Issue Date: 05/05/2014 Issue Time: 1200 hrs

Revision No. 12

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	297	1703		
	1st May 2014 to	00-17 23-24	4200	500	3700	3992	0		
	3rd May 2014	17-23	4200		3700		0		
	4th May 2014	00-09	4200	500	3700	3992	0		
		09'-24	3800 4200		3300 3700		0		Revised as the shutdown of 400 kV
	5th May2014	05'-24	4200	500	3700	3992	0	400	Bhiwani (PG) - Mohindergarh Ckt-1 is
		00-05	4200		3700		0	100	not being availed.
	6th May2014	05'-24	3800	500	3300	3992	0	-400	Revised due to shutdown of 400 kV Bhiwani (PG) - Mohindergarh Ckt-1
WR-NR		00-05	4200		3700		0		Revised due to shutdown of 400 kV
	7th May2014	05'-24	3800	500	3300	3992	0	-400	Bhiwani (PG) -Mohindergarh Ckt-2
	9d- M 2014	00-05	4200	500	3700	2002	0		Revised due to shutdown of 400 kV
	8th May2014	05'-24	3900	500	3400	3992	0	-300	Dhanonda - Mohindergarh Ckt-1
		00-05	4200		3700		0		Revised due to shutdown of 400 kV
	9th May2014	05'-24	3900	500	3400	3992	0	-300	Dhanonda - Mohindergarh Ckt-2
	10th May 2014 to	00-17							
	31st May 2014 to	23-24 17-23	4200 4200	500	3700 3700	3992	0		
			4200						
		00-06 06-17'	1000		800 800	293 423	507 377		
NR-ER*	1st August 2014 to 31st August 2014	17-18'	1100	200	900	423	477		
	31st August 2014	18-23	1100		900	293	607		
		23-24	1000		800	293	507		
	1st May 2014	23-24	3800	300	3500	2431	1069		
ER-NR <sup>\$</sup>	2nd May 2014	17-23 00-07	3800	300	3500	2431	1069 1069		
ER-NK		07'-24 00-17	3500	300	3200	2431	769		
	3rd May 2014 to 31st May 2014	23-24	3800	300	3500	2431	1069		
	,	17-23					1069		
	1st May 2014	00-07	1800	300	1500	551	949		
	13t May 2014	07'-24	1500	300	1200	551	649		
	2nd May 2014	00-07	1800	300	1500	551	949		
W3-ER		07'-24	1800	300	1500	551	949		
	3rd May to 4th May 2014	00-07	1800	300	1500	551	949		
	5th May to 31st	07'-24	1500	300	1200	551	649		
	May 2014	00-24	1800	300	1500	551	949		
ER-W3	1st May 2014 to 31st May 2014	00-24	1000	300	700	874	0		
	1st May 2014 to								
WR-SR	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		
	1st May 2014 to	00-06				593	157		
	2nd May 2014	18-24 06-18'	750	0	750	638	157		
		00-06	750		750	593	157		
ER-SR	3rd May 2014	18-24 06-17'	450	0	450	638	0		
		17-18	750		750	638	112		
	4th May 2014 to 31st May 2014	00-06 18-24	750	0	750	593	157		
	-	06-18' 00-17				638	112		
SR-ER *	1st May 2014 to 31st May 2014	23-24	1100	0	1100	197	903		
		17-23	1100		1100		903		
	1st May 2014 to	00-06 23-24	720		670	205	465		
ER-NER <sup>2</sup>	31st May 2014 to	06-17' 17-18	720 640	50	670 590	210 210	460 380		
		18-23	640		590	205	385		
NER-ER	1st May 2014 to	00-17 23-24	530	100	430	0	430		
	31st May 2014	17-23	550		450		450		
	•	20			.50				

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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 (MTOA) #	Margin Available for Short Term Open Access (STOA)	Changes in TTC w.r.t. Last Revision	Comments
	1st May 2014 to 05th May 2014	00-24	5650	400	5250	5150	100		
S1-S2	06th May 2014 to	00-07	5650	400	5250	5150	100		
51-52	07th May 2014	07-24'	5100	400	4700	5150	0	-550	Revised due to shutdown of 400 kV Hosur-Salem 2
	08th May 2014 to 31st May 2014	00-24	5650	400	5250	5150	100		
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			
	1st May 2014 07-17 23-24 17-23	00-07	9000		8800		1899		
		07-17 23-24	8500	200	8300	6901	1399		
		17-23	9000		8800		1899		
	2nd May 2014	00-17 23-24	9000	200	8800	6901	1899		
		17-23	9500		9300		2399		
		00-08	9000		8800		1899		
W3 zone Injection	3rd May 2014	08'-17 23-24	8600	200	8400	6901	1499		
		17-23	9100		8900		1999		
		00-07'	9000		8800		1899		
	4th May 2014	17-23	9000	200	8800	6901	1899		
		07'-17 23-24	8500		8300		1399		
	5th May 2014 to	00-17 23-24	9000	200	8800	6901	1899		
	31st May 2014	17-23	9500		9300		2399		

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) Chattisgant Bell transaction, b) Jindal Power Limited (JPL) Stage-1 & 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 be 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.

# 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 (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda.
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 (during Off-Peak Hours) (n-1) contingency of one circuit of 400 kV Balipara – Bongaigaon D/C (during Peak Hours)
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

\*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									
	1st May 2014	00-17 23-24	8000	800	7200	6423	777		
	2nd May 2014	17-23 00-07' 07'-24	8000 8000 7700	800	7200 7200 6900	6423	777 777 477		
	3rd May 2014	07-24 00-17 23-24	8000	800	7200	6423	777		
		17-23	8000		7200		777		
	4th May 2014	00-09	8000 7600	800	7200 6800	6423	777 377		
		00-05	8000		7200		777		Revised as the shutdown of
NR	5th May 2014	05'-24	8000	800	7200	6423	777	400	400 kV Bhiwani (PG) - Mohindergarh Ckt-1 is not being availed.
	6th May 2014	00-05 05'-24	8000 7600	800	7200 6800	6423	777 377	-400	Revised due to shutdown of 400 kV Bhiwani (PG) - Mohindergarh Ckt-1
	7th May 2014	00-05 05'-24	8000 7600	800	7200 6800	6423	777 377	-400	Revised due to shutdown of 400 kV Bhiwani (PG) - Mohindergarh Ckt-2
	8th May 2014	00-05 05'-24	8000 7700	800	7200 6900	6423	777 477	-300	Revised due to shutdown of 400 kV Dhanonda - Mohindergarh Ckt-1
	09th May 2014	00-05 05'-24	8000 7700	800	7200 6900	6423	777 477	-300	Revised due to shutdown of 400 kV Dhanonda - Mohindergarh Ckt-2
	10th May 2014 to 31st May 2014	00-17 23-24	8000	800	7200	6423	777		Ü
	1	17-23 00-06 23-24	8000 720		7200 670	205	777 465		
NER <sup>2</sup>	1st May 2014 to 31st May 2014	06-17' 17-18 18-23	720 640 640	50	670 590 590	210 210 205	460 380 385		
WR									
	1st May 2014 to 2nd May 2014	00-06 18-24	1750	0	1750	1593	157		
	•	06-18' 00-06 18-24	1750 1750	_	1750 1750	1638 1593	112 157		
SR	3rd May 2014	06-17' 17-18	1450 1750	0	1450 1750	1638 1638	0 112		
	4th May 2014 to 31st May 2014	00-06 18-24	1750	0	1750	1593	157		
	31st May 2014	06-18'	1750		1750	1638	112		

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

Simultane	ous Export Capa	bility			297				
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
		00-06	3500		2800	590	2210		
	1st May 2014 to 31st May 2014	06-17'	3500	700	2800	720	2080		
NR*		17-18	3600		2900	720	2180		
		18-23	3600		2900	590	2310		
		23-24	3500		2800	590	2210		
NER	1st May 2014 to 31st May 2014	00-17 23-24	530	100	430	0	430		
		17-23	550		450		450	1	
WR									
WK									
SR*	1st May 2014 to 31st May 2014	00-17 23-24	2100	0	2100	197	1903		
	51st May 2014	17-23	2100	1	2100		1903	1	

<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**

		(n-1) contingency of 400 kV Kahalgaon-Biharshariff
	Import	High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high
NR		loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda.
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
	Export	(n-1) contingency of 400 kV Allahabad-Pusauli
	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff (during Off-Peak hours) and (n-1) contingency of one circuit of
NER		400 kV Balipara – Bongaigaon D/C (during Peak Hours)
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
		1. Commissioning of 765kV Raichur-Sholapur S/C
	Import	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

Revisi	Date of	Period of	Period of Person for Povision				
on No	Revision	Revision	Reason for Revision	Affected			
			Revised due to change in Inter-regional flow pattern &	ER-NR/			
			COD of Sasan UMPP Unit-2				
1	10/02/2014	Whole	Revised considering operational experience and	ER-SR/WR-			
1	19/02/2014	Month	margins on HVDC	SR			
			Review of flow pattern due to network topology	W3 Zone			
			change and Load Generation Balance.	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			
3	13/03/2014	Whole Month	Margin revised due to withdrawal/cancellation of 150MW MTOA from Corporate Power Limited	ER-SR			
		Whole	Margin revised due to correction in LTA/MTOA				
4	25/03/2014	Month	figure.	NR-WR			
5	29/03/2014	Whole	Margin revised due to grant of 150 MW LTA towards	ER-SR			
		Month	SR from NEW grid				
			Margin revised due to Non-Commissioning of Kudankulam U-1, Vallur U-3 unit and NLC-2 EXP units and Allocation of 150 MW to TANGEDCO.	S1-S2			
			Margin revised due to incorporation of existing Solar Power Allocation to SR, ER, NER constituents between 6 hrs -18 hrs in LTA figures and allocation data avialable on RPCs RTA/REA.	NR-ER/ ER- SR			
6	20/04/2014	Whole	WR-NR				
6	29/04/2014	Month	Margin revised considering the LTA/MTOA allocation avialable in RPCs RTA/REA and due to incorporation of existing Solar Power Allocation to Assam.	ER-NER			
			Margin revised considering the LTA/MTOA allocation	NR-WR/			
			avialable in RPCs RTA/REA.	ER-NR			
			Margin revised considering the LTA/MTOA allocation avialable on RPCs RTA/REA and Re-routing of existing MTOA granted by CTU.	W3-ER			
		04  05  001	Revised due to shutdown of 400kV Raipur-Wardha	W3 Zone			
_	20/04/2044	01/05/2014	Circuit-2.	Injection			
7	30/04/2014	01/05/2014-	Revised due to shutdown of 400 kV				
			Rourkela-Sundergarh-Raigarh Ckt-II	W3-ER			
			Revised due to shutdown of 400 kV Biharshariff- Banka Ckt-II	ER-NR			
8	01/05/2014	02/05/2014	Revised due to 400 kV Rourkela-Sundergarh-Raigarh Ckt-II shutdown not being availed	W3-ER			

Revisi on No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected	
	02/05/2014	02/05/2011	Revised due to shutdown of 400 kV Raipur- Bhadrawati-II	W3 injection	
9		03/05/2014	Revised due to shutdown of 400 kV JITPL-Anugul- Meramundli	ER-SR	
		03/05/2014 to 04/05/2014	Revised due to shutdown of 400 kV Rourkela-Sundergarh-Raigarh Ckt-II	W3-ER	
			Revised due to shutdown of 400 kV Raipur-Wardha-I	W3 injection	
10 03/05/2014	03/05/2014	04/05/2014	Revised due to shutdown of 765 kV Bus-I of 765/400 kV Agra Substation	WR-NR	
	04/05/2014	05/05/2014	Revised due to shutdown of 400 kV Bhiwani (PG) - Mohindergarh ckt-1		
11		04/05/2014	06/05/2014	Revised due to shutdown of 400 kV Bhiwani (PG) - Mohindergarh ckt-2	WR-NR
		07/05/2014	Revised due to shutdown of 400 kV Dhanonda - Mohindergarh ckt-1		
		08/05/2014	Revised due to shutdown of 400 kV Dhanonda - Mohindergarh ckt-2		
12	05/05/2014	to 09/05/2014	Revised due to rescheduling of 400 kV Bhiwani (PG) - Mohindergarh ckt-1, ckt-2 and 400 kV Dhanonda - Mohindergarh ckt-1 and ckt-2 shutdown	WR-NR	
		06/05/2014 to 07/05/2014	Revised due to shutdown of 400 kV Hosur-Salem Ckt 2	S1-S2	