Issue Date: 20/05/2013

Issue Time: 1230 hrs

Revision No. 12

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

1	# against any corrido	r indicate	s that revision	n has been don	ie for this corri				
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 commisioning of CGPL Unit-50.
WR-NR ¹	9th May 2013 to 12th May 2013	00-24	5700 [∆]	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 [∆]	500	5200^{Δ}	2787^{Δ}	2413		Revised due to shutdown of 400 kV
	16th May 2013	07-20'	5450 ^Δ		4950^{Δ}	2707	2163		Zerda-Bhinmal.
	17th May 2013 to 31st May 2013	00-24	5700 [∆]	500	5200^{Δ}	2787^{Δ}	2413		
NR-ER	1st May 2013 to 31st May 2013	00-17 23-24 17-23	1000 1100	200	800	0	800 900		
	1st May 2013 to 8th May 2013	00-17 23-24 17-23	2600	300	2300	1913 1913	387		
ER-NR	9th May 2013 to 14th May 2013	00-17 23-24 17-23	3000	300	2700	1913 1913 1913	787		Revised due to increase in hydro generation pattern in Eastern Region
	15th May 2013 to 31st May 2013	00-24	2600	300	2300	1913	387		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 08-24'	1650 1450	300 300	1350 1150	0	1350 1150		
	3rd May 2013 to 7th May 2013	00-24	1450	300	1150	0	1150		Revised due to shutdown of 400 kV Sterlite-Raigarh (LILO 1) and 400
	8th May 2013	00-18 18-24	1450 1650	300 300	1150 1350	0	1150 1350		kV Raigarh-Rourkela 1
W3-ER	9th May 2013 to 12th May 2013	00-24	1900	300	1600	0	1600		Revised due to load generation balance review.
	13th May 2013	00-07 19-24 07-19'	1900 1650	300	1600 1350	0	1600 1350		Revised due to shutdown of 400 kV
	14th May 2013 to 16th May 2013	07-19	1650	300	1350	0	1350		Rourkela-Jharsuguda-Raigarh.
	17th May 2013 to 19th May 2013	00-24'	1650	300	1350	0	1350	250	Revised due to extension of 400 kV
	20th May 2013	00-19' 19-24	1650 1900	300	1350 1600	0	1350 1600	250	Rourkela-Jharsuguda-Raigarh shutdown.
	21st May 2013 to 31st May 2013	00-24	1900	300	1600	0	1600		

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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	00-24	1000	300	700	700	0		
	2nd May 2013	00-08	1000	300	700	700	0		
	2110 May 2015	08-24'	800	300	500	500	0		Povised due to shutdown of 400 kV
	3rd May 2013 to 7th May 2013	00-24	800	300	500	500	0		Revised due to shutdown of 400 kV Sterlite-Raigarh (LILO 1) and 400 kV Raigarh-Rourkela 1
	8th May 2013	00-18	800	300	500	500	0		K V Kaigani-Kourkeia i
	our way 2015	18-24	1000	300	700	700	0		
ER-W3	9th May 2013 to 13th May 2013	00-24	1000	300	700	700	0		
ER-W5	14th May 2013 to 16th May 2013	00-24	800	300	500	500	0		Revised due to shutdown of 400 kV Rourkela-Jharsuguda-Raigarh.
	17th May 2013 to 19th May 2013	00-24	800	300	500	500	0	200	Revised due to extension of 400 kV Rourkela-Jharsuguda-Raigarh
	20th May 2013	00-19'	800	300	500	700	0	200	shutdown.
	2001 Way 2015	19-24	1000	500	700	700	0		shutdown.
	21st 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 MTOA Quantum.
SR-WR	1st May 2013 to 31st May 2013	00-24	1000	0	1000	0	1000		
	,								
		00-05	1000		1000		000		Deview of TTC due to shares in Lond
	1st May 2013 to 2nd May 2013	10-19	1000	0	1000	112	888		Review of TTC due to change in Load Generation scenario and also change in
		05-10	1000		1000		000		LTA Quantum.
		19-24	1000		1000		888		
		00-05	1000		1000		888		
ER-SR	3rd May 2013 to	10-19	1000	0	1000	112	000		
ER SR	8th May 2013	05-10	1000^		1000^		888^		
		19-24	1000		1000		000		
	9th May 2013 to 31st May 2013	00-05	1200**		1200**		1088**		
		10-19		0		112		<u> </u>	Revised due to change in Load
		05-10		1200**		1200**		1088**	
		19-24							
CD ED	1st May 2013 to	00-17	700	0	700	107	503		
SR-ER	31st May 2013	23-24	700	0	700	197	502		4
		17-23	700		700		503		
	1-+ M 2012 / 41	00-17	45.5		4.10	2000	010		
	1st May 2013 to 4th	23-24	475	35	440	230	210		Revised due to change in load
	May 2013	17-23	475		440	230	210		generation Balance.
	5th May 2013 to 8th	00-17	525		490	230	260		Revised due to increase in hydro
	May 2013 to 8th May 2013	23-24		35					generation in ER/Bhutan.
	111ay 2015	17-23	525		490	230	260		Seneration in Ere Blutall.
	9th May 2013 to	00-17	575		540	230	310		Revised due to increase in hydro
	14th May 2013	23-24		35					generation in ER/Bhutan.
		17-23	575		540	230	310		-
ER-NER#	15th May 2013 to 19th May 2013	00-24	525	35	490	230	260		Revised due to tower collapse of 400 kV Maithon-Koderma D/C line
	20th May 2013 to 21st May 2013	00-24	525	35	490	230	260		Revised due to cancellation of shutdown of 400 kV Binaguri- Bonagaigan ckt-1.
	22nd May 2013 to	00-08,	525		490		260		Revised due to shutdown of 400 kV
		18-24	525	35		230			Binaguri-Bonagaigan ckt-1
	29th May 2013	08-18'	400		365		135	125	Dinagun-Donagargan CKt-1
						220	200		
	30th May 2013 to	00-24	525	35	490	2.10	200		
	30th May 2013 to 31st May 2013	00-24	525	35	490	230	260		
NED 55		00-17	525 520		490		420		
NER-ER	31st May 2013			35 100		0			

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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
S1-S2	1st May 2013 to 31st May 2013	00-24	5400	200	5200	4000	1200		Revised due to Non-commissioning Kudamkulam unit-1.
Import of	1st May 2013 to 4th May 2013	00-24	5400	300	5100	3243	1857		
Punjab	5th May 2013 to 31st May 2013	00-24	5600	300	5300	3350	1950		
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 D/C section from 400 kV to 765 kV and other new generating units addition.
W3 zone		17-23	9500		9300		2430		
Injection		00-10	9000		8800		1930		Revised due to emergency shutdown
	4th May 2013	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	00-17, 23-24	9000	200	8800	6870	1930		
	31st May 2013	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

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			Total		Available	Long Term	Margin	Changes	
		Time	Transfer	Reliability	Transfer	Access (LTA)/	Available for	in TTC	
Corridor	Date	Period	Capability	Margin	Capability	Medium Term	Short Term	w.r.t.	Comments
		(hrs)	(TTC)	Margin	(ATC)	Open Access	Open Access	Last	
			(IIC)		(AIC)	(MTOA)	(STOA)	Revision	

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
	*Deimours 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										
	1st May 2013 to 8th May 2013	00-17 23-24 17-23	4600*	500	4100	3200	900 900		LTA revised due to commisioning of CGPL Unit- 50	
	9th May 2013 to	00-17 23-24	8700 ^Δ	800	7900 ^Δ	4700^{Δ}	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	800	7900 ^Δ	4700	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^{Δ}	4700^{Δ}	3200		Revised due to shutdown of 400 kV Zerda-Bhinmal.	
	1 1011100 2010	07-20'	8450^{Δ}		7650^{Δ}		2950			
	15th May 2013 to	00-07 20-24	8300^{Δ}	800	7500^{Δ}	4700^{Δ}	2800	400	 Revised due to shutdown of 400 kV Zerda-Bhinmal. Revised due to tower 	
	16th May 2013	07-20'	8050^{Δ}	800	7250^{Δ}	4700	2550	400	collapse of 400 kV Maithon- Koderma D/C line.	
	17th May 2013 to 31st May 2013	00-24	8300 [∆]	800	7500 [∆]	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	
		17-23	475		440	230	210		generation Balance.	
	5th May 2013 to 8th May 2013	00-17 23-24	525	35	490	230	260		Revised due to increase in	
		17-23	525		490	230	260		hydro generation.	
	9th May 2013 to	00-17 23-24	575	35	540	230	310		Revised due to increase in	
	14th May 2013	17-23	575		540	230	310		hydro generation pattern.	
NER#	15th May 2013 to 19th May 2013	00-24	525	35	490	230	260		Revised due to tower collapse of 400 kV Maithon-Koderma D/C line.	
	20th May 2013 to 21st May 2013	00-24	525	35	490	230	260		Revised due to cancellation of shutdown of 400 kV Binaguri- Bonagaigan ckt-1.	
	22nd May 2013 to	00-08, 18-24	525	35	490	230	260		Revised due to shutdown of 400 kV Binaguri-Bonagaigan	
	29th May 2013	08-18'	400	55	365	230	135	125	ckt-1	
	30th May 2013 to 31st May 2013	00-24	525	35	490	230	260			
WR										
	1st May 2013 to	00-05 10-19	2000		2000		888		Review of TTC due to change in	
	2nd May 2013	05-10 19-24	2000	0	2000	1112	888		Load Generation scenario and also change in LTA quantum.	
SR	3rd May 2013 to	00-05 10-19	2000	0	2000	1112	888			
SK	8th May 2013	05-10 19-24	2000^	U	2000^	1112	888^			
	9th May 2013 to 31st May 2013	00-05	2200**	0	2200**	1112	1088**		Revised due to change in Load	
	515t wiay 2013	05-10 19-24	2200**		2200**		1088**		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).

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 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 2013	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		
	5150 Widy 2015	17-23	1700		1700		1503		

Limiting Constraints

	Import	(n-1) contingency of 400 kV Farakka-Malda* (n-1) contingency of 765/400 kV ICT at Agra*	
NR	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 I*	
		(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		