	110	
8	ISGS/IPPs			990	738	
	Total NER	1596	1224	1475	1151	
	Total All India	144840	118566	149616	131260	