

National Load Despatch Centre
Total Transfer Capability for April 2017

Issue Date: 7th April 2017

Issue Time: 1300 hrs

Revision No. 7

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 Apr 2017 to 30th Apr 2017	00-06	2500	500	2000	55	1945			
		06-18				65	1935			
		18-24				55	1945			
WR-NR*	1st Apr 2017 to 30th Apr 2017	00-24	9050	500	8550	7951	599			
NR-ER*	1st Apr 2017 to 30th Apr 2017	00-06	2000	200	1800	193	1607			
		06-18'	2000		1800	303	1497			
		18-24	2000		1800	193	1607			
ER-NR*	1st Apr 2017 to 30th Apr 2017	00-24	4200	300	3900	2931	969			
W3-ER	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being specified.							
ER-W3	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being specified.							
WR-SR	1st Apr 2017 to 3rd Apr 2017	00-05	3800	500	3300	2900	400			
		05-22	3400		2900		0			
		22-24	3800		3300		400			
	4th Apr 2017 to 5th Apr 2017	00-05	4750	500	4250	3850	400			
		05-22	4350		3850		0			
		22-24	4750		4250		400			
	6th Apr 2017 to 07th Apr 2017	00-05	4350	500	3850	3850	0			
		05-22	4350		3850		0			
		22-24	4350		3850		0			
	08th Apr 2017 to 09th Apr 2017	00-05	4350	500	3850	3850	0		-500	Revised considering Generation outages around Gazuwaka and emergency shutdown of 765kV Wardha-Nizamabad-D/C (One at a time)
		05-22	3850		3350		0			
		22-24	3850		3350		0			
	10th Apr 2017 to 30th Apr 2017	00-05	4350	500	3850	3850	0			
		05-22	4350		3850		0			
		22-24	4350		3850		0			
SR-WR *	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being Specified.							
ER-SR	1st Apr 2017 to 3rd Apr 2017	00-06	3450	250	3200	3232	0			
		06-18'				3317	0			
		18-24				3232	0			
	4th Apr 2017 to 07th Apr 2017	00-06	3350	250	3100	3100	0			
		06-18'				3100	0			
		18-24				3100	0			
	8th Apr 2017 to 09th Apr 2017	00-05	3350	250	3100	3100	0		-200	Revised considering Generation outages around Gazuwaka and emergency shutdown of 765kV Wardha-Nizamabad-D/C (One at a time)
		05-22'	3150		2900	3100	0			
		22-24	3150		2900	3100	0			
	10th Apr 2017 to 30th Apr 2017	00-06	3350	250	3100	3100	0			
		06-18'				3100	0			
		18-24				3100	0			

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SR-ER *	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being Specified.						
ER-NER	1st Apr 2017 to 30th Apr 2017	00-17	1040	45	995	225	770		
		17-23	1050		1005		780		
		23-24	1040		995		770		
NER-ER	1st Apr 2017 to 30th Apr 2017	00-17	1230	45	1185	0	1185		
		17-23	1300		1255		1255		
		23-24	1230		1185		1185		
W3 zone Injection	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised accordingly)						
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) KWPCCL, 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 commissioned 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) Contingency 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 & ER-SR	(n-1) contingency of 765 / 400 kV, 1500 MVA single ICT at Nizamabad will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C) Low Voltage at Gazuwaka (East) Bus.
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa 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, 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									
NR*	1st Apr 2017 to 30th Apr 2017	00-05	12900	800	12100	10882	1218		
		05-08	12000		11200		318		
		08-18	12900		12100		1218		
		18-23	11600		10800		0		
		23-24	12900		12100		1218		
NER	1st Apr 2017 to 30th Apr 2017	00-17	1040	45	995	225	770		
		17-23	1050		1005		780		
		23-24	1040		995		770		
WR									
SR	1st Apr 2017 to 3rd Apr 2017	00-05	7250	750	6500	6132	368		
		05-06	6850		6100	6132	0		
		06-18	6850		6100	6217	0		
		18-22	6850		6100	6132	0		
		22-24	7250		6500	6132	368		
	4th Apr 2017 to 6th Apr 2017	00-05	8100	750	7350	6950	400		
		05-06	7700		6950	6950	0		
		06-18	7700		6950	6950	0		
		18-22	7700		6950	6950	0		
		22-24	8100		7350	6950	400		
	6th Apr 2017 to 07th Apr 2017	00-05	7700	750	6950	6950	0		
		05-06	7700		6950	6950	0		
		06-18	7700		6950	6950	0		
		18-22	7700		6950	6950	0		
		22-24	7700		6950	6950	0		
	8th Apr 2017 to 9th Apr 2017	00-05	7700	750	6950	6950	0		Revised considering Generation outages around Gazuwaka and emergency shutdown of 765kV Wardha-Nizamabad-D/C (One at a time)
		05-06	7000		6250	6950	0	-700	
		06-18	7000		6250	6950	0	-700	
		18-22	7000		6250	6950	0	-700	
		22-24	7000		6250	6950	0	-700	
	10th Apr 2017 to 30th Apr 2017	00-05	7700	750	6950	6950	0		
		05-06	7700		6950	6950	0		
		06-18	7700		6950	6950	0		
		18-22	7700		6950	6950	0		
		22-24	7700		6950	6950	0		

* 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).

* 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:

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)

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	4500	700	3800	248	3552		
		06-18'			3800	368	3432		
		18-24	4500		3800	248	3552		
NER	1st Apr 2017 to 30th Apr 2017	00-17	1230	45	1185	0	1185		
		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.						

* 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) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c. 1. (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. 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. (n-1) contingency of 400 kV Saranath-Pusauli
NER	Import	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)
	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.
SR	Import	(n-1) contingency of 765 / 400 kV, 1500 MVA single ICT at Nizamabad will lead to 874 MW loading on 400kV 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	02-03-2017	Whole month	STOA margin revised considering Solar allocation in LTA/MTOA during non solar hours	Import of SR
2	28-02-2017	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
7	7th April 2017	8th Apr 2017 to 9th Apr 2017	Revised considering Generation outages around Gazuwaka and emergency shutdown of 765kV Wardha-Nizamabad-D/C (One at a time)	WR-SR/ ER-SR/ Import of SR

ASSUMPTIONS 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
2	Haryana	6634	4998	2470	2470
3	Rajasthan	8620	8226	6298	6298
4	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				
1	Maharashtra	19346	14655	15124	11320
2	Gujarat	13639	12072	9171	8787
3	Madhya Pradesh	7977	7209	3825	4078
4	Chattisgarh	3532	3572	2830	2020
5	Daman and Diu	303	258	0	0
6	Dadra and Nagar Haveli	787	692	0	0
7	Goa-WR	436	327	0	0
8	ISGS/IPPs	3139	3282	31411	27887
	Total WR	49158	42068	62360	54091

ASSUMPTIONS 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				
1	Arunachal Pradesh	110	68	0	0
2	Assam	1042	812	230	180
3	Manipur	132	74	0	0
4	Meghalaya	244	135	75	15
5	Mizoram	86	60	8	8
6	Nagaland	98	76	12	8
7	Tripura	217	135	82	77
8	ISGS/IPPs	83	60	1534	1070
	Total NER	2012	1420	1941	1358
	Total All India	162877	138219	169753	143348