National Load Despatch Centre
Total Transfer Capability for June 2015

Issue Date: 10/06/2015 Issue Time: 1500 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 Jun 2015 to 30th Jun 2015	00-24	2500	500	2000	706	1294		
WR-NR*	1st Jun 2015 to 05th Jun 2015	00-17 23-24	5100	500	4600	5157	0		
		17-23	5100		4600		0		
	06th June 2015	00-05 14-17 23-24	5100	500	4600	5157	0		
		05-14'	4850		4350		0		
		17-23	5100		4600		0		
	07th Jun 2015 to 30th Jun 2015	00-17 23-24	5100	500	4600	5157	0		
		17-23	5100		4600		0		
NR-ER*	1st Jun 2015 to 30th Jun 2015	00-06	2000	200	1800	293	1507		
		06-18'	2000		1800	358	1442		
		18-24	2000		1800	293	1507		
ER-NR*#	1st Jun 2015 to 10th Jun 2015	00-17 23-24	4500	300	4200	2431	1769		
		17-23	4500		4200		1769		
	11th Jun 2015 to 30th Jun 2015	00-17 23-24	3225	300	2925	2431	494	-1275	Revised considering the outage of 400 kV Biharshariff-Banka D/C, 400 kV Biharshariff-Koderma D/C, 400 KV Biharshariff-Purnea S/C, 400/200 kV all ICTs at Biharshariff.
		17-23	3175		2875		444	-1325	
W3-ER$	1st Jun 2015 to 30th Jun 2015	00-24	No limit is being specified. No Re-routing is allowed via W3-ER-NR.						
ER-W3	1st Jun 2015 to 30th Jun 2015	00-24	1000	300	700	874	0		
WR-SR	1st Jun 2015 to 5th Jun 2015	00-05	2500	750	1750	1550	200		
		05-22'	2100		1350		0		
		22-24	2500		1750		200		
WR-SR	6th Jun 2015 to 30th Jun 2015	00-05	2700	750	1950	1550	400		
		05-22'	2300		1550		0		
		22-24	2700		1950		400		
SR-WR *	1st Jun 2015 to 30th Jun 2015	00-24	No limit is being Specified.						
ER-SR	1st Jun 2015 to 5th Jun 2015	00-06 18-24	2450	0	2450	2385	65		
		06-18'				2450	0		
	6th Jun 2015 to 30th Jun 2015	00-06 18-24	2650	0	2650	1942	708		
		06-18'				2007	643		
SR-ER *	1st Jun 2015 to 30th Jun 2015	00-24	No limit is being Specified.						
ER-NER	1st Jun 2015 to 30th Jun 2015	00-17 23-24	1260	45	1215	210	1005		
		17-23	1160		1115		905		
NER-ER	1st Jun 2015 to 30th Jun 2015	00-17 23-24	1400	45	1355	0	1355		
		17-23	1245	45	1200		1200		
S1-S2 (Rev-0)	1st Jun 2015 to 5th Jun 2015	00-24	2610	305	2305	2790	0		
	6th Jun 2015 to 14th Jun 2015	00-24	2910	305	2605	2898	0		
	15th Jun 2015 to 30th Jun 2015	00-24	2910	305	2605	2819	0		
Import of Punjab	1st Jun 2015 to 30th Jun 2015	00-24	5700	300	5400	3790	1610		
Import TTC for DD & DNH	1st Jun 2015 to 30th Jun 2015	00-24	1200	0	1200	LTA and MTOA as per ex-pp schedule			
W3 zone Injection	1st Jun 2015 to 30th Jun 2015	00-17 23-24	9400	200	9200	7094	2106		
		17-23	9900		9700		2606		

* 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).

National Load Despatch Centre
Total Transfer Capability for June 2015

Issue Date: 10/06/2015 Issue Time: 1500 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

S1-S2 Corridor: Any revision in S1-S2 TTC/ATC from Rev-0, would be uploaded under Intra-Regional Section on NLDC website.

$ 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.

ER-NR TTC is independent of WR-NR corridor flow

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) KWPCL, 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 commissionned 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 willl 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	High Loading of 400kV Singrauli-Anpara & High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and Loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli
ER-NR	(n-1) contingnecy of 400 kV Farakka-Malda D/C
ER-W3	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular separation between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) D/C
WR-SR & ER-SR	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular separation between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) D/C.
	3. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would emerge.
ER-NER	N-1 contingency of 220/132 kV, 2x100 MVA ICTs at Dimapur.
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
S1-S2	(n-1) contingency of one circuit of 400 kV Kolar-Hosur D/C
Import of DD & DNH	(n-1) contingency of 400/220KV 315MVA ICT at VAPI
Import of Punjab	(n-1) contingency of ICT at Dhuri and (n-1) contingnecy of 220kV Moga(PG)-Moga(PSTCL)
W3 zone Injection	1. n-1 of 400 kV Wardha – Parli will lead to 30 degrees angular separation between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) D/C

*Primary constraints

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 Jun 2015 to 05th Jun 2015	00-17 23-24	9600	800	8800	7588	1212		
		17-23	9600		8800		1212		
	05th Jun 2015 to 30th Jun 2015	00-05 08-18 21-24	7100	800	6300	7588	0		
		05-08'	7900		7100		0		
		18-21	7000		6200		0		
NER	1st Jun 2015 to 30th Jun 2015	00-17 23-24	1260	45	1215	210	1005		
		17-23	1160		1115		905		
WR									
SR	1st Jun 2015 to 5th Jun 2015	00-05	4950	750	4200	3935	265		
		05-06'	4550		3800	3935	0		
		06-18'	4550		3800	4000	0		
		18-22	4550		3800	3935	0		
		22-24	4950		4200	3935	265		
	6th Jun 2015 to 30th Jun 2015	00-05	5350	750	4600	3492	1108		
		05-06'	4950		4200	3492	708		
		06-18'	4950		4200	3557	643		
		18-22	4950		4200	3492	708		
		22-24	5350		4600	3492	1108		

* 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).

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 Jun 2015 to 30th Jun 2015	00-06	4500	700	3800	999	2801		
		06-18'			3800	1064	2736		
		18-24	4500		3800	999	2801		
NER	1st Jun 2015 to 30th Jun 2015	00-17 23-24	1400	45	1355	0	1355		
		17-23	1245	45	1200		1200		
WR									
SR *	1st Jun 2015 to 30th Jun 2015	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) contingnecy of 400 kV Farakka-Malda D/C
		High loading of 765 kV Agra-Gwalior (1250 MW SPS setting on each circuit of 765 kV Gwalior-Agra) and high loop flows on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda (power flowing from WR to NR on 765kV Gwalior-Agra D/C and from NR to WR on 400kV Kankroli-Zerda and 400kV Bhinmal-Zerda).
	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 220/132 kV, 2x100 MVA ICTs at Dimapur.
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa
SR	**Import**	1. (n-1) of 400 kV Wardha – Parli will lead to 30 degrees angular separation between Wardha and Parli. 2. (n-1) contingency of one circuit of 400kV Parli(PG)-Sholapur(PG) D/C.
		3. ER-SR TTC has been declared assuming more than 1100 MW generation at Talcher Stage-2. In case Talcher Stage-2 generation goes below 1100 MW, then the ER-SR TTC would be revised downward as constraints within ER would emerge.

*Primary constraints

National Load Despatch Centre
Total Transfer Capability for June 2015

Revision No	Date of Revision	Period of Revision	Reason for Revision	Corridor Affected
1	02-03-2015	Whole Month	STOA Margins revised due to grant of MTOA from Chattisgarh to KSEB by CTU.	W3 Zone/ W3-ER
2	31-03-2015	Whole Month	Revised due to commissioning of Sasan Unit-6 and reviewed HVDC set points.	WR-NR
			Revised due to commissioning of 765kV Pune-Sholapur S/C.	WR-SR
3	22-05-2015	Whole Month	Fifty Percent (50 %) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction.	Import of NR
		01-06-15 to 05-06-15	Revised considering the present Maharashtra Demand pattern.	WR-SR
		01-06-15 to 05-06-15	Revised considering the present Maharashtra Demand pattern and due to Shutdown of Talcher Stage-2 Unit-2.	WR-SR/ ER-SR
4	29-05-2015	Whole Month	Revised on account of addition of new elements in NER Grid and change in load-generation balance.	ER-NER/ NER-ER
5	31-05-2015	1-06-2015 to 05-06-2015	Revised considering tripping events of Talcher-Kolar HVDC Bipole and high ambient Temperature.	ER-SR / WR-SR
6	05-06-2015	06-06-2015 to 30-06-2015	Revised considering skewed sharing of flows on WR-NR and ER-NR corridor ranging from 65:35 to 72:28	Import of NR
		06-06-2015	Revised considering the shutdown of 400 kV HVDC Rihand Feeder 2	WR-NR
7	10-06-2015	whole month(till restoration)	Revised considering the outage of 400 kV Biharshariff-Banka D/C, 400 kV Biharshariff-Koderma D/C, 400 KV Biharshariff-Purnea S/C, 400/200 kV all ICTs at Biharshariff.	ER-NR

ASSUMPTIONS IN BASECASE

Month : June '15

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	9585	9795	4766	4766
2	Haryana	7802	6896	3352	3352
3	Rajasthan	7493	7935	4303	4303
4	Delhi	5388	4734	1337	1337
5	Uttar Pradesh	12093	12670	6549	6546
6	Uttarakhand	1598	1367	754	666
7	Himachal Pradesh	1248	1034	880	867
8	Jammu & Kashmir	2188	1715	531	441
9	Chandigarh	296	253	0	0
10	ISGS/IPPs			19551	18408
	Total NR	**47691**	**46399**	**42023**	**40686**
II	EASTERN REGION				
1	Bihar	2500	1850	180	110
2	Jharkhand	1100	678	400	360
3	Damodar Valley Corporation	2750	2200	4512	3337
4	Orissa	3803	3285	3508	2688
5	West Bengal	7536	6049	4966	4542
6	Sikkim	90	65	0	0
7	Bhutan	107	106	1000	900
8	ISGS/IPPs	675	664	10789	9319
	Total ER	**18561**	**14897**	**25355**	**21256**
III	WESTERN REGION				
1	Maharashtra	19358	15390	14146	9781
2	Gujarat	13470	10976	10381	7092
3	Madhya Pradesh	7020	5477	3837	1927
4	Chattisgarh	3472	2268	2147	1462
5	Daman and Diu	288	270	0	0
6	Dadra and Nagar Haveli	677	665	0	0
7	Goa-WR	475	299	0	0
8	ISGS/IPPs	1136	1120	23133	23134
	Total WR	**45896**	**36465**	**53644**	**43396**

ASSUMPTIONS IN BASECASE

Month : June '15

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	5271	4582	5048	4666
2	Telangana	5667	5464	2230	1951
3	Karnataka	7755	7025	7076	5624
4	Tamil Nadu	11352	10421	7157	6587
5	Kerala	2827	1928	1567	617
6	Pondy	312	288	0	0
7	Goa-SR	83	89	0	0
8	ISGS/IPPs	79	71	7622	7622
	Total SR	**33346**	**29868**	**30700**	**27067**
V	**NORTH-EASTERN REGION**				
1	Arunachal Pradesh	70	39	0	0
2	Assam	772	627	215	200
3	Manipur	72	43	0	0
4	Meghalaya	280	208	232	154
5	Mizoram	61	39	4	3
6	Nagaland	83	69	21	16
7	Tripura	249	169	110	110
8	ISGS/IPPs	48	27	1055	720
	Total NER	**1635**	**1221**	**1637**	**1203**
	Total All India	**147129**	**128850**	**153359**	**133608**