

National Load Despatch Centre
Total Transfer Capability for April 2018

Issue Date: 27th March 2018

Issue Time: 1500 hrs

Revision No. 5

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 April 2018 to 30th April 2018	00-06	2500	500	2000	55	1945		
		06-18				65	1935		
		18-24				55	1945		
WR-NR*	1st April 2018 to 30th April 2018	00-24	10050	500	9550	9280	270		
NR-ER*	1st April 2018 to 30th April 2018	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st April 2018 to 30th April 2018	00-24	4500	300	4200	3239	961		Revised STOA margin due to 200 MW LTA from Bokaro TPS-A of DVC to PSPCL
W3-ER	1st April 2018 to 30th April 2018	00-24	No limit is being specified.						
ER-W3	1st April 2018 to 30th April 2018	00-24	No limit is being specified.						
WR-SR	1st April 2018 to 30th April 2018	00-05	5150	500	4650	4215	435		
		05-22	5150		4650		435		
		22-24	5150		4650		435		
SR-WR *	1st April 2018 to 30th April 2018	00-24	No limit is being Specified.						
ER-SR	1st April 2018 to 30th April 2018	00-06	4350	250	4100	2762	1338		
		06-18'				2847	1253		
		18-24				2762	1338		
SR-ER *	1st April 2018 to 30th April 2018	00-24	No limit is being Specified.						
ER-NER	1st April 2018 to 30th April 2018	00-17	1370	45	1325	225	1100		
		17-23	1310		1265		1040		
		23-24	1370		1325		1100		
NER-ER	1st April 2018 to 30th April 2018	00-17	1460	45	1415	0	1415		
		17-23	1420		1375		1375		
		23-24	1460		1415		1415		

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W3 zone Injection	1st April 2018 to 30th April 2018	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&S3) corridor, Import of S3(Kerala), 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 Raikhedra, 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.

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 April 2018 to 30th April 2018	00-05	14350	800	13550	12519	1031		Revised STOA margin due to 200 MW LTA from Bokaro TPS-A of DVC to PSPCL
		05-08	14350		13550		1031		
		08-18	14350		13550		1031		
		18-23	13050		12250		0		
		23-24	14350		13550		1031		
NER	1st April 2018 to 30th April 2018	00-17	1370	45	1325	225	1100		
		17-23	1310		1265		1040		
		23-24	1370		1325		1100		
WR									
SR	1st April 2018 to 30th April 2018	00-05	9500	750	8750	6977	1773		
		05-06	9500		8750	6977	1773		
		06-18	9500		8750	7062	1688		
		18-22	9500		8750	6977	1773		
		22-24	9500		8750	6977	1773		

* 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 April 2018 to 30th April 2018	00-06	4500	700	3800	248	3552		
		06-18			3800	368	3432		
		18-24			3800	248	3552		
NER	1st April 2018 to 30th April 2018	00-17	1460	45	1415	0	1415		
		17-23	1420		1375				
		23-24	1460		1415				
WR									
SR *	1st April 2018 to 30th April 2018	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 (Corridor wise)

Corridor	Constraint	Applicable Revisions
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	Rev-0 to 5
WR-NR	1. (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.	Rev-0 to 5
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-0 to 5
ER-NR	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c	Rev-0 to 5
WR-SR and ER-SR	a. (n-1) contingency of one ckt of 765 kV Wardha-Nizamabad D/C will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (When 400kV Vemagiri(PG)-Nunna S/C is not in service)	Rev-0 to 3
	b. (n-1) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading (874 MW) on 400 kV Vemagiri - Gazuwaka S/C (When 400 kV Vemagiri(PG) - Nunna S/C in kept in service)	
	Low Voltage at Gazuwaka (East) Bus.	
	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-4 to 5
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)	Rev-0 to 5
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of 220 kV Samaguri - Sonabil line	Rev-0 to 5
W3 zone Injection	---	Rev-0 to 5

Limiting Constraints (Simultaneous)

		Applicable Revisions
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 220 kV Samaguri - Sonabil line
SR	Import	a. (n-1) contingency of one ckt of 765 kV Wardha-Nizamabad D/C will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (When 400kV Vemagiri(PG)-Nunna S/C is not in service) b. (n-1) contingency of 400 kV Vemagiri - Vijaywada S/C will lead to high loading (874 MW) on 400 kV Vemagiri - Gazuwaka S/C (When 400 kV Vemagiri(PG) - Nunna S/C in kept in service)
		Low Voltage at Gazuwaka (East) Bus.
		n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT

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Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	22nd Jan 2018	Whole month	Revised STOA margin due to (i) allocation of 125 MW and 200 MW power from NTPC WR to Telangana & Karnataka respectively and (ii) 50 MW of power from NTPC ER to Telangana	WR-SR/ER-SR/Import of SR
2	3rd Feb 2018	Whole month	Revised STOA margins due to change in Talcher Stg-II DC	ER-SR/Import of SR
3	26th Feb 2018	Whole month	Revised STOA margin due to (a) 50 MW allocation to Karnataka from NTPC WR plants (b) 5 MW allocation to Telangana from NTPC WR plants	WR-SR/Import of SR
4	23rd March 2018	Whole month	<p>1. Revised due to commissioning/ reconfiguration of following lines:</p> <p>(a) Commissioning of 400kV Vijaywada(PG)-Vemagiri (PG) Ckt 2 & 3</p> <p>(b) Commissioning of 400kV Vemagiri (PG)-Vemagiri (AP) 1 & 2</p> <p>(c) Vemagiri (AP) end of 400 kV Simhadri II - Vemagiri (AP)-ckt 1 & 2 moved to 400 kV Vemagiri (PG)</p> <p>2. With the commissioning/ reconfiguration of above lines, TTC/ATC for Import of SR remains unchanged however the relative sensitivity of ER-SR and WR-SR to net import of SR has changed. The limiting constraint which was earlier (n-1) contingency of one ckt of 765 kV Wardha-Nizamabad D/C and (n-1) contingency of 400 kV Vemagiri - Vijaywada S/C has also shifted to n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG).</p>	ER-SR / WR-SR
			Revised STOA margin on basis of inter-regional LTA utilisation/allocation	ER-SR/Import of SR
5	27th Mar 2018	Whole month	Revised STOA margin due to 200 MW LTA from Bokaro TPS-A of DVC to PSPCL	ER-NR/Import of NR

ASSUMPTIONS IN BASECASE					
				Month : April'18	
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	7292	6644	3354	3234
2	Haryana	6516	6006	1283	1283
3	Rajasthan	8713	8271	4971	4941
4	Delhi	5224	4967	664	664
5	Uttar Pradesh	14753	13787	8154	8178
6	Uttarakhand	1679	1271	691	579
7	Himachal Pradesh	1471	1100	602	404
8	Jammu & Kashmir	2555	2050	1148	839
9	Chandigarh	232	168	0	0
10	ISGS/IPPs	25	25	19298	14451
	Total NR	48459	44289	40165	34573
II	EASTERN REGION				
1	Bihar	3982	2561	290	181
2	Jharkhand	1198	860	374	210
3	Damodar Valley Corporation	2986	2649	4717	3994
4	Orissa	3986	3116	2975	2252
5	West Bengal	7678	5578	5372	4249
6	Sikkim	86	50	0	0
7	Bhutan	208	218	424	290
8	ISGS/IPPs	270	261	10897	9516
	Total ER	20394	15291	25050	20692
III	WESTERN REGION				
1	Maharashtra	19680	18252	12471	12257
2	Gujarat	14041	14278	9155	9155
3	Madhya Pradesh	8174	7947	3316	3446
4	Chattisgarh	4013	3793	2305	2305
5	Daman and Diu	309	304	0	0
6	Dadra and Nagar Haveli	733	745	0	0
7	Goa-WR	491	417	0	0
8	ISGS/IPPs	3822	3757	38254	37653
	Total WR	51263	49493	65501	64816

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	8398	6262	5740	3534
2	Telangana	9459	7003	4294	3914
3	Karnataka	10363	7363	6949	5564
4	Tamil Nadu	15027	13021	7100	5500
5	Kerala	4029	2694	1589	245
6	Pondy	366	262	0	0
7	Goa-SR	82	84	0	0
8	ISGS/IPPs	0	0	17631	12306
	Total SR	47726	36689	43303	31062
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	126	60	0	0
2	Assam	1123	843	224	112
3	Manipur	156	87	0	0
4	Meghalaya	270	192	135	58
5	Mizoram	95	66	8	8
6	Nagaland	103	78	12	8
7	Tripura	182	185	72	70
8	ISGS/IPPs	157	160	1829	1331
	Total NER	2213	1669	2280	1587
	Total All India	170430	147825	176777	153060