## 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		Revised due to commissioning of 765 kV Agra-Jhatikara.
	1st June 2013 to 9th June 2013	00-24	5700 <sup>∆</sup>	500	$5200^{\Delta}$	$2787^{\Delta}$	2413		Revised due to commissioning of 765 kV Agra-Jhatikara.
	10th June 2013	00-08'	5700 <sup>∆</sup>	500	$5200^{\Delta}$	$2787^{\Delta}$	2413		Revised due to deferrment of 765
	Tour same 2013	08-24'	5700 <sup>∆</sup>	500	$5200^{\Delta}$	$2787^{\Delta}$	2413		kV Agra-Jhatikara Shutdown.
WR-NR <sup>1</sup>	114 1 2012	00-07'	5700 <sup>∆</sup>	500	$5200^{\Delta}$	$2787^{\Delta}$	2413		
**************************************	11th June 2013	07-24'	3100 <sup>Δ</sup>	300	$2800^{\Delta}$	$2787^{\Delta}$	13		Revised due to Shutdown of 765 kV
	12th June 2013	00-24	3100 <sup>Δ</sup>	300	$2800^{\Delta}$	$2787^{\Delta}$	13		Agra-Jhatikara.
	13th June 2013 to 30th June 2013	00-24	5700 <sup>∆</sup>	500	5200 <sup>Δ</sup>	$2787^{\Delta}$	2413		Revised due to commissioning of 765 kV Agra-Jhatikara.
		00-17							
NR-ER	1st June 2013 to 30th June 2013	23-24	1000	200	800	0	800		
	30m June 2013	17-23	1100		900		900		
	1st June 2013	00-09	3600	300	3300	1913	1387		Revised due to shutdown of 400 kV
	1st June 2015	09-18' 18-24	3000 3600	300 300	2700 3300	1913 1913	787 1387		Kahalgaon-Biharshariff 1
	2nd June 2013	00-24	3600	300	3300	1913	1387		
		00-09	3600	300	3300	1913	1387		Revised due to shutdown of 400 kV
	3rd June 2013	09-18'	3000	300	2700	1913	787		Kahalgaon-Biharshariff 2
		18-24	3600	300	3300	1913	1387		
ER-NR	4th June 2013	00-09 18-24	3600	300	3300	1913	1387		Revised due to shutdown of 400 kV
	4th June 2015	09-18'	3000	300	2700	1913	787		Kahalgaon-Biharshariff ckt-1.
	5th June 2013	00-09 18-24	3600	300	3300	1913	1387		Revised due to shutdown of 400 kV Kahalgaon-Biharshariff ckt-1.
		09-18'	3000	300	2700	1913	787		Kanaigaon-binaishann CKC-1.
	6th June 2013 to 30th June 2013	00-17 23-24	3600	300	3300	1913	1387		
		17-23				1913	1387		
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		
WD CD	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		
	1st June 2013 to	00-05 10-19	1000	0	1000	112	888	l l	Revised considering present loading of
	12th June 2013	05-10 19-24	1000	U	1000	112	888		400KV Rourkela-Talcher D/C
	13th June 2013	00-08 19-24	1000	0	1000	112	888		Revised due to Emergency shutdown of Talcher-Kolar HVDC Pole-2.
		08-19' 00-07	700		700	700	0		
ER-SR#	14th June 2013 to	18-24	1000	0	1000	112	888		Revised due to shutdown of 400 kV
	15th June 2013	07-18'	600		600	112	488	400	Rourkela-Talcher ckt-1/2
	16th June 2013 to	00-07	1000		1000	212	388		Revised due to shutdown of 400 kV
	19th June 2013	18-24 07-18'	600	0	600	612	0	400	Rourkela-Talcher ckt-1/2
	20th June 2013 to	00-05 10-19	1000		1000		388	400	
	30th June 2013 to	05-10 19-24	1000	0	1000	612	388		

#### 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 cornuc	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	
SR-ER	1st June 2013 to 30th June 2013	00-17 23-24	700	0	700	197	503			
		17-23	700		700		503			
	1st June 2013 to 8th June 2013	00-07 18-24	575	35	540	230	310		Revised due to shutdown of 400 kV Binaguri-Bongoigaon ckt 2	
	0.1.7	07-18'	400		365	230	135		<i>c c c</i>	
	9th June 2013 to 11th June 2013	00-24	575	35	540	230	310			
	12th June 2013 to 13th June 2013	00-08 18-24	575	35	540	230	310		Revised due to shutdown of 400 kV Binaguri-Bongoigaon ckt 2	
ER-NER#		08-18'	400		365	230	135			
	14th June 2013 to 15th June 2013	00-24	575	35	540	230	310	175	Revised due to cancellation of 400 kV Binaguri-Bongaigaon ckt-2 shutdown.	
	16th June 2013	00-08 18-24	575	35	540	230	310		Revised due to shutdown of 400	
		08-18'	400		365	230	135		kV Binaguri-Bongoigaon ckt 2	
	17th June 2013 to 30th June 2013	00-24	575	35	540	230	310			
MED ED	1st June 2013 to	00-17	520	100	420	0	420			
NER-ER	30th June 2013	23-24 17-23	320	100	220	0	220			
		17-23	320		220		220			
G4 G4	1st June 2013 to 15th June 2013	00-24	5400	200	5200	3800	1400		Revised due to Non-commissioning Kudamkulam unit-1 and change in LTA quantum as Talcher unit-4 has	
S1-S2	16th June 2013 to 30th June 2013	00-24	5400	200	5200	4500	700		gone under annual maintenance from 00:00 Hrs of 27.05.2013 to 30.06.2013.	
Import of Punjab #	1st June 2013 to 30th June 2013	00-24	5600	300	5300	3475	1825		LTA/MTOA quantum revised due to change in Allocation.	
Import TTC for DD & DNH	1st June 2013 to 30th June 2013	00-24	980	0	980	LTA and MTO scheo				
		00-08	9000		8800		1970			
	1st June 2013	08-17' 23-24	8000	200	7800	6830	970		Revised due to shutdown of 400 kV	
		17-23	8500		8300		1470		Raipur-Wardha D/C from 01st June	
		00-17	8000		7800		970		2013 to 2nd June 2013	
W3 zone Injection	2nd June 2013	17-19	8500	200	8300	6830	1470			
	2.1d 3dile 2013	19-23	9500	200	9300	0050	2470			
	2.17 2012	23-24	9000		8800		1970			
	3rd June 2013 to 15th June 2013	00-17, 23-24	9000	200	8800	6830	1970			
		17-23	9500		9300		2470			
	16th June 2013 to 30th June 2013	00-17, 23-24	9000	200	8800	7630	1170			
	Jour June 2013	17-23	9500		9300		1670			

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

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).

<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

g) In cases where TTC is revised on account of any transmission element shutdown, the revised TTC shall be effective till the time the transmission element under shutdown is restored back.

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

Issue Date: 13/06/2013 Revision No. 12 Issue Time: 1230 hrs

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

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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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	Outage in 400 kV Purnea-Muzaffarpur Section
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*
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

#### **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									
		00-09	9300 <sup>∆</sup>	800	$8500^{\Delta}$	4300	4200		
	1st June 2013	09-18'	8700 <sup>∆</sup>	800	7900 <sup>∆</sup>	4300	3600		Revised due to shutdown of 400 kV Kahalgaon-Biharshariff 1
		18-24	9300 <sup>∆</sup>	800	8500 <sup>∆</sup>	4300	4200		
	2nd June 2013	00-24	$9300^{\Delta}$	800	$8500^{\Delta}$	4300	4200		
		00-09	$9300^{\Delta}$	800	$8500^{\Delta}$	4300	4200		Revised due to shutdown of 400 kV
	3rd June 2013	09-18'	$8700^{\Delta}$	800	$7900^{\Delta}$	4300	3600		Kahalgaon-Biharshariff 2
		18-24	9300 <sup>∆</sup>	800	$8500^{\Delta}$	4300	4200		Ü
	4th June 2013	00-09 18-24	$9300^{\Delta}$	800	$8500^{\Delta}$	4300	4200		Revised due to shutdown of 400 kV
NR <sup>1</sup>		09-18'	8700 <sup>∆</sup>	800	$7900^{\Delta}$	4300	3600		Kahalgaon-Biharshariff 1
	5th June 2013	00-09 18-24	$9300^{\Delta}$	800	$8500^{\Delta}$	4300	4200		Revised due to shutdown of 400 kV Kahalgaon-Biharshariff 1
		09-18'	$8700^{\Delta}$	800	7900 <sup>∆</sup>	4300	3600		Kanaigaon-binaishaini 1
	6th June 2013 to 09th June 2013	00-24	9300 <sup>∆</sup>	800	$8500^{\Delta}$	$4300^{\Delta}$	4200		
	10th June 2013	00-08'	$9300^{\Delta}$	800	$8500^{\Delta}$	4300 <sup>Δ</sup>	4200		Revised due to deferrment of 765 kV
		08-24'	$9300^{\Delta}$	800	$8500^{\Delta}$	4300	4200		Agra-Jhatikara Shutdown.
	11d. I 2012	00-07'	$9300^{\Delta}$	800	$8500^{\Delta}$	$4300^{\Delta}$	4200		Device of due to Chartelesson of 7CF IN
	11th June 2013	07-24'	$6700^{\Delta}$	600	$6100^{\Delta}$	4300	1400		Revised due to Shutdown of 765 kV Agra-Jhatikara.
	12th June 2013	00-24	$6700^{\Delta}$	600	$6100^{\Delta}$	$4300^{\Delta}$	1400		7 9.4 3.144.144.14
	13th June 2013 to 30th June 2013	00-24	$9300^{\Delta}$	800	$8500^{\Delta}$	$4300^{\Delta}$	4200		
	1st June 2013 to	00-07 18-24	575	35	540	230	310		Revised due to shutdown of 400
	08th June 2013	07-18'	400		365	230	135		kV Binaguri-Bongoigaon ckt 2
	9th June 2013 to 11th June 2013	00-24	575	35	540	230	310		
	12th June 2013 to 13th June 2013	00-08 18-24	575	35	540	230	310		Revised due to shutdown of 400 kV Binaguri-Bongoigaon ckt 2
NER#	15 June 2015	08-18'	400		365	230	135		
_ ,,	14th June 2013 to 15th June 2013	00-24	575	35	540	230	310	175	Revised due to cancellation of 400 kV Binaguri-Bongaigaon ckt-2 shutdown.
	16th June 2013	00-08 18-24	575	35	540	230	310		Revised due to shutdown of 400 kV Binaguri-Bongoigaon ckt 2.
	17th June 2012 :-	08-18'	400		365	230	135		3. 8
	17th June 2013 to 30th June 2013	00-24	575	35	540	230	310		
WR									

#### **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
	1st June 2013 to	00-05 10-19	2000	0	2000	1112	888		Revised due to Non-commissioning Kudamkulam unit-1 and change in LTA
	15th June 2013	05-10 19-24	2000	U	2000	1112	888		quantum.
	13th June 2013	00-08 19-24	2000	0	2000	1112	888		Revised due to Emergency shutdown of Talcher-Kolar HVDC Pole-2.
		08-19'	1700		1700	1700	0		of falctier-kolai HVDC Fole-2.
SR#	14th June 2013 to 15th June 2013	00-07 18-24	2000	0	2000	1112	888		Revised due to shutdown of 400 kV Rourkela-Talcher ckt-1/2
	13th Julie 2013	07-18'	1600		1600		488	400	Rourkeia-Taicher Ckt-1/2
	16th June 2013 to 30th June 2013	00-07 18-24	2000	0	2000	1612	388		Revised due to shutdown of 400 kV Rourkela-Talcher ckt-1/2
1	30th Julie 2013	07-18'	1600		1600		0	400	Nourkela-Talcher CKC-1/2
	16th June 2013 to	00-05 10-19	2000	0	2000	1612	388		
	30th June 2013	05-10 19-24	2000	0	2000	1012	388		

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		
	30th Julie 2013	17-23	3600		2900		2614		
NER	1st June 2013 to 30th June 2013	00-17 23-24	520	100	420	0	420		
	30th Julie 2013	17-23	320		220		220		
WR									
** 1									
ISR	1st May 2013 to	00-17 23-24	1700	0	1700	197	1503		
	31st May 2013	17-23	1700		1700		1503		

# **Limiting Constraints**

	Τ 4	(4) (4001) (4001) (4001)
	Import	(n-1) contingency of 400 kV Farakka-Malda*
NR		(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	419	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		