

**National Load Despatch Centre
Total Transfer Capability for Jan 2025**

Issue Date:Dec 27 2024

Issue Time:11:26:05

Revision No :5

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 17:00	2000	60	1940	NA		150	TTC/ATC revised due to change in LGB
		17:00 to 21:00	1600	60	1540	NA		30	
		21:00 to 24:00	2000	60	1940	NA		150	
ER-NR	01 Jan to 31 Jan	00:00 to 24:00	6700	400	6300	NA		0	
ER-SR	01 Jan to 31 Jan	00:00 to 24:00	6200	350	5850	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 24:00	3250	60	3190	NA		350	TTC/ATC revised due to change in LGB
NR-ER	01 Jan to 31 Jan	00:00 to 24:00	4000	300	3700	NA		0	
NR-WR	01 Jan to 31 Jan	00:00 to 24:00	6000	500	5500	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	7200	650	6550	NA		0	
		06:00 to 18:00	7100	650	6450	NA		0	
		18:00 to 24:00	7200	650	6550	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 24:00	5500	300	5200	NA		0	
WR-NR	01 Jan to 31 Jan	00:00 to 09:00	22350	1000	21350	NA		0	
		09:00 to 15:00	19050	1000	18050	NA		1000	TTC/ATC revised due to change in LGB
		15:00 to 16:00	20550	1000	19550	NA		2500	
		16:00 to 24:00	22350	1000	21350	NA		0	
WR-SR	01 Jan to 31 Jan	00:00 to 24:00	16100	650	15450	NA		0	

- Based on the actual distribution of corridor flows, Counter flow benefit on account of 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 GNA approved by CTU. In actual Operation, due to Units being on Maintenance/ Fuel shortage/New units being commissioned, the dispatches of units 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		3222	0	0	
NER	01 Jan to 31 Jan	00:00 to 17:00	1500	60	1440	824	616	150	
		17:00 to 21:00	1100	60	1040	824	216	30	
		21:00 to 24:00	1500	60	1440	824	616	150	
NR	01 Jan to 31 Jan	00:00 to 09:00	25700	1400	24300	17344	6956	0	
		09:00 to 15:00	20250	1400	18850	17344	1506	1000	TTC/ATC revised due to change in LGB
		15:00 to 16:00	21750	1400	20350	17344	3006	2500	
		16:00 to 24:00	25700	1400	24300	17344	6956	0	
SR	01 Jan to 31 Jan	00:00 to 24:00	22300	1000	21300	7601	13699	0	
WR	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		7813	0	0	

- Based on the actual distribution of corridor flows, Counter flow benefit on account of 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.
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- 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
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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	
NER	01 Jan to 31 Jan	00:00 to 24:00	3750	60	3690	NA		350	TTC/ATC revised due to change in LGB
NR	01 Jan to 31 Jan	00:00 to 24:00	6000	500	5500	NA		0	
SR	01 Jan to 31 Jan	00:00 to 24:00	6400	650	5750	NA		0	
WR	01 Jan to 31 Jan	00:00 to 24:00	NA	NA		NA		0	

- Based on the actual distribution of corridor flows, Counter flow benefit on account of 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.
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- 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 GNA approved by CTU. In actual Operation, due to Units being on Maintenance/ Fuel shortage/New units being commissioned, the dispatches of units 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.
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Limiting Constraints

Corridor	Constraints	Revisions
WR-NR	1. N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit 2. Low Voltages in major load Centres in the northern region during solar hours. 3. High loading of 765 KV Aligarh-Gr. Noida under N-1 contingency of 765 KV Bara-Mainpuri ckt	0-17,21,23-24-25,26-27,26,28-29,5
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	0-17,21,23-24-25,26-27,26,28-29,5
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	0-17,21,23-24-25,26-27,26,28-29,5
ER-NR	Inter-regional flow pattern towards NR	0-17,21,23-24-25,26-27,26,28-29,5
WR-SR	Outage of any one of the 2x1500 MVA, 765/400 kV ICTs at Maheswaram overloads the other ICT	0-17,21,23-24-25,26-27,26,28-29,5
ER-SR	1. Low Voltage at Gazuwaka (East) Bus.	0-17,21,23-24-25,26-27,26,28-29,5
SR-WR	a) Angular separation between Kudgi & Kolhapur (PG) under N-1 touches 30 deg. b) N-1 Contingency of 765/400 kV, 1500 MVA ICTs at Raichur - PG will overload the other circuit. c) N-1 Contingency of 400 kV Pune – Kalwa will overload 400 kV Pune -Khargar & and vice-versa. d) N-1 Contingency of 400 kV Kolhapur – Karad D/C will overload the other circuit. e) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– B at Raigarh – PS (Kotra) with operation of HVDC Raigarh – Pugalur Bipole – 1 in SR-WR direction	0-17,21,23-24-25,26-27,26,28-29,5
ER-NER	N-1 contingency of 400 kV Bongaigaon - Azara line will lead to high Loading of 220 kV Balipara-Sonabil D/C	0-17,21,23-24-25,26-27,26,28-29,5
NER-ER	N-1 contingency of 400 kV Bongaigaon-Alipurduar I or II will lead to the High Loading of 400 kV Bongaigaon-Alipurduar II or I	0-17,21,23-24-25,26-27,26,28-29,5
NR_IMPORT	1. N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit 2. Low Voltages in major load Centres in the northern region during solar hours. 3. High loading of 765 KV Aligarh-Gr. Noida under N-1 contingency of 765 KV Bara-Mainpuri ckt	0-17,21,23-24-25,26-27,26,28-29,5
NR_EXPORT	Outage of any one of 765 kV Chittorgarh - Banaskantha D/C will overload 400 kV Zerda - Kankroli - 1 (Direct Line)	0-17,21,23-24-25,26-27,26,28-29,5
NER_IMPORT	N-1 contingency of 400 kV Bongaigaon - Azara line will lead to high Loading of 220 kV Balipara-Sonabil D/C	0-17,21,23-24-25,26-27,26,28-29,5
NER_EXPORT	N-1 contingency of 400 kV Bongaigaon-Alipurduar I or II will lead to the High Loading of 400 kV Bongaigaon-Alipurduar II or I	0-17,21,23-24-25,26-27,26,28-29,5
SR_IMPORT	1. Outage of any one of the 2x1500 MVA, 765/400 kV ICTs at Maheswaram overloads the other ICT 2. Low Voltage at Gazuwaka (East) Bus	0-17,21,23-24-25,26-27,26,28-29,5
SR_EXPORT	a) Angular separation between Kudgi & Kolhapur (PG) under N-1 touches 30 deg. b) N-1 Contingency of 765/400 kV, 1500 MVA ICTs at Raichur - PG will overload the other ICT. c) N-1 Contingency of 400 kV Pune – Kalwa will overload 400 kV Pune -Khargar & and vice-versa. d) N-1 Contingency of 400 kV Kolhapur – Karad D/C will overload the other circuit. e) N-1 non-compliance of 2*1500 MVA, 765/400 kV ICTs at Section– B at Raigarh – PS (Kotra) with operation of HVDC Raigarh – Pugalur Bipole – 1 in SR-WR direction	0-17,21,23-24-25,26-27,26,28-29,5

Revision Summary

Revision	Date Of Revision	Period Of Revision	Reason for Revision/Comment	Corridor Affected
1	28 Feb	01 Jan to 31 Jan	Revised T-GNA margin due to approval of 500 MW GNA for Andhra Pradesh from Outside Southern Region	SR_IMPORT
2	28 Mar	01 Jan to 31 Jan	Enhancement in TTC due to Bypassing of 400 kV Kankroli - Bhinmal and 400 kV Bhinmal - Zerda at Bhinmal - PG (Temporary Arrangement) & revival of 400 KV Jodhpur-Kankroli-S/C after reconductoring	NR-WR
		01 Jan to 31 Jan	Enhancement in TTC due to Bypassing of 400 kV Kankroli - Bhinmal and 400 kV Bhinmal - Zerda at Bhinmal - PG (Temporary Arrangement) & revival of 400 KV Jodhpur-Kankroli-S/C after reconductoring	NR_EXPORT
3	28 Apr	01 Jan to 31 Jan	1. Revised T-GNA margin due to approval of 6.54 MW GNA for Arunachal Pradesh from Outside North-Eastern Region. 2. Revised T-GNA margin due to approval of 371 MW GNA for Assam from Outside North-Eastern Region	NER_IMPORT
		01 Jan to 31 Jan	Revised T-GNA margin due to approval of 25 MW GNA for Goa from Outside Western Region	WR_IMPORT
		01 Jan to 31 Jan	Revised T-GNA margin due to approval of 500 MW GNA for Karnataka from Outside Southern Region	SR_IMPORT
		01 Jan to 31 Jan	Revised T-GNA margin due to approval of 24 MW GNA for West Bengal from Outside Eastern Region	ER_IMPORT
4	28 Aug	01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	WR-NR
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	SR-WR
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	NR_IMPORT
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	SR_EXPORT
5	27 Dec	01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	WR-NR
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	ER-NER
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	NER-ER
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	NR_IMPORT
		01 Jan to 31 Jan	TTC/ATC revised due to change in LGB	NER_EXPORT

ASSUMPTIONS IN BASECASE

Month : January'25

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	6786	6770	3900	3660
2	Haryana	6932	7300	1426	3659
3	Rajasthan	13840	17619	6944	8474
4	Delhi	4003	4328	365	314
5	Uttar Pradesh	18915	17337	10369	10075
6	Uttarakhand	1977	1728	821	366
7	Himachal Pradesh	1660	1709	595	306
8	Jammu & Kashmir	2278	2673	226	230
9	Chandigarh	203	176	0	0
10	ISGS/IPPs	114	115	19978	22204
	Total NR	56708	59755	44624	49288
II	EASTERN REGION				
1	Bihar	5084	4030	445	436
2	Jharkhand	1645	1700	406	427
3	Damodar Valley Corporation	3510	3400	5600	5332
4	Orissa	6186	6000	3818	3764

5	West Bengal	7660	8000	6462	6115
6	Sikkim	106	98	0	0
7	Bhutan	33	49	307	372
8	ISGS/IPPs	920	728	16923	17242
	Total ER	25143	24005	33962	33688
III	WESTERN REGION				
1	Maharashtra	25755	29506	16723	19565
2	Gujarat	18687	20689	8270	8865
3	Madhya Pradesh	14705	17125	7923	9952
4	Chattisgarh	4208	3970	1768	1801
5	DD & DNH	971	974	0	0
6	Goa-WR	674	676	0	0
7	ISGS/IPPs	2490	2493	47245	48284
	Total WR	67491	75433	81929	88468
IV	SOUTHERN REGION				
1	Andhra Pradesh	9057	12431	5376	7080
2	Telangana	7435	9730	4578	7247
3	Karnataka	10750	13304	5081	7257
4	Tamil Nadu	16629	16830	5755	9952
5	Kerala	4253	3484	1637	646
6	Pondy	578	575	25	40
7	Goa-SR	87	87	0	0
8	ISGS/IPPs	12	12	21969	20081
	Total SR	48800	56452	44422	52305
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	164	100	0	0
2	Assam	1430	1140	271	444
3	Manipur	260	138	0	0
4	Meghalaya	468	348	139	13
5	Mizoram	169	140	31	8
6	Nagaland	157	119	14	7
7	Tripura	366	316	190	193
8	ISGS/IPPs	0	0	3215	2609
	Total NER	3014	2301	3860	3274
	Total All India	201120	217890	208385	226545