Issue Date: 10/03/2015 Issue Time: 1345 hrs Revision No. 13

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 2015 to 31st March 2015	00-24	2500	500	2000	706	1294		
WR-NR	1st March 2015 to 31st March 2015	00-24	4200	500	3700	4768	0		
			1			,			
NR-ER*	1st March 2015 to 31st March 2015	00-06 18-24	2000	200	1800	293	1507		
	5 15t 11taren 2015	06-18'	2000		1800	358	1442		
ER-NR	1st March 2015 to 31st March 2015	00-17 23-24	3100	300	2800	2431	369		
	51st Maich 2015	17-23	3200		2900		469		
W3-ER <sup>\$</sup>	1st March 2015 to 4th March 2015	00-24	1800	300	1500	351	1149		
WS-ER	5th March 2015 to 31st March 2015	00-24	1800	300	1500	583	917		
ER-W3	1st March 2015 to 31st March 2015	00-24	1000	300	700	874	0		
WR-SR##	1st March 2015 to 31st March 2015	00-24	2100	750	1350	1350	0		
SR-WR *	1st March 2015 to 31st March 2015	00-24				No limit is	s being Specified.		
		00.06	l						
	1st March 2015 to 10th March 2015	00-06 18-24	2650	0	2650	2585	65		
	Tour Water 2013			U	2650				
		06-18'		Ů		2650	0		
		00-06	2650	0	2650	2650 2585	0 65		
ER-SR##	11th March 2015	00-06	2650 2650	0	2650 2650	2650 2585 2650	0 65 0		
ER-SR##	11th March 2015	00-06 06-09' 09-'18	2650 2650 2350		2650 2650 2350	2650 2585 2650 2650	0 65 0		
ER-SR##	11th March 2015	00-06 06-09' 09-'18 18-24	2650 2650		2650 2650	2650 2585 2650	0 65 0		
_	11th March 2015  12th March 2015 to 31st March 2015	00-06 06-09' 09-'18 18-24 00-06 18-24	2650 2650 2350		2650 2650 2350	2650 2585 2650 2650 2585 2585	0 65 0 0 0		
	12th March 2015 to 31st March 2015	00-06 06-09' 09-'18 18-24 00-06	2650 2650 2350 2350	0	2650 2650 2350 2350	2650 2585 2650 2650 2585	0 65 0 0		
CD FD *	12th March 2015 to	00-06 06-09' 09-'18 18-24 00-06 18-24	2650 2650 2350 2350	0	2650 2650 2350 2350	2650 2585 2650 2650 2585 2585 2650	0 65 0 0 0		
CD FD *	12th March 2015 to 31st March 2015 1st March 2015 to	00-06 06-09' 09-'18 18-24 00-06 18-24 06-18' 00-24	2650 2650 2350 2350	0	2650 2650 2350 2350	2650 2585 2650 2650 2585 2585 2650	0 65 0 0 0 65		
SR-ER*	12th March 2015 to 31st March 2015 1st March 2015 to 31st March 2015 1st March 2015 to	00-06 06-09' 09-'18 18-24 00-06 18-24 06-18' 00-24	2650 2650 2350 2350 2350 2650	0	2650 2650 2350 2350 2350 2650	2650 2585 2650 2650 2585 2585 2650	0 65 0 0 0 65 0 s being Specified.		
SR-ER*	12th March 2015 to 31st March 2015 1st March 2015 to 31st March 2015	00-06 06-09' 09-'18 18-24 00-06 18-24 06-18' 00-24	2650 2650 2350 2350 2650	0	2650 2650 2350 2350 2650	2650 2585 2650 2650 2585 2585 2585 2650 No limit is	0 65 0 0 0 65 0 s being Specified.		
SR-ER *  ER-NER	12th March 2015 to 31st March 2015 1st March 2015 to 31st March 2015 1st March 2015 to	00-06 06-09' 09-'18 18-24 00-06 18-24 06-18' 00-24	2650 2650 2350 2350 2350 2650	0	2650 2650 2350 2350 2350 2650	2650 2585 2650 2650 2585 2585 2585 2650 No limit is	0 65 0 0 0 65 0 s being Specified.		

Issue Date: 10/03/2015 Issue Time: 1345 hrs Revision No. 13

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
	I	00.10	2075		25.00	I	25	1	
	1st March 2015	00-10 10-13' 13-22 22-24	2875 2625 2875 3190	315	2560 2310 2560 2875	2535	25 0 25 340		
	2nd March 2015 to 3rd March 2015	00-24	3190	315	2875	2535	340		
	4th March 2015	00-1530	3190	315	2875	2535	340		
	4th March 2013	1530-24	3485	315	3170	2644	526		
		00-08	3485		3170		526		
	5th March 2015	08-18'	3335	315	3020	2644	376		
		18-24	3485		3170		526		
S1-S2	6th March 2015	00-24	3485	315	3170	2644	526		
	7th March 2015	00-09	3485	315	3170	2644	526		
		09-'19	3340		3340	2644	696		
		19-24	3485		3170	2644	526		
	8th March 2015 to 9th March 2015	00-24	3485	315	3170	2644	526		
	104h Manah 2015	00-12	3485	215	3170	2644	526		
	10th March 2015	12-24'	3485	315	3170	2044	526		Revised due to extension of outage
	11th March 2015 to 12th March 2015	00-24	3485	315	3170	2644	526	320	of Vallur unit 2 and NCTPS stage 2 unit 1.
	13th March 2015 to 31st March 2015	00-24	2875	315	2560	2535	25		
Import of Punjab	1st March 2015 to 31st March 2015	00-24	5700	300	5400	3790	1610		
Import TTC for DD & DNH	1st March 2015 to 31st March 2015	00-24	1200	0	1200		OA as per ex-pp edule		
	1st March 2015 to 4th March 2015	00-17 23-24	9400	200	9200	6862	2338		
W3 zone		17-23	9900		9700		2838		
Injection ##	5th March 2015 to 31st March 2015	00-17 23-24	9400	200	9200	7094	2106		
	51st March 2015	17-23	9900		9700		2606		

<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).

Issue Date: 10/03/2015 Issue Time: 1345 hrs Revision No. 13

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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<sup>\$</sup> 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) S1 comprises of AP and Karnataka: S2 comprises of Tamil Nadu, Kerala and Pondicherry
- 2) W3 comprises of the following regional entities :
- a) Chattisgarh Sell transaction, b) Jindal Power Limited (JPL) Stage-I & 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

## 232 MW MTOA w.e.f 01.03.2015 was approved by CTU. CERC vide order dated 16-02-2015 in petition no. 92/MP/2014 is under further implementation by CTU as per the timelines given in the order. Pending this any margins would be released for short term transactions on day ahead basis.

# 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 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.

#### **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 400kV Singrauli-Anpara & High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and Loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingnecy of Kahalgaon-Banka S/C
W3-ER	<ul><li>i. (n-1) Contingency of 400 kV MPL-Maithon S/C</li><li>ii. (n-1) contingency of 400kV Sterlite-Rourkela S/C</li></ul>
ER-W3	(n-1) contingency of 400kV Raigarh-Jharsuguda-Rourkela
WR-SR & ER-SR	(n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)     ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would emerge.
ER-NER	(n-1) contingnecy of Kahalgaon-Banka S/C
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA ICT at Misa
S1-S2	(n-1) contingency of one circuit of 400 kV Kolar-Hosur
Import of DD & DNH	(n-1) contingency of 400/220KV 315MVA ICT at VAPI
Import of Punjab	(n-1) contingency of ICT at Dhuri and (n-1) contingnecy of 220kV Moga(PG)-Moga(PSTCL)
W3 zone Injection	(n-1-1) contingency of 400 kV Raipur-Bhadrawati D/C section and High loading of 400kV Raipur-Wardha (850 MW SPS setting on each circuit of 400kV Raipur-Wardha)
	*Drimary constraints

<sup>\*</sup>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	1st March 2015 to 31st March 2015	00-17 23-24	7300	800	6500	6811	0		
	51st Water 2015	17-23	7400		6600		0		
NER	1st March 2015 to 31st March 2015	00-17 23-24	650	40	610	210	400		
	31st March 2015	17-23	720		680		470		
WR									
WK									
	1st March 2015 to 10th March 2015	00-06 18-24	4750	750	4000	3935	65		
	Total Water 2013	06-18'	4750		4000	4000	0		
		00-06	4750		4000	3935	65		
SR##	11th March 2015	06-09'	4750	750	4000	4000	0		
SK##	11th March 2013	09-18'	4450	730	3700	4000	0		
		18-24	4450		3700	3935	0		
	12th March 2015 to	00-06 18-24	4750	750	4000	3935	65		
	31st March 2015	06-18'	4750		4000	4000	0		

#### **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 2015 to 31st March 2015	00-06 18-24	4500	700	3800	999	2801				
	318t March 2013	06-18'			3800	1064	2736				
NER	1st March 2015 to 31st March 2015	00-17 23-24	990	30	960	0	960				
NEK		17-23	1050	40	1010	U	1010				
WR											
***											
SR *	1st March 2015 to 31st March 2015	00-24		No limit is being Specified.							

<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).

## 232 MW MTOA w.e.f 01.03.2015 was approved by CTU. CERC vide order dated 16-02-2015 in petition no. 92/MP/2014 is under further implementation by CTU as per the timelines given in the order. Pending this any margins would be released for short term transactions on day ahead basis.

## **Limiting Constraints**

		(n-1) contingnecy of Kahalgaon-Banka S/C
	T	High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop
NR	Import	flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra
1117		D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
	E	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
	Export	(n-1) contingency of 400 kV Saranath-Pusauli
NER	Import	(n-1) contingnecy of Kahalgaon-Banka S/C
NEK	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa
		1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
CD	T4	2. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-
SR	Import	2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would
		emerge.
		, -

<sup>\*</sup>Primary constraints

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	29-12-2014	Whole Month	Margin revised due to change in LTA/MTOA.	NR-WR/ER- W3/W3-ER
		MOILLI	Margin revised due to COD of Sasan Unit-5.	WR-NR
2	12-02-2015	Whole Month	Margin revised due to cancellation of LTA/MTOA	NR-WR/ER- W3
3	23-02-2015	Whole Month	Revised considering the LGBR changes given by constituents in 104th SRPC OCC meeting, Kudankulam Unit-1 and Energen Unit-1 Commissioning.	S1-S2
		Whole	Revised due to Commissioning of Vallur Unit-3.	S1-S2
4	25-02-2015	Month	Revised considering full generation at Rihand/Singrauli complex.	WR-NR
F	20.02.2045	01-03-2015	Revised due to shutdown of 400kV Pugalur-Kalivendapattu Ckt-2	S1-S2
5	5 28-02-2015 W		Rveised due to commissioning of new transmission elements in NER.	ER-NER/ NER- ER
6	01-03-2015	1/3/2015 - 10/3/2015	Revised due to NCTPS Unit-1 Outage.	S1-S2
7	03-03-2015	5/3/2015 - 31/3/2015	STOA Margin revised due to grant of MTOA from Chattisgarh to KSEB by CTU.	W3 Zone/ W3-ER
	03-03-2013	05-03-2015	Revised due to 220kV Kadakola - Kaniyampeta Shutdown.	S1-S2
8	04-03-2015	04/03/2015 - 07/03/2015	Revised due to outage of Vallur Unit - 2	S1-S2
9	06-03-2015	07-03-2015	Revised due to shutdown of 400kV Cudappah - Chitoor- Sriperumbudur S/C.	S1-S2
10	07-03-2015	08-03-2015 - 10-03-2015	Revised due to extension of outage of Vallur Unit-2	S1-S2
11	09-03-2015	10-03-2015 - 12-03-2015	Revised due to extension of Vallur Unit-2 outage and synchornisation of NCTPS Stage-2 Unit -1	S1-S2
12	10-03-2015	11-03-2015	Revised due to shutdown of 400 kV Indravati - Jeypore S/C	ER-SR
13	10-03-2014	11-03-2014	Revised due to extension of outage of Vallur unit 2 and NCTPS stage 2 unit 1.	S1-S2

# **ASSUMPTIONS IN BASECASE**

Month: Mar '15

		L	oad	Gen	eration
S.No.	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
ı	NORTHERN REGION				
1	Punjab	4960	3131	2800	2520
2	Haryana	5400	3758	1864	1677
3	Rajasthan	9200	8267	4974	4974
4	Delhi	3600	1700	935	935
5	Uttar Pradesh	10650	11162	5443	5443
6	Jammu & Kashmir	1850	1994	244	244
7	Uttarakhand	1650	1115	507	190
8	Himachal Pradesh	1186	812	177	64
9	Chandigarh	189	97	0	0
10	ISGS/IPPs			15776	10793
	Total NR	38685	32036	32720	26840
II	EASTERN REGION				
1	West Bengal	5218	5202	3734	3802
2	Jharkhand	985	749	427	435
3	Orissa	3677	2354	1597	1625
4	Bihar	2216	1605	104	106
5	Damodar Valley Corporation	2561	2354	3211	3269
6	Sikkim	79	43		
7	Bhutan	107	107	110	110
8	ISGS/IPPs	513	511	8144	8100
	Total ER	15356	12925	17327	17447
	-				
III	WESTERN REGION				
1	Chattisgarh	3117	2765	1915	2062
2	Madhya Pradesh	10300	5308	5801	1000
3	Maharashtra	20963	13907	16531	8763
4	Gujarat	11198	10475	8946	7757
5	Goa	425	339		
6	Daman and Diu	262	252		
7	Dadra and Nagar Haveli	608	596		
8	ISGS/IPPs	1070	1070	22377	21836
	Total WR	47943	34712	55570	41418

# **ASSUMPTIONS IN BASECASE**

Month: Mar '15

		L	oad	Gene	eration
S.No.	Name of State/Area	Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
IV	SOUTHERN REGION				
1	Andhra Pradesh	5945	5241	5011	4762
2	Telangana	6351	5662	2707	2367
3	Tamil Nadu	12188	10362	6958	5865
4	Karnataka	8873	7418	7473	4852
5	Kerala	2699	2630	1249	1276
6	Pondy	330	319	0	0
7	Goa	89	88	0	0
8	ISGS/IPPs	0	0	9103	8630
	Total SR	36475	31720	32501	27752
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	66	33	0	0
2	Assam	713	609	220	190
3	Manipur	74	49	0	0
4	Meghalaya	166	84	77	17
5	Mizoram	51	34	6	4
6	Nagaland	57	52	7	3
7	Tripura	227	153	103	100
8	ISGS/IPPs			1089	680
	Total NER	1354	1015	1502	994
	Total All India	139813	112407	139620	114451