

National Load Despatch Centre
Total Transfer Capability for Jan 2024

Issue Date:Dec 28 2023

Issue Time:10:45:39

Revision No :2

Corridor	Date	Time Period(hrs)	Total Transfer Capability(TTC)	Reliability Margin(RM)	Available Transfer Capability(ATC)	Approved GNA(MW)	Margin for T-GNA (MW)	Changes w.r.t. Previous Revision	Comment	
ER-NER	01 Jan to 31 Jan	00:00 to 07:00	1330	60	1270	NA		0		
		07:00 to 12:00	1230	60	1170	NA		0		
		12:00 to 18:00	1140	60	1080	NA		0		
		18:00 to 22:00	950	60	890	NA		0		
		22:00 to 24:00	1330	60	1270	NA		0		
ER-NR	01 Jan to 31 Jan	00:00 to 24:00	8000	400	7600	NA		0		
ER-SR	01 Jan to 31 Jan	00:00 to 06:00	6000	350	5650	NA		0		
		06:00 to 18:00	6000	350	5650	NA		0		
		18:00 to 24:00	6000	350	5650	NA		0		
ER-W3	01 Jan to 31 Jan	00:00 to 24:00	No limit is being specified.							
ER-WR	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		NA		0		
NER-ER	01 Jan to 31 Jan	00:00 to 07:00	3480	60	3420	NA		0		
		07:00 to 12:00	3480	60	3420	NA		0		
		12:00 to 18:00	3480	60	3420	NA		0		
		18:00 to 22:00	3480	60	3420	NA		0		
		22:00 to 24:00	3480	60	3420	NA		0		
NR-ER	01 Jan to 31 Jan	00:00 to 06:00	4000	300	3700	NA		0		
		06:00 to 18:00	4000	300	3700	NA		0		
		18:00 to 24:00	4000	300	3700	NA		0		
NR-WR	01 Jan to 31 Jan	00:00 to 06:00	4000	500	3500	NA		0		
		06:00 to 18:00	4000	500	3500	NA		0		
		18:00 to 24:00	4000	500	3500	NA		0		
SR-ER	01 Jan to 31 Jan	00:00 to 24:00	No limit is being specified.							
SR-WR	01 Jan to 31 Jan	00:00 to 06:00	6000	650	5350	NA		0		
		06:00 to 18:00	7650	650	7000	NA		0		
		18:00 to 24:00	6000	650	5350	NA		0		
W3 Injection	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		NA		0		
W3-ER	01 Jan to 31 Jan	00:00 to 24:00	No limit is being specified.							
WR-ER	01 Jan to 31 Jan	00:00 to 06:00	5500	300	5200	NA		0		
		06:00 to 18:00	5500	300	5200	NA		0		
		18:00 to 24:00	5500	300	5200	NA		0		
WR-NR	01 Jan to 31 Jan	00:00 to 06:00	17800	1000	16800	NA		0		
		06:00 to 18:00	17800	1000	16800	NA		0		
		18:00 to 24:00	17800	1000	16800	NA		0		
WR-SR	01 Jan to 31 Jan	00:00 to 06:00	14700	650	14050	NA		0		
		06:00 to 18:00	14700	650	14050	NA		0		
		18:00 to 24:00	14700	650	14050	NA		0		

- All values are in Mega Watt (MW)
- Based on the actual distribution of corridor flows, Counter flow benefit on account of LTA/MTOA transactions in the reverse direction would be considered for short-term transactions wherever applicable.
- 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.
- S1 comprises of Telangana, AP and Karnataka; S2 comprises of Tamil Nadu and Puducherry; S3 comprises Kerala
- 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) NTPC Korba I, II & III, j) NTPC Sipat I & II, k) KSK Mahanadi, l) DB Power, m) REGL (Previously KWPC), n) RKM, o) REL, p) Bharat Aluminium, q) MCCPL, r) SKS, s) TRN, t) NTPC Lara, u) Adani Power Limited Raipur 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 Grid-India/NLDC "News Update" (Flasher) Section

Simultaneous Import Capability

Corridor	Date	Time Period(hrs)	Total Transfer Capability(TTC)	Reliability Margin(RM)	Available Transfer Capability(ATC)	Approved GNA(MW)	Margin for T-GNA (MW)	Changes w.r.t. Previous Revision	Comment
ER	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		3088	NA	0	
NER	01 Jan to 31 Jan	00:00 to 07:00	1330	60	1270	486	784	0	Change in T-GNA Margin due to grant of additional 45 MW GNA to Mizoram from outside North Eastern Region
		07:00 to 12:00	1230	60	1170	486	684	0	
		12:00 to 18:00	1140	60	1080	486	594	0	
		18:00 to 22:00	950	60	890	486	404	0	
		22:00 to 24:00	1330	60	1270	486	784	0	
NR	01 Jan to 31 Jan	00:00 to 06:00	25800	1400	24400	17344	7056	0	Change in T-GNA Margin due to grant of additional 174 MW GNA to Uttar Pradesh from outside Northern Region
		06:00 to 18:00	25800	1400	24400	17344	7056	0	
		18:00 to 24:00	25800	1400	24400	17344	7056	0	
SR	01 Jan to 31 Jan	00:00 to 06:00	20700	1000	19700	6601	13099	0	
		06:00 to 18:00	20700	1000	19700	6601	13099	0	
		18:00 to 24:00	20700	1000	19700	6601	13099	0	
WR	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		7702	NA	0	

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- The GNA figures are based on latest figures approved by CTUIL available on its website .
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Simultaneous Export Capability

Corridor	Date	Time Period(hrs)	Total Transfer Capability(TTC)	Reliability Margin(RM)	Available Transfer Capability(ATC)	Approved GNA(MW)	Margin for T-GNA (MW)	Changes w.r.t. Previous Revision	Comment
ER	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		NA		0	

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NER	01 Jan to 31 Jan	00:00 to 07:00	3480	60	3420	NA		0	
		07:00 to 12:00	3480	60	3420	NA		0	
		12:00 to 18:00	3480	60	3420	NA		0	
		18:00 to 22:00	3480	60	3420	NA		0	
		22:00 to 24:00	3480	60	3420	NA		0	
NR	01 Jan to 31 Jan	00:00 to 06:00	4000	500	3500	NA		0	
		06:00 to 18:00	4000	500	3500	NA		0	
		18:00 to 24:00	4000	500	3500	NA		0	
SR	01 Jan to 31 Jan	00:00 to 06:00	5150	650	4500	NA		0	
		06:00 to 18:00	6600	650	5950	NA		0	
		18:00 to 24:00	5150	650	4500	NA		0	
WR	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		NA		0	

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Limiting Constraints

Corridor	Constraints	Revisions
WR-NR	N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit	0-5,3,1-2
NR-ER	1. Overloading of one circuit of 400 kV New Ranchi – New PPSP D/C on the tripping of the other circuit 2. Overloading of one circuit of 400 kV Kahalgaon – Farakka D/C on the tripping of the other circuit 3. Overloading of 400 kV Farakka – Sagardighi – 1 on the tripping of 400 kV Farakka – Sagardighi - 2	0-5,3,1-2
WR-ER	1. Overloading of one circuit of 400 kV New Ranchi – New PPSP D/C on the tripping of the other circuit 2. Overloading of one circuit of 400 kV Kahalgaon – Farakka D/C on the tripping of the other circuit 3. Overloading of 400 kV Farakka – Sagardighi – 1 on the tripping of 400 kV Farakka – Sagardighi - 2	0-5,3,1-2
ER-NR	Inter-regional flow pattern towards NR	0-5,3,1-2
WR-SR	Outage of any one of the 2x1500 MVA, 765/400 kV ICTs at Nizamabad overloads the other ICT	0-5,3,1-2
ER-SR	1. Outage of any one circuit of the 765 kV Angul – Srikakulam D/C overloads the other circuit 2. Low Voltage at Gazuwaka (East) Bus.	0-5,3,1-2
SR-WR	a) Angular separation between Kudgi & Kolhapur (PG) under N-1 of 400 kV Kudgi - Kolhapur (PG) D/C touches 30 deg b) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– A at Raigarh - PS (Kotra) with increase in HVDC Raigarh – Pugalur Bipole – II power order beyond 950 MW in SR to WR Direction (Solar Hours) c) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– B at Raigarh -PS (Kotra) with increase in HVDC Raigarh – Pugalur Bipole – I power order beyond 450 MW in SR to WR Direction (Solar Hours) d) N-1 Contingency of 400 kV Pune – Kalwa will overload 400 kV Pune -Khargar and vice-versa	1-5,3,1-2
ER-NER	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Balipara-Sonabil D/C	0-5,3,1-2
NER-ER	a) N-1 contingency of 400 kV Bongaigaon-Alipurduar I or II b) High Loading of 400 kV Bongaigaon- New Siliguri DC	0-5,3,1-2
NR_IMPORT	N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit	0-5,3,1-2
NR_EXPORT	(N-1) Contingency of 400 kV Kankroli-Zerda-S/C will overload 400 kV Bhinmal-Zerda-S/C	0-5,3,1-2
NER_IMPORT	a) N-1 contingency of 400 kV Bongaigaon - Azara line b) High Loading of 220 kV Balipara-Sonabil D/C	0-5,3,1-2
NER_EXPORT	a) N-1 contingency of 400 kV Bongaigaon-Alipurduar I or II b) High Loading of 400 kV Bongaigaon- New Siliguri DC	0-5,3,1-2
SR_IMPORT	1. Outage of any one of the 2x1500 MVA, 765/400 kV ICTs at Nizamabad overloads the other ICT 2. Outage of any one circuit of the 765 kV Angul – Srikakulam D/C overloads the other circuit 3. Low Voltage at Gazuwaka (East) Bus	0-5,3,1-2

Corridor	Constraints	Revisions
SR_EXPORT	a) Angular separation between Kudgi & Kolhapur (PG) under N-1 of 400 kV Kudgi - Kolhapur (PG) D/C touches 30 deg b) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– A at Raigarh - PS(Kotra) with increase in HVDC Raigarh – Pugalur Bipole – II power order beyond 950 MW in SR to WR Direction (Solar Hours) c) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– B at Raigarh -PS (Kotra) with increase in HVDC Raigarh – Pugalur Bipole – I power order beyond 450 MW in SR to WR Direction (Solar Hours) d) N-1 Contingency of 400 kV Pune – Kalwa will overload 400 kV Pune -Khargar and vice-versa	1-5,3,1-2

Revision Summary

Revision	Date Of Revision	Period Of Revision	Reason for Revision/Comment	Corridor Affected
1	28 Oct	01 Jan to 31 Jan	TTC/ATC increased due to the the commissioning of 765 kV Warora (Pool) –Warangal (New) D/C and associated system	WR-SR
		01 Jan to 31 Jan	TTC/ATC increased due to the the commissioning of 765 kV Warora (Pool) –Warangal (New) D/C and associated system	ER-SR
		01 Jan to 31 Jan	TTC/ATC increased due to the the commissioning of 765 kV Warora (Pool) –Warangal (New) D/C and associated system	SR_IMPORT
2	28 Dec	01 Jan to 31 Jan	Change in T-GNA Margin due to grant of additional 174 MW GNA to Uttar Pradesh from outside Northern Region	NR_IMPORT
		01 Jan to 31 Jan	Change in T-GNA Margin due to grant of additional 45 MW GNA to Mizoram from outside North Eastern Region	NER_IMPORT

ASSUMPTIONS IN BASECASE

Month : January'24

S.No.	Name of State/Area	Demand		Generation	
		Non-Solar Peak(MW)	Solar Peak (MW)	Non-Solar Peak(MW)	Solar Peak (MW)
I	NORTHERN REGION				
1	Punjab	7031	7510	4881	4940
2	Haryana	7418	7386	3037	3499
3	Rajasthan	13248	16311	8225	10042
4	Delhi	4405	5136	564	545
5	Uttar Pradesh	22062	18685	10734	11973
6	Uttarakhand	2375	2108	694	463
7	Himachal Pradesh	1985	1936	474	302
8	Jammu & Kashmir	3311	2984	264	206
9	Chandigarh	266	258	0	0
10	ISGS/IPPs	105	105	18638	22308
	Total NR	62206	62419	47511	54278
II	EASTERN REGION				
1	Bihar	5063	4065	464	458
2	Jharkhand	1407	1559	410	365
3	Damodar Valley Corporation	3416	3284	5273	5244
4	Orissa	5269	4919	3608	3496
5	West Bengal	7175	6925	6049	5781
6	Sikkim	116	109	0	0
7	Bhutan	32	50	107	228
8	ISGS/IPPs	928	917	18890	15263
	Total ER	23406	21828	34802	30835
III	WESTERN REGION				
1	Maharashtra	24878	25141	15943	16380
2	Gujarat	18292	17984	6324	6349
3	Madhya Pradesh	15567	16371	6053	6073
4	Chattisgarh	4447	4465	1823	1592
5	DD & DNH	984	867	0	0
6	Goa-WR	660	554	0	0

7	ISGS/IPPs	2463	1937	53004	49159
	Total WR	67290	67320	83147	79553
IV	SOUTHERN REGION				
1	Andhra Pradesh	8005	10681	6952	8203
2	Telangana	10834	14680	5212	6980
3	Karnataka	12118	15214	6579	9390
4	Tamil Nadu	16381	16743	6524	9609
5	Kerala	4221	3432	1510	340
6	Pondy	493	494	0	0
7	Goa-SR	109	109	0	0
8	ISGS/IPPs	0	0	19847	21748
	Total SR	52162	61353	46623	56270
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	166	101	0	0
2	Assam	1441	1146	275	428
3	Manipur	262	139	0	0
4	Meghalaya	471	350	144	12
5	Mizoram	171	141	33	8
6	Nagaland	158	120	15	7
7	Tripura	369	318	190	187
8	ISGS/IPPs	0	0	3308	2557
	Total NER	3038	2314	3964	3200
	Total All India	208065	215177	215925	223878