National Load Despatch Centre Total Transfer Capability for December 2014

Issue Date: 04/12/2014

Issue Time: 1220 hrs

Revision No. 6

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	00-24	2500	500	2000	(MIOA) #	945	Revision	
NK-WK *	31st December 2014 1st December 2014 to 2nd	00-24	4900	500	4400	1055	20		
	December 2014 to 2nd December 2014	07-24'	4900	500	3600	4380	0		
	3rd December 2014	00-07'	4900	500	4400	4200	20		
	3rd December 2014	07-14' 14-24	4100 3600	500	3600 3600	4380	0		
	4th December 2014	00-07'	4400	500	3900	4380	0		
WR-NR	5th December 2014 to	07-24' 00-07	3600 4900		3100 4400		0 20		Revised due to shutdown of HVDC
	11th December 2014	07'-24	4900	500	3600	4380	0	-800	Rihand - Dadri pole 1
	12th December 2014 to	00-07	4900	500	4400	4380	20		Revised due to shutdown of HVDC
	18st December 2014	07'-24 00-17	4100		3600		0	-800	Rihand - Dadri pole 2
	19th December 2014 to 31st December 2014	23-24	4900	500	4400	4380	20		
		17-23	4900		4400		20		
	1st December 2014 to	00-06	2000		1800	293	1507		
NR-ER*	31st December 2014 to 31st December 2014	06-18' 18-24	2000 2000	200	1800 1800	358 293	1442 1507		
	1st December 2014 to	00-17	3500		3200	293	769		
ER-NR	1st December 2014 to 31st December 2014	23-24		300		2431			
		17-23	3600		3300		869		
W3-ER ^{\$}	1st December 2014 to 31st December 2014	00-24	1900	300	1600	697	903		
	1st December 2014 to	00.04	1000	200	700	072			
ER-W3	31st December 2014	00-24	1000	300	700	973	0		
WR-SR	1st December 2014 to	00-24	2100	750	1350	1350	0		
	31st December 2014 1st December 2014 to		2100	750	1550				
SR-WR *	31st December 2014 to 31st December 2014	00-24				No limit	is being Specified.		
		00-06					-		
	1st December 2014 to 7th December 2014	18-24	2300	0	2300	2435	0		
ER-SR ^{\$\$}		06-18'	2500			2500	0		
EK-SK	8th December 2014 to 31st December 2014	00-06	-24 2000	0			_		
		18-24 20			2000	2435	0		
	1st December 2014 to	06-18'				2500	0		
SR-ER *	31st December 2014 to 31st December 2014	00-24				No limit	is being Specified.		
		00-17			610			[
	1st December 2014	23-24	650	40	610	210	400		
ER-NER		17-23 00-17	670		630		420		
	2nd December 2014 to 31st December 2014	23-24	685	40	645	210	435		
	51st December 2014	17-23	710		670		460		
NER-ER	1st December 2014 to	00-17 23-24	480	30	450	0	450		
	31st December 2014	17-23	500	40	470		470		
	1st December 2014 to	00.24	2200	207	2005	2870	127		
	2nd December 2014	00-24	3300	295	3005	2879	126		
		00-10	3300	295	3005	2879	126		
	3rd December 2014	1730	3210	295	2915	2879	36		
		1730- 2400	3300	295	3005	2879	126		
	4th December 2014 to	00-24	3300	205	2005	2070	126		
S1 53	9th December 2014	00-24	3300	295	3005	2879	126		
S1-S2	10th December 2014 to	00-24	3300	295	3005	3029	0		
	14th December 2014								
	15th December 2014 to	00-24	3300	295	3005	2978	27		
	28th December 2014	00.24	5500	275	5505	2270	27		
	29th December 2014 to	00.24	3300	205	3005	2042	62		
	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	1st December 2014 to					LTA and MT	OA as per ex-pp		
for DD & DNH	31st December 2014 to 31st December 2014	00-24	1200	0	1200		edule		
W3 zone	1st December 2014 to	00-17	9400		9200		2357		
Injection	31st December 2014 to 31st December 2014	23-24		200		6843			
		17-23	9900		9700		2857		transactions (Bilateral & First Come

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).

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

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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	Margin Available for Short Term Open Access (STOA)	in TTC w.r.t. Last	Comments
			(-)		· · ·	(MTOA) #	()	Revision	

\$ 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

(a) 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) KWPCL, n)Vandana Vidyut

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 commissionned 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	 (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) 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) contingnecy 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 Jepore-Gazuwaka will result in blocking of HVDC Gauwaka B/B, only LTA and MTOA transfers are allowed against the additional margin 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									
		00-07	8400		7600		789		
	1st December 2014 to	00-07	7600		6800		0		
	2nd December 2014	17-23	7700	800	6900	6811	89		
		23-24	7600		6800		0		
		00-07	8400		7600		789		
		07-'14	7600		6800		0		
	3rd December 2014	14-'17	7100	800	7100	6811	0		
		17-23	7200		6400		0		
		23-24 00-07	7100 7900		6300 7100		0 289		
	4th December 2014	07-'17	7900	800	6300	6811	0		
		17-23	7200		6400		0		
		23-24	7100		6300		0		
NR		00-07	8400		7600	6811	789		
	5th December 2014 to 11th December 2014	07-17 23-24	7600	800	6800		0	-800	Revised due to shutdown of HVDC Rihand - Dadri pole 1
		17-23	7700		6900		89		
		00-07	8400	800	7600	6811	789		
	12th December 2014 to 18th December 2014	07-17 23-24	7600		6800		0	-800	Revised due to shutdown of HVDC Rihand - Dadri pole 2
		17-23	7700		6900		89		_
	19th December 2014 to	00-17 23-24	8400	800	7600	6811	789		
	31st December 2014	17-23	8500		7700		889		
	1st December 2014	00-17 23-24 17-23	650 670	40	610 630	210	400		
NER	0.1D 1.0011	00-17							
	2nd December 2014 to 31st December 2014	23-24 17-23	685 710	40	645 670	210	435		
WR		2. 20							
WK									
		00-06 18-24	4100		3350	3785	0		
SR	1st December 2014 to 31st December 2014	06-18'	4100	750	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	17-18'		700	3800 3800 3800	999 1064 1064	2801 2736 2736		
NER	1st December 2014 to 31st December 2014	18-24 00-17 23-24	4500 480	30	3800 450	999 0	2801 450		
		17-23	500	40	470		470		
WR									
CD *	1 at December 2014 to	00.24				No limit is be	ing Specified		

 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

	Compertantes	
		Outage of one circuit of 400KV Kahalgaon-Banka leads to thermal loading of second circuit.
	Import	High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop
ND		flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra
NR		D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
Ι Γ	Ermont	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
	Export	(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.
NEK	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)
	import	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
		Whole	Revised due to 400kV Jeypore-Gazuwaka D/C line Tower collapse	ER-SR
1	21-11-2014	Month	Revised due to 400kV KalivendapattuPugalur-2 and 400/230kV Tiruvalam Downstream commissioning & Revised LGBR by constituents.	S1-S2
		Whole month	LTA revised due to allocation of power from North to West	NR-WR
		monun	LTA revised due to allocation of LTA from ER to MP	ER-W3
2	27-11-2014	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
		WOIIII	Revised considering network restructuring in NER region	ER-NER
	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
3		Whole	Revised considering the real time load generation balance conditions in ER region	ER-NER
		month	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 Vindhyachal B/B to 250 MW for maintenance reasons.	WR-NR
6	04-12-2014	05-12-2014 to 11-12-2014	Revised due to shutdown of HVDC Rihand - Dadri pole 1	WR-NR
ъ	04-12-2014	12-12-2014 to 18-12-2014	Revised due to shutdown of HVDC Rihand - Dadri pole 2	