# National Load Despatch Centre Total Transfer Capability for July 2018

Issue Date: 12th July 2018 Issue Time: 1100 hrs Revision No. 9

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
		00-06				55	1945		
NR-WR*	1st July 2018 to	06-18	2500	500	2000	65	1935		
	31st July 2018	18-24				55	1945		
			12000		11500	9179	2321		
	4 . 7 1 2010	00-730		500					
	1st July 2018 to		11050**		10550**	8229**	2321**		
	2nd July 2018	730-24	11000	500	10500	9179	1321		
		730-24	10050**	300	9550**	8229**	1321**		
			12000		11500	9179	2321		
	3rd July 2018 to	00-24		500					
WR-NR*	5th July 2018		11050**		10550**	8229**	2321**		
<b>VV IX-1VIX</b>			12000		11500	9179	2321		
		00-05'	4.4.0. <b>7</b> .0.data	500	4.0 % % O date	O O O O Italia	2224 data		
	6th July 2018		11050**		10550**	8229**	2321**		
		05-24'	10500	500	10000	9179	821		
		03-24	9550**	300	9050**	8229**	821**		
	07.1 1.1 2010		12000		11500	9179	2321		
	07th July 2018	00-24		500					
	to 31st July 2018		11050**		10550**	8229**	2321**		
		00-06	2000		1800	102	1607		
NR-ER*	1st July 2018 to	06-18	2000	200	1800	193 303	1497	-	
	31st July 2018		1800	193	1607	1			
ED ND*	1st July 2018 to 02nd July 2018	00-24	5250	300	4950	3413	1537		
ER-NR*	3rd July 2018 to 31st July 2018	00-24	5250	300	4950	3523	1427		
	1at July 2019 to								
W3-ER	1st July 2018 to 31st July 2018	00-24				No limit is	s being specified.		
ER-W3	1st July 2018 to 31st July 2018	00-24				No limit is	s being specified.		
		00.620	5150		4650		125		
		00-630	5150		4650		135		
	1st July 2018	630-22	4900	500	4400	4515	0		
WR-SR		22-24	4900		4400		0		
WK-SK		00-05	5150		4650		135		
	02nd July 2018	05-22	5150	500	4650	4515	135		
	to 31st July 2018	22-24	5150		4650		135		
	1st July 2018 to		3130		1050				
SR-WR *	31st July 2018	00-24				No limit is	s being Specified.		
		00.00				22.62	929		
	1-4 1-1-2010	00-06	4250	250	4100	3262	838		
	1st July 2018	06-18	4350	250	4100	3347	753	-	
		18-24				3262	838		
ER-SR		00-06	4350		4100	3262	838		
	2nd July 2018 to	06-630	4350	250	4100	3347	753		
	3rd July 2018	630-18	4050		3800	3347	453		
		18-24	4050		3800	3262	538		

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	44 1 2010 4	00-06				3262	838		
	4th July 2018 to 09th July 2018	06-18	4350	250	4100	3347	753		
	09th July 2016	18-24				3262	838		
	101 7 1 2010	00-06	4350		4100	3262	838		
	10th July 2018	06-09	4350	250	4100	3347	753		
	to 11th July 2018	09-18	4150	250	3900	3347	553		
	11th 3th 2010	18-24	4150		3900	3262	638		
		00-06				3262	838		
ER-SR	12th July 2018	06-18	4350	250	4100	3347	753		
		18-24				3262	838		
	13th July 2018 to 14th July 2018	00-06	4350	250	4100	3262	838		
		06-09	4350		4100	3347	753		Power order restriction of Talcher-
		09-18	4150		3900	3347	553	200	Kolar HVDC to 1800MW due to ACF-3 (Filter Bank-3) shutdown at
		18-24	4150		3900	3262	638	-200	Kolar.
		00-06		250	) 4100	3262	838		
	15th July 2018 to 31st July 2018	06-18	4350			3347	753		
	10 31st July 2018	18-24				3262	838		
SR-ER *	1st July 2018 to 31st July 2018	00-24				No limit is	s being Specified.		
		00-17	1250		1205		980	<u> </u>	
ER-NER	1st July 2018 to	17-23	1110	45	1065	225	840	_	
211 1 (221	31st July 2018	23-24	1250		1205		980		
	1st July 2018 to	00-17	1760		1715		1715		
<b>NER-ER</b>	31st July 2018	17-23	1780	45	1735	0	1735		
	21200019 2010	23-24	1760		1715		1715		
W3 zone Injection	1 UU-74 INO limit is being specified (in case of any constraints appearing in the system, with a zone export would be revised accordingly). I								

\* 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
- $f)\ BALCO,\ g)\ Sterlite\ (\#1,3,4),\ h)\ NSPCL,\ i)\ Korba,\ j)\ Sipat,\ k)\ KSK\ Mahanadi,\ L)DB\ Power,\ m)\ KWPCL,\ n)Vandana\ Vidyut\ o)RKM,\ p)GMR\ Raikheda,\ q)Ind\ Barath\ and\ any\ other\ regional\ entity\ generator\ in\ Chhattisgarh$

# 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.

<sup>\*\*</sup>Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

## **Simultaneous Import Capability**

Corrido r	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									
		00-730	17100 16150**		16300 15350**		3708 3708**		
	1st July 2018 to	730-18	15700 14750**	800	14900 13950**	12592	2308		
	02nd July 2018	18-23	14100	000	13300	11642**	708 708**		
		23-24	15700 14750**		14900 13950**		2308		
		00-18	17100 16150**		16300 15350**		3598 3598**		
	3rd July 2018 to 05th July 2018	18-23	15400 14450**	800	14600 13650**	12702	1898 1898**		
	2016	23-24	17100		16300	11752**	3598		
NR			16150** 17100		15350** 16300		3598** 3598		
		00-05'	16150**		15350**		3598**		
	6th July 2018	05-18'	15000 14050**		14200 13250**		1498 1498**		
	our July 2018	18-23	13450 12500**	800	12650 11700**	12702 11752**	0**		
		23-24	15000 14050**		14200 13250**		1498 1498**		
		00-18	17100		16300		3598		
	7th July 2018 to 31st July	18-23	16150**	800	15350**	12702	3598** 1898		
	2018		14450** 17100		13650** 16300	11752**	1898** 3598		
		23-24 16150**		15350**		3598** 980			
NER	1st July 2018 to 31st July 2018	00-17 17-23 23-24	1110 1250	45	1205 1065 1205	225	840 980		
WR									
	1st July 2018	00-06	9500 9500	750	8750 8750	7777 7862	973 888		
	15t July 2010	630-18	9250		8500	7862	638		

				_					_
		18-24	9250		8500	7777	723		
		00-06	9500		8750	7777	973		
	02nd July 2018 to 03rd July	06-630	9500	750	8750	7862	888		
	2018	630-18	9200	/50	8450	7862	588		
		18-24	9200		8450	7777	673		
	4th July 2018	00-06	9500		8750	7777	973		
	to 09th July	06-18	9500	750	8750	7862	888		
	2018	18-24	9500		8750	7777	973		
		00-06	9500		8750	7777	973		
G.D.	10th July 2018 to 11th July	06-09	9500	750	8750	7862	888		
SR	2018	09-18	9300		8550	7862	688		
		18-24	9300		8550	7777	773		
		00-06	9500	750	8750	7777	973		
	12th July 2018	06-18	9500		8750	7862	888		
		18-24	9500		8750	7777	973		
		00-06	9500		8750	7777	973		Power order restriction of
	13th July 2018 to 14th July	06-09	9500	750	8750	7862	888		Talcher-Kolar HVDC to
	2018	09-18	9300	730	8550	7862	688	-200	1800MW due to ACF-3 (Filter Bank-3) shutdown at Kolar.
		18-24	9300		8550	7777	773	-200	Dank-3) shudown at Kolar.
	15th July 2018	00-06	9500		8750	7777	973		
	to 31st July	06-18	9500	750	8750	7862	888		
	2018	18-24	9500		8750	7777	973		

<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).

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)

<sup>\*\*</sup>Considering 400 kV Rihand stage-III - Vindhyachal PS D/C line as inter-regional line for the purpose of scheduling, metering and accounting and 950 MW ex-bus generation in Rihand stage-III. Rihand Stage-III generation is considered as NR regional entity.

<sup>\*</sup> 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:

#### **Simultaneous Export Capability**

Corrido r	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 July 2018 to	1.06-18.1	4500	700	3800 3800	248 368	3552 3432		
	31st July 2018	18-24	4500		3800	248	3552		
	1 -4 1-1- 2010 4-	00-17	1760	45	1715		1715		
NER	1st July 2018 to 31st July 2018	17-23	1780		1735	0	1735		
	518t July 2018	23-24	1760		1715		1715		
WR									
WK									
SR *	1st July 2018 to 31st July 2018	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 (Corridor wise)**

		<b>Applicable Revisions</b>
Corridor	Constraint	
NR-WR	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak	Rev-0 to 9
WR-NR	(n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.  (n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.  Frequent outage of HVDC Champa - Kurukshetra poles	Rev-0 Rev- 1 to 9 Rev- 3-9
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev-0 to 9
ER-NR	1. N-1 contingencies of 400 kv Mejia-Maithon A S/c 2. N-1 contingencies of 400 kv Kahalgaon-Banka S/c 3. N-1 contingencies of 400kV MPL- Maithon S/C	Rev-0 to 9
WR-SR	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 9
and ER- SR	Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 9
ER-NER	a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa b. High loading of 220 kV Balipara-Sonabil line(200 MW)	Rev-0 to 9
NER-ER	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 9
W3 zone Injection		Rev-0 to 9

## **Limiting Constraints (Simultaneous)**

			<b>Applicable Revisions</b>
	Immont	<ol> <li>N-1 contingencies of 400 kv Mejia-Maithon A S/c</li> <li>N-1 contingencies of 400 kv Kahalgaon-Banka S/c</li> <li>N-1 contingencies of 400kV MPL- Maithon S/c</li> </ol>	Rev-0 to 9
NR	Import	(n-1) Contingnecy of 765kV Gwalior-Agra one ckt leads to 2750 MW loading on second circuit.	Rev-0
111		(n-1) Contingnecy of 765kV Aligarh-Jhatikara leads to 2500 MW loading on 765kV Aligarh-Greater Noida.	Rev-1 to 9
		Frequent outage of HVDC Champa - Kurukshetra poles	Rev-3-9
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.	Rev-0 to 9
	Export	(n-1) contingency of 400 kV Saranath-Pusauli	Kev-0 to 7
NER	Import	<ul><li>a. (n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa</li><li>b. High loading of 220 kV Balipara-Sonabil line(200 MW)</li></ul>	Rev-0 to 9
	Export	(n-1) contingency of 400/220 kV, 2x315 MVA ICTs at Misa results in high loading of other ICT at Misa	Rev-0 to 9
SR	Import	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev-0 to 9
		Low Voltage at Gazuwaka (East) Bus.	Rev-0 to 9

## National Load Despatch Centre Total Transfer Capability for July 2018

Revision	Date of	Period of	Reason for Revision	Corridor
No	Revision	Revision	Reason for Revision	Affected
1	26th April 2018	Whole Month	Revised considering (a) newly commisioned 765kV Jabalpur-Orai D/C, Orai-Aliagarh D/C, LILO 765kV Satna-Gwalior-1 S/C at Orai, 2*1000MVA 765/400kV Orai ICTs, 400kV Orai PG- Orai UP D/C, LILO of 765kV Kanpur-Jhatikara S/C at Aligarh, LILO of 765kV Agra-Greater Noida at Aligarh and (b) due to restriction on power order of HVDC Mundra - Mahindragarh bipole due to low generation at APL Mundra	WR-NR / ER-NR / Import of NR
2	11th May 2018	Whole Month	Revised STOA margins due to operationalization of 174 MW LTA from Teesta-III HEP to UP discoms w.e.f. 12th May 2018	ER- NR/Import of NR
3	27th May 2018	Whole Month	Revised considering (a) Restoration of power order on HVDC Mundra-Mahindragarh due to revival of generation at APL and CGPL plants, b) Frequent outage of HVDC Champa - Kurukshetra poles	WR-NR / Import of NR
4	29th June	01st July 2018 and 02nd July 2018	Revised due to shutdown of 765kV Phagi-Gwalior-2	WR-NR / Import of NR
	2018	01st July 2018	Revised due to shutdown of 765kV Nizamabad- Maheshwaram-2	WR-SR / Import of SR
5	01st July 2018	02nd July 2018 and 3rd July 2018	Revised due to shutdown of 400kV Jeypore-Gazuwaka-1 and 2 respectively	ER-SR / Import of SR
6	02nd July 2018	03rd July 2018 to 31st July 2018	Revised STOA margins due to operationalisation of 110 MW MTOA from JITPL, Odisha to Northern Railways (Uttar Pradesh)	ER-NR / Import of NR
7	5th July 2018	6th July 2018	Revised due to emergency shutdown of HVDC Champa- Kurukshetra Bipole	WR-NR / Import of NR
8	09th July 2018	10th July 2018 and 11th July 2018	Power order restriction of Talcher-Kolar HVDC to 1800MW due to ACF-2 (Filter Bank-2) shutdown at Kolar.	ER-SR / Import of SR
9	12th July 2018	13th July 2018 and 14th July 2018	Power order restriction of Talcher-Kolar HVDC to 1800MW due to ACF-3 (Filter Bank-3) shutdown at Kolar.	ER-SR / Import of SR

ASSUN	MPTIONS IN BASECASE				
				Month : July'18	
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	9930	10215	4966	4979
2	Haryana	8382	8543	2582	2582
3	Rajasthan	10604	11049	6919	6890
4	Delhi	5892	6206	968	968
5	Uttar Pradesh	15757	15580	9652	9570
6	Uttarakhand	2000	1785	1034	921
7	Himachal Pradesh	1463	1398	775	747
8	Jammu & Kashmir	2450	1808	1171	1161
9	Chandigarh	341	278	0	0
10	ISGS/IPPs	24	25	21264	19125
	Total NR	56842	56888	49331	46943
II	EASTERN REGION				
1	Bihar	4118	2870	310	200
2	Jharkhand	1180	879	364	227
3	Damodar Valley Corporation	2946	2686	5264	4211
4	Orissa	4042	3213	2539	2192
5	West Bengal	8671	5746	5360	4272
6	Sikkim	85	85	0	0
7	Bhutan	214	220	1592	1393
8	ISGS/IPPs	264	258	11393	8908
	Total ER	21519	15957	26822	21403
III	WESTERN REGION				
1	Maharashtra	18078	13981	12207	9821
2	Gujarat	14438	9108	7871	6560
3	Madhya Pradesh	9530	6420	4533	3587
4	Chattisgarh	4003	3591	2999	2675
5	Daman and Diu	320	278	0	0
6	Dadra and Nagar Haveli	810	724	0	0
7	Goa-WR	505	331	0	0
8	ISGS/IPPs	3712	3407	37104	29370
	Total WR	51396	37840	64714	52013

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	8636	8636	5505	4512
2	Telangana	9615	7115	3735	2937
3	Karnataka	9463	5196	7213	3381
4	Tamil Nadu	14700	12900	8860	7491
5	Kerala	3675	2150	1502	216
6	Pondy	376	376	0	0
7	Goa-SR	85	85	0	0
8	ISGS/IPPs	0	0	13591	11248
	Total SR	46548	36458	40406	29785
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	133	74	0	0
2	Assam	1308	1173	258	136
3	Manipur	166	87	0	0
4	Meghalaya	278	195	192	66
5	Mizoram	99	69	8	8
6	Nagaland	128	86	22	16
7	Tripura	220	147	162	168
8	ISGS/IPPs	160	100	2092	2022
	Total NER	2492	1931	2734	2416
	Total All India	179241	149469	185705	154048