

National Load Despatch Centre
Total Transfer Capability for August 2016

Issue Date: 3/8/2016

Issue Time: 1600 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
NR-WR *	1st Aug 2016 to 3rd Aug 2016	00-24	2500	500	2000	149	1851		
	4th Aug 2016 to 31st Aug 2016	00-24	2500	500	2000	55	1945		STOA margin revised considering change in LTA/MTOA allocation
WR-NR*	1st Aug 2016 to 31st Aug 2016	00-24	6800	500	6300	6170	130		
NR-ER*	1st Aug 2016 to 3rd Aug 2016	00-06	2000	200	1800	293	1507		STOA margin revised considering change in LTA/MTOA allocation
		06-18'	2000		1800	358	1442		
		18-24	2000		1800	293	1507		
	4th Aug 2016 to 31st Aug 2016	00-06	2000	200	1800	93	1707		
		06-18'	2000		1800	158	1642		
		18-24	2000		1800	93	1707		
ER-NR*	1st Aug 2016 to 31st Aug 2016	00-24	4400	300	4100	2431	1669		
W3-ER	1st Aug 2016 to 31st Aug 2016	00-24	No limit is being specified.						
ER-W3	1st Aug 2016 to 31st Aug 2016	00-24	No limit is being specified.						
WR-SR	1st Aug 2016	00-10'	4000	750	3250	3250	0		
		10'-24	2000	750	1250	3250	0		
	2nd Aug 2016 to 31st Aug 2016	00-24	4000	750	3250	3250	0		
SR-WR *	1st Aug 2016 to 31st Aug 2016	00-24	No limit is being Specified.						
ER-SR	1st Aug 2016	00-06	2650	0	2650	2142	508		STOA margin revised considering the rescheduling of shutdown of Talcher unit 6
		06-0830'	2650		2650	2207	443		
		0830-18'	2650		2650	2207	443		
		18-24'	2650		2650	2142	508		
	2nd Aug 2016 to 3rd Aug 2016	00-06	2650	0	2650	2142	508		
		06-0830'	2650		2650	2207	443		
		0830-18'	2450		2450	2207	243		
	4th Aug 2016 to 6th Aug 2016	18-24'	2450	0	2450	2142	308		
		00-06	2650		2650	2585	65		
		06-0830'	2650		2650	2650	0		
	7th Aug 2016 to 9th Aug 2016	0830-18'	2450	0	2450	2650	0		
		18-24'	2450		2450	2585	0		
		00-06	2650		0	2650	2585	65	
	10th Aug 2016 to 31st Aug 2016	06-18'	2650	0	2650	2585	0		
		18-24	2650		0	2650	2142	508	
00-06		2650	0		2650	2207	443		
SR-ER *	1st Aug 2016 to 31st Aug 2016	00-24	No limit is being Specified.						
ER-NER	1st Aug 2016 to 31st Aug 2016	00-17	1050	45	1005	210	795		
		23-24	950		905		695		
NER-ER	1st Aug 2016 to 31st Aug 2016	00-17	1550	45	1505	0	1505		
		23-24	1500		1455		1455		

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W3 zone Injection	1st Aug 2016 to 31st Aug 2016	00-24	No limit is being specified (in case of skewed inter-regional flows or 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, Kerala and Puducherry

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 Vidyt

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 contingency of one circuit of 400 kV Biharshariff- Lakhisarai leads to high loading on the other circuit
WR-SR & ER-SR	(n-1) contingency of one circuit of 765 kV Raichur - Sholapur will lead to 2500 MW loading on the other circuit Low Voltage at Gazuwaka (East) Bus.
ER-NER	(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. n-1 contingency of 400/132 kV, 2 x 200 MVA ICTs at Silchar
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 Aug 2016 to 31st Aug 2016	00-18	10800	800	10000	8701	1299		
		18-23	10000		9200		499		
		23-24	10800		10000		1299		
NER	1st Aug 2016 to 31st Aug 2016	00-17	1050	45	1005	210	795		
		23-24			905		695		
		17-23							
WR									
SR	1st Aug 2016	00-06	6650	750	5900	5392	508		
		06-0830'	6650		5900	5457	443		
		0830-10'	6650		5900	5457	443		
		10-18'	4650		3900	5457	0		
		18-24	4650		3900	5392	0		
	2nd Aug 2016 to 3rd Aug 2016	00-06	6650	750	5900	5392	508		
		06-0830'	6650		5900	5457	443		
		0830-18'	6450		5700	5457	243		
		18-24	6450		5700	5392	308		
	4th Aug 2016 to 6th Aug 2016	00-06	6650	750	5900	5835	65		
		06-0830'	6650		5900	5900	0		
		0830-18'	6450		5700	5900	0	STOA margin revised considering the rescheduling of shutdown of Talcher unit 6	
		18-24	6450		5700	5835	0		
	7th Aug 2016 to 9th Aug 2016	00-06	6650	750	5900	5835	65		
		06-18'	6650		5900	5900	0		
		18-24	6650		5900	5835	65		
	7th Aug 2016 to 31st Aug 2016	00-06	6650	750	5900	5392	508		
		06-18'	6650		5900	5457	443		
		18-24	6650		5900	5392	508		

* 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 Aug 2016 to 3rd Aug 2016	00-06	4500	700	3800	442	3358		
		06-18'			3800	507	3293		
		18-24			3800	442	3358		
	4th Aug 2016 to 31st Aug 2016	00-06	4500	700	3800	148	3652		STOA margin revised considering change in LTA/MTOA allocation
		06-18'			3800	213	3587		
		18-24			3800	148	3652		
NER	1st Aug 2016 to 31st Aug 2016	00-17	1550	45	1505	0	1505		
		23-24			1455		1455		
		17-23	1500						
WR									
SR *	1st Aug 2016 to 31st Aug 2016	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) contingency of one circuit of 400 kV Biharshariff- Lakhisarai leads to high loading on the other circuit 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	(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. n-1 contingency of 400/132 kV, 2 x 200 MVA ICTs at Silchar
	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 one circuit of 765 kV Raichur - Sholapur will lead to 2500 MW loading on the other circuit Low Voltage at Gazuwaka (East) Bus.

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Total Transfer Capability for August 2016**

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	27/5/2016	Whole month	Revised considering the present high generation trend in Rajasthan state	WR-NR/ Import of NR
2	16/7/2016	Whole month	STOA margin revised due to anticipated outage of Talcher Stage-2 Unit -6 approved in 121st OCC of SRPC.	ER-SR/Import of SR
3	25/7/2016	Whole month	Revised due to commissioning of 400kV Ranchi-Chandawa-Gaya D/C, 765kV Varanasi-Kanpur D/C, 765kV Kanpur-Jhatikara S/C, 400kV Kanpur (GIS)-Kanpur D/C and considering total gen at Kawai, Chhabra, Kalisindh as 2500 MW.	WR-NR/ Import of NR
4	28/7/2016	1/8/2016 to 6/8/2016	Revised due to shutdown of 400 kV Kolar AC Filter Bus-2	ER-SR/Import of SR
5	31/7/2016	1/8/2016	Revised due to deferment of shutdown of 400 kV Kolar AC Filter Bus-2 and due to shutdown of 765 kV Raichur-Sholapur ckt 2	ER-SR/WR- SR/Import of SR
6	3/8/2016	4/8/2016 to 31/8/2016	STOA margin revised considering change in LTA/MTOA allocation	NR-ER/ NR-WR/ Simultaneous export of NR
		4/8/2016 to 9/8/2016	STOA margin revised considering the rescheduling of shutdown of Talcher unit 6	ER-SR/Import of SR

ASSUMPTIONS IN BASECASE					
				Month : August '16	
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	9279	9090	4255	4405
2	Haryana	7893	6794	2163	2163
3	Rajasthan	9034	8910	5291	5223
4	Delhi	5155	5079	988	988
5	Uttar Pradesh	13173	15204	6151	6190
6	Uttarakhand	1742	1281	964	1049
7	Himachal Pradesh	1211	956	1079	1022
8	Jammu & Kashmir	2220	1254	730	696
9	Chandigarh	307	210	0	0
10	ISGS/IPPs			21241	21080
	Total NR	49518	48289	42861	42815
II	EASTERN REGION				
1	Bihar	3200	3132	200	110
2	Jharkhand	960	879	400	350
3	Damodar Valley Corporation	2454	2089	3400	2871
4	Orissa	3788	2968	2929	1959
5	West Bengal	7574	6115	4768	3830
6	Sikkim	90	49	0	0
7	Bhutan	215	215	1504	1322
8	ISGS/IPPs	418	416	9746	9135
	Total ER	18699	15863	22947	19577
III	WESTERN REGION				
1	Maharashtra	20213	14173	15518	10116
2	Gujarat	13391	9603	9648	5998
3	Madhya Pradesh	8075	5070	3948	2185
4	Chattisgarh	4056	2853	3030	2123
5	Daman and Diu	318	254	0	0
6	Dadra and Nagar Haveli	696	632	0	0
7	Goa-WR	494	246	0	0
8	ISGS/IPPs	842	855	28198	23241
	Total WR	48085	33685	60343	43662

IV	SOUTHERN REGION				
1	Andhra Pradesh	7043	6324	6272	5515
2	Telangana	8617	7809	2837	2285
3	Karnataka	8642	6842	7177	5540
4	Tamil Nadu	15373	14479	8470	6570
5	Kerala	3677	2356	1650	684
6	Pondy	391	315	0	0
7	Goa-SR	89	89	0	0
8	ISGS/IPPs	20	19	13647	13377
	Total SR	43852	38233	40053	33972
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	128	100	0	0
2	Assam	1219	1004	280	230
3	Manipur	160	84	0	0
4	Meghalaya	215	162	218	177
5	Mizoram	93	63	8	0
6	Nagaland	115	80	22	16
7	Tripura	251	152	91	91
8	ISGS/IPPs	100	60	1932	1795
	Total NER	2281	1705	2551	2309
	Total All India	162680	138020	170289	143672