## National Load Despatch Centre Total Transfer Capability for April 2017

Issue Date: 3/2/2016 Issue Time: 1200 hrs Revision No. 1

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 Apr 2017 to 30th Apr 2017	00-06 06-18 18-24	2500	500	2000	55 65 55	1945 1935 1945		
WR-NR*	1st Apr 2017 to 30th Apr 2017	00-24	7200	500	6700	6850	0		
NR-ER*	1st Apr 2017 to 30th Apr 2017	00-06 06-18' 18-24	2000 2000 2000	200	1800 1800 1800	193 303 193	1607 1497 1607	_	
ER-NR*	1st Apr 2017 to 30th Apr 2017	00-24	4200	300	3900	2931	969		
W3-ER	1st Apr 2017 to 30th Apr 2017								
ER-W3	1st Apr 2017 to 30th Apr 2017	00-24				No limit i	s being specified.		
WR-SR	1st Apr 2017 to 30th Apr 2017	00-05 05-22 22-24	4000 4000 4000	750	3250 3250 3250	3384	0 0		
SR-WR *	1st Apr 2017 to 30th Apr 2017	00-24				No limit i	s being Specified.	1	
ER-SR	1st Apr 2017 to 30th Apr 2017	00-06 06-18' 18-24	2650	0	2650	2565 2650 2565	85 0 85		
SR-ER *	1st Apr 2017 to 30th Apr 2017	00-24		No limit is being Specified.					
ER-NER	1st Apr 2017 to 30th Apr 2017	00-17 17-23 23-24	1040 1050 1040	45	995 1005 995	225	770 780 770	-	
NER-ER	1st Apr 2017 to 30th Apr 2017	00-17 17-23 23-24	1230 1300 1230	45	1185 1255 1185	0	1185 1255 1185	-	
W3 zone Injection	zone 1st Apr 2017 to 00.24 No limit is being specified (In case of any constraints appearing in the system W3 zone export would be revised accordingly)								

<sup>\*</sup> Fifty Percent (50 % ) Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for advanced transactions (Bilateral & First Serve).

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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
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- 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 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 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 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) Contingnecy 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) contingencies of N.Ranchi - Chandawa S/C & (n-1) contingencies of 400kV MPL- Maithon S/C						
WR-SR & ER-SR	00-05 hrs & 22-24 hrs: (n-1) contingency of one circuit of 765 kV Raichur - Sholapur will lead to 2750 MW loading on the other circuit.  05-22 hrs: (n-1) contingency of one circuit of 765 kV Aurangabad - Sholapur will lead to 2750 MW loading on the other circuit and 10kV voltage dip at Sholapur (PG)  Low Voltage at Gazuwaka (East) Bus.						
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Samaguri-Sonabil line(200 MW)						
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									
		00-07	10300		9500		0		
N/D*	1st Apr 2017 to	07-18	10300	900	9500	9781	0		
NR <sup>*</sup>	30th Apr 2017	18-23	9600	800	8800		0		
		23-24	10300		9500		0		
	1.4 4 2017 4	00-17	1040	45	995	225	770		
NER	1st Apr 2017 to 30th Apr 2017	17-23	1050		1005		780		
	30th Apr 2017	23-24	1040		995		770		
WR									
VV IX									
		00-05	6650		5900	5949	0		
SR	4 . 4 . 2017 .	05-06	6650		5900	5949	0		STOA margin revised
	1st Apr 2017 to 30th Apr 2017	06-18	6650	750	5900	6034	0		considering Solar allocation in LTA/MTOA
	55ai 7 ipi 2017	18-22	6650		5900	5949	0		during non solar hours
		22-24	6650		5900	5949	0		

<sup>\*</sup> 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-NRATC = 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
NIDY	1st Apr 2017 to	00-06	4500	700	3800	248	3552		
NR*	30th Apr 2017	06-18' 18-24	4500	700	3800 3800	368 248	3432 3552		
	1 . 4 . 2017 .	00-17	1230		1185	0	1185		
NER	1st Apr 2017 to	17-23	1300	45	1255		1007		
	30th Apr 2017	23-24 1230	1230		1185		1185		
WR									
WK									
SR *	1st Apr 2017 to 30th Apr 2017	00-24	No limit is being Specified.						

<sup>\*</sup> 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**

	Comstraints	
		(n-1) contingencies of N.Ranchi - Chandawa S/C & (n-1) contingencies of 400kV MPL- Maithon S/C.
	Import	1. (n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.
NR	_	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
	-	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa
NER	Import	b. High loading of 220 kV Samaguri-Sonabil line(200 MW)
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other 400/220 kV, 315 MVA
SR	Import	00-05 hrs & 22-24 hrs: (n-1) contingency of one circuit of 765 kV Raichur - Sholapur will lead to 2750 MW loading on the other circuit.  05-22 hrs: (n-1) contingency of one circuit of 765 kV Aurangabad - Sholapur will lead to 2750 MW loading on the other circuit and 10kV voltage dip at Sholapur (PG)
		Low Voltage at Gazuwaka (East) Bus.

# National Load Despatch Centre Total Transfer Capability for April 2017

Revision	Date of	Period of	Reason for Revision	Corridor
No	Revision	Revision		Affected
1	3/2/2017		STOA margin revised considering Solar allocation in LTA/MTOA during non solar hours	Import of SR

Month : April 17   Generation	ASSU	MPTIONS IN BASECASE				
S.No.   Name of State/Area   Load   Peak Load (MW)   Peak (MW)   Peak (MW)   Off Peak (MW)	- 10001	1			Month : April'17	
NORTHERN REGION   Peak Load (MW)   Peak (MW)   Off Peak (MW)   Off Peak (MW)   NORTHERN REGION	S.No.	Name of State/Area	Load		· · · · · · · · · · · · · · · · · · ·	
NORTHERN REGION				Off Peak Load (MW)		Off Peak (MW)
Punjab	1	NORTHERN REGION	,	,	,	,
2 Haryana 6634 4998 2470 2470 3 Rajasthan 8620 8226 6298 6298 4 Delhi 4678 4074 437 437 5 Uttar Pradesh 13735 12612 7711 7738 6 Uttarakhand 1920 1329 728 691 7 Himachal Pradesh 1342 929 379 547 8 Jammu & Kashmir 2372 1687 618 700 9 Chandigarh 232 164 0 0 0 10 ISGS/IPPs 175 133 17627 11556 Total NR 45844 40044 39027 33225  III EASTERN REGION 1 1 Bihar 3680 2648 200 131 2 Jharkhand 1042 883 400 400 3 Damodar Valley Corporation 2531 2207 3741 3372 4 Orissa 4031 2991 3359 2199 5 West Bengal 7642 5394 5049 3656 6 Sikkim 89 39 0 0 0 7 Bhutan 245 245 842 527 8 ISGS/IPPs 563 568 9897 8843 Total ER 19793 14946 23459 19114  IIII WESTERN REGION 1 1 Maharashtra 19346 14655 15124 11320 2 Gujarat 13639 12072 9171 8787 3 Madhya Pradesh 7977 7209 3825 4078 4 Chattisgarh 3532 3572 2830 2020 5 Daman and Diu 303 258 0 0 0 6 Dadra and Nagar Haveli 787 692 31411 27887	1		6138	5892	2760	2789
3 Rajasthan       8620       8226       6298       6298         4 Delhi       4678       4074       437       437         5 Uttar Pradesh       13735       12612       7711       7738         6 Uttarakhand       1920       1329       728       691         7 Himachal Pradesh       1342       929       3379       547         8 Jammu & Kashmir       2372       1687       618       700         9 Chandigarh       232       164       0       0       0         10 ISGS/IPPs       175       133       17627       11556         Total NR       45844       40044       39027       33225         III       EASTERN REGION       1       18ihar       3680       2648       200       131         2 Jharkhand       1042       883       400       400       400         3 Damodar Valley Corporation       2531       2207       3741       3372         4 Orissa       4031       2991       3359       2199         5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       24				4998	2470	2470
Delhi		-		8226	6298	6298
Himachal Pradesh   1342   929   379   547		-	4678	4074	437	437
Himachal Pradesh   1342   929   379   547	5	Uttar Pradesh	13735	12612	7711	7738
Sammu & Kashmir   2372   1687   618   700     Chandigarh   232   164   0   0     ISGS/IPPs   175   133   17627   11556     Total NR   45844   40044   39027   33225     III   EASTERN REGION				1329	728	691
9 Chandigarh 232 164 0 0 0 10 ISGS/IPPs 175 133 17627 11556 Total NR 45844 40044 39027 33225  III EASTERN REGION	7	Himachal Pradesh	1342	929	379	547
10   ISGS/IPPs	8	Jammu & Kashmir	2372	1687	618	700
Total NR	9	Chandigarh	232	164	0	0
Bihar   3680   2648   200   131	10	ISGS/IPPs	175	133	17627	11556
1 Bihar       3680       2648       200       131         2 Jharkhand       1042       883       400       400         3 Damodar Valley Corporation       2531       2207       3741       3372         4 Orissa       4031       2991       3359       2199         5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         IIII       WESTERN REGION       1       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs <td></td> <td>Total NR</td> <td>45844</td> <td>40044</td> <td>39027</td> <td>33225</td>		Total NR	45844	40044	39027	33225
1 Bihar       3680       2648       200       131         2 Jharkhand       1042       883       400       400         3 Damodar Valley Corporation       2531       2207       3741       3372         4 Orissa       4031       2991       3359       2199         5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         IIII       WESTERN REGION       1       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
2 Jharkhand       1042       883       400       400         3 Damodar Valley Corporation       2531       2207       3741       3372         4 Orissa       4031       2991       3359       2199         5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         IIII       WESTERN REGION       1       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	II	EASTERN REGION				
3 Damodar Valley Corporation   2531   2207   3741   3372     4 Orissa	1	Bihar	3680	2648	200	131
4 Orissa       4031       2991       3359       2199         5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         IIII       WESTERN REGION       WESTERN REGION       1       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	2	Jharkhand	1042	883	400	400
5 West Bengal       7642       5394       5049       3656         6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         III       WESTERN REGION       1       14655       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	3	Damodar Valley Corporation	2531	2207	3741	3372
6 Sikkim       89       39       0       0         7 Bhutan       245       245       842       527         8 ISGS/IPPs       563       568       9897       8843         Total ER       19793       14946       23459       19114         III       WESTERN REGION       VAR       15124       11320         2 Gujarat       19346       14655       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	4	Orissa	4031	2991	3359	2199
7 Bhutan         245         245         842         527           8 ISGS/IPPs         563         568         9897         8843           Total ER         19793         14946         23459         19114           IIII         WESTERN REGION              1 Maharashtra         19346         14655         15124         11320           2 Gujarat         13639         12072         9171         8787           3 Madhya Pradesh         7977         7209         3825         4078           4 Chattisgarh         3532         3572         2830         2020           5 Daman and Diu         303         258         0         0           6 Dadra and Nagar Haveli         787         692         0         0           7 Goa-WR         436         327         0         0           8 ISGS/IPPs         3139         3282         31411         27887	5	West Bengal	7642	5394	5049	3656
8 ISGS/IPPs     563     568     9897     8843       Total ER     19793     14946     23459     19114       III     WESTERN REGION         1 Maharashtra     19346     14655     15124     11320       2 Gujarat     13639     12072     9171     8787       3 Madhya Pradesh     7977     7209     3825     4078       4 Chattisgarh     3532     3572     2830     2020       5 Daman and Diu     303     258     0     0       6 Dadra and Nagar Haveli     787     692     0     0       7 Goa-WR     436     327     0     0       8 ISGS/IPPs     3139     3282     31411     27887	6	Sikkim	89	39	0	0
Total ER       19793       14946       23459       19114         IIII       WESTERN REGION       Image: Comparison of the comparison of	7	Bhutan	245	245	842	527
III   WESTERN REGION	8	ISGS/IPPs	563	568	9897	8843
1 Maharashtra       19346       14655       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887		Total ER	19793	14946	23459	19114
1 Maharashtra       19346       14655       15124       11320         2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887						
2 Gujarat       13639       12072       9171       8787         3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	III	WESTERN REGION				
3 Madhya Pradesh       7977       7209       3825       4078         4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	1	Maharashtra	19346	14655	15124	11320
4 Chattisgarh       3532       3572       2830       2020         5 Daman and Diu       303       258       0       0         6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	2	Gujarat		12072	_	8787
5 Daman and Diu     303     258     0     0       6 Dadra and Nagar Haveli     787     692     0     0       7 Goa-WR     436     327     0     0       8 ISGS/IPPs     3139     3282     31411     27887				7209	3825	4078
6 Dadra and Nagar Haveli       787       692       0       0         7 Goa-WR       436       327       0       0         8 ISGS/IPPs       3139       3282       31411       27887	4	Chattisgarh	3532	3572	2830	2020
7 Goa-WR 436 327 0 0 8 ISGS/IPPs 3139 3282 31411 27887						
8 ISGS/IPPs 3139 3282 31411 27887	6	Dadra and Nagar Haveli	787	692	_	-
Total WR 49158 42068 62360 54091	8		3139	3282	31411	27887
		Total WR	49158	42068	62360	54091

ASSU	MPTIONS IN BASECASE				
				Month : April'17	
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	8268	7479	7920	6664
2	Telangana	8627	7461	3853	3386
3	Karnataka	9575	8509	7352	5568
4	Tamil Nadu	14817	12625	7110	6510
5	Kerala	4200	3110	1698	650
6	Pondy	395	330	0	0
7	Goa-SR	89	89	0	0
8	ISGS/IPPs	0	0	14288	12255
	Total SR	45971	39603	42222	35033
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	110	68	0	0
	Assam	1042	812	230	180
3	Manipur	132	74	0	0
4	Meghalaya	244	135	75	15
	Mizoram	86	60	8	8
6	Nagaland	98	76	12	8
	Tripura	217	135	82	77
8	ISGS/IPPs	83	60	1534	1070
	Total NER	2012	1420	1941	1358
	Total All India	162877	138219	169753	143348