

**National Load Despatch Centre
Total Transfer Capability for May 2020**

Issue Date: 11th May 2020

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 May 2020 to 31st May 2020	00-06	2500	500	2000	195	1805		
		06-18				250	1750		
		18-24				195	1805		
WR-NR*	1st May 2020	00-06	17200	500	16700	10219	6481		
			16250**		15750**	9269**			
		06-0830	17200	500	16700	10608	6092		
			16250**		15750**	9658**			
		0830-18	15200	500	14700	10608	4092		
			14250**		13750**	9658**			
	18-24	15200	500	14700	10219	4481			
		14250**		13750**	9269**				
	2nd May 2020 to 31st May 2020	00-06	17200	500	16700	10219	6481		
			16250**		15750**	9269**			
		06-18	17200	500	16700	10608	6092		
			16250**		15750**	9658**			
18-24		17200	500	16700	10219	6481			
		16250**		15750**	9269**				
NR-ER*	1st May 2020 to 31st May 2020	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st May 2020	00-0830	5250	300	4950	4050	900		
			4650		4350	4050	300		
	2nd May 2020 to 31st May 2020	00-24	5250	300	4950	4050	900		
W3-ER	1st May 2020 to 31st May 2020	00-24	No limit is being specified.						
ER-W3	1st May 2020 to 31st May 2020	00-24	No limit is being specified.						
WR-SR	1st May 2020 to 31st May 2020	00-05	6950	500	6450	4035	2415		
		05-22	6950		6450		2415		
		22-24	6950		6450		2415		
SR-WR*	1st May 2020 to 31st May 2020	00-24	No limit is being Specified.						
ER-SR	1st May 2020 to 31st May 2020	00-06	5650	250	5400	2663	2737		
		06-18				2748	2652		
		18-24				2663	2737		

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SR-ER *	1st May 2020 to 31st May 2020	00-24	No limit is being Specified.							
ER-NER	1st May 2020 to 11th May 2020	00-07	1340	45	1295	289	1006		TTC/ATC revised due to planned shutdown of 400 kV BYRNIHAT-BONGAIGAON	
		07-18	1340		1295	334	961			
		18-22	1000		955	289	666			
		22-24	1340		1295	289	1006			
	12th May 2020 to 13th May 2020	00-07	1340	45	1295	289	1006			
		07-08	1340		1295	334	961			
		08-18	1100		1055	334	721	-240		
		18-22	750		705	289	416	-250		
	14th May 2020 to 31st May 2020	22-24	1100	45	1055	289	766	-240		
		00-07	1340		1295	289	1006			
		07-18	1340		1295	334	961			
		18-22	1000		955	289	666			
	NER-ER	1st May 2020 to 11th May 2020	22-24	1340	45	1295	289	1006		
			00-18	2120		2075		2075		
			18-22	2550		2505	0	2505		
			22-24	2120		2075		2075		
12th May 2020 to 13th May 2020		00-08	2120	45	2075		2075			
		08-18	1550		1505	0	1505	-570		
		18-22	2090		2045		2045	-460		
		22-24	1550		1505		1505	-570		
14th May 2020 to 31st May 2020		00-18	2120	45	2075		2075			
		18-22	2550		2505	0	2505			
		22-24	2120		2075		2075			

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W3 zone Injection	1st May 2020 to 31st May 2020	00-24	No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised accordingly)						

Note: TTC/ATC of S1-(S2&S3) corridor, Import of S3(Kerala), 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).

**Considering 400 kV Rihand stage-III - Vindhychal 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.

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) KWPC, 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 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.

Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section

Though 2X315 MVA, 400/220 kV ICTs at Maradam are N-1 non-compliant, the TTC of WR-SR and ER-SR corridor has not been restricted due to the same considering that this aspect will be managed by AP SLDC through appropriate measures like SPS implementation.

In case of drawl of Karnataka beyond 3800 MW, the voltages in Bengaluru area are observed to be critically low. This issue may be taken care of by Karnataka SLDC by taking appropriate measures.

WR-NR/Import of NR TTC has been calculated considering generation at Pariccha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Pariccha TPS.

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	
NR	1st May 2020	00-06	22450	800	21650	14269	7381			
			21500**		20700**	13319**				
		06-0830	22450		21650	14658	6992			
			21500**		20700**	13708**				
		0830-18	19850		19050	14658	4392			
			18900**		18100**	13708**				
	18-24	19850	19050	14269	4781					
		18900**	18100**	13319**						
	2nd May 2020 to 31st May 2020	00-06	22450	800	21650	14269	7381			
			21500**		20700**	13319**				
		06-18	22450		21650	14658	6992			
			21500**		20700**	13708**				
18-24		22450	21650		14269	7381				
		21500**	20700**		13319**					
NER	1st May 2020 to 11th May 2020	00-07	1340	45	1295	289	1006			
		07-18	1340		1295	334	961			
		18-22	1000		955	289	666			
		22-24	1340		1295	289	1006			
	12th May 2020 to 13th May 2020	00-07	1340	45	1295	289	1006			
		07-08	1340		1295	334	961			
		08-18	1100		1055	334	721			-240
		18-22	750		705	289	416			-250
		22-24	1100		1055	289	766			-240
	14th May 2020 to 31st May 2020	00-07	1340	45	1295	289	1006			
		07-18	1340		1295	334	961			
		18-22	1000		955	289	666			
		22-24	1340		1295	289	1006			
	WR									
	SR	1st May 2020 to 31st May 2020	00-06	12600	750	11850	6698	5152		
			06-18	12600		11850	6783	5067		
			18-24	12600		11850	6698	5152		
	* 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).									
**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.										

* 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 = $A * C / (B + C)$

Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section

Though 2X315 MVA, 400/220 kV ICTs at Maradam are N-1 non-compliant, the TTC of SR Import has not been restricted due to the same considering that this aspect will be managed by AP SLDC through appropriate measures like SPS implementation.

In case of drawl of Karnataka beyond 3800 MW, the voltages in Bengaluru area are observed to be critically low. This issue may be taken care of by Karnataka by taking appropriate measures.

WR-NR/Import of NR TTC has been calculated considering generation at Pariccha TPS as 350 MW. TTC figures are subject to change with significant change in generation at Pariccha TPS.

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 May 2020 to 31st May 2020	00-06	4500	700	3800	388	3412			
		06-18			3800	553	3247			
		18-24			3800	388	3412			
NER	1st May 2020 to 11th May 2020	00-18	2120	45	2075	0	2075			
		18-22	2550		2505		2505			
		22-24	2120		2075		2075			
	12th May 2020 to 13th May 2020	00-08	2120	45	2075	0	2075			
		08-18	1550		1505		1505			-570
		18-22	2090		2045		2045			-460
		22-24	1550		1505		1505			-570
	14th May 2020 to 31st May 2020	00-18	2120	45	2075	0	2075			
		18-22	2550		2505		2505			
		22-24	2120		2075		2075			
	WR									
	SR *	1st May 2020 to 31st May 2020	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).										
Real Time TTC/ATC revisions are uploaded on POSOCO/NLDC "News Update" (Flasher) Section										

Limiting Constraints (Corridor wise)			Applicable Revisions	
Corridor	Constraint			
WR-NR	n-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overloading of 765 kV Aligarh - Gr. Noida Line		Rev- 0 to 2	
	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT		Rev- 3to 5	
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli		Rev- 0 to 5	
ER-NR	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. 3. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt.		Rev- 0 to 5	
WR-SR and ER-SR	n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT		Rev- 0	
	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT			
	Low Voltage at Gazuwaka (East) Bus.			
	n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt		Rev- 1 to 5	
	n-1 contingency of one ckt of 765 kV Angul - Srikakulam D/C will overload of the other ckt			
	Low Voltage at Gazuwaka (East) Bus.			
	Overloading of 400/220 kV ICT - I at Jeypore in case of tripping of 400 kV Jeypore - Indravati line		Rev- 3 to 5	
ER-NER	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Salakati-BTPS Double circuit (200 MW) c) High Loading of 220/132 kV,160 MVA ICT at BTPS		Rev- 0 to 5	
NER-ER	a) N-1 contingency of 400 kV Silchar- Azara line b) High Loading of 400 kV Silchar-Killing Line c) High Loading of Meghalaya Internal System		Rev- 0 to 5	
W3 zone Injection	---		Rev- 0 to 5	
Limiting Constraints (Simultaneous)			Applicable Revisions	
NR	Import	1. N-1 contingency of 400 kV Mejia-Maithon A line will overload the other ckt. 2. N-1 contingency of 400 kV Kahalgaon-Banka line will overload the other ckt. 3. N-1 contingency of 400kV MPL- Maithon line will overload the other ckt.	Rev- 0 to 5	
		n-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overloading of 765 kV Aligarh - Gr. Noida Line		Rev- 0 to 2
		N-1 contingency of 1000 MVA, 765/400 kV ICT at Orai will overload the other ICT		Rev- 3 to 5
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.		Rev- 0 to 5
(n-1) contingency of 400 kV Saranath-Pusauli				
NER	Import	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Salakati-BTPS Double circuit (200 MW) c) High Loading of 220/132 kV,160 MVA ICT at BTPS	Rev- 0 to 5	
	Export	a) N-1 contingency of 400 kV Silchar- Azara line b) High Loading of 400 kV Silchar-Killing Line c) High Loading of Meghalaya Internal System	Rev- 0 to 5	
SR	Import	n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev- 0	
		n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT		
		Low Voltage at Gazuwaka (East) Bus.		
		n-1 contingency of one ckt of 765 kV Wardha - Nizamabad D/C will overload of the other ckt		Rev- 1 to 5
		n-1 contingency of one ckt of 765 kV Angul - Srikakulam D/C will overload of the other ckt		
		Low Voltage at Gazuwaka (East) Bus		
		Overloading of 400/220 kV ICT - I at Jeypore in case of tripping of 400 kV Jeypore - Indravati line		Rev- 3 to 5

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Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	31st January 2020	Whole Month	Increment in TTC/ATC after commissioning of 765 kV Vemagiri - C'peta D/C	WR-SR/ER-SR and Import of SR
2	29th March 2020	Whole Month	1) Revision in STOA margin due to the following:- a) Operationalization of 50 MW LTA from AGEMPL (Wind, Bhuj) to Punjab b) Completion of 108 MW MTOA from SKS to NPCL (UP) 2) Revision in TTC/ATC due to change in inter-regional flow pattern towards NR.	WR-NR/NR Import
3	29th April 2020	Whole Month	Revision in TTC/ATC after after commissioning of 400 kV Aligarh (PG) - Prithala - Kadarapur - Sohna Road link and 765 kV Bikaner - Moga D/C	WR-NR/Import of NR
			Reduction in TTC/ATC due to extension of forced outage of 400/220 KV ICT-II at Jeypore	ER-SR/Import of SR
			Revision in TTC/ATC due to change in Load - Generation Balance in NER	ER-NER/NER-ER/Import and Export of NER
4	30th April	1st May	TTC/ATC revised due to planned shutdown of 765 kV Orai - Aligarh ckt 2	WR-NR/ER-NR/NR Import
5	11th May	12th to 13th May 2020	TTC/ATC revised due to planned shutdown of 400 kV BYRNIHAT-BONGAIGAON	ER-NER/NER-ER/Import and Export of NER

ASSUMPTIONS IN BASECASE					
				Month : May'2020	
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	8945	7996	4345	4345
2	Haryana	7078	7080	1482	1482
3	Rajasthan	11096	11171	7310	7310
4	Delhi	5399	5646	675	675
5	Uttar Pradesh	16353	15141	8159	8163
6	Uttarakhand	1994	1654	1002	904
7	Himachal Pradesh	1587	1214	503	598
8	Jammu & Kashmir	2835	2230	1114	1113
9	Chandigarh	313	247	0	0
10	ISGS/PPs	26	26	19268	15677
	Total NR	55626	52406	43858	40268
II	EASTERN REGION				
1	Bihar	4752	3257	198	180
2	Jharkhand	1312	1000	425	387
3	Damodar Valley Corporation	3064	2872	4721	3825
4	Orissa	4372	2915	3434	2012
5	West Bengal	8398	6426	5454	4242
6	Sikkim	226	297	0	0
7	Bhutan	178	170	596	621
8	ISGS/PPs	-178	-170	12961	10999
	Total ER	22123	16767	27789	22266
III	WESTERN REGION				
1	Maharashtra	20197	17639	16056	14338
2	Gujarat	16505	15341	10959	11482
3	Madhya Pradesh	8999	8245	3359	4870
4	Chattisgarh	4685	4146	2038	2130
5	Daman and Diu	345	298	0	0
6	Dadra and Nagar Haveli	872	745	0	0
7	Goa-WR	608	419	0	0
8	ISGS/PPs	5376	4560	41709	37155
	Total WR	57588	51393	74120	69976

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	9263	5967	6407	4555
2	Telangana	8387	8052	4377	4644
3	Karnataka	10291	8660	7689	5927
4	Tamil Nadu	16248	14749	7750	6247
5	Kerala	4248	2932	1703	554
6	Pondy	327	276	0	0
7	Goa-SR	64	54	0	0
8	ISGS/IPPs	0	0	17514	12179
	Total SR	48827	40689	45440	34107
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	139	65	8	8
2	Assam	1769	1193	286	244
3	Manipur	187	86	0	0
4	Meghalaya	277	205	215	154
5	Mizoram	103	68	20	8
6	Nagaland	130	85	12	0
7	Tripura	221	137	75	77
8	ISGS/IPPs	133	84	2321	1892
	Total NER	2959	1924	2937	2383
	Total All India	187123	163179	194144	168999