## National Load Despatch Centre Total Transfer Capability for May 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 May 2014 to 31st May 2014	00-24	2500	500	2000	286	1714		
WR-NR <sup>1</sup>	1st May 2014 to 31st May 2014	00-17 23-24 17-23	4200 4200	500	3700 3700	3656	44 44		
NR-ER*	1st May 2014 to 31st May 2014	00-17 23-24 17-23	1000 1100	200	800 900	200	600 700		
ER-NR <sup>\$</sup>	1st May 2014 to 31st May 2014	00-17 23-24 17-23	3800	300	3500	2789	711 711		
W3-ER	1st May 2014 to 31st May 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st May 2014 to 31st May 2014	00-24	1000	300	700	700	0		
WR-SR	1st May 2014 to 31st May 2014	00-24	1000	0	1000	1000	0		
SR-WR *	1st May 2014 to 31st May 2014	00-24	1000	0	1000	0	1000		
ER-SR	1st May 2014 to 31st May 2014	00-05 10-19 05-10	750	0	750	- 657	93		
SR-ER *	1st May 2014 to 31st May 2014	19-24 00-17 23-24	750 1100	0	750 1100	197	93		
	515t May 201 .	17-23	1100		1100		903		
ER-NER <sup>2</sup>	1st May 2014 to 31st May 2014	00-17 23-24	720	50	670	230	440		
NER-ER	1st May 2014 to 31st May 2014	17-23 00-17 23-24 17-23	530 550	100	590 430 450	0	360 430 450		
			-50		.50		.50		
S1-S2	1st May 2014 to 31st May 2014	00-24	6200	500	5700	5500	200		
Import of Punjab	1st May 2014 to 31st May 2014	00-24	5600	300	5300	3800	1500		
Import TTC for DD & DNH	1st May 2014 to 31st May 2014	00-24	980	0	980	LTA and MTO sched			
W3 zone Injection	1st May 2014 to 31st May 2014	00-17 23-24	9000	200	8800	6901	1899		
	•	17-23	9500		9300		2399		

<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).

\$ As per Simulations, predminant direction of flow is on West to North Corridor. Hence, in case injection point is in Western Region, No Re-routing of STOA/PX application may be done through West-East-North Corridor as such re-routing increases congestion in the West to North Corridor.

<sup>1)</sup> ER-SR TTC declared at Talcher Interconnector and Gazuwaka HVDC B/B seam

<sup>2)</sup> S1 comprises of AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Pondicherry

<sup>3)</sup> 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

 $f)\;BALCO,\;g)\;Sterlite\;(\#1,3,4),\;h)\;NSPCL,\;i)\;Korba,\;j)\;Sipat,\;k)\;KSK\;Mahanadi,\;L)DB\;Power,\;m)\;KWPCL$ 

<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

# **National Load Despatch Centre Total Transfer Capability for May 2014**

Issue Date: 05/03/2014 Issue Time: 1600 hrs Revision No. 2

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
<ul> <li>WR-NR Total Transfer capability will be reduced to 3100 MW in case of outage of any one of the following sections:</li> <li>• 765 kV Gwalior-Agra one circuit</li> <li>• 765 kV Bina-Gwalior one circuit</li> </ul>									

# 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									
NR <sup>1</sup>	1st May 2014 to 23-24	00-17 23-24	8000	800	7200	6445	755		
NK		17-23	8000		7200		755		
NER <sup>2</sup>	1st May 2014 to 31st May 2014	00-17 23-24	720	50	670	230	440		
	51st May 2014	17-23	640		590		360		
WR									
		00.05							
SR	1st May 2014 to	00-05 10-19	1750	0	1750	1657	93		
)K	31st May 2014	05-10 19-24	1750	0	1750		93		

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 May 2014 to 31st May 2014	00-17 23-24	3500	700	2800	486	2314		
		17-23	3600		2900		2414		
NER	1st May 2014 to 31st May 2014	00-17 23-24	530	100	430	0	430		
		17-23	550		450		450		
WR									
WK									
SR*	1st May 2014 to 31st May 2014	1 23-24 1 1 0 1	197	1903					
t Fig. B	31st May 2014	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**

	Turnant	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NR	Import	High loading of 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
1111	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
	In out	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 May 2014

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected	
			Revised due to change in Inter-regional flow pattern & COD of Sasan UMPP Unit-2	ER-NR/ WR-NR	
1	19-02-2014	Whole Month			
			Review of flow pattern due to network topology change and Load Generation Balance.	W3 Zone Injection	
2	05-03-2014	Whole Month	Re-Routing of transactions on West-East-North Corridor discontinued on account of Inter-Regional Loop flows leading to physical congestion on WR-NR.	WR-NR/ ER-NR	