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

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		
WR-NR	1st May 2015 to 31st May 2015	00-17 23-24 17-23	4900 4900	500	4400	4767	0		
NR-ER*	1st May 2015 to 31st May 2015	00-06 06-18' 18-24	2000 2000 2000	200	1800 1800 1800	293 358 293	1507 1442 1507		
ER-NR	1st May 2015 to 31st May 2015	00-17 23-24 17-23	3100 3200	300	2800 2900	2431	369 469		
W3-ER <sup>\$</sup>	1st May 2015 to 31st May 2015	00-24	1800	300	1500	583	917		STOA Margins revised due to grant of MTOA from Chattisgarh to KSEB by CTU.
ER-W3	1st May 2015 to 31st May 2015	00-24	1000	300	700	874	0		
	1st May 2015 to								
WR-SR	31st May 2015	00-24	2100	750	1350	1350	0		
SR-WR *	1st May 2015 to 31st May 2015	00-24		No limit is being Specified.					
ER-SR	1st May 2015 to 31st May 2015	00-06 18-24 06-18'	2650	0	2650	2585 2650	65 0		
SR-ER *	1st May 2015 to 31st May 2015	00-24				No limit is	s being Specified.		
ER-NER	1st May 2015 to 31st May 2015	00-17 23-24 17-23	650 720	40	610 680	210	400 470		
NER-ER	1st May 2015 to	00-17 23-24	545	30	515	0	515		
	31st May 2015	17-23	450	40	410		410		
	1et May 2015 to								Payisad due to commissioning of
S1-S2	1st May 2015 to 31st May 2015	00-24	2830	315	2515	2535	0	-285	Revised due to commissioning of Vallur Unit-3.
Import of Punjab	1st May 2015 to 31st May 2015	00-24	5700	300	5400	3790	1610		
Import TTC for DD & DNH	1st May 2015 to 31st May 2015	00-24	1200	0	1200	LTA and MTOA as per ex-pp schedule			
W3 zone	1st May 2015 to	00-17 23-24	9400	200	9200	7094	2106		STOA Margins revised due to grant of MTOA from Chattisgarh to
Injection * Fifter Personal	31st May 2015	17-23	9900		9700		2606		KSEB by CTU.

<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).

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

Issue Date: 02/03/2015 Issue Time: 1500 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
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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	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingnecy of Kahalgaon-Banka S/C
W3-ER	<ul><li>i. (n-1) Contingency of 400 kV MPL-Maithon S/C</li><li>ii. (n-1) contingency of 400kV Sterlite-Rourkela S/C</li></ul>
ER-W3	(n-1) contingency of 400kV Raigarh-Jharsuguda-Rourkela
WR-SR & ER-SR	1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)  2. 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) 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

<sup>\*</sup>Primary constraints

#### **Simultaneous Import Capability**

Date	Time Period (hrs)		•	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 May 2015 to 31st May 2015	00-17 23-24 17-23	8000 8100	800	7200 7300	7198	2		
1st May 2015 to 31st May 2015	00-17 23-24 17-23	650 720	40	610 680	210	400 470		
1st May 2015 to 31st May 2015	00-06	4750	750	4000	3935	65		
	1st May 2015 to 31st May 2015 1st May 2015 to 31st May 2015	1st May 2015 to 31st Ma	Date       Time Period (hrs)       Transfer Capability (TTC)         1st May 2015 to 31st May 2015 to 31st May 2015 to 31st May 2015 to 31st May 2015       00-17 23-24 8100         1st May 2015 to 31st May 2015 to 31st May 2015       00-06 18-24 4750	Date       Time Period (hrs)       Transfer Capability (TTC)       Reliability Margin         1st May 2015 to 31st May 2015 to 31st May 2015 to 31st May 2015 to 31st May 2015       00-17 23-24 8000 17-23 8100       800         1st May 2015 to 31st May 2015 to 31st May 2015 to 31st May 2015       00-06 18-24 4750 18-24       4750 750	Date         Time Period (hrs)         Transfer Capability (TTC)         Reliability Margin         Transfer Capability (ATC)           1st May 2015 to 31st Ma	Date         Time Period (hrs)         Transfer Capability (TTC)         Reliability Margin         Available Transfer Capability (ATC)         Access (LTA)/Medium Term Open Access (MTOA)           1st May 2015 to 31st May 2015         4750         750         4000         3935	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

#### **Simultaneous Export Capability**

Corridor	Date	Time Period (hrs)	Total Transfer Capability (TTC)	Reliability Margin	Available Transfer Capability (ATC)	Medium Term	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	00-06 06-18'	4500	700	3800 3800	999 1064	2801 2736			
		18-24	4500		3800	999	2801			
NER	1st May 2015 to 31st May 2015	00-17 23-24	660	30	630	0	630			
		17-23	675	40	635		635			
WR										
VV IX										
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
	Impaut	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
NK -		Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
	<b>T</b>	(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)
C.D.	<b>T</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
2	02-03-2015	Whole Month	STOA Margins revised due to grant of MTOA from Chattisgarh to KSEB by CTU. Revised due to commissioning of Vallur Unit-3	W3-ER/ W3 Zone S1-S2

# **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)				
I	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	Genera	ation
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