National Load Despatch Centre Total Transfer Capability for March 2014

Issue Date: 28/02/2014 Issue Time: 1300 hrs Revision No. 4

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 44		
						I			
NR-ER*	1st March 2014 to 31st March 2014	00-17 23-24 17-23	1000	200	900	200	700		
	1st March 2014 to	00-17	3600		3300		511		
	6th March 2014	23-24		300		2789	11		
ER-NR	74 34 1 2014	17-23 00-17	3100		2800				
	7th March 2014 to 31st March 2014	23-24	3800	300	3500	2789	711		
		17-23	<u> </u>	<u> </u>	<u> </u>	<u> </u>	711	<u> </u>	
		00-09	1800	300	1500	0	1500		
	1st March 2014	17-24							Revised due to shutdown of 400 kV
W3-ER		09-17'	1500	300	1200	0	1200	-300	SEL-Rourkela Ckt 1
	2nd March 2014 to 31st March 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st March 2014 to 31st March 2014	00-24	1000	300	700	700	0		
	1st March 2014 to	ı	1	1	1		1	1	
WR-SR	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		
		00.05	I	I	I		1	1	
ED CD	1st March 2014 to 31st March 2014	00-05 10-19	750	0	750	657	93		
ER-SR		05-10	750		750		93		
	1st March 2014 to 31st March 2014	19-24 00-17		0		197			
SR-ER *		23-24	1100		1100		903		
	313t Water 2014	17-23	1100		1100		903	<u> </u>	
	1st March 2014 to	00-17	650	50	600	230	370		
	05th March 2014	23-24 17-23	590		540		310		
		00-17	650		600	230	370		
ER-NER ²	06th March 2014	17-23	720	50	540		310		
		23-24	720		670		440		
	7th March 2014 to 31st March 2014	00-17 23-24	720	50	670	230	440		
		17-23	720		670		440		
	1st March 2014 to	00-17 23-24	520	100	420	0	420		
	05th March 2014	17-23	450	130	350		350		
MED ED	06th Marris 2014	00-17	520	100	420	0	420		
NER-ER	06th March 2014	17-23 23-24	590 630	100	490 530	0	490 530		
	7th March 2014 to	00-17	630	40.5	530		530		
	31st March 2014	23-24 17-23	590	100	490	0	490		
		11-23	370		770		770		
S1-S2	1st March 2014 to 31st March 2014	00-24	5650	400	5250	4900	350		
Import of Punjab	1st March 2014 to 31st March 2014	00-24	5600	300	5300	3800	1500		
Import TTC for DD & DNH	1st March 2014 to 31st March 2014	00-24	980	0	980	LTA and MTO.			
W3 zone	1st March 2014 to	00-17	9000	200	8800	7167	1633		
Injection	31st March 2014	23-24 17-23	9500	200	9300	7167	2133		

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).

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

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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 17-23	7800 7300	800	7000 6500	6445	555 55		
NR ¹	7th March 2014 to 31st March	00-17 23-24	8000	800	7200	6445	755		
	2014 1st March 2014	17-23 00-17	8000		7200		755		
	to 05th March 2014	23-24 17-23	650 590	50 540	540	230	370 310		
NER ²	06th March 2014	00-17	650 720	50	600 540	230	370 310		
NEK	Ooth Watch 2014	23-24	720	30	670	230	440		
	7th March 2014 to 31st March	00-17 23-24	720	50	670	230	440		
	2014	17-23	720		670		440		
WR									
SR	1st March 2014 to	00-05 10-19	1750	0	1750	1657	93		
SR	31st March 2014	05-10 19-24	1750	U	1750	1657	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		
	31st March 2014	17-23	3600		2900		2339		
	1st March 2014 to 05th March	00-17 23-24	520	100	420	0	420		
	2014	17-23	450		350		350		
	06th March 2014	00-17	520	100	420	0	420		
NER		17-23	590		490		490		
		23-24	630		530		530		
	7th March 2014 to 31st March	00-17 23-24	630	100	530	0	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		
4 F/A B	31st Watch 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

	Import	(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)
IVIX	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
NER	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
NEK	Export	(n-1) contingency of 315 MVA ICT 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)
		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 Month	 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		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
2	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
4	28/02/2014	01.03.14	Revised due to shutdown of 400 kV SEL-Rourkela Ckt 1	W3-ER

ASSUMPTIONS IN BASECASE

Month: March '14

				World : Walch 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	ajasthan	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