National Load Despatch Centre Total Transfer Capability for May 2013

Issue Date: 14/05/2013

Issue Time: 1230 hrs

Revision No. 10

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

	# against any corrido	i muicate	s that levision	i nas been uoi	le for this com				
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 May 2013 to 8th May 2013	00-24	1500	200	1300	286	1014		
NR-WR	9th May 2013 to 31st May 2013	00-24	2500	500	2000	286	1714		 Revised due to upgradation of 400 kV Bina-Gwalior-Agra D/C to 765 kV. Revised due to commissioning of 765 kV Agra-Jhatikara.
	1st May 2013 to 8th May 2013	00-24	2000*	200	1800	1287	513		LTA revised due to commissioning of CGPL Unit-50.
WR-NR ¹	9th May 2013 to 12th May 2013	00-24	5700 ^Δ	500	5200^{Δ}	2787 ^Δ	2413		 Revised due to upgradation of 400 kV Bina-Gwalior-Agra D/C to 765 kV. Revised due to commissioning of 765 kV Agra-Jhatikara.
	13th May 2013 to	00-07 20-24	5700 ^Δ	500	5200^{Δ}	2787^{Δ}	2413		Revised due to shutdown of 400 kV
	16th May 2013	07-20'	5450 ^Δ	200	4950^{Δ}	2767	2163		Zerda-Bhinmal.
	17th May 2013 to 31st May 2013	00-24	5700 ^Δ	500	5200^{Δ}	2787^{Δ}	2413		
		00-17							
NR-ER	1st May 2013 to 31st May 2013	23-24 17-23	1000 1100	200	800 900	0	800 900		
		00-17	1100	300	900				
	1st May 2013 to 8th May 2013	23-24 17-23	2600		2300	1913 1913	387 387		
ER-NR#	9th May 2013 to	00-17	2000	200) 2700	1913	787		Revised due to increase in hydro
	14th May 2013	23-24 17-23		300		1913	787		generation pattern in Eastern Region
	15th May 2013 to 31st May 2013	00-24	2600	300	2300	1913	387	400	Revised due to tower collapse of 400 kV Maithon-Koderma D/C line.
						- -			
	1st May 2013	00-24	1650	300	1350	0	1350		Revised due to network configuration changes in Eastern Region and other new generating units addition leading to change in power flow pattern.
	2nd May 2013	00-08	1650	300	1350	0	1350		
	3rd May 2013 to	08-24'	1450	300	1150		1150		Revised due to shutdown of 400 kV
	7th May 2013	00-24	1450	300	1150	0	1150		Sterlite-Raigarh (LILO 1) and 400
	8th May 2013	00-18	1450	300	1150	0	1150		- kV Raigarh-Rourkela 1
W3-ER	9th May 2013 to	18-24	1650	300	1350	6	1350		Revised due to load generation
	12th May 2013	00-24	1900	300	1600	0	1600		balance review.
	13th May 2013	19-24	1900	300	1600	0	1600		
	14th May 2013 to 16th May 2013	07-19' 00-24'	1650 1650	300	1350 1350	0	1350 1350		Revised due to shutdown of 400 kV Rourkela-Jharsuguda-Raigarh.
		00-07	1900	300	1600	0	1600		Koukola-sharsuguda-Kaigani.
	17th May 2013	19-24 07-19'	1650	500	1350	0	1350		
	18th May 2013 to 31st May 2013	00-24	1900	300	1600	0	1600		

National Load Despatch Centre Total Transfer Capability for May 2013

Issue Date: 14/05/2013

Issue Time: 1230 hrs

Revision No. 10

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

Corridor Date Time (hrs) Total Transfer (hrs) Total Transfer (hrs) Total Transfer (hrs) Reliability Reliability (TC) Available Transfer (ATC) Margin Access (LTA)/ (ATC) Margin Available for (MTOA) Changes in TC (w.i.t.) Changes in TC (w.i.t.) 1st May 2013 00-24 1000 300 700 700 0 Narrigin (ATC) Narrigin (MTOA) Narigin (MTOA)	n of 400 kV 1) and 400 n of 400 kV aigarh. MTOA
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1) and 400 m of 400 kV aigarh.
ER-W3 2nd May 2013 to 7th May 2013 to 7th May 2013 to 13rd May 2013 to 13th May 2013 to 31st May 2013 to 31st May 2013 to 31st May 2013 to 31st May 2013 to 13th May 2013 to 31st May 2013 to 31st May 2013 to 31st May 2013 to 31st May 2013 to 20-24 00-24 1000 300 700 700 0 Revised due to shutdown Revised due to change in May 2013 to 31st May 2013 to 31st May 2013 to 31st May 2013 to 2nd May 2013 00-24 1000 0 1000 0 1000 0 Revised due to change in May 2013 to 31st May 2013 to 2nd May 2013 00-24 1000 0 1000 0 1000 0 Revised due to change in May 2013 to 31st May 2013 to 2nd May 2013 00-24 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 1000 0 1000 1000 0 1000 1000 1000 1000 1000 <	1) and 400 m of 400 kV aigarh.
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	1) and 400 m of 400 kV aigarh.
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	1) and 400 m of 400 kV aigarh.
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	aigarh. MTOA
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	aigarh. MTOA
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	aigarh. MTOA
$ \frac{16 \text{th May 2013}}{16 \text{th May 2013}} = \frac{1000}{19.24} = \frac{300}{19.24} = \frac{300}{1000} = \frac{300}{500} = \frac{500}{500} = \frac{100}{1000} = \frac{1000}{19.24} = \frac{1000}{19.24} = \frac{300}{1000} = \frac{700}{500} = \frac{700}{1000} = $	aigarh. MTOA
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	МТОА
WR-SR 1st May 2013 to 31st May 2013 00-24 1000 300 700 700 0 WR-SR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 1000 0 Revised due to change in N Quantum. SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 Revised due to change in N Quantum. Ist May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 Revised due to change in N Quantum. Ist May 2013 to 2nd May 2013 00-24 1000 0 1000 0 1000 0 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 1000 112 888 Review of TTC due to change in the interval of th	
18th May 2013 to 31st May 2013 00-24 1000 300 700 700 0 0 1000 1000 WR-SR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 1000 0 Revised due to change in M Quantum. SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 0 Revised due to change in M Quantum. 0 SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 1000 0 Revised due to change in M Quantum. 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 0 1000 <td< td=""><td></td></td<>	
WR-SR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 1000 0 Revised due to change in N Quantum. SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 Revised due to change in N Quantum. SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 1000	
WR-SR 31st May 2013 00-24 1000 0 1000 1000 0 Quantum. SR-WR 1st May 2013 to 31st May 2013 00-24 1000 0 1000 0 1000 0 1000 0 Quantum. SR-WR 1st May 2013 to 2nd May 2013 00-24 1000 0 1000 0 1000 0 1000	
SK-WK 31st May 2013 00-24 1000 0 1000 0 10000 10000 1000	unga in Load
1st May 2013 to 2nd May 2013 10-19 1000 1000 888 Review of 11C due to char Generation scenario and all LTA Quantum. 1st May 2013 05-10 0 1000 112 888 Review of 11C due to char Generation scenario and all LTA Quantum.	unge in Lood
1st May 2013 to 2nd May 2013 10-19 1000 1000 888 Review of 11C due to char Generation scenario and all LTA Quantum. 1st May 2013 05-10 0 1000 112 888 Review of 11C due to char Generation scenario and all LTA Quantum.	ange in Load
2nd May 2013 05-10 19-24 0 112 Generation scenario and an LTA Quantum.	
19-24 1000 1000 1000	Iso change in
00-05 1000 1000 888	
ER-SR 3rd May 2013 to 8th May 2013 10-19 1000 0 112 000	
811 May 2013 05-10 19-24 1000^ 1000^ 888^	
00-05	
9th May 2013 to 10-19 1200** 1200** 1120** 1088** Revised due to change in L	Load
31st May 2013 05-10 19-24 1200** 112 1088** Generation scenario	
1st May 2013 to 00-17 700 0 700 107 503	
SR-ER 31st May 2013 23-24 0 197	
S1st May 2013 17-23 700 700 503	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	n load
May 2013 23-24 35 generation Balance. 17-23 475 440 230 210	
5th May 2013 to 8th 00-17 525 25 490 230 260 Revised due to increase	in hydro
May 2013 23-24 35 generation in ER/Bhutan	-
ER-NER# 00.17	
9th May 2013 to $23-24$ 575 35 540 230 310 Revised due to increase generation in ER/Bhuta	
14th May 2013 17-23 575 540 230 310 generation in ER/Brittan	
15th May 2013 to 31st May 2013 00-24 525 35 490 230 260 400 Revised due to tower col 400 kV Maithon-Kodern	
NER-ER 31st May 2013 to 23-24 520 100 420 0 420	
S1st May 2013 17-23 320 220 220	
S1-S2 1st May 2013 to 31st May 2013 00-24 5400 200 5200 4000 1200 Revised due to Non-com Kudamkulam unit-1.	nmissioning
Ist May 2013 to 4th 00-24 5400 300 5100 3243 1857	
import of May 2013	
Punjab 5th May 2013 to 31st May 2013 00-24 5600 300 5300 3350 1950	

National Load Despatch Centre Total Transfer Capability for May 2013

Issue Date: 14/05/2013

Issue Time: 1230 hrs

Revision No. 10

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
Import TTC for DD & DNH	1st May 2013 to 31st May 2013	00-24	980	0	980	LTA and MTO. scheo			
	1st May 2013 to 31st May 2013	00-17, 23-24	9000	- 200	8800	6870	1930		Revised due to change in power flow pattern consequent to upgradation of Bina-Gwalior-Agra
W3 zone		17-23	9500		9300		2430		D/C section from 400 kV to 765 kV and other new generating units addition.
Injection	4th May 2013	00-10	9000		8800		1930		Revised due to emergency shutdown
-		10-16'	8550	200	8350	6870	1480		of 400 kV Raipur-Wardha ck2 on
		16-17 17-23	9000 9500		8800 9300		1930 2430		4th May 2013
	5th May 2013 to 31st May 2013	00-17, 23-24	9000	200	8800	6870	1930		
	515t Way 2015	17-23	9500		9300		2430		

1) ER-SR TTC declared at Talcher Interconnector and Gazuwaka HVDC B/B seam

2) S1 comprises of AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Pondicherry

3) 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

^ additional 200 MW can be transferred to SR if injection point is South odisha.

* Would be reviewed after completion of augmentation works at 765 kV Agra

** additional 300 MW can be transferred to SR if injection point is South odisha.

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

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 400 kV Sterlite-Rourkela
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 -I
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
	*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 May 2013 to 8th May 2013	00-17 23-24 17-23	4600*	500	4100 4100	3200	900 900		LTA revised due to commisioning of CGPL Unit- 50	
	9th May 2013 to	00-17 23-24			7900 [∆]		3200		 Revised due to upgradation of 400 kV Bina-Gwalior- Agra D/C to 765 kV. Revised due to 	
NR ¹ #	12th May 2013	17-23	8700 ^Δ	800	7900 ^Δ	4700^{Δ}	3200		commissioning of 765 kV Agra-Jhatikara. 3.Increase in hydro generation pattern in ER.	
	13th May 2013 to 14th May 2013	00-07 20-24	8700 ^Δ	800	7900 [∆]	4700^{Δ}	3200		Revised due to shutdown of 400 kV Zerda-Bhinmal.	
	15th May 2013 to 16th May 2013	07-20' 00-07 20-24	$\frac{8450^{\Delta}}{8300^{\Delta}}$	800	7650^{Δ} 7500^{Δ}	4700^{Δ}	2950 2800	400	1. Revised due to shutdown of 400 kV Zerda-Bhinmal.	
		07-20'	8050^{Δ}		7250^{Δ}		2550	400	2. Revised due to tower collapse of 400 kV Maithon- Koderma D/C line.	
	17th May 2013 to 31st May 2013	00-24	8300 [∆]	800	7500^{Δ}	4300^{Δ}	2800	400	Revised due to tower collapse of 400 kV Maithon-Koderma D/C	
	1st May 2013 to 4th May 2013	00-17 23-24	475	35	440	230	210		Revised due to change in load generation Balance.	
	5th May 2013 to 8th May 2013	17-23 00-17 23-24	475 525	35	440 490	230 230	210 260		Revised due to increase in hydro generation.	
NER#	8th May 2013	17-23	525		490	230	260	260		
	9th May 2013 to 14th May 2013	00-17 23-24 17-23	575 575	35	540 540	230 230	310 310		Revised due to increase in hydro generation pattern.	
	15th May 2013 to 31st May 2013	00-24	525	35	490	230	260		Revised due to tower collapse of 400 kV Maithon-Koderma D/C line.	
WR										
	1st May 2013 to	00-05 10-19	2000	0	2000	1112	888		Review of TTC due to change in Load Generation scenario and	
	2nd May 2013	05-10 19-24	2000	0	2000	1112	888		also change in LTA quantum.	
SR	3rd May 2013 to 8th May 2013	00-05 10-19 05-10	2000	0	2000	1112	888			
	500 Way 2013	03-10 19-24 00-05	2000^		2000^		888^			
	9th May 2013 to 31st May 2013	10-19 05-10 19-24	2200** 2200**	0	2200** 2200**	1112	1088**		Revised due to change in Load Generation scenario	

* Would be reviewed after completion of augmentation works at 765 kV Agra ^ additional 200 MW can be transferred to SR if injection point is South odisha. ** additional 300 MW can be transferred to SR if injection point is South odisha.

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
	1st May 2013 to	00-17 23-24	2500	200	2300	286	2014		
	8th May 2013	17-23	2600		2400		2114		
NR	9th May 2013 to 31st May 2013	00-17 23-24	3500	200	3300	286	3014		1. Revised due to upgradation of 400 kV Bina-Gwalior-Agra D/C to 765 kV. 2. Revised due to commissioning
		17-23	3600		3400		3114		of 765 kV Agra-Jhatikara.
NER	1st May 2013 to 31st May 2013	00-17 23-24	520	100	420	0	420		
	51st May 2015	17-23	320		220		220		
WR									
SR	1st May 2013 to 31st May 2013	00-17 23-24	1700	0	1700	197	1503		
	515t Way 2015	17-23	1700		1700		1503		

Limiting Constraints

	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 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
		(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 1*
		(n-1) contingency of 400 kV Balipara-Bongaigaon-I
	Import	Bhadrawati HVDC back to back capacity
SR		(n-1) contingency of 400 kV Rourkela-Talcher*
	Export	

ASSUMPTIONS IN BASECASE

S.No.	Name of State/Area			Generation		
	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)	
I	NORTHERN REGION					
1	Punjab	5637	5311	2111	212	
2	Haryana	5363	5014	3289	328	
3	Rajasthan	6574	5912	3466	3472	
4	Delhi	4605	3932	1416	141	
5	Uttar Pradesh	10824	10831	6163	5976	
6	Jammu & Kashmir	1825	1671	604	593	
7	Uttarakhand	1476	1081	757	673	
8	Himachal Pradesh	1043	943	590	49:	
9	Chandigarh	227	192	0		
10	ISGS			16916	1462	
	Total NR	37574	34888	35312	3266	
Ш	EASTERN REGION					
1	West Bengal	6658	5280	4836	367	
2	Jharkhand	1035	715	483	54	
3	Orissa	3597	2530	2451	161	
4	Bihar	1743	1430	101	10	
5	Damodar Valley Corporation	2461	2310	2954	2954	
6	Sikkim	45	45	0		
7	Bhutan	112	112	275	26	
8	ISGS			7384	5854	
	Total ER	15651	12422	18484	1499	
1	WESTERN REGION					
	Chattisgarh	2977	2132	2518	198	
2	Madhya Pradesh Maharashtra	7112	4894	3601	2802	
4	Gujarat	15798	12916	13113	9454	
		10470	8369	10918	7764	
5	Goa Daman and Diu	327	198			
6		260	181			
7	Dadra and Nagar Haveli	612	479	10000	1100	
8	ISGS			13063	1199	
	Total WR	37556	29169	43213	3400	
IV	SOUTHERN REGION					
1	Andhra Pradesh	10292	0/12	7290	656	
		10283	9413		656	
2	Tamil Nadu	10813	9100	6050	540	
3	Karnataka	8503	7453	4779	423	
4	Kerala	3254	2414	2007	79	
5	Pondy	313	241			
6	Goa	84	84	100.10		
7	ISGS	00050	00705	10846	1004	
	Total SR	33250	28705	30972	2704	
v	NORTH-EASTERN REGION					
1	Manipur	110	203	0		
2	Meghalaya	290	53	95	8	
3	Mizoram	75	84	4		
4	Nagaland	120	168	8		
5	Assam	1320	880	190	18	
	Tripura	240	1537	85	8	
6		110	924	0		
6 7	Arunachal Pradesh	110	324	0		
	Arunachal Pradesh ISGS			1013		
7		0 2265	0 3848		57 92	