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

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 April 2014 to 30th April 2014	00-24	2500	500	2000	361	1639		
WR-NR <sup>1</sup>	1st April 2014 to 30th April 2014	00-17 23-24 17-23	4200 4200	500	3700 3700	3656	44 44	300	Revised due to change in Inter- regional flow pattern & COD of Sasan UMPP Unit-2
NR-ER*	1st April 2014 to 30th April 2014	00-17 23-24 17-23	1000 1100	200	800 900	200	600 700		
ER-NR	1st April 2014 to 30th April 2014	00-17 23-24 17-23	3800	300	3500	2789	711 711		
W3-ER	1st April 2014 to 30th April 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st April 2014 to 30th April 2014	00-24	1000	300	700	700	0		
WR-SR	1st April 2014 to 30th April 2014	00-24	1000	0	1000	1000	0	150	Revised considering operational experience and margins on HVDC
SR-WR *	1st April 2014 to 30th April 2014	00-24	1000	0	1000	0	1000		
ER-SR	1st April 2014 to 30th April 2014	00-05 10-19 05-10	750	0	750	657	93	50	Revised considering operational experience and margins on HVDC
SR-ER *	1st April 2014 to	19-24 00-17 23-24	750 1100	0	750 1100	197	93	50	
SK-EK	30th April 2014	17-23	1100	Ü	1100	197	903		
ER-NER <sup>2</sup>	1st April 2014 to 30th April 2014	00-17 23-24 17-23	720 670	50	670 620	230	440 390		
NER-ER	1st April 2014 to 30th April 2014	00-17 23-24 17-23	580	100	480	0	480		
	1st April 2014 to	1							
S1-S2	30th April 2014	00-24	6200	500	5700	5500	200		
Import of Punjab	1st April 2014 to 30th April 2014	00-24	5600	300	5300	3800	1500		
Import TTC for DD & DNH	1st April 2014 to 30th April 2014	00-24	980	0	980	LTA and MTO			
W3 zone Injection	1st April 2014 to 30th April 2014	00-17 23-24 17-23	9000	200	8800	6901	1899	500	Review of flow pattern due to network topology change and Load
-	J		9500		9300		2399		Generation Balance.

<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).

- 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

#### 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

<sup>#</sup> 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

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# 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 (n-1) contingency of one circuit of 400 kV Balipara – Bongaigaon D/C
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
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 Raipur-Wardha-Parli section

<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									
vm1	1st April 2014 to 30th April 2014	00-17 23-24	8000	800	7200	6445	755	200	Revised due to change in Inter-regional flow pattern & COD of Sasan UMPP Unit-2
NR <sup>1</sup>		17-23	8000		7200		755		
NER <sup>2</sup>	1st April 2014 to 30th April 2014	00-17 23-24	720	50	670	230	440		
	30th April 2014	17-23	670		620		390		
WR									
		00.05							
SR	1st April 2014 to 30th April 2014	00-05 10-19	1750	750	1750	1657	93	200	Revised considering operational experience and margins on HVDC
		05-10 19-24	1750	0	1750	1037	93	200	

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 April 2014 to 30th April 2014	00-17 23-24	3500	700	2800	561	2239		
		17-23	3600		2900		2339		
NER	1st April 2014 to 30th April 2014	00-17 23-24	580	100	480	0	480		
		17-23	560		460		460		
WR									
WK									
SR*	1st April 2014 to 30th April 2014	00-17 23-24	2100	0	2100	197	1903		
t Fig. B		17-23	2100		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**

NR	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
	Import	High loading of 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
INK	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 and (n-1) contingency of one circuit of 400 kV Balipara – Bongaigaon D/C
NEK	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
	Townset	1. Commissioning of 765kV Raichur-Sholapur S/C
		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).
		3. Considering transfer capability asessment by CTU on NEW-SR corridor.
	Export	

<sup>\*</sup>Primary constraints

# National Load Despatch Centre Total Transfer Capability for April 2014

Revision No	Date of Revision	l Reason for Revision					
1	22-01-2014	Whole	Revised due to commissioning of 765kV Raichur-	WR-SR /			
1		Month	Sholapur S/C	ER-SR			
		Whole Month	Revised due to change in Inter-regional flow pattern & COD of Sasan UMPP Unit-2	WR-NR			
2	19-02-2014		Revised considering operational experience and	WR-SR /			
2	19-02-2014		margins on HVDC	ER-SR			
			Review of flow pattern due to network topology change	W3 Zone			
			and Load Generation Balance.	Injection			