

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

Issue Date: 21/02/2013

Issue Time: 1300 hrs

Revision No. 11

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 18th February 2013	00-24	1500	200	1300	286	1014	
		00-08	1500	200	1300	286	1014	
	19th February 2013	08-20'	1200	200	1000	286	714	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1
		20-24	1500	200	1300	286	1014	
	20th February 2013 to 21st February 2013	00-24	1500	200	1300	286	1014	
		00-08	1700	200	1500	286	1214	Review and dynamic studies carried out to assess transfer capability
	20-24	1400	1200		914		Revised due to Shutdown of 400kV Agra-Gwalior ckt#2	
	22nd February 2013	00-08	1700	200	1500	286	1214	Review and dynamic studies carried out to assess transfer capability
		19-24	1400		1200		914	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1
	23rd February 2013	00-08	1700	200	1500	286	1214	Review and dynamic studies carried out to assess transfer capability
19-24		1400	1200		914		Revised due to Shutdown of 400kV Agra-Gwalior ckt#1	
24th February 2013 to 28th February 2013	00-24	1700	200	1500	286	1214		
WR-NR#	1st February 2013 to 15th February 2013	00-24	1700	200	1500	1040	460	LTA revised due to commissioning of CGPL unit-40.
		00-24	2000	200	1800	1040	760	Review and dynamic studies carried out to assess transfer capability
	16th February 2013 to 18th February 2013	00-08	2000	200	1800	1040	760	
		08-20'	1600	200	1400	1040	360	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1
	19th February 2013	20-24	2000	200	1800	1040	760	
		00-24	2000	200	1800	1040	760	
	20th February 2013 to 21st February 2013	00-08	2000	200	1800	1040	760	
		20-24	1600		1400		360	Revised due to Shutdown of 400kV Agra-Gwalior ckt#2
	22nd February 2013	00-08	2000	200	1800	1040	760	
		08-20'	1600		1400		360	Revised due to Shutdown of 400kV Agra-Gwalior ckt#2
23rd February 2013	00-08	2000	200	1800	1040	760		
	19-24	1600		1400		360	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1	
24th February 2013 to 28th February 2013	00-24	2000	200	1800	1040	760		
NR-ER	1st February 2013 to 28th February 2013	00-17	800	200	600	0	600	
		23-24	900		700		700	
ER-NR	1st February 2013 to 28th February 2013	00-17	2700	300	2400	1912	488	
		23-24					1912	488
17-23								
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	
ER-SR	1st February 2013 to 5th February 2013	00-05	950	0	950	170	780	Revised due to full availability of ER ISGS, TSTPP st-II and less drawal by Odisha.
		10-19	950*		780*			
		05-10	950*		780*			
	6th February 2013	00-05	950	0	950	170	780	Revised due to Shutdown of 400kV Meramundali-Bolangir.
		18-19	750		580			
		10-18'	950*		780*			
	7th February 2013	05-10	950*	0	950*	170	780*	
		00-05	950		780			
		10-19	950*		780*			
	8th February 2013	00-05	500	0	500	170	330	Revised due to outage of two units of Talcher Stage-1 and shutdown of Bolangir-Jeypore.
10-19		500*	330*					
05-10		500*	330*					
9th February 2013 to 28th February 2013	00-05	950	0	950	170	780		
	10-19	950*		780*				
	05-10	950*		780*				
SR-ER	1st February 2013 to 28th February 2013	00-17	700	0	700	197	503	
		23-24	700		503			
		17-23	700		503			

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

Issue Date: 21/02/2013

Issue Time: 1300 hrs

Revision No. 11

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-NER	1st February 2013 to 28th February 2013	00-17	450	35	415	220	195	
		23-24	450		415	220	195	
NER-ER	1st February 2013 to 28th February 2013	00-17	490	100	390	0	390	
		23-24	490		390		390	
		17-23	270		170		170	
S1-S2	1st February 2013 to 28th February 2013	00-24	5500	200	5300	4400	900	Revised due to non-commissioning of Kudankulam 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 MTOA as per ex-pp schedule		
W3 zone Injection	1st February 2013 to 28th February 2013	00-17, 23-24	8000	200	7800	6413	1387	6413 MW corresponds to maximum effective LTA from W3. Export Margin from W3 would vary as per the maintenance schedule of generators in the zone.
		17-23	8500		8300		1887	

- 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 Neyveli- 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 – Saraujai 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

\*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
<b>ER</b>								
<b>NR#</b>	1st February 2013 to 15th February 2013	00-24	4400	500	3900	2952	948	LTA revised due to commissioning of CGPL unit-40.
	16th February 2013 to 18th February 2013	00-24	4700		4200		1248	Review and dynamic studies carried out to assess transfer capability
	19th February 2013	00-08	4700		4200		1248	
		08-20'	4300		3800		848	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1
		20-24	4700	4200	1248			
	20th February 2013 to 21st February 2013	00-24	4700		4200		1248	
	22nd February 2013	00-08 20-24	4700	500	4200	2952	1248	
		08-20'	4300		3800		848	Revised due to Shutdown of 400kV Agra-Gwalior ckt#2
	23rd February 2013	00-08 19-24	4700		4200		1248	
		08-19'	4300		3800		848	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1
24th February 2013 to 28th February 2013	00-24	4700	500	4200	2952	1248		
<b>NER</b>	1st February 2013 to 28th February 2013	00-17 23-24	450	35	415	220	195	
		17-23	450		415	220	195	
<b>WR</b>								
<b>SR</b>	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 Odisha.
		05-10 19-24	1950*		950*		788*	
	6th February 2013	00-05 18-19	1950	0	1950	1162	788	Revised due to Shutdown of 400kV Meramundali-Bolangir.
		10-18'	1750		1750		588	
		05-10 19-24	1950*		950*		788*	
	7th February 2013	00-05 10-19	1950	0	1950	1162	788	
		05-10 19-24	1950*		950*		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 Bolangir-Jeypore.
		05-10 19-24	1500*		1500*		338*	
	9th February 2013 to 28th February 2013	00-05 10-19	1950	0	1950	1162	788	
05-10 19-24		1950*	950*		788*			

\* 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			
		17-23	3000		2650	2132	518			
NR#	1st February 2013 to 18th February 2013	00-17 23-24	2300	200	2100	286	1814			
		17-23	2400		2200		1914			
		19th February 2013	00-08 23-24		2300		2100	1814		
	08-17'		2000		1800		1514	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1		
	17-20		2100		1900		1614			
	20-23		2400		2200		1914			
	20th February 2013 to 21st February 2013	00-17 23-24	2300		2100		1814			
		17-23	2400		2200		1914			
	22nd February 2013	00-08 20-24	2500		2300		2014	Review and dynamic studies carried out to assess transfer capability		
		08-20'	2200		2000		1714	Revised due to Shutdown of 400kV Agra-Gwalior ckt#2		
	23rd February 2013	00-08 19-24	2500		2300		2014	Review and dynamic studies carried out to assess transfer capability		
		08-19'	2200		2000		1714	Revised due to Shutdown of 400kV Agra-Gwalior ckt#1		
	24th February 2013 to 28th February 2013	00-24	2500		200		2300	286	2014	
	NER	1st February 2013 to 28th February 2013	00-17 23-24		490		100	390	0	390
17-23			270	170	170					
WR										
SR	1st February 2013 to 28th February 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*
	Export	(n-1) contingency of 400 kV Satna-Bina leading to overloading of 765/ 400 kV Bina transformer* (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

S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
<b>I</b>	<b>NORTHERN REGION</b>				
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	321
8	Himachal Pradesh	1055	940	230	44
9	Chandigarh	187	86	0	0
10	ISGS			16279	10791
	<b>Total NR</b>	<b>36197</b>	<b>30506</b>	<b>33392</b>	<b>27341</b>
<b>II</b>	<b>EASTERN REGION</b>				
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	0
7	Bhutan	110	110	1400	270
8	ISGS			6300	5180
	<b>Total ER</b>	<b>13070</b>	<b>10330</b>	<b>17170</b>	<b>14010</b>
<b>III</b>	<b>WESTERN REGION</b>				
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
	<b>Total WR</b>	<b>37556</b>	<b>29169</b>	<b>42070</b>	<b>33841</b>
<b>IV</b>	<b>SOUTHERN REGION</b>				
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		
6	Goa	84	84		
7	ISGS			11053	10815
	<b>Total SR</b>	<b>34068</b>	<b>28635</b>	<b>30430</b>	<b>26577</b>
<b>V</b>	<b>NORTH-EASTERN REGION</b>				
1	Manipur	105	74	0	0
2	Meghalaya	280	196	121	118
3	Mizoram	75	53	6	3
4	Nagaland	115	81	12	10
5	Assam	1200	800	230	211
6	Tripura	200	140	100	100
7	Arunachal Pradesh	105	74	0	0
8	ISGS	0	0	966	533
	<b>Total NER</b>	<b>2080</b>	<b>1418</b>	<b>1435</b>	<b>975</b>
	<b>Total All India</b>	<b>122971</b>	<b>100058</b>	<b>124497</b>	<b>102744</b>