National Load Despatch Centre Total Transfer Capability for March 2014

Issue Date: 26/02/2014 Issue Time: 1500 hrs Revision No. 3

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 March 2014 to 31st March 2014	00-24	2500	500	2000	361	1639		
WR-NR ¹	1st March 2014 to 31st March 2014	00-17 23-24 17-23	4200 4200	500	3700 3700	3656	44		
							· · · · · · · · · · · · · · · · · · ·		
NR-ER*	1st March 2014 to 31st March 2014	00-17 23-24 17-23	1000	200	800 900	200	600 700		
	1st March 2014 to	00-17	3600		3300		511		
	6th March 2014	23-24		300		2789			
ER-NR		17-23 00-17	3100		2800		11		
	7th March 2014 to 31st March 2014	23-24	3800	300	3500	2789	711		
	31st March 2014	17-23					711		
	1st March 2014 to			***			4-00		
W3-ER	31st March 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st March 2014 to	00-24	1000	300	700	700	0		
	31st March 2014	<u> </u>						l e	
WR-SR	1st March 2014 to 31st March 2014	00-24	1000	0	1000	1000	0		
SR-WR *	1st March 2014 to 31st March 2014	00-24	1000	0	1000	0	1000		
	1st March 2014 to	00-05	750		750		93		
ER-SR	31st March 2014 to	10-19 05-10		0		657			
		19-24	750		750		93		
CD ED #	1st March 2014 to	00-17	1100	0	1100	197	903		
SR-ER *	31st March 2014	23-24 17-23	1100	0	1100	197	903		
		00.17							
	1st March 2014 to	00-17 23-24	650	50	600	230	370	-70	
	1st March 2014 to 05th March 2014	00-17 23-24 17-23	650 590	50	600 540	230	370 310	-70 130	
		23-24		50		230			Revised due to shutdown of 220 Balipara - Samaguri S/C
FD-NFD ²		23-24 17-23	590	50	540	230	310	130	
ER-NER ²	05th March 2014	23-24 17-23 00-17	590 650		540 600		310 370	130	Revised due to shutdown of 2200 Balipara - Samaguri S/C
ER-NER ²	05th March 2014	23-24 17-23 00-17 17-23	590 650 720		540 600 540		310 370 310	130	
ER-NER ²	05th March 2014 06th March 2014 7th March 2014 to	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23	590 650 720 720	50	540 600 540 670	230	310 370 310 440	130	
ER-NER ²	05th March 2014 06th March 2014 7th March 2014 to 31st March 2014 to	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24	590 650 720 720 720 720 520	50	540 600 540 670 670 670 420	230	310 370 310 440 440 440 420	-110	Balipara - Samaguri S/C Revised due to shutdown of 220
ER-NER ²	05th March 2014 06th March 2014 7th March 2014 to 31st March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 17-23	590 650 720 720 720 720 720 520 450	50	540 600 540 670 670 670 420 350	230	310 370 310 440 440 440 420 350	-110 -140	Balipara - Samaguri S/C
ER-NER ²	05th March 2014 06th March 2014 7th March 2014 to 31st March 2014 to	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 17-23 00-17	590 650 720 720 720 720 520	50	540 600 540 670 670 670 420	230	310 370 310 440 440 440 420	-110	Balipara - Samaguri S/C Revised due to shutdown of 220
	05th March 2014 06th March 2014 7th March 2014 to 31st March 2014 1st March 2014 to 05th March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 17-23 00-17 17-23 23-24	590 650 720 720 720 720 520 450 520	50	540 600 540 670 670 670 420 350 420	230 230 0	310 370 310 440 440 440 420 350 420	-110 -140	Balipara - Samaguri S/C Revised due to shutdown of 220
	05th March 2014 06th March 2014 7th March 2014 to 31st March 2014 1st March 2014 to 05th March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 17-23 23-24 17-23 00-17 17-23	590 650 720 720 720 720 520 520 590	50 50 100	540 600 540 670 670 420 350 420 490	230 230 0	310 370 310 440 440 440 420 350 420 490	-110 -140	Balipara - Samaguri S/C Revised due to shutdown of 220
	05th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 06th March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 17-23 00-17 17-23 23-24 00-17 23-24	590 650 720 720 720 720 520 450 520 590 630	50	540 600 540 670 670 420 420 490 530 530	230 230 0	310 370 310 440 440 440 420 350 420 490 530	-110 -140	Balipara - Samaguri S/C Revised due to shutdown of 220
	05th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 06th March 2014 06th March 2014 to 105th March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 17-23 23-24 17-23 00-17 17-23	590 650 720 720 720 720 520 450 520 590 630	50 50 100	540 600 540 670 670 420 420 490 530	230 230 0	310 370 310 440 440 440 420 350 420 490 530	-110 -140	Balipara - Samaguri S/C Revised due to shutdown of 220 Balipara - Samaguri S/C
NER-ER	05th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 06th March 2014 06th March 2014 7th March 2014 to 31st March 2014 1st March 2014 to 31st March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 17-23 00-17 17-23 23-24 00-17 23-24	590 650 720 720 720 720 520 450 520 590 630	50 50 100	540 600 540 670 670 420 420 490 530 530	230 230 0	310 370 310 440 440 440 420 350 420 490 530	-110 -140	Balipara - Samaguri S/C Revised due to shutdown of 220 Balipara - Samaguri S/C Revised due to Non-Commission
NER-ER	05th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 06th March 2014 06th March 2014 7th March 2014 to 31st March 2014 1st March 2014 to 31st March 2014	23-24 17-23 00-17 17-23 23-24 17-23 00-17 23-24 17-23 00-17 17-23 23-24 00-17 17-23 23-24 17-23	590 650 720 720 720 720 520 520 520 530 630 630	50 50 100 100	540 600 540 670 670 420 350 420 490 530 530	230	310 370 310 440 440 440 420 350 420 490 530 490	-110 -110 -110	Revised due to shutdown of 220 Balipara - Samaguri S/C
NER-ER S1-S2 Import of	05th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 06th March 2014 to 05th March 2014 7th March 2014 to 31st March 2014 to 31st March 2014 1st March 2014 to 31st March 2014 to 31st March 2014 1st March 2014 to 31st March 2014 to 31st March 2014	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 00-17 23-24	590 650 720 720 720 720 520 450 520 630 630 590	50 50 100 100 100	540 600 540 670 670 420 350 420 490 530 530 490	230 230 0 0 0	310 370 310 440 440 440 420 350 420 490 530 530 490 350 490	-110 -110 -110	Revised due to shutdown of 220 Balipara - Samaguri S/C Revised due to Non-Commission of Kudankulam U-1, Vallur U-3
NER-ER S1-S2 Import of Punjab mport TTC for DD &	06th March 2014 06th March 2014 to 31st March 2014 to 05th March 2014 1st March 2014 to 05th March 2014 7th March 2014 to 31st March 2014 1st March 2014 to 31st March 2014 to 31st March 2014 to 31st March 2014 1st March 2014 to 31st March 2014 to 31st March 2014 1st March 2014 to 31st March	23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 17-23 23-24 00-17 23-24 17-23 00-17 23-24 00-17 23-24 00-17 23-24	590 650 720 720 720 720 520 450 520 590 630 630 590 5650	50 50 100 100 100 400 300	540 600 540 670 670 670 420 350 420 490 530 530 530	230 230 0 0 4900 3800 LTA and MTO.	310 370 310 440 440 440 420 350 420 490 530 530 490 350 490	-110 -110 -110	Revised due to shutdown of 220 Balipara - Samaguri S/C

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

Issue Date: 26/02/2014 Issue Time: 1500 hrs Revision No. 3

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
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- DER-SR TTC declared at Talcher Interconnector and Gazuwaka HVDC B/B seam
 SI comprises of AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Pondicherry
 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

- 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 315 MVA ICT 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
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^{*}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 March 2014 to 6th March 2014	00-17 23-24	7800	800	7000	6445	555		
NR ¹	7th March 2014 to 31st March	17-23 00-17 23-24	7300 8000	800	7200	6445	55 755		
	2014	17-23	8000		7200		755		
	1st March 2014 to 05th March	00-17 23-24	650	50	600	230	370	-70	Revised due to shutdown of 220kV Balipara -
	2014	17-23	590		540		310	130	Samaguri S/C
		00-17	650	50	600	230	370	-70	Sumaguri 5/C
NER ²	06th March 2014		720		540		310		
	7th March 2014 to 31st March	23-24 00-17 23-24	720 720	50	670 670	230	440		
	2014	17-23	720		670		440		
WR									
SR	1st March 2014 to	00-05 10-19	1750	0	1750	1657	93		
DIX.	31st March 2014	05-10 19-24	1750	0	1750	1037	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 March 2014 to 31st March 2014	00-17 23-24	3500	700	2800	561	2239		
	51st March 2014	17-23	3600		2900		2339		
	1st March 2014 to 05th March	00-17 23-24	520	100	420	0	420	-110	Revised due to shutdown
	2014	17-23	450		350		350	-140	of 220kV Balipara -
		00-17	520	100	420	0	420	-110	Samaguri S/C
NER	06th March 2014	17-23	590		490		490		
		23-24	630		530		530		
	7th March 2014 to 31st March	00-17 23-24	630	100	530		530		
	2014	17-23	590		490		490		
WR									
SR*	1st March 2014 to 31st March 2014	00-17 23-24	2100	0	2100	197	1903		
	518t WalCll 2014	17-23	2100		2100		1903		

^{*} 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
		High loading of 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
IVIX	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
		(n-1) contingency of 400 kV Allahabad-Pusauli
NER	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NEK	Export	(n-1) contingency of 315 MVA ICT at Misa
	Import	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)
		Considering transfer capability assessment by CTU on NEW-SR corridor.
	Export	

*Primary constraints

National Load Despatch Centre Total Transfer Capability for March 2014

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	22/01/2014	Whole Month	Revised due to commissioning of 765kV Raichur- Sholapur S/C	ER-SR/ WR- SR
		Whole	 Revised due to shutdown of TEESTA Power Station. Revised due to change in Inter-regional flow pattern & COD of Sasan UMPP Unit-2 	ER-NR/ WR-NR
2	19/02/2014	Month	Revised considering operational experience and margins on HVDC	ER-SR/ WR- SR
			Review of flow pattern due to network topology change and Load Generation Balance.	W3 Zone Injection
3	26/02/2014	Whole Month	Revside due to Non-Commissioning of Kudankulam U-1, Vallur U-3 & NLC Exp U-1	S1-S2
3	26/02/2014	01.03.14 - 06.03.14	Revised due to shutdown of 220kV Balipara - Samaguri S/C	ER-NER / NER-ER

ASSUMPTIONS IN BASECASE

Month: March '14

				WOTHIT : Watch 14			
		Loa	ad	Generation			
S.No.	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)		
I	NORTHERN REGION						
1 P	unjab	5571	4510	2524	2495		
2 H	laryana	5755	4779	3482	3482		
3 R	tajasthan	8215	8320	4940	4892		
4 D	elhi	4102	2950	1101	1101		
5 U	Ittar Pradesh	11500	10154	5957	5867		
6 Ja	ammu & Kashmir	2249	1725	343	567		
7 U	Ittarakhand	1582	1397	649	580		
8 H	limachal Pradesh	1353	1194	367	253		
9 C	handigarh	238	138	0	0		
10 IS	SGS/IPPs			17573	11543		
To	otal NR	40564	35167	36936	30780		
II	EASTERN REGION						
1 W	Vest Bengal	6600	5100	4797	4000		
2 Jł	harkhand	1000	800	450	450		
3 O)rissa	3400	2600	2405	1600		
4 B	ihar	2000	1600	0	0		
5 D	amodar Valley Corporation	2600	2350	3600	3397		
6 S	ikkim	90	50		0		
7 B	hutan	110	110	200	200		
8 IS	SGS/IPPs	270	270	6849	6490		
T	otal ER	16070	12880	18301	16137		
Ш	WESTERN REGION						
1 C	hattisgarh	3236	2968	1629	1629		
2 M	ladhya Pradesh	6961	5643	3847	3003		
3 M	1aharashtra	16185	14018	11275	10527		
4 G	Gujarat	11063	10565	10649	9002		
5 G	Goa	422	283	0	0		
6 D	aman and Diu	239	240	0	0		
7 D	adra and Nagar Haveli	588	552	0	0		
8 IS	SGS/IPPs	1291	1111	18555	16029		
T	otal WR	39985	35380	45955	40190		

IV	SOUTHERN REGION				
1	Andhra Pradesh	12233	9818	8014	6538
2	Tamil Nadu	11677	9714	7485	5425
3	Karnataka	8822	6821	6694	5453
4	Kerala	3378	2583	1844	916
5	Pondy	312	247		
6	Goa	80	80		
7	ISGS/IPPs			10790	9643
	Total SR	36502	29263	34827	27975
V	NORTH-EASTERN REGION				
1	Manipur	120	84	0	0
2	Meghalaya	300	210	90	70
3	Mizoram	70	49	4	0
4	Nagaland	110	77	12	6
5	Assam	1280	940	190	190
6	Tripura	220	130	105	100
7	Arunachal Pradesh	120	84	0	0
8	ISGS/IPPs			921	603
	Total NER	2220	1574	1322	969
	T				
	Total All India	135341	114264	137341	116051