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NR-WR * 1st March 2015 to 31st March 2015 00-24 2500 500 2000 706 1294 WR-NR 1st March 2015 to 12th March 2015 00-24 4200 500 3700 4768 0 13th March 2015 00-09* 4200 500 2700 4768 0 13th March 2015 09-16* 3200 500 2700 4768 0 14th March 2015 to 18st March 2015 00-24 4200 500 3700 4768 0 19th March 2015 to 31st March 2015 00-24 4900 500 4400 4768 0 NR-ER* 1st March 2015 to 31st March 2015 00-06 18-24 2000 200 1800 293 1507	
WR-NR 12th March 2015 00-24 4200 500 3/00 4768 0 13th March 2015 00-09' 4200 3700 4768 0 13th March 2015 09-16' 3200 500 2700 4768 0 14th March 2015 to 18st March 2015 00-24 4200 500 3700 4768 0 19th March 2015 to 31st March 2015 00-24 4900 500 4400 4768 0 NR_FR** 1st March 2015 to 18, 24 2000 200 1800 293 1507	
WR-NR 13th March 2015 09-16' 3200 500 2700 4768 0 14th March 2015 to 18st March 2015 00-24 4200 500 3700 4768 0 19th March 2015 to 31st March 2015 00-24 4900 500 4400 4768 0 NR_FR** 1st March 2015 to 18, 24 2000 200 1800 293 1507	
WR-NR 16-24 4200 3700 4768 0 14th March 2015 to 18st March 2015 00-24 4200 500 3700 4768 0 19th March 2015 to 31st March 2015 00-24 4900 500 4400 4768 0 NR.FR* 1st March 2015 to 18, 24 2000 200 1800 293 1507	
14th March 2015 to 18st March 2015 to 19th March 2015 to 31st March 2015 to 31st March 2015 to 18th March 2015 to 31st March 2015 to 18th March 20	
18st March 2015 00-24 4200 500 3/00 4/68 0 19th March 2015 to 31st March 2015 to 00-24 4900 500 4400 4768 0 NR.FR* 1st March 2015 to 18 24 2000 200 1800 293 1507	
31st March 2015 00-24 4900 500 4400 4708 0 NR.FR* 1st March 2015 to 18 24 2000 200 1800 293 1507	
NR-FR* 1st March 2015 to 18 24 2000 200 1800 293 1507	
NR_FR* 1st March 2015 to 18 24 2000 200 1800 293 1507	
06-18' 2000 1800 358 1442	
1st March 2015 to 11th March 2015 11th March 2015 23-24 3100 300 2800 2431 369	
17-23 3200 2900 469	
ER-NR 12th March 2015 to 00-17 2600 300 2300 2431 0	
22nd March 2015 23-24 300 2431 2431 2431 2431 2431 2431 2431	
00-17	
23 rd March 2015 to 31st March 2015 23-24 3100 300 2800 2431 369	
318t March 2015 17-23 3200 2900 469	
1st March 2015 to 4th March 2015 00-24 1800 300 1500 351 1149	
W3-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	
1st March 2015 to 23rd March 2015 00-24 2100 750 1350 1350 0	
WR-SR## 24th March 2015 00-08 2100 750 1350 0	
08-24' 1600 850 1350 0 25th March 2015 to 0.024 2100 750 1350	
25th March 2015 00-24 2100 750 1350 1350 0	
SR-WR * SR-WR This March 2015 to 31st March 2015 to 00-24 No limit is being Specified.	
1.W 1.2015. 00-06	
1st March 2015 to 18 24 2650 0 2650 2585 65	
10th March 2015 16-24 2030 0 2030 2650 0	
00-06 2650 2650 2585 65	
11th March 2015 06-09' 2650 0 2650 0 0	
09-18 2350 2350 0	
18-24 2350 2350 2585 0	
ER-SR## 12th March 2015 to 18th March 2015	
19th March 2015 00-06 18-24 2650 0 2650 2585 65	
19th March 2013 06-08' 2650 0	
08-18' 2350 2350 0	
20th March 2015 to 31st March 2015	
06-18' 2650 0 Str. Fig. 1st March 2015 to 00.24	
SR-ER * SR-ER * Ist March 2015 to 31st March 2015 to 00-24 No limit is being Specified.	

Issue Date: 25/03/2015 Issue Time: 1315 hrs Revision No. 29

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 March 2015 to	00-17 23-24	650		610		400		
ER-NER	31st March 2015	17-23	720	40	680	210	470		
	1st March 2015 to	00-17 23-24	990	30	960		960		
NER-ER	31st March 2015	17-23	1050	40	1010	0	1010		
	<u> </u>					L			
		00-10	2875		2560		25		
	1st March 2015	10-13' 13-22	2625 2875	315	2310 2560	2535	0 25		
		22-24	3190		2875		340		
	2nd March 2015 to 3rd March 2015	00-24	3190	315	2875	2535	340		
	41.34 1.2015	00-1530	3190	315	2875	2535	340		
	4th March 2015	1530-24	3485	315	3170	2644	526		
		00-08	3485		3170		526		
	5th March 2015	08-18'	3335	315	3020	2644	376		
	6th March 2015	18-24 00-24	3485 3485	315	3170 3170	2644	526 526		
	oth March 2015	00-24	3485	313	3170	2644	526		
	7th March 2015	09-'19	3340	315	3340	2644	696		
		19-24	3485		3170	2644	526		
	8th March 2015 to 9th March 2015	00-24	3485	315	3170	2644	526		
	10th March 2015	00-12 12-24'	3485 3485	315	3170 3170	2644	526 526		
	11th March 2015 to 12th March 2015	00-24	3485	315	3170	2644	526		
	13th March 2015	00-11	3485	315	3170	2644	526		
S1-S2		11-'24 00-08	3770 3485		3455 3170	2752	703 526		
~~~	14th March 2015	08-24'	3415	315	3100	2644	456		
		00-10	3415		3100		456		
	15d M 1 2015	1000-	3110	215	2795	2614	151		
	15th March 2015	1730 1730- '2400	3415	315	3100	2644	456		
	16th March 2015	0000- 1130	3110	315	2795	2644	151		
	Total March 2015	1130- 2400	3415	313	3100	2044	456		
	17th March 2015	00-24	3250	315	2935	2644	291		
	18th March 2015	00-24	3250	315	2935	2644	291		
	19th March 2015	00-24 00-12	3310 3000	315	2995 2685	2600 2600	395 85		
	20th March 2015	12-24'	3165	315	2850	2644	206		
	21st March 2015	00-24	3165	315	2850	2644	206		
	22nd March 2015 to 24th March 2015	00-24	3165	315	2850	2644	206		
		00-08'	3165		2850	2644	206		
	25th March 2015	08-17'	2520	315	2205	2644	0	1/5	Revised due to extension of Vallur
	26th March 2015	17-24 00-24	3165 3165	315	2850 2850	2644 2644	206 206	165 165	Unit-3 outage.
	27th March 2015 to 31st March 2015	00-24	3000	315	2685	2600	85		Ü

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
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		LTA and MTOA as per ex-pp schedule		
W3 zone	1st March 2015 to 4th March 2015	00-17 23-24	9400	200	9200	6862	2338		
Injection ##	4th Watch 2013	17-23	9900		9700		2838		
Injection ##	5th March 2015 to	00-17	9400	200	9200	7094	2106		
	31st March 2015	17-23	9900	200	9700	7054	2606		

^{*} 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).

- \$ 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.
- 1 11	
WR-NR	High Loading of 400kV Singrauli-Anpara & High loading of 765 kV Agra-Gwalior (1250 MW SPS setting
NR-ER	(n 1) continuously of 400 kW Savanath Propuli
	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingnecy of Kahalgaon-Banka S/C
W3-ER	i. (n-1) Contingency of 400 kV MPL-Maithon S/C
ER-W3	
	(n-1) contingency of 400kV Raigarh-Jharsuguda-Rourkela
WR-SR &	1. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG)
	2. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case
ER-SR	Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as
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,
S1-S2	(n-1) contingency of one circuit of 400 kV Kolar-Hosur
Import of DD	(n-1) contingency of 400/220KV 315MVA ICT at VAPI
& DNH	(II-1) containgency of 400/220K v 515M v A IC 1 at v AF1
Import of	( ) Company of the control of the co
Punjab	(n-1) contingency of ICT at Dhuri and (n-1) contingnecy of 220kV Moga(PG)-Moga(PSTCL)
W3 zone	(n-1-1) contingency of 400 kV Raipur-Bhadrawati D/C section and High loading of 400kV Raipur-Wardha
Injection	(850 MW SPS setting on each circuit of 400kV Raipur-Wardha)
	*Primary constraints

^{*}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									
		00.17							
	1st March 2015 to 11th March 2015	00-17 23-24	7300	800	6500	7199	0		
		17-23	7400		6600		0		
	12th March 2015	00-17 23-24	6800	800	6000	7199	0		
		17-23	6800		6000		0		
		00-09	6800		6000		0		
	13th March 2015	09-16'	5800	800	5000		0		
NID		16-24	6800		6000	7100	0		
NR	14th March 2015 to	00-17 23-24	6800	800	6000	7199	0		
	18th March 2015	17-23	6800	000	6000		0		
	19th March 2015 to	00-17 23-24	7500	800	6700	7199	0		
	22 nd March 2015	17-23	7500	000	6700		0		
	23rd March 2015 to 31st March 2015	00-17 23-24	8000	800	7200	7199	1		
		17-23	8100		7300		101		
NER	1st March 2015 to	00-17 23-24	650	40	610	210	400		
L	31st March 2015	17-23	720	40	680	210	470		
WR			, = 3				11.0		
		00.06							
	1st March 2015 to 10th March 2015	00-06 18-24	4750	750	4000	3935	65		
		06-18'	4750		4000	4000	0		
		00-06	4750		4000	3935	65		
	11th March 2015	06-09'	4750	750	4000	4000	0		
		09-18'	4450		3700	4000	0		
		18-24	4450		3700	3935	0		
	12th March 2015 to 18th March 2015	00-06 18-24	4750	750	4000	3935	65		
		06-18'	4750		4000	4000	0		
CD ##	19th March 2015	00-06 18-24	4750	750	4000	3935	65		
SR##	19th March 2015	06-08'	4750	750	4000	4000	0		
		08-18'	4450		3700	4000	0		
	20th March 2015 to	00-06 18-24	4750	750	4000	3935	65		
	23rd March 2015	06-18'	4750		4000	4000	0		
		00-06	4750		4000	3935	65		
	24th Mag-1- 2015	06-08'	4750	750	4000	4000	0		
	24th March 2015	08-18'	4250	750	3500	4000	0		
		18-24'	4250		3500	3935	0		
	25th 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				
	315t 1.1arch 2015	06-18'			3800	1064	2736				
NER	1st March 2015 to 31st March 2015	00-17 23-24	990	30	960	0	960				
	518t Water 2015	17-23	1050	40	1010		1010				
WD											
WR											
SR *	1st March 2015 to 31st March 2015	00-24		No limit is being Specified.							

^{*} 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
	<b>T</b> 4	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
NK		D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
	T	(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	T	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.
		•

^{*}Primary constraints

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
	12/29/2014	Whole	Margin revised due to change in LTA/MTOA.	NR-WR/ ER-
1	12/29/2014	Month	Margin revised due to COD of Sasan Unit-5.	W3/ W3-ER WR-NR
2	2/12/2015	Whole		NR-WR/ ER- W3
3	2/23/2015	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	2/25/2015	Month	Revised considering full generation at Rihand/Singrauli complex.	WR-NR
F	2/20/2015	3/1/2015	Revised due to shutdown of 400kV Pugalur-Kalivendapattu Ckt-2	S1-S2
5	2/28/2015	Whole month	Rveised due to commissioning of new transmission elements in NER.	ER-NER/ NER- ER
6	3/1/2015	1/3/2015 - 10/3/2015	Revised due to NCTPS Unit-1 Outage.	S1-S2
7	3/3/2015	5/3/2015 - 31/3/2015	STOA Margin revised due to grant of MTOA from Chattisgarh to KSEB by CTU.	W3 Zone/ W3-ER
,	3/3/2013	3/5/2015	Revised due to 220kV Kadakola - Kaniyampeta Shutdown.	S1-S2
8	3/4/2015	04/03/2015 - 07/03/2015	Revised due to outage of Vallur Unit - 2	S1-S2
9	3/6/2015	3/7/2015	Revised due to shutdown of 400kV Cudappah - Chitoor- Sriperumbudur S/C.	S1-S2
10	3/7/2015	08-03-2015 - 10-03-2015	Revised due to extension of outage of Vallur Unit-2	S1-S2
11	3/9/2015	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	3/10/2015	3/11/2015	Revised due to shutdown of 400 kV Indravati - Jeypore S/C	ER-SR
13	3/10/2015	3/11/2015	Revised due to extension of outage of Vallur unit 2 and NCTPS stage 2 unit 1.	S1-S2
14	3/11/2015	12-03-2015 22-03-2015	Revised due to the shutdown of 400 kV Biharshariff- Lakhisarai D/C	ER-NR
		3/13/2015	Revised due to shutdown of HVDC Mundra - Mahendragarh pole 1	WR-NR
		13-03-2015-	Revised due to extension of Vallur Unit-2 and outage of	
15	3/12/2015	16-03-2015 3/17/2015	NCTPS Stage-2 Unit -1 Revised due to extension of NCTPS Stage-2 Unit -1 outage & Less generation at Vallur	S1-S2

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
		18-03-2015 -	Revised due to revival of NCTPS Stage-2 Unit -1 & less	
		31-03-2015	generation Vallur	
		3/13/2015	Revised due to outage of Vallur unit 3	
16	3/13/2015	14-03-2015 -	Devised due to shutdown of 100k/ Kurnool Tiruvolom D/C	S1-S2
		18-03-2015	Revised due to shutdown of 400kV Kurnool-Tiruvalam D/C.	

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
17	3/15/2015	15-03-2015 - 17-03-2015	Revised due to synchronisation of NCTPS Unit-1	S1-S2
18	3/15/2015	3/15/2015	Revised due to outage of NCTPS-II Unit-1	S1-S2
19	3/16/2015	3/16/2015	Revised due to outage of NCTPS-II Unit-1	S1-S2
20	3/16/2015	3/17/2015	Revised due to extension of outage of Vallur unit-3	S1-S2
21	3/16/2015	17-03-2015 - 18-03-2015	Revised due to extension of Outage of NCTPS Unit-1 & Outage of Mettur-III Unit-1.	S1-S2
22	3/17/2015	3/18/2015 3/19/2015	Revised due to extension of outage of Vallur unit 3 Revised due to extensions of the outages of Vallur unit 3 & Mettur-III unit 1	S1-S2
23	23 3/18/2015 3/19/2015		Revised due to shutdown of 400 kV Jeypore - Indravati S/C	ER-SR
			Revised due to Mettur-III Unit-1 revival & NCTPS Unit-1 outage extension	S1-S2
24	3/18/2015	Whole month	Revised due to outage of Rihand unit 4	WR-NR
25	3/20/2015	20-03-2015- 21-03-2015	Revised due to outage of Vallur Unit-3	S1-S2
26	3/21/2015	22-03-2015 - 24-03-2015	Revised due to extension of outage of Vallur unit 3	S1-S2
27	3/23/2015	24-03-015	Revised due to shutdown of HVDC Bhadrawti Pole-1	WR-SR
28	3/24/2015	3/25/2015	Revised due to extension of outage of Vallur unit 3 and revised due to shutdown of 400 kV Somanhalli - Hosur	S1-S2
29	3/25/2015	3-2015 - 26-03-	Revised due to extension of Vallur Unit-3 outage.	S1-S2

# **ASSUMPTIONS IN BASECASE**

Month : Mar '15

		L	oad	Generation		
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		5801		
3	Maharashtra	20963		16531	8763	
4	Gujarat	11198		8946	7757	
5	Goa	425	339	0340	1131	
6	Daman and Diu	262				
7	Dadra and Nagar Haveli	608				
8	ISGS/IPPs	1070		22377	21836	
	Total WR	47943	34712	55570	41418	