

National Load Despatch Centre
Total Transfer Capability for September 2017

Issue Date: 15th September 2017

Issue Time: 1500 hrs

Revision No. 10

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 September 2017 to 30th September	00-06	2500	500	2000	55	1945		
		06-18				65	1935		
		18-24				55	1945		
WR-NR*	1st September 2017 to 5th September 2017	00-24	9050	500	8550	8330	220		
	6th September 2017 to 8th	00-830	9050	500	8550	8330	220		
		0830-24	7550	500	7050	8330	0		
	9th September 2017	00-0630	9050	500	8550	8330	220		
		0630-18	7700	500	7200	8330	0		
		18-24	9050	500	8550	8330	220		
	10th September 2017 to 13th September 2017	00-24	9050	500	8550	8330	220		
	14th September 2017	00-0730	9050	500	8550	8330	220		
		730-24	7950	500	7450	8330	0		
	15th September 2017	00-24	9050	500	8550	8330	220		
	16th September 2017	00-0730	9050	500	8550	8330	220		Revised due to deferred shutdown of 765kV Phagi-Bhiwani-1 line in view of grid security.
0730-24		9050	500	8550	8330	220	500		
17th September 2017 to 30th September 2017	00-24	9050	500	8550	8330	220			
NR-ER*	1st September 2017 to 30th September	00-06	2000	200	1800	193	1607		
		06-18'	2000			1800	303	1497	
		18-24	2000			1800	193	1607	
ER-NR*	1st September 2017 to 30th September 2017	00-24	4500	300	4200	2983	1217		
W3-ER	1st September 2017 to 30th September 2017	00-24	No limit is being specified.						
ER-W3	1st September 2017 to 30th September 2017	00-24	No limit is being specified.						
WR-SR	1st September 2017 to 30th September	00-05	4350	500	3850	3483	367		
		05-22	4350		3850		367		
		22-24	4350		3850		367		
SR-WR *	1st September 2017 to 30th September 2017	00-24	No limit is being Specified.						
ER-SR	1st September 2017 to 11th September	00-06	3450	250	3200	3053	147		
		06-18'				3138	62		
		18-24				3053	147		

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ER-SR	12th September 2017 to 30th September	00-06	3450	250	3200	2610	590		
		06-18'				2695	505		
		18-24				2610	590		
SR-ER *	1st September 2017 to 30th September 2017	00-24	No limit is being Specified.						
ER-NER	1st September 2017 to 7th September	00-17	1400	45	1355	225	1130		
		17-23	1400		1355		1130		
		23-24	1400		1355		1130		
	8th September 2017 to 30th September	00-17	1170	45	1125	225	900		
		17-23	1190		1145		920		
		23-24	1170		1125		900		
NER-ER	1st September 2017 to 30th September	00-17	1300	45	1255	0	1255		
		17-23	1170		1125		1125		
		23-24	1300		1255		1255		
W3 zone Injection	1st September 2017 to 30th September 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&S3) corridor, Import of S3(Kerala), Import of Punjab and Import of DD & DNH is uploaded on NLDC website under Intra-

* 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.

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 September 2017 to 5th September 2017	00-05	12900	800	12100	11313	787		
		05-08	12900		12100		787		
		08-18	12900		12100		787		
		18-23	11300		10500		0		
		23-24	12900		12100		787		
	6th September 2017 to 07th September 2017	00-05	12900	800	12100	11313	787		
		05-0830	12900		12100		787		
		0830-18	10800		10000		0		
		18-23	9450		8650		0		
		23-24	10800		10000		0		
	08th September 2017	00-05	12900	800	12100	11313	787		
		05-0830	12900		12100		787		
		0830-18	10800		10000		0		
		18-23	9700		8900		0		
		23-24	10800		10000		0		
	09th September 2017	00-0630	12900	800	12100	11313	787		
		0630-08	11000		10200		0		
		08-18	11000		10200		0		
		18-23	11600		10800		0		
		23-24	12900		12100		787		
	10th September 2017 to 13th September 2017	00-05	12900	800	12100	11313	787		
		05-08	12900		12100		787		
		08-18	12900		12100		787		
		18-23	11600		10800		0		
		23-24	12900		12100		787		
	14th September 2017	00-05	12900	800	12100	11313	787		
		05-0730	12900		12100		787		
		0730-18	11350		10550		0		
		18-23	10200		9400		0		
		23-24	11350		10550		0		
	15th September 2017	00-05	12900	800	12100	11313	787		
		05-08	12900		12100		787		
		08-18	12900		12100		787		
		18-23	11600		10800		0		
		23-24	12900		12100		787		
	16th September 2017	00-05	12900	800	12100	11313	787		
		05-0730	12900		12100		787		
		0730-18	12900		12100		787	700	
		18-23	11600		10800		0	600	
		23-24	12900		12100		787	700	
17th September 2017 to 30th September 2017	00-05	12900	800	12100	11313	787			
	05-08	12900		12100		787			
	08-18	12900		12100		787			
	18-23	11600		10800		0			
	23-24	12900		12100		787			

NER	1st September 2017 to 7th September 2017	00-17	1400	45	1355	225	1130		
		17-23	1400		1355		1130		
		23-24	1400		1355		1130		
	8th September 2017 to 30th September 2017	00-17	1170	45	1125	225	900		
		17-23	1190		1145		920		
		23-24	1170		1125		900		
WR									
SR	1st September 2017 to 11th September 2017	00-05	7800	750	7050	6536	514		
		05-06	7800		7050	6536	514		
		06-18	7800		7050	6621	429		
		18-22	7800		7050	6536	514		
		22-24	7800		7050	6536	514		
	12th September 2017 to 30th September 2017	00-05	7800	750	7050	6093	957		
		05-06	7800		7050	6093	957		
		06-18	7800		7050	6178	872		
		18-22	7800		7050	6093	957		
		22-24	7800		7050	6093	957		

* 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 September 2017 to 30th September 2017	00-06	4500	700	3800	248	3552		
		06-18'			3800	368	3432		
		18-24			3800	248	3552		
NER	1st September 2017 to 30th September 2017	00-17	1300	45	1255	0	1255		
		17-23	1170		1125				
		23-24	1300		1255				
WR									
SR *	1st September 2017 to 30th September 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 (Corridor wise)

Corridor	Constraint	Applicable Revisions
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	All
WR-NR	(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C.	Rev-1-5.7-10
	(n-1) Contingency of HVDC Champa-Kurukshetra Pole-1 leads to 2750 MW loading on second circuit.	Rev-6
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	All
ER-NR	(n-1) contingencies of N.Ranchi - Chandawa S/c & (n-1) contingencies of 400kV MPL- Maithon S/c and high availability of Hydro power	All
WR-SR & ER-SR	(n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	All
	Low voltage at Gazuwaka (East) bus	
ER-NER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
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	All
W3 zone Injection	---	All

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 and high availability of Hydro power	All
		(n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit. High Loading of 400kV Singrauli-Anpara S/C.	Rev-1-5.7-10
		(n-1) Contingency of HVDC Champa-Kurukshetra Pole-1 leads to 2750 MW loading on second circuit	Rev-6
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	All
		(n-1) contingency of 400 kV Saranath-Pusauli	All
NER	Import	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa High loading of 220 kV Sonabil-Samaguri line(200 MW)	All
	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	All
SR	Import	(n-1) contingency of 400 kV Dichipalli-Ramagundam or (n-1) contingency of one circuit of 765kV Aurangabad-Sholapur will lead to 874 MW loading on 400kV Vemagiri(PG)-Gazuwaka (With Opening of 400kV Vemagiri(PG)-Nunna S/C)	All
		Low Voltage at Gazuwaka (East) Bus	All

National Load Despatch Centre
Total Transfer Capability for September 2017

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	28th July 2017	Whole Month	Revised STOA margins due to change in LTA / MTOA figures approved by CTU	WR-NR / Import of NR
2	31st July 2017	Whole Month	Revised STOA margins due to change in LTA / MTOA figures approved by CTU	WR-NR / Import of NR
3	22nd August 2017	01st September 2017 to 07th September 2017	Revised due to restriction on power flow from NER-NR on HVDC BNC-Agra due to maintenance activity in gas pipeline to Palatana units and generation restriction, and Change in pattern of simultaneous import towards NR	Import of NR
4	1st September 2017	01st September 2017 to 07th September 2017	Revised considering present load generation scenario in NER, outage of units of Palatana CCGT due to maintenance of fuel-supply link, and high hydro generation in Sikkim/Bhutan	ER-NER/Import of NER
5	5th September 2017	6th September 2017 to 08th September 2017	Revised due to shutdown of HVDC Champa-Kurukshetra Pole-1 for Commissioning of Pole-2	WR-NR / Import of NR
6	08th September 2017	09th September 2017	Revised due to shutdown of 765kV Agra-Gwalior-1 and 2(One by one)	WR-NR / Import of NR
7	11th September 2017	12th September 2017 to 30th September 2017	Revised STOA margin due to planned outage of Talcher StgII U#3	ER-SR / Import of SR
8	12th September 2017	14th September 2017	Revised due to shutdown of 765kV Phagi-Gwalior-1	WR-NR / Import of NR
9	15th September 2017	16th September 2017	Revised due shutdown of 765kV Phagi-Bhiwani-1	WR-NR / Import of NR
9	15th September 2017	16th September 2017	Revised due to deferred shutdown of 765kV Phagi-Bhiwani-1 line in view of grid security.	WR-NR / Import of NR

ASSUMPTIONS IN BASECASE					
				Month : September'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	9538	8003	3576	3524
2	Haryana	8123	6864	2062	2062
3	Rajasthan	9628	9037	4586	4602
4	Delhi	4955	4467	853	853
5	Uttar Pradesh	15515	15586	9854	9900
6	Uttarakhand	1915	1547	1079	982
7	Himachal Pradesh	1263	982	896	1013
8	Jammu & Kashmir	2427	1304	1037	1037
9	Chandigarh	317	210	0	0
10	ISGS/IPPs	27	27	23942	23972
	Total NR	53708	48027	47884	47944
II	EASTERN REGION				
1	Bihar	4100	2319	202	178
2	Jharkhand	1354	888	187	187
3	Damodar Valley Corporation	3190	2586	4808	3850
4	Orissa	4346	3151	3382	2160
5	West Bengal	8640	5784	5753	4270
6	Sikkim	90	89	0	0
7	Bhutan	215	212	1434	1434
8	ISGS/IPPs	522	521	13101	10221
	Total ER	22457	15550	28867	22300
III	WESTERN REGION				
1	Maharashtra	19685	11540	14102	8860
2	Gujarat	14398	11862	10214	9443
3	Madhya Pradesh	8164	7055	4500	4500
4	Chattisgarh	3785	3422	2710	2710
5	Daman and Diu	328	289	0	0
6	Dadra and Nagar Haveli	696	716	0	0
7	Goa-WR	577	302	0	0
8	ISGS/IPPs	3299	4098	26212	36388
	Total WR	50933	39284	57738	61902

IV	SOUTHERN REGION				
1	Andhra Pradesh	8442	7063	7236	5165
2	Telangana	9068	6607	5618	3638
3	Karnataka	8668	7785	5803	3989
4	Tamil Nadu	14129	11794	7641	6011
5	Kerala	3647	2024	1572	283
6	Pondy	393	385	0	0
7	Goa-SR	89	88	0	0
8	ISGS/IPPs	0	0	11434	11359
	Total SR	44436	35745	39304	30445
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	142	88	0	0
2	Assam	1141	1056	230	190
3	Manipur	158	85	0	0
4	Meghalaya	242	149	276	167
5	Mizoram	95	68	8	8
6	Nagaland	123	82	22	16
7	Tripura	287	190	81	82
8	ISGS/IPPs	100	60	1488	1514
	Total NER	2288	1779	2105	1977
	Total All India	173823	140385	175898	164568