

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

Issue Date: 03/12/2014

Issue Time: 1500 hrs

Revision No. 5

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		Revised due to restriction of Power order of HVDC Vindhyachal B/B to 250 MW for maintenance.
		07-24'	4100		3600		0		
	3rd December 2014	00-07'	4900	500	4400	4380	20		
		07-14'	4100		3600		0		
	4th December 2014	14-24	3600	500	3600	4380	-500		
		00-07'	4400		3900		0		
	5th December 2014 to 31st December 2014	07-24'	3600	500	3100	4380	0		
		00-17	4900		4400		20		
		23-24							
		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	3600		3300		869		
W3-ER ^{\$}	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 31st December 2014	00-24	2100	750	1350	1350	0		
SR-WR *	1st December 2014 to 31st December 2014	00-24	No limit is being Specified.						
ER-SR ^{\$}	1st December 2014 to 7th December 2014	00-06	2300	0	2300		2435	0	
		18-24					2500	0	
	8th December 2014 to 31st December 2014	00-06	2000	0	2000		2435	0	
		18-24					2500	0	
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		630		420		
	17-23	670	630	420					
2nd December 2014 to 31st December 2014	00-17	685	40	645	210	435			
	23-24	710		670		460			
NER-ER	1st December 2014 to 31st December 2014	00-17	480	30	450	0	450		
		23-24	500	40	470	470			
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		
	10th December 2014 to 14th December 2014	00-24	3300	295	3005	3029	0		
	15th 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	9900		9700		2857		
		17-23	9900		9700		2857		

* 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).

\$ 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 Vidut

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

Issue Date: 03/12/2014

Issue Time: 1500 hrs

Revision No. 5

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

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.

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

\$\$ 400 kV Jeypore Gazuwaka ckt 2 is restored after severe damage due to Hudhud cyclone. In view of this, TTC has been increased. However considering that n-1 of 400 kV Jeypore-Gazuwaka will result in blocking of HVDC Gauwaka B/B .Therefore, only LTA and MTOA transfers are allowed through ER-SR corridor till 7th December.

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		Revised due to restriction of Power order of HVDC Vindhyachal B/B to 250 MW for maintenance reasons.
		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	-500	
		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	-500	
		00-07	7900		7100		289		
		07-17	7100		6300		0		
		17-23	7200		6400		0		
	5th December 2014 to 31st December 2014	23-24	8400	800	7600	6811	789		
		00-17							
		17-23	8500		7700		889		
	NER	1st December 2014	00-17	650	40	610	210	400	
23-24									
2nd December 2014 to 31st December 2014		17-23	670	40	630	210	420		
		00-17	685		645		435		
WR		23-24	710		670		460		
		17-23							
SR	1st December 2014 to 31st December 2014	00-06	4100	750	3350	3785	0		
		18-24							
		06-18'	4100		3350	3850	0		

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'		3800			1064	2736			
18-24		3800			999	2801			
NER	1st 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	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 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).
	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	21-11-2014	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	27-11-2014	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-Mohindergarh 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	01-12-2014	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	02-12-2014	03-12-2014	Revised due to shutdown of 400kV Nellore - Alamatty	S1-S2
5	03-12-2014	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