### National Load Despatch Centre Total Transfer Capability for February 2014

Issue Date: 31/01/2014 Issue Time: 1300 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 February 2014 to 28th February 2014	00-24	2500	500	2000	286	1714		
WR-NR <sup>1</sup>	1st February 2014 to 28th February 2014	00-17 23-24	3900	500	3400	3181	219		
		17-23	3900		3400	3181	219		
NR-ER *	1st February 2014 to 28th February 2014	00-17 23-24	1000	200	800	200	600		
	1st February 2014 to	17-23 00-17	1100 2600	200	900 2300	2110	700 182		
ER-NR	6th February 2014	23-24 17-23 00-17	1900	300	1600	2118	0		
	7th February 2014 to 28th February 2014	23-24 17-23	3600 3100	300	3300 2800	2118	1182 1182		
		17-23	3100		2000		1102		
W3-ER	1st February 2014 to 28th February 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st February 2014 to 28th February 2014	00-24	1000	300	700	700	0		
WR-SR	1st February 2014 to 28th February 2014	00-24	850	0	850	850	0		
SR-WR *	1st February 2014 to 28th February 2014	00-24	1000	0	1000	0	1000		
		00-05		1			l	I	
ER-SR	1st February 2014 to 28th February 2014	10-19	700	0	700	700	0		
ER-SK		05-10 19-24	700		700		0		
SR-ER *	1st February 2014 to 28th February 2014	00-17 23-24	1100	0	1100	197	903		
	,	17-23	1100		1100		903		
	1st February 2014 to	00-17 23-24	350	50	300	230	70		
ER-NER <sup>2</sup>	6th February 2014	17-23	330		280		50		
220 7 (220	7th February 2014 to 28th February 2014	00-17 23-24	720	50	670	230	440		
	1st February 2014 to	17-23 00-17	570		590 470		360 470		
NER-ER	28th February 2014	23-24 17-23	570	100	470	0	470		
		17-23	370		470		470		
S1-S2	1st February 2014 to 28th February 2014	00-24	5650	400	5250	4900	350		
Import of Punjab	1st February 2014 to 28th February 2014	00-24	5600	300	5300	3800	1500		
Import TTC for DD & DNH	1st February 2014 to 28th February 2014	00-24	980	0	980	LTA and MTO sched			
		00-08 23-24	8500		8300		670		
	1st February 2014	08-16'	7600	200	7400	7630	-230	400	Revised due to shutdown of 400kV
	,	16-17 17-18	8600 9100		8400 8900	7030	770 1270	-400	Seoni-Bhilai
W3 zone Injection		18-23	9500		9300		1670		
Injection	2nd February 2014 to	00-08 23-24	8500		8300		670		
	28th February 2014	08-16'	8000	200	7800	7630	170		
		16-17 17-23	9000 9500		9300 9300		1170 1670		
									vanced transactions (Rilateral & First

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

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Come First Serve).

- 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, 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, k) KSK Mahanadi, L)DB Power, m) KWPCL
- # The figure is based on LTA/MTOA approved by CTU. In actual Operation, due to Units being on Maintenance/ Fuel shortage the LTA/MTOA utilized would be les. RLDC/ NLDC would factor this situation while issuing STOA approvals
- 1. WR-NR Total Transfer capability will be reduced to 3100 MW in case of outage of any one of the following sections:
  - 765 kV Gwalior-Agra one circuit
  - 765 kV Bina-Gwalior one circuit

2. ER-NER Total Transfer capability will be reduced to 450 MW in case of outage of any one of the 400kV Purnea-Biharshariff circuit.

#### **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 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
NR-ER	(n-1) contingency of 400 kV Allahabad-Pusauli
ER-NR	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
W3-ER	(n-1) contingency of 400kV Sterilte-Rourkela S/C
ER-W3	High loading of 400 kV Raipur-Bhadrawati T/C, Bhilai-Bhadrawati S/C, Bhilai-Koradi and Bhilai-Seoni* (n-1) contingency of 400kV Raigarh-Sterlite
WR-SR & ER-SR	Commissioning of 765kV Raichur-Sholapur S/C     Based on the operational experience after the synchronization of SR grid with NEW grid and due to inadvertent variation of 765kV Raichur-Sholapur line flow, observation of Low Frequency Oscillations (LFO)     Considering transfer capability assessment by CTU on NEW-SR corridor.
SR-WR	Bhadrawati HVDC B/B link capacity
SR-ER	
ER-NER	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NER-ER	(n-1) contingency of 400 kV Farakka-Malda
S1-S2	(n-1) contingency of 400 kV Kolar-Hosur D/C line, 400kV Hosur-Salem S/C and 400kV Somanahalli-Salem S/C line.
Import of Punjab	(n-1) contingency of ICT at Patiala/Moga
W3 zone Injection	(n-1) contingency of 400 kV 400 kV Raipur-Wardha

<sup>\*</sup>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									
LIK									
NR¹	1st February 2014 to 6th February 2014	00-17 23-24	6500	800	5700	5299	401		
		17-23	5800		5000		0		
	7th February 2014 to 28th February 2014	00-17 23-24	7500	800	6700	5299	1401		
		17-23	7000		6200		901		
	1st February 2014 to 6th February 2014	00-17 23-24	350	50	300	230	70		
NED 2		17-23	330		280		50		
NER <sup>2</sup>	7th February 2014 to 28th February 2014	00-17 23-24	720	50	670	230	440		
		17-23	640		590		360		
WR									
WK									
SR	1st February 2014 to	00-05 10-19	1550	0	1550	1550	0		
	28th February 2014	05-10 19-24	1550	0	1550	1550	0		

- 1. WR-NR Total Transfer capability will be reduced to 3100 MW in case of outage of any one of the following sections:
  - 765 kV Gwalior-Agra one circuit
  - 765 kV Bina-Gwalior one circuit

#### 2. ER-NER Total Transfer capability will be reduced to 450 MW in case of outage of any one of the 400kV Purnea-Biharshariff circuit.

#### **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 February 2014 to 28th February 2014	00-17 23-24	3500	700	2800	286	2514		
	2011 February 2014	17-23	3600		2900		2614		
NER	1st February 2014 to 28th February 2014	00-17 23-24	570	100	470	0	470		
		17-23	570		470		470		
WR									
WK									
SR*	1st February 2014 to 28th February 2014	00-17 23-24	2100	0	2100 2100	197	1903		
	2011 February 2014	17-23	2100				1903		

<sup>\*</sup> 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**

1		(n.1) contingency of 400 kW Vehelgeen Pihamberiff
	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NR		High loading of 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
1112	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	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NEK	Export	(n-1) contingency of 400 kV Farakka-Malda
		1. Commissioning of 765kV Raichur-Sholapur S/C
	T4	2. Based on the operational experience after the synchronization of SR grid with NEW grid and due to inadvertent
SR	Import	variation of 765kV Raichur-Sholapur line flow, observation of Low Frequency Oscillations (LFO)
		<ol><li>Considering transfer capability assessment by CTU on NEW-SR corridor.</li></ol>
	Export	

<sup>\*</sup>Primary constraints

# National Load Despatch Centre Total Transfer Capability for February 2014

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected		
1	06-11-2013	Whole Month	Revised considering the LTA/MTOA on NR-ER Path	NR-ER		
2	27-11-2013	Whoe Month	Revised due to change in Load Generation in WR/NR Commissioning of 400 kV Purnea-Biharshariff D/C and Network reconfiguration at Malda & Purnea. Revised due to change in Inter-Regional flow pattern and Load generation change in ER/WR.	WR-NR ER-NR/ER-NER W3 Zone Injection		
3	22-01-2014	Whoe Month	Revised due to commissioning of 765kV Raichur-Sholapur S/C	WR-SR/ER-SR		
	29-01-2014			01.02.14 - 06.02.14	Revised due to shutdown of 400kV Kahalgaon-Biharshariff D/C	ER-NR/ER-NER
4		07.02.14 - 31.02.14	Revised due to shutdown of TEESTA Power Station	ER-NR		
			Whole Month	Revside due to Non-Commissioning of Kudankulam U-1, Vallur U-3 & NLC Exp U-1	S1-S2	
5	30-01-2014	01.02.14 - 06.02.14	Revised due to change in ER and Inter-regional flow pattern.	ER-NER/ER-NR		
6	31-01-2014	01.02.14	Revised due to shutdown of 400kV Seoni-Bhilai	W3 Zone Injection		