

National Load Despatch Centre
Total Transfer Capability for January 2020

Issue Date: 04th January 2020

Issue Time: 1130 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 January 2020 to 31st January 2020	00-06	2500	500	2000	195	1805		
		06-18				250	1750		
		18-24				195	1805		
WR-NR*	1st January 2020 to 2nd January 2020	00-06	14900	500	14400	10231	4169		
			13950**		13450**	9281**	4169**		
		06-18	14900	500	14400	10420	3980		
			13950**		13450**	9470**	3980**		
		18-24	14900	500	14400	10231	4169		
			13950**		13450**	9281**	4169**		
	3rd January 2020 to 4th January 2020	00-06	14900	500	14400	10231	4169		
			13950**		13450**	9281**	4169**		
		06-0830	14900	500	14400	10420	3980		
			13950**		13450**	9470**	3980**		
		0830-18	13800	500	13300	10420	2880		
			12850**		12350**	9470**	2880**		
18-24	13800	500	13300	10231	3069				
	12850**		12350**	9281**	3069**				
5th January 2020 to 6th January 2020	00-06	14900	500	14400	10231	4169		Reduction in TTC/ATC due to planned outage of 765 kV Phagi - Gwalior - II	
		13950**		13450**	9281**	4169**			
	06-0830	14900	500	14400	10420	3980			
		13950**		13450**	9470**	3980**			
	0830-18	13800	500	13300	10420	2880			
		12850**		12350**	9470**	2880**			
	18-24	13800	500	13300	10231	3069			
		12850**		12350**	9281**	3069**	-1100		
	7th January 2020 to 31st January 2020	00-06	14900	500	14400	10231	4169		
			13950**		13450**	9281**	4169**		
06-18		14900	500	14400	10420	3980			
		13950**		13450**	9470**	3980**			
18-24		14900	500	14400	10231	4169			
		13950**		13450**	9281**	4169**			
NR-ER*	1st January 2020 to 31st January 2020	00-06	2000	200	1800	193	1607		
		06-18	2000		1800	303	1497		
		18-24	2000		1800	193	1607		
ER-NR*	1st January 2020 to 31st January 2020	00-24	5250	300	4950	4050	900		
W3-ER	1st January 2020 to 31st January 2020	00-24	No limit is being specified.						
ER-W3	1st January 2020 to 31st January 2020	00-24	No limit is being specified.						

National Load Despatch Centre
Total Transfer Capability for January 2020

Issue Date: 04th January 2020

Issue Time: 1130 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
WR-SR	1st January 2020 to 4th January 2020	00-05	5050	500	4550	4035	515		
		05-22	5050		4550		515		
		22-24	5050		4550		515		
WR-SR	5th January 2020 to 6th January 2020	00-05	5050	500	4550	4035	515	-500	Reduction in TTC/ATC due to forced outage of HVDC Bhadravati Block-I
		05-22	5050		4550		515		
		22-24	5050		4550		515		
WR-SR	7th January 2020 to 31st January 2020	00-05	5550	500	5050	4035	1015		
		05-22	5550		5050		1015		
		22-24	5550		5050		1015		
SR-WR *	1st January 2020 to 31st January 2020	00-24	No limit is being Specified.						
ER-SR	1st January 2020 to 31st January 2020	00-06	4950	250	4700		2663	2037	
		06-18					2748	1952	
		18-24					2663	2037	
SR-ER *	1st January 2020 to 31st January 2020	00-24	No limit is being Specified.						
ER-NER	1st January 2020 to 31st January 2020	00-17	1300	45	1255	334	921		
		17-23	1000		955		621		
		23-24	1300		1255		921		
NER-ER	1st January 2020 to 31st January 2020	00-17	2650	45	2605	0	2605		
		17-23	2610		2565		2565		
		23-24	2650		2605		2605		
W3 zone Injection	1st January 2020 to 31st January 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 - 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.

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) KWPCCL, 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.

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 January 2020 to 2nd January 2020	00-06	20400	800	19600	14281	5319		Reduction in TTC/ATC due to planned outage of 765 kV Phagi Gwalior - II
			19450**		18650**	13331**			
		06-09	21900		21100	14470	6630		
			20950**		20150**	13520**			
		09-17	20400		19600	14470	5130		
			19450**		18650**	13520**			
	17-18	19850	19050	14470	4580				
		18900**	18100**	13520**					
	18-24	19850	19050	14281	4769				
		18900**	18100**	13331**					
	3rd January 2020 to 4th January 2020	00-06	20400	800	19600	14281	5319		
			19450**		18650**	13331**			
		06-0830	21900		21100	14470	6630		
			20950**		20150**	13520**			
		0830-09	20300		19500	14470	5030		
			19350**		18550**	13520**			
	09-17	18900	18100	14470	3630				
		17950**	17150**	13520**					
17-18	18400	17600	14470	3130					
	17450**	16650**	13520**						
18-24	18400	17600	14281	3319					
	17450**	16650**	13331**						
5th January 2020 to 6th January 2020	00-06	20400	800	19600	14281	5319	0		
		19450**		18650**	13331**				
	06-0830	21900		21100	14470	6630			
		20950**		20150**	13520**				
	0830-09	20300		19500	14470	5030			
		19350**		18550**	13520**				
09-17	18900	18100	14470	3630					
	17950**	17150**	13520**						
17-18	18400	17600	14470	3130					
	17450**	16650**	13520**						
18-24	18400	17600	14281	3319					
	17450**	16650**	13331**						

	7th January 2020 to 31st January 2020	00-06	20400 19450**	800	19600 18650**	14281 13331**	5319		
		06-09	21900 20950**		21100 20150**	14470 13520**	6630		
		09-17	20400 19450**		19600 18650**	14470 13520**	5130		
		17-18	19850 18900**		19050 18100**	14470 13520**	4580		
		18-24	19850 18900**		19050 18100**	14281 13331**	4769		
NER	1st January 2020 to 31st January 2020	00-17	1300	45	1255	334	921		
		17-23	1000		955		621		
		23-24	1300		1255		921		
WR									
SR	1st January 2020 to 04th January 2020	00-06	10000	750	9250	6698	2552		
		06-18	10000		9250	6783	2467		
		18-24	10000		9250	6698	2552		
	05th January 2020 to 06th January 2020	00-06	10000	750	9250	6698	2552	-500	Reduction in TTC/ATC due to forced outage of HVDC Bhadrawati Block-I
		06-18	10000		9250	6783	2467		
		18-24	10000		9250	6698	2552		
	07th January 2020 to 31st January 2020	00-06	10500	750	9750	6698	3052		
		06-18	10500		9750	6783	2967		
		18-24	10500		9750	6698	3052		

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

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 January 2020 to 31st January 2020	00-06	4500	700	3800	388	3412		
		06-18			3800	553	3247		
		18-24	4500		3800	388	3412		
NER	1st January 2020 to 31st January 2020	00-17	2650	45	2605	0	2605		
		17-23	2610		2565		2565		
		23-24	2650		2605		2605		
WR									
SR *	1st January 2020 to 31st January 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).

Limiting Constraints (Corridor wise)

Corridor	Constraint	Applicable Revisions
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 3
	N-1 contingency of 765/400 kV, 1500 MVA ICT at Agra-PG will overload the other ICT	Rev- 4,5
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev- 0 to 5
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 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 to 5
	n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev- 0 to 5
	Low Voltage at Gazuwaka (East) Bus.	Rev- 0 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)	Rev- 0 to 5
NER-ER	a. N-1 contingency of 400 kV Silchar- Azara Line b. High Loading of 400 kV Bongaigaon-Killing line	Rev- 0 to 2
	a. N-1 contingency of 400 kV Silchar- Azara Line b. High Loading of 400 kV Silchar-Killing line	Rev- 3-5
W3 zone Injection	---	Rev- 0 to 5

Limiting Constraints (Simultaneous)

		Applicable Revisions	
NR	Import	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 5
		N-1 contingency of 765 kV Aligarh - Jhatikara Line will lead to overloading of 765 kV Aligarh - Gr. Noida Line	Rev- 0 to 4
		N-1 contingency of 765/400 kV, 1500 MVA ICT at Agra-PG will overload the other ICT	Rev- 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	Rev- 0 to 5
NER	Import	a. N-1 contingency of 400 kV Bongaigaon - Azara line b. High Loading of 220 kV Salakati-BTPS Double circuit (200 MW)	Rev- 0 to 5
	Export	a. N-1 contingency of 400 kV Silchar- Azara Line b. High Loading of 400 kV Bongaigaon-Killing line	Rev- 0 to 2
		a. N-1 contingency of 400 kV Silchar- Azara Line b. High Loading of 400 kV Silchar-Killing line	Rev- 3-5
SR	Import	n-1 contingency of 2x315 MVA, 400/220 kV ICTs at Mardam will lead to overloading of the second ICT	Rev- 0 to 5
		n-1 contingency of 2x1500 MVA, 765/400 kV ICTs at Vemagiri (PG) will lead to overloading of the second ICT	Rev- 0 to 5
		Low Voltage at Gazuwaka (East) Bus.	Rev- 0 to 5

**National Load Despatch Centre
Total Transfer Capability for January 2019**

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	18th November 2019	Whole Month	Revised STOA margin due to 4.2 MW LTA and 19.76 MW MTOA to Assam from GIWEL	ER-NER/Import of NER
2	29th November 2019	Whole Month	Revised STOA margin due to the following. Operationalization of following LTAs:- a) AGEMPL to UPPCL – 40 MW b) GIWEL_SECI-III_RE to Punjab – 112 MW c) SEISPPL_MP to TPDDL – 90 MW Revision in LTA quantum of following:- a) INOX to UPPCL – 100 MW to 50 MW b) RPL-SECI-II-RE to UPPCL – 34.5 MW to 73.8 MW c) RPL-SECI-II-RE to Punjab – 73.8 MW to 100 MW d) Mahindra - Rewa UMSP to DMRC – 7.75 MW to 33 MW	WR-NR/Import of NR
			Revised STOA margin due to allocation of 100 MW quantum from NTPC-WR to Andhra Pradesh.	WR-SR/Import of SR
3	31st December 2019	Whole Month	Revised STOA margin due to the following:- a) Operationalization of 10 MW LTA from AGEMPL (Wind, Bhuj) to Noida Power Company Limited (UP) b) Change in LTA quantum from GIWEL_SECI-III_RE (Wind, Bhuj) to Punjab from 112 MW to 117.6 MW	WR-NR/Import of NR
			Revision in TTC/ATC due to the following:- a) Non availability of 220 kV Misa-Kopili and 132 kV Khandong- Kopili link b) Long outage of Kopili generation due to bursting of Penstock at Kopili c) Forced outage of Palatana Module-1 d) Change in Load-Generation of NER	ER-NER/NER-ER corridor and Import/Export of NER
		01st Jan 2020 to 04th Jan 2020	Reduction in TTC/ATC due to forced outage of HVDC Bhadrawati Block-I	WR-SR/Import of SR
4	2nd January 2020	3rd Jan 2020 to 4th Jan 2020	Reduction in TTC/ATC due to planned outage of 765 kV Phagi - Gwalior - I	WR-NR/Import of NR
5	4th Jan 2020	5th Jan 2020 to 6th Jan 2020	Reduction in TTC/ATC due to planned outage of 765 kV Phagi - Gwalior - II	WR-NR/Import of NR
			Reduction in TTC/ATC due to forced outage of HVDC Bhadrawati Block-I	WR-SR/Import of SR

ASSUMPTIONS IN BASECASE					
				Month : January'20	
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	7620	5837	3839	3687
2	Haryana	7609	6313	1734	1734
3	Rajasthan	11864	11880	7595	7674
4	Delhi	4955	2966	718	718
5	Uttar Pradesh	13788	12963	6160	6142
6	Uttarakhand	1851	1394	703	461
7	Himachal Pradesh	1168	892	145	75
8	Jammu & Kashmir	1971	2079	421	421
9	Chandigarh	293	170	0	0
10	ISGS/PPs	27	27	17739	11795
	Total NR	51144	44520	39053	32706
II	EASTERN REGION				
1	Bihar	4565	3383	165	165
2	Jharkhand	1140	989	362	327
3	Damodar Valley Corporation	2600	2971	4562	3873
4	Orissa	4054	3098	3268	2234
5	West Bengal	7013	5688	4926	3921
6	Sikkim	225	311	0	0
7	Bhutan	178	347	336	281
8	ISGS/PPs	-178	-347	12627	9543
	Total ER	19596	16440	26244	20344
III	WESTERN REGION				
1	Maharashtra	19414	11587	15086	10205
2	Gujarat	15089	11817	10252	8665
3	Madhya Pradesh	10715	8841	3652	4046
4	Chattisgarh	4390	2701	2460	2390
5	Daman and Diu	334	214	0	0
6	Dadra and Nagar Haveli	836	637	0	0
7	Goa-WR	551	295	0	0
8	ISGS/PPs	5331	4036	43289	31372
	Total WR	56660	40129	74740	56677

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	9440	7721	7006	5245
2	Telangana	10136	7870	4948	4648
3	Karnataka	9838	6400	7796	4125
4	Tamil Nadu	13865	11313	6747	5897
5	Kerala	3836	2263	1484	189
6	Pondy	304	304	0	0
7	Goa-SR	59	59	0	0
8	ISGS/IPPs	0	0	14019	12129
	Total SR	47477	35931	42000	32233
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	123	69	0	0
2	Assam	1466	1082	234	206
3	Manipur	193	115	0	0
4	Meghalaya	349	261	112	58
5	Mizoram	99	68	34	23
6	Nagaland	124	81	12	4
7	Tripura	211	133	99	99
8	ISGS/IPPs	133	79	2071	1680
	Total NER	2698	1887	2562	2069
	Total All India	177575	138907	184600	144031