

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

Issue Date: 04/03/2014

Issue Time: 1300 hrs

Revision No. 6

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 4th March 2014	00-17	4200	500	3700	3656	44		Revised due to emergency shutdown of 765 kV Gwalior Bus 1
		23-24	4200		3700		44		
	5th March 2014	00-08	4200	500	3700	3656	44		
		17-23	3100		2600		0		
	6th March 2014 to 31st March 2014	00-17	4200	500	3700	3656	44		
		23-24	4200		3700		44		
NR-ER*	1st March 2014 to 31st March 2014	00-17 23-24	1000	200	800	200	600		
		17-23	1100		900		700		
ER-NR	1st March 2014 to 6th March 2014	00-17	3600	300	3300	2789	511		
		23-24	3100		2800		11		
	7th March 2014 to 31st March 2014	00-17 23-24	3800	300	3500	2789	711		
		17-23					711		
W3-ER	1st March 2014	00-09 17-24	1800	300	1500	0	1500		
		09-17	1500	300	1200	0	1200		
	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		
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		
ER-SR	1st March 2014 to 31st March 2014	00-05 10-19	750	0	750	657	93		
		05-10 19-24	750		750		93		
SR-ER *	1st March 2014 to 31st March 2014	00-17 23-24	1100	0	1100	197	903		
		17-23	1100		1100		903		
ER-NER ²	1st March 2014 to 05th March 2014	00-17	650	50	600	230	370		Revised due to extension of 220 kV Balipara-Samaguri shutdown
		23-24	590		540		310		
		17-23	650		600		370		
	06th March 2014	17-23	590	50	540	230	310	-130	
		23-24	650	600	370	-70			
	7th March 2014 to 14th March 2014	00-17	650	50	600	230	370	-70	
		23-24	590	50	540	230	310	-130	
	15th March 2014	00-17	650	50	600	230	370	-70	
		17-23	720	50	670	230	440		
	16th March 2014 to 31st March 2014	23-24	720	50	670	230	440		
		17-23	720	50	670	230	440		
	NER-ER	1st March 2014 to 05th March 2014	00-17	520	100	420	0	420	
23-24			450	350		350			
17-23			520	420		420			
06th March 2014		00-17	520	100	420	0	350	-140	
		17-23	450	100	350	0	420	-110	
7th March 2014 to 14th March 2014		00-17	520	100	420	0	420	-110	
		23-24	450	100	350	0	350	-140	
15th March 2014		00-17	520	100	420	0	420	-110	
		17-23	590	100	490	0	490		
16th March 2014 to 31st March 2014		23-24	630	100	530	0	530		
		17-23	590	100	490	0	490		

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S1-S2	1st March 2014	00-24	5650	400	5250	4900	350		
	2nd March 2014	00-06	5650	400	5250	4900	350		
		06-24	5350	400	4950	4900	50		
	3rd 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 MTOA as per ex-pp schedule			
W3 zone Injection	1st March 2014 to 31st March 2014	00-17	9000	200	8800	7167	1633		
		17-23	9500		9300		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).

- 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) KWPCCL

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 less. RLDC/ NLDC would factor this situation while issuing STOA approvals

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-Biharsharif circuit.

Limiting Constraints

Corridor	Constraint
NR-WR	(n-1) contingency of 400kV Zerda-Bhimnal 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-Pusaui
ER-NR	(n-1) contingency of 400 kV Kahalgaon-Biharsharif
W3-ER	(n-1) contingency of 400kV Sterlite-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	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 variation of 765kV Raichur-Sholapur line flow, observation of Low Frequency Oscillations (LFO) 3. 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-Biharsharif
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

*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 ¹	1st March 2014 to 4th March 2014	00-17	7800	800	7000	6445	555		
		23-24	7300		6500		55		
	5th March 2014	00-08	7800	800	7000	6445	555		Revised due to emergency shutdown of 765 kV Gwalior Bus 1
		08-17	5800		5000		0	-2000	
		17-23	7300		6500		55		
	6th March 2014	00-17	7800	800	7000	6445	555		
		23-24	7300		6500		55		
	7th March 2014 to 31st March 2014	00-17	8000	800	7200	6445	755		
		23-24	8000		7200		755		
	NER ²	1st March 2014 to 05th March 2014	00-17	650	50	600	230	370	
23-24			590	540		310			
06th March 2014		00-17	650	50	600	230	370	-130	
		23-24	590		540		310	-70	
7th March 2014 to 14th March 2014		00-17	650	50	600	230	370	-70	
		23-24	590		540		310	-130	
15th March 2014		00-17	650	50	600	230	370	-70	
		23-24	720		670		440		
16th March 2014 to 31st March 2014		00-17	720	50	670	230	440		
		23-24	720		670		440		
WR									
SR	1st March 2014 to 31st March 2014	00-05	1750	0	1750	1657	93		
		10-19	1750		1750		93		

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 • 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	3500	700	2800	561	2239		
		23-24	3600		2900		2339		
NER	1st March 2014 to 05th March 2014	00-17	520	100	420	0	420		Revised due to extension of 220 kV Balipara-Samaguri shutdown
		23-24	450		350		350		
	06th March 2014	00-17	520	100	420	0	420	-140	
		23-24	450		350		420	-110	
	7th March 2014 to 14th March 2014	00-17	520	100	420	0	420	-110	
		23-24	450		350		350	-140	
	15th March 2014	00-17	520	100	420	0	420	-110	
		23-24	590		490		490		
	16th March 2014 to 31st March 2014	00-17	630	100	530	0	530		
		23-24	590		490		490		
WR									
SR*	1st March 2014 to 31st March 2014	00-17	2100	0	2100	197	1903		
		23-24	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)
	Export	(n-1) contingency of 400kV Zerda-Bhimnal and (n-1) contingency of 220kV Badod-Modak.
NER	Import	(n-1) contingency of 400 kV Kahalgaon-Biharshariff
	Export	(n-1) contingency of 315 MVA ICT at Misa
SR	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 variation of 765kV Raichur-Sholapur line flow, observation of Low Frequency Oscillations (LFO) 3. Considering transfer capability assessment by CTU on NEW-SR corridor.
	Export	

*Primary constraints

ASSUMPTIONS IN BASECASE

Month : March '14

S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
I	NORTHERN REGION				
1	Punjab	5571	4510	2524	2495
2	Haryana	5755	4779	3482	3482
3	Rajasthan	8215	8320	4940	4892
4	Delhi	4102	2950	1101	1101
5	Uttar Pradesh	11500	10154	5957	5867
6	Jammu & Kashmir	2249	1725	343	567
7	Uttarakhand	1582	1397	649	580
8	Himachal Pradesh	1353	1194	367	253
9	Chandigarh	238	138	0	0
10	ISGS/IPPs			17573	11543
	Total NR	40564	35167	36936	30780
II	EASTERN REGION				
1	West Bengal	6600	5100	4797	4000
2	Jharkhand	1000	800	450	450
3	Orissa	3400	2600	2405	1600
4	Bihar	2000	1600	0	0
5	Damodar Valley Corporation	2600	2350	3600	3397
6	Sikkim	90	50		0
7	Bhutan	110	110	200	200
8	ISGS/IPPs	270	270	6849	6490
	Total ER	16070	12880	18301	16137
III	WESTERN REGION				
1	Chattisgarh	3236	2968	1629	1629
2	Madhya Pradesh	6961	5643	3847	3003
3	Maharashtra	16185	14018	11275	10527
4	Gujarat	11063	10565	10649	9002
5	Goa	422	283	0	0
6	Daman and Diu	239	240	0	0
7	Dadra and Nagar Haveli	588	552	0	0
8	ISGS/IPPs	1291	1111	18555	16029
	Total 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
	Total All India	135341	114264	137341	116051