National Load Despatch Centre Total Transfer Capability for February 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 February 2014 to 28th February 2014	00-24	2500	500	2000	286	1714		
WR-NR ¹	1st February 2014 to 28th February 2014	00-17 23-24	3900	500	3400	3181	219		
		17-23	3900		3400	3181	219		
NR-ER *	1st February 2014 to 28th February 2014	00-17 23-24	1000	200	800	200	600		
	1st February 2014	17-23 00-07 16-17 23-24 07-16'	2600 1900	300	900 2300 1600	2118	700 182		
	2nd February 2014 to	17-23 00-17	1900	200	1600	2440	0		
ER-NR	5th February 2014	23-24 17-23 00-17	1900	300	1600	2118	0		
	6th February 2014	23-24	3600 3100	300	3300 2800	2118	1182 1182	1000 1200	Revised due to restoration of 400 kV Kahalgaon-Biharshariff D/C
	7th February 2014 to 28th February 2014	00-17 23-24 17-23	3600	300	3300	2118	1182		
		17-23	3100		2800		1182		
W3-ER	1st February 2014 to 28th February 2014	00-24	1800	300	1500	0	1500		
ER-W3	1st February 2014 to 28th February 2014	00-24	1000	300	700	700	0		
WR-SR	1st February 2014 to 28th February 2014	00-24	850	0	850	850	0		
SR-WR *	1st February 2014 to 28th February 2014	00-24	1000	0	1000	0	1000		
ER-SR	1st February 2014 to	00-05 10-19	700	0	700	700	0		
	28th February 2014	05-10 19-24 00-17	700		700		0		
SR-ER*	1st February 2014 to 28th February 2014	23-24	1100	0	1100 1100	197	903		
		00-07							
	1st February 2014	16-17 23-24	350	50	300	230	70		
		07-16' 17-23	320 330		270 280		40 50		
ER-NER ²	2nd February 2014 to 5th February 2014	00-17 23-24	350	50	300	230	70		
ZZC TYZZK	6th February 2014	17-23 00-17 23-24	330 720	50	280 670	230	50 440	370	Revised due to restoration of 400 kV
		23-24 17-23 00-17	640	50	590	230	360	310	Kahalgaon-Biharshariff D/C
	7th February 2014 to 28th February 2014	23-24 17-23	720 640	50	670 590	230	360 360		
NER-ER	1st February 2014 to 28th February 2014	00-17 23-24 17-23	570 570	100	470 470	0	470 470		
S1-S2	1st February 2014 to	00-24	5650	400	5250	4900	350		
Import of Punjab	28th February 2014 1st February 2014 to 28th February 2014	00-24	5600	300	5300	3800	1500		
Import TTC for DD & DNH	1st February 2014 to 28th February 2014	00-24	980	0	980	LTA and MTO			

National Load Despatch Centre Total Transfer Capability for February 2014

Issue Date: 05/02/2014 Issue Time: 1800 hrs Revision No. 8

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 February 2014	00-08 23-24	8500	200	8300	7630	670		
		08-16'	7600		7400		-230		
		16-17	8600		8400		770		
W3 zone		17-18	9100		8900		1270		
Injection		18-23	9500		9300		1670		
injection		00-08 23-24	8500	200	8300		670		
	2nd February 2014 to 28th February 2014	08-16'	8000		7800	7630	170		
	26th February 2014	16-17	9000		8800		1170		
		17-23	9500		9300		1670		

^{*} Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First

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

- 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 400 kV Farakka-Malda
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 400 kV Raipur-Wardha

^{*}Primary constraints

[#] 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

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 February 2014	00-07 16-17 23-24	6500	800	5700	5299	401		
	,	07-16' 17-23	5800 5800		5000 5000		0		
NR^1	2nd February 2014 to 5th February 2014	00-17 23-24	6500	800	5700	5299	401		
	6th February 2014	17-23 00-17 23-24	5800 7500	800	5000 6700	5299	0 1401	1000	Revised due to restoration of 400 kV Kahalgaon-Biharshariff
		17-23	7000		6200		901	1200	D/C
	7th February 2014 to 28th February 2014	00-17 23-24	7500	800	6700	5299	1401		
	1st February 2014	17-23 00-07 16-17 23-24 07-16'	7000 350 320	50	300	230	901 70 40		
		17-23	330		270 280		50		
NER ²	2nd February 2014 to 5th February 2014	00-17 23-24	350	50	300	230	70		
	6th February 2014	17-23 00-17 23-24	330 720	50	280 670	230	50 440	370	Revised due to restoration of 400 kV Kahalgaon-Biharshariff
	om reducing 2014	17-23	640	30	590	230	360	310	D/C
	7th February 2014 to 28th February 2014	00-17 23-24	720	50	670	230	440	-	
WR	20th February 2014	17-23	640		590		360		
	1st February 2014 to	00-05 10-19	1550		1550		0		
SR	1st February 2014 to 28th February 2014	05-10 19-24	1550	0	1550	1550	0		

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 February 2014 to 28th February 2014	00-17 23-24	3500	700	2800	286	2514		
	20th February 2014	17-23	3600		2900		2614		
NER	1st February 2014 to 28th February 2014	00-17 23-24	570	100	470	0	470		
	26th February 2014	17-23	570		470		470		
WR									
WK									
SR*	1st February 2014 to 28th February 2014	00-17 23-24	2100	0	2100	197	1903		
	Zoui rebluary 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 High loading of 765 kV Agra-Gwalior (1000 MW SPS setting on each circuit of 765 kV Gwalior-Agra)
NR	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 400 kV Farakka-Malda
SR	Import	 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.
	Export	

^{*}Primary constraints

National Load Despatch Centre Total Transfer Capability for February 2014

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected	
1	06/11/2013	Whole Month	Revised considering the LTA/MTOA on NR-ER Path	NR-ER	
		Wilditii	Revised due to change in Load Generation in WR/NR	WR-NR	
2	27/11/2013	Whoe	Commissioning of 400 kV Purnea-Biharshariff D/C and Network reconfiguration at Malda & Purnea.	ER-NR/ER-NER	
		Month	Revised due to change in Inter-Regional flow pattern and Load generation change in ER/WR.	W3 Zone Injection	
3	22/01/2014	Whoe Month	Revised due to commissioning of 765kV Raichur-Sholapur S/C	WR-SR/ER-SR	
	29/01/2014		01.02.14 - 06.02.14	Revised due to shutdown of 400kV Kahalgaon-Biharshariff D/C	ER-NR/ER-NER
4		07.02.14 - 28.02.14	Revised due to shutdown of TEESTA Power Station	ER-NR	
		Whole Month	Revside due to Non-Commissioning of Kudankulam U-1, Vallur U-3 & NLC Exp U-1	S1-S2	
5	30/01/2014	01.02.14 - 06.02.14	Revised due to change in ER and Inter-regional flow pattern.	ER-NER/ER-NR	
6	31/01/2014	01.02.14	Revised due to shutdown of 400kV Seoni-Bhilai	W3 Zone Injection	
7	31/01/2014	01.02.14	Revised due to shutdown of Purnea-Malda ckt-1	ER-NER/ER-NR	
8	05/02/2014	06.02.14 - 28.02.14	Revised due to restoration of 400 kV Kahalgaon-Biharshariff D/C	ER-NER/ER-NR	

ASSUMPTIONS IN BASECASE

Month : February '14

S.No. Name of State/Area Peak Load (MW) Off Peak Load (MW) Peak (MW) Off Peak (MW) I NORTHERN REGION Image: Common of the common of			Loa	ad	Gener	ation
Punjab 5581 3588 2452 2392	S.No.	Name of State/Area	Peak Load	Off Peak Load		Off Peak
Haryana	ı	NORTHERN REGION				
Rajasthan	1	Punjab	5581	3588	2452	2392
Delhi 3786 1623 1039 1039 1039 5	2	Haryana	5304	4892	3632	3632
5 Uttar Pradesh 11585 11600 5886 6052 6 Jammu & Kashmir 2099 1897 245 278 7 Uttarakhand 1573 1028 403 318 8 Himachal Pradesh 1287 882 249 126 9 Chandigarh 238 98 0 0 10 ISGS/IPPs 16390 11197 Total NR 39342 34060 35181 29818 II EASTERN REGION 35181 29818 Jarkhand 3 Orissa 3 4 Bihar 3 35181 29818 5 Damodar Valley Corporation 3618 3618 3618 3618 5 Damodar Valley Corporation 378	3	Rajasthan	7889	8452	4885	4783
6 Jammu & Kashmir 2099 1897 245 276 7 Uttarakhand 1573 1028 403 319 8 Himachal Pradesh 1287 882 249 126 9 Chandigarh 238 98 0 0 10 ISGS/IPPs 16390 11197 Total NR 39342 34060 35181 29818 II EASTERN REGION 1	4	Delhi	3786	1623	1039	1039
Total National Process	5	Uttar Pradesh	11585	11600	5886	6052
B	6	Jammu & Kashmir	2099	1897	245	278
9 Chandigarh 238 98 0 (0 11197	7	Uttarakhand	1573	1028	403	319
Total NR	8	Himachal Pradesh	1287	882	249	126
I	9	Chandigarh	238	98	0	0
I	10	ISGS/IPPs			16390	11197
1 West Bengal 2 Jharkhand 3 Orissa 4 Bihar 5 Damodar Valley Corporation 6 Sikkim 7 Bhutan 8 ISGS/IPPs Total ER 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs		Total NR	39342	34060	35181	29818
1 West Bengal 2 Jharkhand 3 Orissa 4 Bihar 5 Damodar Valley Corporation 6 Sikkim 7 Bhutan 8 ISGS/IPPs Total ER 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs						
2	II	EASTERN REGION				
3 Orissa 4 Bihar 5 Damodar Valley Corporation 6 Sikkim 7 Bhutan 8 ISGS/IPPs Total ER 0 0 0 III WESTERN REGION 0 0 1 Chattisgarh 0 0 0 2 Madhya Pradesh 0 0 0 3 Maharashtra 0 0 0 0 4 Gujarat 0 0 0 0 0 0 5 Goa 0	1	West Bengal				
4 Bihar 5 Damodar Valley Corporation 6 Sikkim 7 Bhutan 8 ISGS/IPPs Total ER 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	2	Jharkhand				
5 Damodar Valley Corporation 6 Sikkim 7 Bhutan 8 ISGS/IPPS Total ER 0 0 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPS	3	Orissa				
6 Sikkim 7 Bhutan 8 ISGS/IPPs Total ER 0 0 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	4	Bihar				
7 Bhutan 8 ISGS/IPPS Total ER 0 0 0 0 III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPS	5	Damodar Valley Corporation				
8 ISGS/IPPs Total ER 0 0 0 III WESTERN REGION 0 0 0 1 Chattisgarh 0 0 0 0 2 Madhya Pradesh 0	6	Sikkim				
Total ER	7	Bhutan				
III WESTERN REGION 1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	8	ISGS/IPPs				
1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs		Total ER	0	0	0	0
1 Chattisgarh 2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs						
2 Madhya Pradesh 3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	III	WESTERN REGION				
3 Maharashtra 4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	1	Chattisgarh				
4 Gujarat 5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	2	Madhya Pradesh				
5 Goa 6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	3	Maharashtra				
6 Daman and Diu 7 Dadra and Nagar Haveli 8 ISGS/IPPs	4	Gujarat				
7 Dadra and Nagar Haveli 8 ISGS/IPPs	5	Goa				
8 ISGS/IPPs	6	Daman and Diu				
8 ISGS/IPPs	7	Dadra and Nagar Haveli				
Total WR 0 0 0	8					
		Total WR	0	0	0	0

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
٧	NORTH-EASTERN REGION				
1	Manipur	125	88	0	0
2	Meghalaya	300	210	110	80
3	Mizoram	75	53	0	0
4	Nagaland	110	77	12	6
5	Assam	1230	830	190	185
6	Tripura	230	130	100	100
7	Arunachal Pradesh	120	84	0	0
8	ISGS/IPPs			935	623
	Total NER	2190	1472	1347	994
	Tatal All In Ca		0.4505		
	Total All India	78034	64795	71355	58787