

National Load Despatch Centre
Total Transfer Capability for March 2016

Issue Date:12/03/2016

Issue Time: 1200 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 Mar 2016 to 31st Mar 2016	00-24	2500	500	2000	706	1294		
WR-NR*	1st Mar 2016 to 06th Mar 2016	00-24	7450	500	6950	6103	847		
	07th Mar 2016 to 08th Mar 2016	00-08	7450	500	6950	6103	847		
		08-24'	6300	500	5800	6103	0		
	09th Mar 2016	00-24	7450	500	6950	6103	847		
	10th Mar 2016	00-08	7450	500	6950	6103	847		
		08-24'	6300		5800	6103	0		
	11th Mar 2016	00-08	7450	500	6950	6103	847		
		08-24'	7450		6950	6103	847		
12th Mar 2016 to 31st Mar 2016	00-24	7450	500	6950	6103	847			
NR-ER*	1st Mar 2016 to 31st Mar 2016	00-06	2000	200	1800	293	1507		
		06-18'	2000		1800	358	1442		
		18-24	2000		1800	293	1507		
ER-NR*	1st Mar 2016 to 12th Mar 2016	00-24	4800	300	4500	2431	2069		
	13th Mar 2016 to 15th Mar 2016	00-06	4800	300	4500	2431	2069		Revised due to shutdown of 400kV Kahalgaon-Barh-2 and 400kV Barh-Patna-1
		06-24'	2500		2200		0	-2300	
16th Mar 2016 to 31st Mar 2016	00-24	4800	300	4500	2431	2069			
W3-ER ^{\$}	1st Mar 2016 to 31st Mar 2016	00-24	No limit is being specified. No Re-routing is allowed via W3-ER-NR.						
ER-W3	1st Mar 2016 to 31st Mar 2016	00-24	No limit is being Specified.						
WR-SR	1st Mar 2016 to 11th Mar 2016	00-05	4000	750	3250	3250	0		
		05-22'	4000		3250	3250	0		
		22-24	4000		3250	3250	0		
	12th Mar 2016 to 13th Mar 2016	00-05	4000	750	3250	3250	0		
		05-08'	4000		3250	3250	0		
		08-22'	3450		2700	3250	0		
	14th Mar 2016 to 31st Mar 2016	22-24	3450	750	2700	3250	0		
		00-05	4000		3250	3250	0		
		05-22'	4000		3250	3250	0		
22-24	4000	3250	3250	0					
SR-WR *	1st Mar 2016 to 31st Mar 2016	00-24	No limit is being Specified.						
ER-SR	1st Mar 2016 to 31st Mar 2016	00-06	2650	0	2650	2585	65		
		18-24				2650	0		
SR-ER *	1st Mar 2016 to 31st Mar 2016	00-24	No limit is being Specified.						
S1-S2	1st Mar 2016 to 31st Mar 2016	00-24	S1-S2 corridor TTC/ATC is uploaded on NLDC website under Intra-Regional Section in Monthly ATC.						
ER-NER	1st Mar 2016 to 31st Mar 2016	00-17	1470	45	1425	210	1215		
		23-24	1420		1375		1165		
NER-ER	1st Mar 2016 to 31st Mar 2016	00-17	1300	45	1255	0	1255		
		23-24	1340		1295		1295		

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W3 zone Injection	1st Mar 2016 to 31st Mar 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)							

* 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).

\$ As per Simulations, predominant direction of flow is on West to North Corridor. Hence, in case injection point is in Western Region (W1,W2,W3), STOA/PX transactions from West to North on West-East-North corridor shall not be allowed as such transaction increases congestion in the West to North Corridor.

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 Vidyut

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 400 kV Biharshariff- Lakhisarai S/C
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
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	---

SR	1st Mar 2016 to 11th Mar 2016	00-06	6650	750	5900	5835	65	
		06-18'	6650		5900	5900	0	
		18-24	6650		5900	5835	65	
	12th Mar 2016 to 13th Mar 2016	00-06	6650	750	5900	5835	65	
		06-08'	6650		5900	5900	0	
		08-18'	6100		5350	5900	0	
		18-24	6100		5350	5835	0	
	14th Mar 2016 to 31st Mar 2016	00-06	6650	750	5900	5835	65	
		06-18'	6650		5900	5900	0	
		18-24	6650		5900	5835	65	

* 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 Mar 2016 to 31st Mar 2016	00-06	4500	700	3800	999	2801		
		06-18'			3800	1064	2736		
		18-24			3800	999	2801		
NER	1st Mar 2016 to 31st Mar 2016	00-17 23-24	1300	45	1255	0	1255		
		17-23	1340	45	1295		1295		
WR									
SR *	1st Mar 2016 to 31st Mar 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 400 kV Biharshariff- Lakhisarai S/C 1. (n-1) Contingency of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.
	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
	Export	ICT at Misa
SR	Import	(n-1) contingency of one circuit of 765 kV Raichur - Sholapur leads to 2500 MW loading on the other circuit
		Low Voltage at Gazuwaka (East) Bus.

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Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	29/02/2016	Whole Month	Revised considering the present Inter-Regional Power flow pattern and STOA Margin revised due to grant of LTA/MTOA	WR-NR/ Import of NR
			Revised due to commissioning of new transmission elements on WR-SR corridor.	WR-SR/ Import of SR
2	6/3/2016	07-03-16 to 08-03-16	Revised due to the shutdown of 765 kV Gwalior-Jaipur- Ckt 2	WR-NR/ Import of NR
3	9/3/2016	10/3/2016 to 11/3/2016	Revised due to the shutdown of 765 kV Gwalior-Phagi ckt 1	WR-NR/ Import of NR
		12/3/2016 to 13/3/2016	Revised due to shutdown of one ckt at a time of 765 kV Aurangabad - Solapur	WR-SR/ Import of SR
4	10/3/2016	11/3/2016	Revised due to deferment of shutdown of 765 kV Gwalior-Phagi ckt 1	WR-NR/ Import of NR
5	12/3/2016	13/3/2016 to 15/3/2016	Revised due to shutdown of 400kV Kahalgaon-Barh-2 and 400kV Barh-Patna-1	ER-NR

ASSUMPTIONS IN BASECASE					
				Month : March '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	5782	4347	2184	2166
2	Haryana	5635	3030	2334	2334
3	Rajasthan	9713	8644	5806	5806
4	Delhi	3399	1819	738	738
5	Uttar Pradesh	13196	13591	5398	5327
6	Uttarakhand	1831	1619	428	388
7	Himachal Pradesh	1465	1239	364	267
8	Jammu & Kashmir	2352	2006	391	321
9	Chandigarh	188	88	0	0
10	ISGS/IPPs	0	0	20070	13525
	Total NR	43560	36383	37713	30872
II	EASTERN REGION				
1	Bihar	3054	2141	210	100
2	Jharkhand	1167	925	430	215
3	Damodar Valley Corporation	2440	2044	3305	2685
4	Orissa	3588	2613	2792	1436
5	West Bengal	7206	5126	5276	4150
6	Sikkim	99	64	0	0
7	Bhutan	245	245	222	52
8	ISGS/IPPs	605	624	10472	9149
	Total ER	18405	13781	22707	17787
III	WESTERN REGION				
1	Maharashtra	19478	13189	14472	8950
2	Gujarat	12927	10173	11306	7938
3	Madhya Pradesh	7999	4958	4745	2377
4	Chattisgarh	3711	2343	1750	1368
5	Daman and Diu	300	246	0	0
6	Dadra and Nagar Haveli	783	317	0	0
7	Goa-WR	488	213	0	0
8	ISGS/IPPs	1075	1070	26242	21619
	Total WR	46762	32510	58515	42252

IV	SOUTHERN REGION				
1	Andhra Pradesh	6158	5510	6058	5620
2	Telangana	7461	6374	2730	2204
3	Karnataka	8469	7332	6468	4869
4	Tamil Nadu	13780	12143	6536	5241
5	Kerala	3692	2714	1749	722
6	Pondy	391	297	0	0
7	Goa-SR	89	89	0	0
8	ISGS/IPPs	0	0	13250	11981
	Total SR	40059	34459	36791	30637
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	75	40	0	0
2	Assam	794	625	215	135
3	Manipur	89	53	0	0
4	Meghalaya	226	150	118	63
5	Mizoram	57	41	4	4
6	Nagaland	67	62	8	6
7	Tripura	225	145	90	86
8	ISGS/IPPs	0	0	1057	820
	Total NER	1533	1116	1492	1114
	Total All India	150288	118219	157219	122662