

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Issue Date: 17/12/2014

Issue Time: 1500 hrs

Revision No. 17

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
NR-WR *	1st December 2014 to 31st December 2014	00-24	2500	500	2000	1055	945		
WR-NR	1st December 2014 to 2nd December 2014	00-07'	4900	500	4400	4380	20		
		07-24'	4100		3600		0		
	3rd December 2014	00-07'	4900	500	4400	4380	20		
		07-14'	4100		3600		0		
		14-24	3600		3600		0		
	4th December 2014	00-07'	4400	500	3900	4380	0		
		07-24'	3600		3100		0		
	5th December 2014 to 11th December 2014	00-07	4900	500	4400	4380	20		
		07-24	4100		3600		0		
	12th December 2014 to 18th December 2014	00-07	4900	500	4400	4380	20		
		07-24	4100		3600		0		
	19th December 2014 to 31st December 2014	00-17	4900	500	4400	4380	20		
		23-24	4900		4400		20		
			17-23	4900		4400		20	
NR-ER*	1st December 2014 to 31st December 2014	00-06	2000	200	1800	293	1507		
		06-18'	2000		1800	358	1442		
		18-24	2000		1800	293	1507		
ER-NR	1st December 2014 to 31st December 2014	00-17	3500	300	3200	2431	769		
		23-24	3500		3300		869		
		17-23	3600		3300		869		
W3-ER^s	1st December 2014 to 31st December 2014	00-24	1900	300	1600	697	903		
ER-W3	1st December 2014 to 31st December 2014	00-24	1000	300	700	973	0		
WR-SR	1st December 2014 to 9th December 2014	00-24	2100	750	1350	1350	0		
	10th December 2014	00-05	2100	750	1350	1350	0		
		10-24'	1750		1000	1350	0		
	11th December 2014	05-22	2100	750	1350	1350	0		
		00-05	2500		1750	1350	400		
	12th December 2014 to 13th December 2014	05-08	2100	750	1350	1350	0		
		08-22'	1600		850	1350	0		
		22-24	2000		1250	1350	0		
		00-05	2500		1750	1350	400		
	14th December 2014 to 31st December 2014	05-22	2100	750	1350	1350	0		
		00-05	2500		1750	1350	400		
SR-WR *	1st December 2014 to 31st December 2014	00-24	No limit is being Specified.						

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Issue Date: 17/12/2014

Issue Time: 1500 hrs

Revision No. 17

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-SR	1st December 2014 to 4th December 2014	00-06	2300	0	2300	2435	0						
		18-24				2500	0						
		06-18'				2435	0						
	5th December 2014	00-06	2300	0	2300	2435	0						
		06-13'	2300			2500	0						
		13-18'	2500			2500	0						
		18-24	2500			2435	65						
	6th December 2014 to 7th December 2014	00-06	2650	0	2650	2435	215						
		18-24				2500	150						
		06-18'				2435	215						
	8th December 2014 to 15th December 2014	00-06	2650	0	2650	2435	215						
		18-24				2500	150						
06-18'		2435				215							
16th December 2014 to 31st December 2014	00-06	2650	0	2650	2435	215							
	18-24				2500	150							
	06-18'				2435	215							
SR-ER *	1st December 2014 to 31st December 2014	00-24	No limit is being Specified.										
ER-NER	1st December 2014	00-17	650	40	610	210	400						
		23-24					670			420			
		17-23					685			435			
	2nd December 2014 to 8th December 2014	00-17	710	40	645	210	435						
		23-24					670			460			
		17-23					685			435			
	9th December 2014	00-08	460	40	645	210	435						
		23-24					420			210			
		08-17'					710			460			
	10th December 2014 to 31st December 2014	00-17	710	40	645	210	435						
		23-24					670			460			
		17-23					480			30	450	0	450
NER-ER	1st December 2014 to 8th December 2014	00-17	500	40	470	0	470						
		23-24					480			30	450	0	450
		17-23					275			30	245	245	
	9th December 2014	00-08	470	40	470	0	470						
		23-24					480			30	450	0	450
		08-17'					275			30	245	245	
10th December 2014 to 31st December 2014	00-17	500	40	470	0	470							
	23-24					480			30	450	0	450	
	17-23					480			30	450	0	450	

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Issue Date: 17/12/2014

Issue Time: 1500 hrs

Revision No. 17

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 December 2014 to 2nd December 2014	00-24	3300	295	3005	2879	126		
	3rd December 2014	00-10	3300	295	3005	2879	126		
		1000-1730	3210	295	2915	2879	36		
		1730-2400	3300	295	3005	2879	126		
	4th December 2014 to 9th December 2014	00-24	3300	295	3005	2879	126		
	11th December 2014	00-06	3300	295	3005	3029	0		
		06-24	3575	295	3280	3138	142		
	12th December 2014	00-24	3575	295	3280	3138	142		
	13th December 2014	00-09	3575	295	3280	3138	142		
		09-18'	2950		2655	3138	0		
		18-21	3575		3280	3138	142		
		21-24	2950		2655	3138	0		
	14th December 2014	00-17	2950	295	2655	3138	0		
		17-24	3575		3280	3138	142		
	15th December 2014 to 17th December 2014	00-24	3575	295	3280	3087	193		
	18th December 2014	00-10	3575	295	3280	3087	193		
		10-24'	3575		3280	3087	193	275	
19th December 2014 to 20th December 2014	00-24	3575	295	3280	3087	193	275	Revised due to Vallur Unit-1 outage extension	
21st December 2014 to 28th December 2014	00-24	3300	295	3005	2978	27			
29th December 2014 to 30th December 2014	00-24	3300	295	3005	2942	63			
31st December 2014	00-24	3300	295	3005	2865	140			
Import of Punjab	1st December 2014 to 31st December 2014	00-24	5700	300	5400	3790	1610		
Import TTC for DD & DNH	1st December 2014 to 31st December 2014	00-24	1200	0	1200	LTA and MTOA as per ex-pp schedule			
W3 zone Injection	1st December 2014 to 31st December 2014	00-17	9400	200	9200	6843	2357		
		23-24			9700		2857		
		17-23			9900				

* Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

** Maharashtra's off peak demand is considered to be lower than the peak demand by approximately 5000 MW from 2200 hrs to 0500 hrs

\$ As per Simulations, predominant direction of flow is on West to North Corridor. Hence, in case injection point is in Western Region (W1,W2,W3), STOA/PX transactions from West to North on West-East-North corridor shall not be allowed as such transaction increases congestion in the West to North Corridor.

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 Sell transaction, b) Jindal Power Limited (JPL) Stage-I & Stage-II, 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, k) KSK Mahanadi, L)DB Power, m) KWPCCL, n)Vandana Viduyut

The figure is based on LTA/MTOA approved by CTU and Allocation figures as per RPCs RTA/REA. In actual Operation, due to Units being on Maintenance/ Fuel shortage/New units being commissioned the LTA/MTOA utilized would vary. RLDC/NLDC would factor this situation on day-ahead basis.

In the eventuality that net schedules exceed ATC, real time curtailments might be effected by RLDCs/NLDC.

In case of TTC Revision due to any shutdown :

1) The TTC value will be revised to normal values after restoration of shutdown.

2) The TTC value will be revised to normal values if the shutdown is not being availed in real time.

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Issue Date: 17/12/2014

Issue Time: 1500 hrs

Revision No. 17

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
----------	------	-------------------	---------------------------------	--------------------	-------------------------------------	--	--	-------------------------------------	----------

Limiting Constraints

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
WR-NR	High Loading of 400kV Singrauli-Anpara & High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and Loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
NR-ER	(n-1) contingency of 400 kV Allahabad-Pusauli
ER-NR & ER-NER	Outage of one circuit of 400KV Kahalgaon-Banka leads to thermal loading of second circuit.
W3-ER	(n-1) contingency of 400kV Sterlite-Rourkela S/C
ER-W3	(n-1) contingency of 400kV Raigarh-Jharsuguda-Rourkela
WR-SR & ER-SR	1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) 2. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would emerge.
ER-NER	Palatana unit tripping leading to the thermal overloading of 220 kV BTPS - Salakati D/C
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa and High loading of 220kV Misa-Samaguri D/C
S1-S2	(n-1) contingency of one circuit of 400 kV Kolar-Hosur
Import of DD & DNH	(n-1) contingency of 400/220KV 315MVA ICT at VAPI
Import of Punjab	(n-1) contingency of ICT at Dhuri and (n-1) contingency of 220kV Moga(PG)-Moga(PSTCL)
W3 zone Injection	(n-1-1) contingency of 400 kV Raipur-Bhadrawati D/C section and High loading of 400kV Raipur-Wardha (850 MW SPS setting on each circuit of 400kV Raipur-Wardha)

*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									
NR	1st December 2014 to 2nd December 2014	00-07	8400	800	7600	6811	789		
		07-'17	7600		6800		0		
		17-23	7700		6900		89		
		23-24	7600		6800		0		
	3rd December 2014	00-07	8400	800	7600	6811	789		
		07-'14	7600		6800		0		
		14-'17	7100		7100		0		
		17-23	7200		6400		0		
	4th December 2014	23-24	7100	800	6300	6811	0		
		00-07	7900		7100		289		
		07-'17	7100		6300		0		
		17-23	7200		6400		0		
	5th December 2014 to 11th December 2014	23-24	7100	800	6300	6811	0		
		00-07	8400		7600		789		
		07-17	7600		6800		0		
		17-23	7700		6900		89		
	12th December 2014 to 18th December 2014	00-07	8400	800	7600	6811	789		
		07-17	7600		6800		0		
		23-24	7600		6900		89		
		17-23	7700		6900		89		
	19th December 2014 to 31st December 2014	00-17	8400	800	7600	6811	789		
		23-24	8400		7700		889		
		17-23	8500		7700		889		

NER	1st December 2014	00-17	650	40	610	210	400			
		23-24								
		17-23	670		630		420			
	2nd December 2014 to 8th December 2014	00-17	685	40	645	210	435			
		23-24								
		17-23	710		670		460			
	9th December 2014	00-08	685	40	645	210	435			
		23-24								
		08-17'	460		420		210			
		17-23	710		670		460			
	10th December 2014 to 31st December 2014	00-17	685	40	645	210	435			
		23-24								
	17-23	710		670		460				
WR										
SR	1st December 2014 to 4th December 2014	00-06	4400	750	3650	3785	0			
		18-24								
		06-18'			3850	0				
	5th December 2014	00-06	4400	750	3650	3785	0			
		06-13'	4400			3850	0			
		13-18'	4600			3850	0			
		18-24	4600			3850	3785	65		
	6th December 2014 to 7th December 2014	00-06	4750	750	4000	3785	215			
		18-24								
		06-18'			3850	150				
	8th December 2014 to 9th December 2014	00-06	4750	750	4000	3785	215			
		18-24								
		06-18'			3850	150				
	10th December 2014	00-05	4750	750	4000	3785	215			
		18-24								
		05-06'				4400	3650	3785	0	
		06'-10				4400	3650	3850	0	
		10-18'	4750		4000	3850	150			
	11th December 2014	00-05	5150	750	4400	3785	615			
		06-18'				4750	4000	3850	150	
		18-22				4750	4000	3785	215	
		22-24				5150	4400	3785	615	
	12th December 2014 to 13th December 2014	00-05	4750	750	4400	3785	615			
		05-06'				4750	4000	3785	215	
		06-08'				4750	4000	3850	150	
		08-18'				4250	3500	3850	0	
		18-22				4250	3500	3785	0	
		22-24				4650	3900	3785	115	
	14th December 2014 to 31st December 2014	00-05	5150	750	4400	3785	615			
		05-06'				4750	4000	3785	215	
		06-18'				4750	4000	3850	150	
		18-22				4750	4000	3785	215	
22-24		5150				4400	3785	615		

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
NR*	1st December 2014 to 31st December 2014	00-06	4500	700	3800	999	2801		
		06-17'			3800	1064	2736		
		17-18'	4500		3800	1064	2736		
		18-24	4500		3800	999	2801		
NER	1st December 2014 to 8th December 2014	00-17	480	30	450	0	450		
		23-24	500	40	470		470		
	9th December 2014	00-08	480	30	450	0	450		
		23-24	275	30	245		245		
		08-17'	500	40	470		470		
	10th December 2014 to 31st December 2014	00-17	480	30	450	0	450		
		23-24	500	40	470		470		
	WR								
SR *	1st December 2014 to 31st December 2014	00-24	No limit is being Specified.						

* Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Come First Serve).

Limiting Constraints

NR	Import	Outage of one circuit of 400KV Kahalgaon-Banka leads to thermal loading of second circuit. High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak. (n-1) contingency of 400 kV Allahabad-Pusauli
NER	Import	Outage of one circuit of 400KV Kahalgaon-Banka leads to thermal loading of second circuit.
	Export	Outage of one 315 MVA, 400/220kV ICT at Misa leads to overloading of second ICT at MISA.
SR	Import	1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
		2. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-

*Primary constraints

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	11-21-14	Whole Month	Revised due to 400kV Jeypore-Gazuwaka D/C line Tower collapse	ER-SR
			Revised due to 400kV KalivendapattuPugalur-2 and 400/230kV Tiruvalam Downstream commissioning & Revised LGBR by constituents.	S1-S2
2	11-27-14	Whole month	LTA revised due to allocation of power from North to West	NR-WR
			LTA revised due to allocation of LTA from ER to MP	ER-W3
		1-12-2014 to 4-12-2014	Revised due to shutdown of Mundra-Mohindergerh HVDC Pole-2	WR-NR
		Whole Month	Revised due to NCTPS Stage -2 Unit-1 outage extension & Synchronisation of 765kV Karnool-Tiruvalam DC line (at 400kV level).	S1-S2
Revised considering network restructuring in NER region	ER-NER			
3	12-01-14	1-12-2014 to 7-12-2014	Revised considering the revival of 400 kV Jeypore Gazuwaka ckt 2 after cyclone Hudhud	ER-SR
		Whole month	Revised considering the real time load generation balance conditions in ER region	ER-NER
			Revised considering network restructuring and real time load generation balance in NER region	NER-ER
4	12-02-14	12-03-14	Revised due to shutdown of 400kV Nellore - Alamatty	S1-S2
5	12-03-14	03-12-2014 to 04-12-2014	Revised due to restriction of Power order of HVDC Vindhychal B/B to 250 MW for maintenance reasons.	WR-NR
6	12-04-14	05-12-2014 to 11-12-2014	Revised due to shutdown of HVDC Rihand - Dadri pole 1	WR-NR
		12-12-2014 to 18-12-2014	Revised due to shutdown of HVDC Rihand - Dadri pole 2	
7	12-05-14	05-12-2014 to 15-12-2014	Revised considering the revival of 400 kV Jeypore Gazuwaka ckt 2 after cyclone Hudhud	ER-SR
8	12-06-14	whole month	Revised considering the revival of 400 kV Jeypore Gazuwaka ckt 1 after cyclone Hudhud	ER-SR
9	12-08-14	12-09-14	Revised due to shutdown of 220 kV Azara	ER-NER / NER-ER
10	12-09-14	12-10-14	Revised due to shutdown of 400 kV Parli - Sholapur ckt 2	WR-SR

**National Load Despatch Centre
Total Transfer Capability for December 2014**

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
11	12-10-14	11-12-2014 to 31-12-2014	Revised considering the present demand pattern of Maharashtra** during off -peak conditions	WR-SR
12	12-10-14	11-12-2014 to 14-12-2014	Revised due to outage of Vallur unit 1	S1-S2
13	12-11-14	12-12-2014 to 13-12-2014	Revised due to shutdown of HVDC Bhadrawati Pole 2	WR-SR
14	12-12-14	13/12/2014	Revised due to shutdown of 400kV Kolar - Hoody D/C	S1-S2
15	13/12/2014	14/12/2014	Revised due to extension of 400kV Kolar - Hoody D/C shutdown	S1-S2
16	14-Dec-14	15-12-2014 to 18-12-2014	Revised due to Vallur Unit-1 outage extension	S1-S2
17	17-Dec-14	18-12-2014 to 20-12-2014	Revised due to Vallur Unit-1 outage extension	S1-S2

ASSUMPTIONS IN BASECASE

Month : Dec '14

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	5406	3976	3065	2990
2	Haryana	5606	4285	2988	2988
3	Rajasthan	9930	8381	5466	5326
4	Delhi	3503	1532	1002	862
5	Uttar Pradesh	13013	12923	5457	5358
6	Jammu & Kashmir	2202	1568	220	220
7	Uttarakhand	1802	1235	450	225
8	Himachal Pradesh	1230	1221	212	148
9	Chandigarh	200	99		0
10	ISGS/IPPs			18951	11830
	Total NR	42892	35220	37811	29947
II	EASTERN REGION				
1	West Bengal	6303	4473	4421	3611
2	Jharkhand	1101	905	426	426
3	Orissa	3603	2882	2993	2479
4	Bihar	2202	1988	100	100
5	Damodar Valley Corporation	2402	2186	3455	2829
6	Sikkim	79	78		0
7	Bhutan	108	108	415	295
8	ISGS/IPPs	360	465	8752	7669
	Total ER	16158	13085	20562	17409
III	WESTERN REGION				
1	Chattisgarh	3043	2108	1325	1087
2	Madhya Pradesh	10239	7247	6005	3126
3	Maharashtra	20364	13255	14565	8280
4	Gujarat	11410	9634	12472	8971
5	Goa	432	255	0	0
6	Daman and Diu	274	214	0	0
7	Dadra and Nagar Haveli	636	580	0	0
8	ISGS/IPPs	1345	1142	21219	19246
	Total WR	47743	34435	55586	40710

ASSUMPTIONS IN BASECASE

Month : Dec '14

S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
IV	SOUTHERN REGION				
1	Andhra Pradesh	10424	9550	7172	5835
2	Tamil Nadu	10739	8741	6854	5533
3	Karnataka	7799	6119	6884	4875
4	Kerala	3266	1912	1974	690
5	Pondy	326	285	0	0
6	Goa	89	88	0	0
7	ISGS/IPPs	74	73	9120	8971
	Total SR	32717	26768	32004	25904
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	92	35	0	0
2	Assam	845	640	225	200
3	Manipur	99	61	0	0
4	Meghalaya	241	133	113	58
5	Mizoram	6	41	8	8
6	Nagaland	77	58	11	6
7	Tripura	248	162	104	103
8	ISGS/IPPs		0	1090	680
	Total NER	1608	1130	1551	1055
	Total All India	141118	110638	147514	115025