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

Issue Date: 15/02/2013 Issue Time: 1030 hrs Revision No. 9

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)	Comments
NR-WR	1st February 2013 to 28th February 2013	00-24	1500	200	1300	286	1014	
	1st February 2013 to 15th February 2013	00-24	1700	200	1500	1040	460	LTA revised due to commissioning of CGPL unit-40.
WR-NR#	16th February 2013 to 28th February 2013	00-24	2000	200	1800	1040	760	Review and dynamic studies carried out to assess transfer capability
	1st February 2013 to	00-17	800		600		600	
NR-ER	28th February 2013	23-24 17-23	900	200	700	0	700	
ER-NR	1st February 2013 to 28th February 2013	00-17 23-24	2700	300	2400	1912	488	
		17-23				1912	488	
W3-ER	1st February 2013 to 28th February 2013	00-24	1400	300	1100	0	1100	
ER-W3	1st February 2013 to 28th February 2013	00-24	1000	250	750	750	0	
WR-SR	1st February 2013 to 28th February 2013	00-24	1000	0	1000	992	8	
SR-WR	1st February 2013 to 28th February 2013	00-24	1000	0	1000	0	1000	
		00-05	950		950		780	Deviced due to full queilebility of ED
	1st February 2013 to 5th February 2013	10-19 05-10	930	0	930	170	760	Revised due to full availability of ER ISGS, TSTPP st-II and less drawal by
		19-24	950*		950*		780*	Odisha.
	6th February 2013	00-05 18-19	950	0	950	170	780	
		10-18'	750		750		580	Revised due to Shutdown of 400kV Meramundali-Bolangir.
		05-10 19-24	950*		950*		780*	
	7th February 2013	00-05	950	0	950	170	780	
ER-SR		10-19 05-10 19-24	950*		950*		780*	
	8th February 2013	00-05 10-19	500	0	500	170	330	Revised due to outage of two units of Talcher Stage-I and shutdown of
	,	05-10 19-24	500*		500*		330*	Bolangir-Jeypore.
	9th February 2013 to	00-05 10-19	950	0	950	170	780	
	28th February 2013	05-10 19-24	950*		950*		780*	
SR-ER	1st February 2013 to 28th February 2013	00-17 23-24	700	0	700	197	503	
	Zour reducing 2013	17-23	700		700		503	
ER-NER	1st February 2013 to	00-17 23-24	450	35	415	220	195	
EK-NEK	28th February 2013	17-23	450	35	415	220	195	
NER-ER	1st February 2013 to	00-17 23-24	490	100	390	0	390	
T (EX-EX	28th February 2013	17-23	270	170	Ů	170		

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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)	Comments
S1-S2	1st February 2013 to 28th February 2013	00-24	5500	200	5300	4400	900	Revised due to non-commissioning of Kudamkulam unit
Import of Punjab	1st February 2013 to 28th February 2013	00-24	5400	300	5100	3243	1857	
Import TTC for DD & DNH	1st February 2013 to 28th February 2013	00-24	980	0	980	LTA and MTO		
W3 zone Injection	1st February 2013 to 28th February 2013	00-17, 23-24	1 8000	200	7800	6413	1397	6413 MW corresponds to maximum effective LTA from W3. Export Margin from W3 would vary as per
		17-23	8500		8300		1887	the maintenance schedule of generators in the zone.

- 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 and would be operational wef 0000 hrs of 18th September 2012
  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 250 MW can be transferred to SR if injection point is South Odisha

#### **Limiting Constraints**

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Bina(PG)-Bina(MP)
WR-NR	(n-1) contingency of 400 kV Satna-Bina leading to overloading of 765/400 kV Bina transformer
NR-ER	(n-1) contingency of 400 kV Pusauli-Biharsharif
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-Wardha, 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 Vijaywada-Nellore* Low Voltage in Chennai Area (n-1) contingency of 400 kV Rourkela-Talcher*
SR-ER	(n-1) contingency of 400 kV Farakka-Malda* (n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur
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 Binaguri-Bongaigaon-I (n-1) contingency of 400 kV Balipara-Bongaigaon-I High loading of 132 kV LTPS – Mariani S/C* (n-1) contingency of 220 kV Samaguri – Saruajai I*
S1-S2	(n-1) contingency of 400 kV Hosur-Salem
Import of Punjab	(n-1) contingency of ICT at Moga
W3 zone export TTC	(n-1) contingency of 400 kV Raipur-Wardha and High loading of 400 kV Bhilai-Koradi

<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)	Comments
ER								
	1st February 2013 to 15th February 2013	00-24	4400		3900	2952	948	LTA revised due to commissioning of CGPL unit-40.
NR#	16th February 2013 to 28th February 2013	00-24	4700	500	4200	2952	1248	Review and dynamic studies carried out to assess transfer capability
NER	1st February 2013 to 28th February 2013	00-17 23-24	450	35	415	220	195	
	20th 1 cordary 2015	17-23	450		415	220	195	
WR								
	1st February 2013 to 5th February 2013	00-05 10-19	1950	0	1950	1162	788	Revised due to full availability of ER ISGS, TSTPP st-II and less drawal by
		05-10 19-24	1950*		950*		788*	Odisha.
	6th February 2013	00-05 18-19	1950		1950	1162	788	Revised due to Shutdown of 400kV
		10-18'	1750	0	1750		588	Meramundali-Bolangir.
		05-10 19-24	1950*		950*		788*	ű
SR	7th February 2013	00-05 10-19	1950	0	1950	1162	788	
	rair cordary 2013	05-10 19-24	1950*	Ů	950*	1102	788*	
	8th February 2013	00-05 10-19	1500	0	1500	1162	338	Revised due to outage of two units of Talcher Stage-I and shutdown of
		05-10 19-24	1500*	U	1500*	1102	338*	Bolangir-Jeypore.
	9th February 2013 to	00-05 10-19	1950		1950	1162	788	
	28th February 2013	05-10 19-24	1950*	0	950*		788*	

<sup>\*</sup> additional 250 MW can be transferred to SR if injection point is South Odisha

## 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)	Comments
ER-NR + ER-NER	1st February 2013 to 28th February 2013	00-17 23-24	3000	350	2650	2132	518	
EK-NEK	2011 reducity 2013	17-23	3000		2650	2132	518	
NR	1st February 2013 to 28th February 2013	00-17 23-24	2300	200	2100	286	1814	
		17-23	2400		2200		1914	
NER	1st February 2013 to 28th February 2013	00-17 23-24	490	100	390	0	390	
		17-23	270		170		170	
WR								
WK								
SR	1st February 2013 to 28th February 2013	00-17 23-24	1700	0	1700	197	1503	
	28th February 2013	17-23	1700		1700		1503	

# **Limiting Constraints**

NR	Import	(n-1) contingency of 400 kV Farakka-Malda*
		(n-1) contingency of 400 kV Satna-Bina leading to overloading of 765/400 kV Bina transformer*
	Export	(n-1) contingency of 400kV Bina(PG)-Bina(MP)
		(n-1) contingency of 400 kV Pusauli-Biharsharif
NER	Import	High Loading of 220 kV BTPS-Agia
		(n-1) contingency of 400 kV Balipara – Bongaigaon-I
		(n-1) contingency of 400 kV Farakka-Malda*
	Export	High loading of 132 kV LTPS - Mariani*
		(n-1) contingency of 400 kV Binaguri-Bongaigaon & 400 kV Balipara-Bongaigaon-I
SR	Import	(n-1) Coningency of 400kV Gooty-Somanhalli & 400kV Gooty-Nelamangala line
		(n-1) contingency of 400 kV Rourkela-Talcher
		Low Voltage in Chennai Area
		(n-1) contingency of 400 kV Vijaywada-Nellore
	Export	(n-1) contingency of Chandrapur-Parli
		(n-1) contingency of 400 kV Maithon Kahalgaon
		(n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur
ER-NR + ER-NER	Export	(n-1) contingency of 400 kV Farakka-Malda

# **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	5062	4141	2242	2174	
2	Haryana	5017	4047	3122	3122	
3	Rajasthan	7048	6700	3855	3886	
4	Delhi	4179	3012	1416	1416	
5	Uttar Pradesh	10478	9100	5500	5335	
6	Jammu & Kashmir	1838	1380	235	252	
7	Uttarakhand	1333	1100	512	32	
8	Himachal Pradesh	1055	940	230	44	
9	Chandigarh	187	86	0	(	
10	ISGS			16279	1079 <sup>-</sup>	
	Total NR	36197	30506	33392	27341	
II	EASTERN REGION					
1	West Bengal	5300	3900	4600	3750	
2	Jharkhand	900	770	390	350	
3	Orissa	3000	2200	2800	1710	
4	Bihar	1500	1300	130	100	
5	Damodar Valley Corporation	2200	2000	1550	2650	
6	Sikkim	60	50	0	(	
7	Bhutan	110	110	1400	270	
8	ISGS	110	110	6300	5180	
	Total ER	13070	10330	17170	14010	
	Total Liv	13070	10330	17170	14010	
III	WESTERN REGION					
1	Chattisgarh	2977	2132	2518	2025	
2	Madhya Pradesh	7112	4894	3443	2802	
3	Maharashtra	15798	12916	13113	9454	
4	Gujarat	10470	8369	9933	7564	
5	Goa	327	198			
6	Daman and Diu	260	181			
7	Dadra and Nagar Haveli	612	479			
8	ISGS			13063	11996	
	Total WR	37556	29169	42070	33841	
	Total VIII	0,000	20100	42070	00041	
IV	SOUTHERN REGION					
1	Andhra Pradesh	11120	9901	8032	6753	
2	Tamil Nadu	10756	9471	5146	3928	
3	Karnataka	8500	6242	5977	3928	
4	Kerala	3305	2690	222	1153	
5	Pondy	303	247	222	1100	
6	Goa	84	84			
7	ISGS	64	64	11052	10045	
'		6.10.00	0000-	11053	10815	
	Total SR	34068	28635	30430	26577	
.,	NODTH EASTEDN DEGICAL					
V	NORTH-EASTERN REGION	10-	<b>-</b> , .			
1	Manipur	105	74	0	111	
2	Meghalaya	280	196	121	118	
3	Mizoram	75	53	6	3	
4	Nagaland	115	81	12	10	
5	Assam	1200	800	230	21	
6	Tripura	200	140	100	100	
7	Arunachal Pradesh	105	74	0	(	
8	ISGS	0	0	966	533	
	Total NER	2080	1418	1435	97	
		122971	100058			