# National Load Despatch Centre Total Transfer Capability for April 2017

Issue Date: 5th April 2017 Issue Time: 1500 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	
	1st Apr 2017 to	00-06				55	1945			
NR-WR *	30th Apr 2017	06-18	2500	500	2000	65	1935			
	<u>r</u>	18-24				55	1945			
WR-NR*	1st Apr 2017 to 30th Apr 2017	00-24	9050	500	8550	7951	599			
		00-06	2000	<u> </u>	1800	193	1607			
NR-ER*	1st Apr 2017 to 30th Apr 2017	06-18'	2000	200	1800	303	1497			
THE LIK		18-24	2000	200	1800	193	1607			
ER-NR*	1st Apr 2017 to 30th Apr 2017	00-24	4200	300	3900	2931	969			
	1st Apr 2017 to									
W3-ER	30th Apr 2017	00-24		No limit is being specified.						
ER-W3	1st Apr 2017 to 30th Apr 2017	00-24				No limit i	s being specified.			
	1st Apr 2017 to 3rd Apr 2017	00-05	3800	500	3300		400			
		05-22	3400		2900	2900	0	_		
		22-24	3800		3300		400	_		
	4th Apr 2017 to 5th Apr 2017	00-05	4750		4250		400			
WR-SR		05-22	4350	500	3850	3850	0			
		22-24	4750		4250		400			
	6th Apr 2017 to 30th Apr 2017	00-05	4350		3850		0		Revised considering high load in	
		05-22	4350	500	3850	3850	0	0	Maharashtra and rest of Western Region	
		22-24	4350		3850		0	-400	Region	
SR-WR *	1st Apr 2017 to 30th Apr 2017	00-24				No limit is	s being Specified.			
		00-06				3232	0			
	1st Apr 2017 to	06-18'	3450	250	3200	3317	0			
	3rd Apr 2017	18-24	2.50	250	2200	3232	0			
ER-SR		00-06				3100	0			
EK-SK	4th Apr 2017 to 30th Apr 2017	06-18'	3350	250	3100	3100	0			
		18-24				3100	0			
SR-ER *	1st Apr 2017 to 30th Apr 2017	00-24		No limit is being Specified.						

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t Apr 2017 to	00-17	1040		995		770		
-	17-23	1050	45	1005	225	780		
oui Api 2017	23-24	1040		995		770		
2017	00-17	1230		1185		1185		
	17-23	1300	45	1255	0	1255		
otn Apr 2017	23-24	1230		1185		1185		
t Apr 2017 to	00.24	No limit is be	ing specified	(In case of any	constraints anneari	ng in the system V	W3 zone evr	port would be revised accordingly)
th Apr 2017	00-24	TWO IIIIII IS DE	ing specified	constraints appears	ing in the system, v	v 5 Zone exp	bort would be revised accordingly)	
)t t .	Apr 2017 to h Apr 2017	Apr 2017 to h Apr 2017	Date Period (hrs) Transfer Capability (TTC)  Apr 2017 to h	Date         Period (hrs)         Transfer Capability (TTC)         Reliability Margin           Apr 2017 to h Apr 2017         00-17         1040         45           23-24         1040         45           Apr 2017 to h Apr 2017         00-17         1230           17-23         1300         45           23-24         1230         45           Apr 2017 to h Apr 2017 to h Apr 2017         No limit is being specified	Period (hrs)	Date   Period (hrs)   Transfer Capability (TTC)   Reliability Margin   Transfer Capability (ATC)   Medium Term Open Access (MTOA) #	Date   Period (hrs)   Transfer Capability (TTC)   Reliability (ATC)   Transfer Capability (ATC)   Medium Term Open Access (MTOA) #   Short Term Open Access (STOA)	Date   Period (hrs)   Transfer Capability (TTC)   Margin   Transfer Capability (ATC)   Medium Term Open Access (MTOA) #   Short Term Open Access (STOA)   Revision      Apr 2017 to h Apr 2017   Apr 2017 to h Ap

Note: TTC/ATC of S1-S2 corridor, Import of Punjab and Import of DD & DNH is uploaded on NLDC website under Intra-Regional Section in Monthly ATC.

- \* 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) S1 comprises of Telangana, AP and Karnataka; S2 comprises of Tamil Nadu and Puducherry; S3 comprises Kerala
- 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 o)RKM, p)GMR Raikheda, q)Ind Barath and any other regional entity generator in Chhattisgarh

# 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	1. (n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.
	2.High Loading of 400kV Singrauli-Anpara S/C.
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c
WR-SR &	$(n\text{-}1)\ contingency\ of\ 765\ /\ 400\ kV,\ 1500\ MVA\ single\ ICT\ at\ Nizamabad\ \ will\ lead\ to\ 874\ MW\ loading\ on\ Nizamabad\ \ will\ lead\ to\ 874\ MW\ loading\ on\ Nizamabad\ \ will\ lead\ to\ 874\ MW\ loading\ on\ Nizamabad\ \ will\ lead\ \ to\ 874\ MW\ loading\ on\ Nizamabad\ \ will\ lead\ \ to\ 874\ MW\ loading\ on\ Nizamabad\ \ will\ lead\ \ to\ 874\ MW\ loading\ \ on\ Nizamabad\ \ will\ \ lead\ \ \ to\ Nizamabad\ \ will\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
ER-SR	400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)
EK-5K	Low Voltage at Gazuwaka (East) Bus.
ED MED	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
ER-NER	b. High loading of 220 kV Balipara-Sonabil line(200 MW)
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV,
NEK-EK	315 MVA ICT at Misa
W3 zone	
Injection	

### **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									
		00-05	12900		12100		1218		
*	1st Apr 2017 to	05-08	12000		11200		318		
NR*	30th Apr 2017	08-18	12900	800	12100	10882	1218		
	•	18-23	11600		10800		0		
		23-24	12900		12100		1218		
	1st Apr 2017 to	00-17	1040		995		770		
NER	30th Apr 2017	17-23	1050	45	1005	225	780		
	30th 71pt 2017	23-24	1040		995		770		
WR									
		00-05	7250		6500	6132	368		
	1st Apr 2017 to	05-06	6850	750	6100	6132	0		
	3rd Apr 2017	06-18	6850		6100	6217	0		
	Î	18-22	6850		6100	6132	0		
		22-24 00-05	7250 8100		6500 7350	6132 6950	368 400		
		05-06	7700		6950	6950	0		
SR	4th Apr 2017 to	06-18	7700	750	6950	6950	0		
211	6th Apr 2017	18-22	7700	, 5 0	6950	6950	0		
		22-24	8100		7350	6950	400		
		00-05	7700		6950	6950	0	-400	
	64h Ama 2017 to	05-06	7700		6950	6950	0		Revised considering high
	6th Apr 2017 to 30th Apr 2017	06-18	7700	750	6950	6950	0		load in Maharashtra and
	30th Apr 2017	18-22	7700		6950	6950	0	0	rest of Western Region
		22-24	7700		6950	6950	0	-400	

<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).

Margin in Simultaneous import of NR = A

WR-NR ATC = B ER-NR ATC = C

Margin for WR-NR applicants = A \* B/(B+C)Margin for ER-NR Applicants = A \* C/(B+C)

<sup>\*</sup> For approving STOA Bilateral transactions, margin available in Simultaneous Import of NR would be apportioned on WR-NR Corridor & ER-NR Corridor in the following ratio:

## **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 Apr 2017 to 30th Apr 2017	00-06 06-18'	4500	700	3800 3800	248 368	3552 3432		
		18-24	4500		3800	248	3552		
	1st Apr 2017 to 30th Apr 2017	00-17	1230	45	1185	0	1185		
NER		17-23	1300		1255		1007		
		23-24	1230		1185		1185		
WR									
****									
SR *	1st Apr 2017 to 30th Apr 2017	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).

## **Limiting Constraints**

Limiting	Constraints	
		(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c.
	Import	1. (n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.
NR		2.High Loading of 400kV Singrauli-Anpara S/C.
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
	Export	(n-1) contingency of 400 kV Saranath-Pusauli
	Import	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
NER		b. High loading of 220 kV Balipara-Sonabil line(200 MW)
NEK	Export	(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.
	Import	(n-1) contingency of 765 / 400 kV, 1500 MVA single ICT at Nizamabad will lead to 874 MW loading on 400kV
SR		Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)
		Low Voltage at Gazuwaka (East) Bus.

## National Load Despatch Centre Total Transfer Capability for April 2017

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	3/2/2017	Whole month	STOA margin revised considering Solar allocation in LTA/MTOA during non solar hours	Import of SR
2	2/28/2017	Whole month	Revised due to commissioning of 765 kV Angul-Srikakulam-Vemagiri D/C, LILO of 400 kV Gazuwaka - Nunna at Vemagiri (PG), and opening of 400 kV Vemagiri-Nunna S/C. STOA margin revised due to operationalization of MTOA.	WR-SR/ ER- SR/ Import of SR
3	28/3/2017	Whole month	Revised considering prolonged shutdown of 765 kV Vadodara SS, reduced power order operation of HVDC Mundra-Mahendragarh, commissioning of one pole of HVDC Champa - Kurukshetra and change in LTA/MTOA approved by CTU	WR-NR/ Import of NR
			Revised considering low demand in Maharashtra area in Off-Peak hours	WR-SR/ Import of SR
4	29th March 2017	Whole month	Revised considering the normal power order operation of HVDC Mundra - Mohindergarh and restoration of 765 kV Vadodara S/S	WR-NR/ Import of NR
5	3rd April 2017	4th Apr 2017 to 30th Apr 2017	Revised considering the commissioning of 765 kV Durg - Wardha D/C, second ICT at Vemagiri, 765 kV Wardha - Nizamabad D/C, one ICT at Nizamabad, and 400 kV Nizamabad-Dichipally D/C.	WR-SR/ER- SR/Import of SR
6	5th April 2017	6th Apr 2017 to 30th Apr 2017	Revised considering high load in Maharashtra and rest of Western Region	WR-SR/ Import of SR

ASSUN	MPTIONS IN BASECASE				
				Month : April'17	
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	6138	5892	2760	2789
	Haryana	6634	4998	2470	2470
	Rajasthan	8620	8226	6298	6298
	Delhi	4678	4074	437	437
5	Uttar Pradesh	13735	12612	7711	7738
6	Uttarakhand	1920	1329	728	691
7	Himachal Pradesh	1342	929	379	547
8	Jammu & Kashmir	2372	1687	618	700
9	Chandigarh	232	164	0	0
10	ISGS/IPPs	175	133	17627	11556
	Total NR	45844	40044	39027	33225
II	EASTERN REGION				
1	Bihar	3680	2648	200	131
2	Jharkhand	1042	883	400	400
3	Damodar Valley Corporation	2531	2207	3741	3372
4	Orissa	4031	2991	3359	2199
5	West Bengal	7642	5394	5049	3656
6	Sikkim	89	39	0	0
7	Bhutan	245	245	842	527
8	ISGS/IPPs	563	568	9897	8843
	Total ER	19793	14946	23459	19114
III	WESTERN REGION		+		+
	Maharashtra	19346	14655	15124	11320
	Gujarat	13639	12072	9171	8787
	Madhya Pradesh	7977	7209	3825	4078
	Chattisgarh	3532	3572	2830	2020
	Daman and Diu	303	258	0	0
	Dadra and Nagar Haveli	787	692	0	0
7	Goa-WR	436	327	0	0
	ISGS/IPPs	3139	3282	31411	27887
	Total WR	49158	42068	62360	54091

ASSU	MPTIONS IN BASECASE				
				Month : April'17	
S.No.	Name of State/Area	Load		Generation	
		Peak Load (MW)	Off Peak Load (MW)	Peak (MW)	Off Peak (MW)
IV	SOUTHERN REGION				
1	Andhra Pradesh	8268	7479	7920	6664
2	Telangana	8627	7461	3853	3386
3	Karnataka	9575	8509	7352	5568
4	Tamil Nadu	14817	12625	7110	6510
5	Kerala	4200	3110	1698	650
6	Pondy	395	330	0	0
7	Goa-SR	89	89	0	0
8	ISGS/IPPs	0	0	14288	12255
	Total SR	45971	39603	42222	35033
V	NORTH-EASTERN REGION				<u> </u>
	Arunachal Pradesh	110	68	0	0
	Assam	1042	812	230	180
	Manipur	132	74	0	0
	Meghalaya	244	135	75	15
	Mizoram	86	60	8	8
	Nagaland	98	76	12	8
	Tripura	217	135	82	77
	ISGS/IPPs	83	60	1534	1070
	Total NER	2012	1420	1941	1358
	TOTAL TYLET	2012	1 120	1011	1000
	Total All India	162877	138219	169753	143348