### National Load Despatch Centre Total Transfer Capability for June 2013

# against any corridor indicates that revision has been done for this corridor

Corridor	# against any corrido  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 June 2013 to 30th June 2013	00-24	2500	500	2000	286	1714	800	Revised due to commissioning of 765 kV Agra-Jhatikara.	
WR-NR <sup>1</sup> #	1st June 2013 to 30th June 2013	00-24	5700 <sup>∆</sup>	500	$5200^{\Delta}$	$2787^{\Delta}$	2413	2200	Revised due to commissioning of 765 kV Agra-Jhatikara.	
NR-ER	1st June 2013 to 30th June 2013	00-17 23-24 17-23	1000 1100	200	800 900	0	800 900			
ER-NR#	1st June 2013 to 30th June 2013	00-17 23-24 17-23	3000	300	2700	1913 1913	787 787	400	Revised due to increase in hydro generation pattern in Eastern Region.	
		17-23				1713	767			
W3-ER	1st June 2013 to 30th June 2013	00-24	1650	300	1350	0	1350			
ER-W3	1st June 2013 to 30th June 2013	00-24	1000	300	700	700	0			
	1st June 2013 to 15th June 2013	00-24	1000	0	1000	1000	0		Revised due to change in LTA/MTOA quantum.	
WR-SR	16th June 2013 to 30th June 2013	00-24	1000	0	1000	1000	0			
SR-WR	1st June 2013 to 30th June 2013	00-24	1000	0	1000	0	1000			
		00-05								
ER-SR	1st June 2013 to 15th June 2013	10-19	700	0	700	112	588		Revised due to change in LTA/MTOA quantum.	
		05-10 19-24	700		700		588			
	16th June 2013 to 30th June 2013	00-05 10-19	700	0	700	612	88		Revised due to change in LTA/MTOA	
		05-10 19-24	700	Ů	700	012	88		quantum.	
SR-ER	1st June 2013 to 30th June 2013	00-17 23-24	700	0	700	197	503			
	2011 0 4110 2013	17-23	700		700		503			
ER-NER#	1st June 2013 to	00-17 23-24	575	35	540	230	310	100	Revised due to increase in Hydro	
	30th June 2013	17-23	575		540	230	310		generation in ER/Bhutan.	
NER-ER	1st June 2013 to 30th June 2013	00-17 23-24	520	100	420	0	420			
NEK-EK		17-23	320	100	220	Ü	220			
	1st June 2012 +-									
S1-S2	1st June 2013 to 15th June 2013	00-24	5800	200	5600	4500	1100			
*	16th June 2013 to 30th June 2013	00-24	5800	200	5600	5200	400			
Import of Punjab	1st June 2013 to 30th June 2013	00-24	5600	300	5300	3350	1950			
Import TTC for DD & DNH	1st June 2013 to 30th June 2013	00-24	980	0	980	LTA and MTO sched				
	1st June 2013 to 15th June 2013	00-17, 23-24	9000	200	8800	6830 7630	1970		Revised due to change in power flow pattern consequent to	
W3 zone	13th Julie 2013	17-23	9500		9300		2470		upgradation of Bina-Gwalior-Agra D/C section from 400 kV to 765 kV and other new generating units addition.	
Injection	16th June 2013 to 30th June 2013	00-17, 23-24	9000 200	200	8800		1170			
	Soul Julie 2013	17-23	9500		9300		1670			

<sup>1)</sup> ER-SR TTC declared at Talcher Interconnector and Gazuwaka HVDC  $\mbox{\sc B/B}$  seam

<sup>2)</sup> S1 comprises of AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Pondicherry

<sup>3)</sup> W3 comprises of the following regional entities:

a) Chattisgarh, b) Jindal Power Limited (JPL), 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

### National Load Despatch Centre Total Transfer Capability for June 2013

A. includes 1500 MW on the dedicated Mundra-Mohindergarh HVDC bipole of M/s Adani Power Limited which is scheduled separately from the generation at stage-III of APL Mundra (3\*660 MW).

- 1. WR-NR Total Transfer capability will be reduced to 3100 MW in case of outage of any one of the following sections:
  - 765 kV Agra-Jhatikara
  - One of the 765/400 kV 1500 MVA ICT at Agra
  - 765 kV Gwalior-Agra one circuit
  - 765 kV Bina-Gwalior one circuit

#### **Limiting Constraints**

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
WR-NR	(n-1) contingency of 765/400 kV ICT at Agra
NR-ER	(n-1) contingency of 400 kV Allahabad-Pusauli
ER-NR	(n-1) contingency of 400 kV Farakka-Malda
W3-ER	(n-1) contingency of either 400 kv Mejia-Maithon or (n-1) contingency of 400 kv MPL -maithon
ER-W3	High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni* (n-1) contingency of 400kV Rourkela-Raigarh
WR-SR	Bhadrawati HVDC B/B link capacity
SR-WR	Bhadrawati HVDC B/B link capacity
ER-SR	(n-1) contingency of 400 kV Rourkela-Talcher
SR-ER	
ER-NER	(n-1) contingency of 400 kV Farakka-Malda* High Loading of 220 kV BTPS-Agia (n-1) contingency of 400 kV Balipara – Bongaigaon
NER-ER	(n-1) contingency of 400 kV Balipara-Bongaigaon-I (n-1) contingency of 220 kV Samaguri – Saruajai I*
S1-S2	(n-1) contingency of 400 kV Hosur-Salem D/C line, 400kV Hosur-Salem & 400kV Somanahalli-Salem SC line.
Import of Punjab	(n-1) contingency of ICT at Patiala/Moga
W3 zone Injection	(n-1-1) contingency of 400 kV Raipur-Bhadrawati D/C section

<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									
NR¹#	1st June 2013 to 30th June 2013	00-17 23-24	$8700^{\Delta}$	800	$7900^{\Delta}$	$4700^{\Delta}$	3200	- 2600	Revised due to commissioning of 765 kV Agra-Jhatikara.
NK#		17-23	8700		$7900^{\Delta}$		3200		
NER#	1st June 2013 to 30th June 2013	00-17 23-24	575	35	540	230	310	100	Revised due to increase in Hydro generation in
		17-23	575		540	230	310		ER/Bhutan.
WR									
	1st June 2013 to 15th June 2013	00-05 10-19	1700	0	1700	1112	588		Revised due to change in LTA/MTOA quantum.
SR		05-10 19-24	1700		1700		588		
	16th June 2013 to 30th June 2013	00-05 10-19	1700	0	1700	1612	88		Revised due to change in LTA/MTOA quantum.
		05-10 19-24	1700		1700		88		

Δ. includes 1500 MW on the dedicated Mundra-Mohindergarh HVDC bipole of M/s Adani Power Limited which is scheduled separately from the generation at stage-III of APL Mundra (3\*660 MW).

1. WR-NR Total Transfer capability will be reduced to 3100 MW in case of outage of any one of the following sections:

- 765 kV Agra-Jhatikara
- One of the 765/400 kV 1500 MVA ICT at Agra
- 765 kV Gwalior-Agra one circuit
- 765 kV Bina-Gwalior one circuit

#### **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 June 2013 to 30th June 2013	00-17 23-24	3500	700	2800	286	2514	800	Revised due to commissioning of 765 kV Agra-Jhatikara.
		17-23	3600		2900		2614		
NER	1st June 2013 to 30th June 2013	00-17 23-24	520	100	420	0	420		
		17-23	320		220		220		
WR									
WK									
SR	1st May 2013 to 31st May 2013	00-17 23-24	1700	0	1700	197	1503		
		17-23	1700		1700		1503		

## **Limiting Constraints**

NR	Import	(n-1) contingency of 400 kV Farakka-Malda*
		(n-1) contingency of 765/400 kV ICT at Agra*
	Export	(n-1) contingency of 400 kV Allahabad-Pusauli
	Import	High Loading of 220 kV BTPS-Agia
		(n-1) contingency of 400 kV Balipara – Bongaigaon-I
NER		(n-1) contingency of 400 kV Farakka-Malda*
	Export	(n-1) contingency of 220 kV Samaguri – Saruajai I*
		(n-1) contingency of 400 kV Balipara-Bongaigaon-I
	Import	(n-1) contingency of 400 kV Rourkela-Talcher*
SR		Bhadrawati HVDC B/B link capacity.
	Export	Bhadrawati HVDC B/B link capacity.

<sup>\*</sup>Primary constraints

# **ASSUMPTIONS IN BASECASE**

		Lo	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	5637	5311	2111	2126		
2	Haryana	5363	5014	3289	3289		
3	Rajasthan	6574	5912	3466	3472		
4	Delhi	4605	3932	1416	1416		
5	Uttar Pradesh	10824	10831	6163	5976		
6	Jammu & Kashmir	1825	1671	604	592		
7	Uttarakhand	1476	1081	757	673		
8	Himachal Pradesh	1043	943	590	493		
9	Chandigarh	227	192	0	0		
10	ISGS			16916	14627		
	Total NR	37574	34888	35312	32663		
II	EASTERN REGION						
1	West Bengal	6658	5280	4836	3678		
2	Jharkhand	1035	715	483	541		
3	Orissa	3597	2530	2451	1611		
4	Bihar	1743	1430	101	101		
5	Damodar Valley Corporation	2461	2310	2954	2954		
6	Sikkim	45	45	0	0		
7	Bhutan	112	112	275	260		
8	ISGS			7384	5854		
	Total ER	15651	12422	18484	14999		
	WESTERN REGION						
1	WESTERN REGION Chattisgarh	0077	0.100	0=10			
2	Madhya Pradesh	2977	2132	2518	1985		
3	Maharashtra	7112	4894	3601	2802		
4	Gujarat	15798	12916	13113	9454		
5	Goa	10470	8369	10918	7764		
6	Daman and Diu	327	198				
7	Dadra and Nagar Haveli	260 612	181 479				
8	ISGS	012	4/9	13063	11996		
	Total WR	37556	29169	43213	34001		
	Total VIII	37330	25105	40210	04001		
IV	SOUTHERN REGION						
1	Andhra Pradesh	10283	9413	7290	6560		
2	Tamil Nadu	10813	9100	6050	5408		
3	Karnataka	8503	7453	4779	4233		
4	Kerala	3254	2414	2007	794		
5	Pondy	313	241	2001			
6	Goa	84	84				
7	ISGS	j.		10846	10049		
	Total SR	33250	28705	30972	27044		
٧	NORTH-EASTERN REGION						
1	Manipur	110	203	0	C		
2	Meghalaya	290	53	95	80		
3	Mizoram	75	84	4	C		
4	Nagaland	120	168	8	6		
5	Assam	1320	880	190	180		
6	Tripura	240	1537	85	85		
7	Arunachal Pradesh	110	924	0	(		
8	ISGS	0	0	1013	577		
	Total NER	2265	3848	1395	928		
	Total All India	126297	109032	129376	109635		