National Load Despatch Centre
Total Transfer Capability for December 2012

Issue Date: 10/12/2012 Issue Time: 1200 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 December 2012 to 31st December 2012	00-24	1500	200	1300	286	1014	
WR-NR	1st December 2012 to 31st December 2012	00-24	1700	200	1500	780	720	
NR-ER	1st December 2012 to 31st December 2012	00-17 23-24	800	200	600	0	600	
		17-23	900		700		700	
ER-NR	1st December 2012	00-18 21-24	2400	300	2100	1774	326	Revised due to change in load generation conditions
		18-21	2650		2350	1819	531	
	2nd December 2012 to 3rd December 2012	00-18 21-24	2400	300	2100	1774	326	Revised due to Emergency Shutdown of Teesta-V HPS
		18-21	2400		2100	1819	281	
	4th December 2012 to 31st December 2012	00-18 21-24	2400	300	2100	1774	326	
		18-21	2650		2350	1819	531	
WR-ER	1st December 2012 to 6th December 2012	00-24	700	300	400	0	400	Sterlite considered in WR in bid area W3 for which separate export TTC is indicated
	7th December 2012 to 8th December 2012	00-08, 17-24	700		400		400	Revised due to shutdown of 220 kV Korba (E)-Budhipadar -I
		08-17'	600		300		300	
	9th December 2012 to 31st December 2012	00-24	700		400		400	
ER-WR	1st December 2012 to 31st December 2012	00-24	1000	300	700	630	70	Sterlite considered in WR in bid area W3 for which separate export TTC is indicated
WR-SR#	1st December 2012 to 10th December 2012	00-24	1000	0	1000	992	8	
	11th December 2012 to 12th December 2012	00-08, 18-24	1000	0	1000	992	8	Shutdown of 400 HVDC Bhadravati Pole-1
		08-18'	500		500	500	0	
	13th December 2012 to 31st December 2012	00-24	1000	0	1000	992	8	
SR-WR#	1st December 2012 to 10th December 2012	00-24	1000	0	1000	0	1000	
	11th December 2012 to 12th December 2012	00-08, 18-24	1000		1000	0	1000	Shutdown of 400 HVDC Bhadravati Pole-1
		08-18'	500	0	500	0	500	
	13th December 2012 to 31st December 2012	00-24	1000	0	1000	0	1000	
ER-SR#	1st December 2012	00-05 10-19	630	0	630	170	460	
		05-10 19-24	750*		750*		580*	
	2nd December 2012	00-05	630	0	630	170	460	Talcher-Kolar HVDC Bi-Pole Shutdown.
		05-19'	600		600	600	0	
		19-24	750*		750*	170	580*	
	3rd December 2012 to 10th December 2012	00-05 10-19	630	0	630	170	460	
		05-10 19-24	750*		750*		580*	
	11th December 2012 to 12th December 2012	00-05, 18-19	630	0	630	170	460	Shutdown of 400 HVDC Bhadravati Pole-1
		08-18'	750		750	662	88	
		05-08, 19-24	750*		750*	170	580*	
	13th December 2012 to 31st December 2012	00-05 10-19	630	0	630	170	460	
		05-10 19-24	750*		750*		580*	

SR-ER	1st December 2012 to 31st December 2012	00-17 23-24	700	0	700	197	503	
		17-23	700		700		503	
ER-NER	1st December 2012	00-18 21-24	400	35	365	157	208	Revised due to change in load generation conditions
		18-21	450		415	160	255	
	2nd December 2012 to 3rd December 2012	00-18 21-24	400	35	365	157	208	Revised due to Emergency Shutdown of Teesta-V HPS
		18-21	400		365	160	205	
	4th December 2012 to 31st December 2012	00-18 21-24	400	35	365	157	208	
		18-21	450		415	160	255	
NER-ER	1st December 2012 to 31st December 2012	00-17 23-24	530	100	430	0	430	
		17-23	300		200		200	
S1-S2	1st December 2012 to 31st December 2012	00-24	5500	100	5400	3800	1600	
Import of Punjab	1st December 2012 to 31st December 2012	00-24	5400	300	5100	3243	1857	
Import TTC for DD & DNH	1st December 2012 to 31st December 2012	00-24	980	0	980	LTA and MTOA as per ex-pp schedule		
W3 zone Injection	1st December 2012 to 7th December 2012	00-18, 22-24	7000	200	6800	6400	400	6400 MW corresponds to maximum effective LTA from W3. Export Margin from W3 would vary as per the maintenance schedule of generators in the zone. LTA revised due to 300 MW of LTA from LANCO to MPPTCL.
		18-22	7500		7300		900	
	8th December 2012	00-09, 22-24	7000	200	6800	6400	400	Shutdown of 400 kV Bhilai-Bhadrawati
		09-18'	6600		6400		0	
		18-22	7500		7300		900	
	9th December 2012 to 31st December 2012	00-18, 22-24	7000	200	6800	6400	400	
		18-22	7500		7300		900	

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 Bina-Gwalior
NR-ER	(n-1) contingency of 400 kV Pusauli-Biharsharif
ER-NR	(n-1-1) contingency of 400 kV Farakka-Malda
WR-ER	(n-1) contingency of 400 kV Maithon-Kahalgaon*
ER-WR	High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni* (n-1) contingency of 400kV Rourkela-Jamshedpur
WR-SR	High loading of 400 kV Raipur-Bhadravati T/C and Bhilai-Bhadrawati S/C (n-1) contingency of 400 kV Vijaywada-Nellore*
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 Maithon-Kahalgaon* (n-1) contingency of 400 kV Kadappa-Kolar and Neyvelli- Sriperumbudur
ER-NER	(n-1-1) contingency of 400 kV Farakka-Malda* High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri High Loading of 400/220 kV 315 MVA ICT at Misa, Balipara
NER-ER	(n-1) contingency of 400 kV Purnea-Muzaffarpur High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri High Loading of 400/220 kV 315 MVA ICT at Misa*
S1-S2	(n-1) contingency of 400 kV Hosur-Salem
Import of Punjab	(n-1) contingency of ICT at Moga
W3 zone export TTC	High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni

*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								
NR	1st December 2012	00-18 21-24	4100	500	3600	2554	1046	Revised due to change in load generation conditions
		18-21	4350		3850	2599	1251	
	2nd December 2012 to 3rd December 2012	00-18 21-24	4100	500	3600	1774	1826	Revised due to Emergency Shutdown of Teesta-V HPS
		18-21	4100		3600	1819	1781	
	4th December 2012 to 31st December 2012	00-18 21-24	4100	500	3600	2554	1046	
		18-21	4350		3850	2599	1251	
NER	1st December 2012	00-18 21-24	400	35	365	157	208	Revised due to change in load generation conditions
		18-21	450		415	160	255	
	2nd December 2012 to 3rd December 2012	00-18 21-24	400	35	365	157	208	Revised due to Emergency Shutdown of Teesta-V HPS
		18-21	400		365	160	205	
	4th December 2012 to 31st December 2012	00-18 21-24	400	35	365	157	208	
		18-21	450		415	160	255	
WR								
SR#	1st December 2012	00-05 10-19	1630	0	1630	1162	468	
		05-10 19-24	1750*		1750*		588*	
	2nd December 2012	00-05	1630	0	1630	1162	468	Talcher-Kolar HVDC Bi-Pole Shutdown.
		05-19'	1600		1600	1600	0	
		19-24	1750*		1750*	1162	588*	
	3rd December 2012 to 10th December 2012	00-05 10-19	1630	0	1630	1162	468	
		05-10 19-24	1750*		1750*		588*	
	11th December 2012 to 12th December 2012	00-05 18-19	1630	0	1630	1162	468	Shutdown of 400 HVDC Bhadravati Pole-1
		08-18'	1250		1250		88	
		05-08 19-24	1750*		1750*		588*	
	13th December 2012 to 31st December 2012	00-05 10-19	1630	0	1630	1162	468	
		05-10 19-24	1750*		1750*		588*	

* 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 December 2012 to 31st December 2012	00-18 21-24	2700	350	2350	1931	419	Revised due to change in load generation conditions
		18-21	3000		2650	1979	671	
NR	1st December 2012 to 31st December 2012	00-24	2300	500	1800	286	1514	
NER	1st December 2012 to 31st December 2012	00-17 23-24	530	100	430	0	430	
		17-23	300		200		200	
WR								
SR#	1st December 2012 to 10th December 2012	00-17 23-24	1700	0	1700	197	1503	
		17-23	1700		1700		1503	
	11th December 2012 to 12th December 2012	00-08 18-24	1700	0	1700	197	1503	Shutdown of 400 HVDC Bhadrava
		08-18'	1200		1200		1003	
	13th December 2012 to 31st December 2012	00-17 23-24	1700	0	1700	197	1503	
		17-23	1700		1700		1503	

Limiting Constraints

NR	**Import**	(n-1-1) contingency of 400 kV Farakka-Malda* (n-1) contingency of 400 kV Bina-Gwalior*
	Export	(n-1) contingency of 400 kV Kahalgaon-Maithon
NER	**Import**	High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri High Loading of 400/220 kV 315 MVA ICT at Misa (n-1) contingency of 400 kV Farakka-Malda*
	Export	High Loading of 220 kV BTPS-Agia High Loading of 220 kV Balipara-Samaguri High Loading of 400/220 kV 315 MVA ICT at Misa (n-1) contingency of 400 kV Purnea-Muzaffarpur*
SR	**Import**	High loading of 400 kV Raipur-Bhadravati T/C and Bhilai-Bhadrawati S/C (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-1-1) 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)
I	**NORTHERN REGION**				
1	Punjab	5260	3870	2340	2200
2	Haryana	5160	4690	3430	3430
3	Rajasthan	7310	6600	3980	3950
4	Delhi	4060	3400	1420	1420
5	Uttar Pradesh	10550	9300	5310	5220
6	Jammu & Kashmir	1990	1400	310	250
7	Uttarakhand	1330	1100	500	280
8	Himachal Pradesh	1060	970	250	150
9	Chandigarh	250	100	0	0
10	ISGS			15860	10570
	Total NR	**36970**	**31430**	**33400**	**27470**
II	**EASTERN REGION**				
1	West Bengal	5996	3306	4222	3160
2	Jharkhand	1077	729	498	449
3	Orissa	2957	2200	1167	827
4	Bihar	1673	1454	0	0
5	Damodar Valley Corporation	2282	1823	3307	2907
6	Sikkim	81	57	0	0
7	Bhutan	110	110	1400	1400
8	ISGS			6360	5670
	Total ER	**14177**	**9679**	**16954**	**14413**
III	**WESTERN REGION**				
1	Chattisgarh	2770	2140	2520	1990
2	Madhya Pradesh	7650	6230	3440	2800
3	Maharashtra	15660	11910	13110	9450
4	Gujarat	9910	7880	9930	7560
5	Goa	330	200		
6	Daman and Diu	220	160		
7	Dadra and Nagar Haveli	530	240		
8	ISGS			13260	11700
	Total WR	**37070**	**28760**	**42260**	**33500**
IV	**SOUTHERN REGION**				
1	Andhra Pradesh	10480	9150	7830	5880
2	Tamil Nadu	10120	8950	4960	3800
3	Karnataka	7640	6100	4500	3440
4	Kerala	3240	2420	900	580
5	Pondy	300	240		
6	Goa	80	80		
7	ISGS			11520	11300
	Total SR	**31860**	**26940**	**29710**	**25000**
V	**NORTH-EASTERN REGION**				
1	Manipur	100	60	0	0
2	Meghalaya	280	170	110	70
3	Mizoram	70	40	10	10
4	Nagaland	80	60	10	10
5	Assam	880	570	270	220
6	Tripura	210	150	100	90
7	Arunachal Pradesh	100	30	0	0
8	ISGS	0	0	820	420
	Total NER	**1720**	**1080**	**1320**	**820**
	Total All India	**121797**	**97889**	**123644**	**101203**