

**National Load Despatch Centre
Total Transfer Capability for November 2021**

Issue Date: 30th October, 2021

Issue Time: 1700 hrs

Revision No. 6

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 November 2021 to 30th November 2021	00-06	2500	500	2000	378	1622		
		06-18				956	1044		
		18-24				378	1622		
WR-NR*	1st November 2021 to 7th November 2021	00-06	17500 16550**	1000	16500 15550**	11412 10462**	5088		
		06-18	17500 16550**	1000	16500 15550**	11801 10851**	4699		
		18-24	17500 16550**	1000	16500 15550**	11412 10462**	5088		
WR-NR*	8th November 2021 to 30th November 2021	00-06	19500 18550**	1000	18500 17550**	11412 10462**	7088		
		06-18	19500 18550**	1000	18500 17550**	11801 10851**	6699		
		18-24	19500 18550**	1000	18500 17550**	11412 10462**	7088		
NR-ER*	1st November 2021 to 30th November 2021	00-06	2000	200	1800	93	1707		
		06-18				1800	1491	309	
		18-24				1800	93	1707	
ER-NR*	1st November 2021 to 7th November 2021	00-24	5250	400	4850	4322	528		
ER-NR*	8th November 2021 to 30th November 2021	00-24	5900	400	5500	4322	1178		
W3-ER	1st November 2021 to 30th November 2021	00-24	No limit is being specified.						
ER-W3	1st November 2021 to 30th November 2021	00-24	No limit is being specified.						
WR-SR^	1st November 2021	00-05	10000	650	9350	3880	5470	-350	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4 & shutdown of HVDC Raigarh-Pugalur Pole-3
		05-08	10000		9350		5470	-350	
		08-22	8800		8150		4270	-1550	
WR-SR^	2nd November 2021	00-05	10000	650	9350	3880	5470	-350	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4
		05-22	10000		9350		5470	-350	
		22-24	10000		9350		5470	-350	
WR-SR^	3rd November 2021 to 30th November 2021	00-05	10350	650	9700	3880	5820		
		05-22	10350		9700		5820		
		22-24	10350		9700		5820		
SR-WR*	1st November 2021	00-08	6600	400	6200	913	5287		
		08-24	5150		4750		3837	-1450	
SR-WR*	2nd November 2021 to 30th November 2021	00-24	6600	400	6200	913	5287		
ER-SR^	1st November 2021 to 2nd November 2021	00-06	5750	350	5400	2672	2728	-50	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4
		06-18				2757	2643	-50	
		18-24				2672	2728	-50	
ER-SR^	3rd November 2021 to 30th November 2021	00-06	5800	350	5450	2672	2778		
		06-18				2757	2693		
		18-24				2672	2778		
SR-ER*	1st November 2021 to 30th November 2021	00-24	No limit is being Specified.						

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ER-NER*	1st November 2021 to 30th November 2021	00-02	1690	45	1645	455	1190		1) Change in Load-Generation of NER 2) Two units of Kameng HEP (4x150 MW) are under force outage
		02-07	1690		1645	455	1190		
		07-12	1690		1645	455	1190		
		12-17	1690		1645	455	1190		
		17-21	1425		1380	455	925		
		21-24	1690		1645	455	1190		
		00-02	2930		2885	81	2804		
NER-ER*	1st November 2021 to 30th November 2021	02-07	2930	45	2885	81	2804		1) Change in Load-Generation of NER 2) Two units of Kameng HEP (4x150 MW) are under force outage
		07-12	2930		2885	81	2804		
		12-17	2930		2885	81	2804		
		17-21	2825		2780	81	2699		
		21-24	2930		2885	81	2804		

W3 zone Injection	1st November 2021 to 30th November 2021	00-24	No limit is being specified (In case of any constraints appearing in the system, W3 zone export would be revised accordingly)						
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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)RKRM, p)GMR Raikhedra, 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.

SR-WR TTC/ATC figures have been calculated considering 01 unit (800 MW) at Kudgi TPS in service. The figures are subject to change with change in generation at Kudgi TPS.

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 November 2021 to 7th November 2021	00-06	22750	1400	21350	15734	5616		
			21800**		20400**	14784**			
		06-09	22750		21350	16123	5227		
			21800**		20400**	15173**			
		09-17	22750		21350	16123	5227		
			21800**		20400**	15173**			
		17-18	22750		21350	16123	5227		
			21800**		20400**	15173**			
		18-24	22750		21350	15734	5616		
			21800**		20400**	14784**			
NR	8th November 2021 to 30th November 2021	00-06	25400	1400	24000	15734	8266		
			24450**		23050**	14784**			
		06-09	25400		24000	16123	7877		
			24450**		23050**	15173**			
		09-17	25400		24000	16123	7877		
			24450**		23050**	15173**			
		17-18	25400		24000	16123	7877		
			24450**		23050**	15173**			
		18-24	25400		24000	15734	8266		
			24450**		23050**	14784**			
NER*	1st November 2021 to 30th November 2021	00-02	1190	45	1145	455	690		1) Change in Load-Generation of NER 2) Two units of Kameng HEP (4x150 MW) are under force outage
		02-07	1190		1145	455	690		
		07-12	1190		1145	455	690		
		12-17	1190		1145	455	690		
		17-21	925		880	455	425		
		21-24	1190		1145	455	690		

WR*									
SR*#	1st November 2021	00-06	15750	1000	14750	6553	8197	-400	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4 & shutdown of HVDC Raigarh-Pugalur Pole-3
		06-08	15750		14750	6638	8112	-400	
		08-18	14550		13550	6638	6912	-1600	
		18-24	14550		13550	6553	6997	-1600	
SR*#	2nd November 2021	00-06	15750	1000	14750	6553	8197	-400	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4
		06-18	15750		14750	6638	8112	-400	
		18-24	15750		14750	6553	8197	-400	
SR*#	3rd November 2021 to 30th November 2021	00-06	16150	1000	15150	6553	8597		
		06-18	16150		15150	6638	8512		
		18-24	16150		15150	6553	8597		

* 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 November 2021 to 30th November 2021	00-06	4500	700	3800	471	3329		
		06-18				2447	1353		
		18-24				471	3329		
NER*	1st November 2021 to 30th November 2021	00-02	3430	45	3385	81	3304		1) Change in Load-Generation of NER 2) Two units of Kameng HEP (4x150 MW) are under force outage
		02-07	3430			81	3304		
		07-12	3430			81	3304		
		12-17	3430			81	3304		
		17-21	3325			81	3199		
		21-24	3430			81	3304		
WR*									
SR*^	1st November 2021	00-24	5600	400	5200	1731	3469		
		08-24	4150		3750		2019		
SR*^	2nd November 2021 to 30th November 2021	00-24	5600	400	5200	1731	3469		

* 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

^SR Export TTC/ATC figures have been calculated considering 01 unit (800 MW) at Kudgi TPS in service. The figures are subject to change with change in generation at Kudgi TPS.

Limiting Constraints (Corridor wise)		Applicable Revisions
Corridor	Constraint	
WR-NR	N-1 contingency of 1000 MVA, 765/400 kV ICT at Orail will overload the other ICT	Rev- 0 to 1
	N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit	Rev- 2 to 6
NR-ER	(n-1) contingency of 400 kV Saranath-Pusauli	Rev- 0 to 6
ER-NR	Inter-regional flow pattern towards NR	Rev- 0 to 6
WR-SR and ER-SR	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT	Rev- 0 to 2
	N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit	
	Low Voltage at Gazuwaka (East) Bus.	Rev- 3 to 6
	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT	
SR-WR	a) N-1 contingency of one ckt of 400 kV Kolhapur-PG - Kolhapur-MS D/C will overload of the other ckt b) N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs	Rev- 0 to 6
ER-NER	a) N-1 contingency of 400 kV Bongaigaon - Azara line	Rev- 0 to 6
	b) High Loading of 220 kV Salakati - BTPS D/C	
NER-ER	a) N-1 contingency of 220 kV Salakati - Alipurduar I or II	Rev- 0 to 6
	b) High Loading of 220 kV Salakati - Alipurduar II or I	
W3 zone Injection	---	Rev- 0 to 6

Limiting Constraints (Simultaneous)		Applicable Revisions
NR	Import	
NR	Inter-regional flow pattern towards NR	Rev- 0 to 6
	N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit	Rev- 0 to 1
	N-1 contingency of one ckt of 765 kV Vindhyachal-Varanasi will overload the other circuit	Rev- 2 to 6
	Export	(n-1) contingency of 400kV Zerda-Bhinmal and (n-1) contingency of 220kV Badod-Modak.
		(n-1) contingency of 400 kV Saranath-Pusauli
NER	Import	a) N-1 contingency of 400 kV Bongaigaon - Killing line (0000 hrs to 2400 hrs) b) High Loading of 220 kV Balipara-Sonabil (0000 hrs to 0700 hrs) c) High Loading of 220 kV Salakati - BTPS D/C (0700 hrs to 1200 hrs)
	Export	a) N-1 contingency of 220 kV Salakati - Alipurduar I or II b) High Loading of 220 kV Salakati - Alipurduar II or I
SR	Import	N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT
		N-1 of one ckt of 765kV Angul-Srikakulam D/C will overload the other circuit
	Export	Low Voltage at Gazuwaka (East) Bus
		N-1 of one ICT of 765/400 kV, 1500 MVA ICT at Nizamabad will overload the other ICT
Export	N-1 contingency of one ckt of 400 kV Kolhapur-PG - Kolhapur-MS D/C will overload of the other ckt	Rev- 0 to 6
	N-1 contingency of 500 MVA ICT at 400 kV Kolhapur-MS will overload the other 2x315 MVA ICTs	

National Load Despatch Centre
Total Transfer Capability for November 2021

Revision No	Date of Revision	Period of Revision	Reason for Revision/Comment	Corridor Affected
1	24th August, 2021	Whole Month	Revised TTC/ATC due to commissioning of 765kV Vindhyachal-Varanasi D/C	WR-NR, ER-NR & NR Import
2	28th August, 2021	Whole Month	Revised STOA margin due to increase in LTA from PGLR_SREPL to UP by 12 MW (from 228MW to 240 MW)	SR-WR/SR Export; WR-NR/NR Import
			Revised STOA margin due to operationalisation of LTA of 73 MW from Tuticorin-BETAMWIND to UPPCL (SR-ER-NR)	ER-NR/NR Import
			Revised STOA margin due to change in LTA allocations	NR-ER
			Revised STOA margin due to change in LTA allocations	NER Import/Export
3	25th September 2021	Whole Month	TTC/ATC revised due to commissioning of HVDC Raigarh-Pugalur Pole-3	WR-SR/ER-SR/SR Import
4	28th September 2021	Whole Month	Revised STOA margin due to a) operationalization of new LTA OF 73 MW from Tuticorin-BETAMWIND to UPPCL b) operationalization of new LTA OF 10 MW from Tuticorin-IWISL to Haryana	WR-NR/NR Import
			Revised STOA margin due to a) Discontinuation of 250 MW MTOA from ACSEPL to Madhya Pradesh b) Operationalization of new LTA of 250 MW from RSWPL3_FT2 to BSPHCL c) Operationalization of new LTA of 300 MW from AP43PL_BKN to Odisha	ER-NR/WR-NR/NR Export
			Revised STOA margin due to a) operationalization of new LTA of 106 MW from Fatehgarh-II Solar to Telangana b) operationalization of new LTA of 176 MW from Bhadla-II Solar to Telangana	WR-SR/SR Import
			Revised STOA margin due to a) Increase LTA by 6 MW from BETAM to UP (NR) b) Increase LTA by 15 MW from Spring Energy, Pugalur to UP (NR) c) Operationalization of 63 MW LTA from HIRIYUR_OSTROKANNADA to Bihar, ER	SR-WR/SR Export
			Revised STOA margin due to discontinuation of 50 MW MTOA Arunachal Pradesh to NPCL(UP)	NER-ER/NER Export
5	28th October 2021	Whole Month	Revised STOA margin due to a) Operationalization of LTA OF 39 MW from PGLR_SREPL to UPPCL b) Operationalization of LTA OF 11 MW from Tuticorin-BETAMWIND to UPPCL c) Discontinuation of 50 MW MTOA Arunachal Pradesh to NPCL(UP)	WR-NR/ER-NR/NR Import
			Revised STOA margin due to operationalization of new LTA of 33 MW from AP41PL_BHDL to ODISHA	NR-ER/NR Export
			Revised STOA margin due to a) Operationalization of LTA of 24 MW from Spring energy to UP (NR) b) Operationalization of LTA of 5 MW from BETAM to UP (NR) c) Operationalization of LTA of 5 MW from BETAM to Odisha (ER) d) Operationalization of LTA of 21 MW from HiriYur_Ostrokannada to Bihar (ER)	SR-WR/SR-ER/SR Export
6	30th October 2021	Whole Month	1) Change in Load-Generation of NER 2) Two units of Kameng HEP (4x150 MW) are under force outage	ER-NER/NER Import/ NER -ER/NER Export
		1st November 2021	Revised TTC/ATC due to shutdown of HVDC Raigarh-Pugalur Pole-3	WR-SR/SR Import/ SR-WR/SR Export
		1st November 2021 to 2nd November 2021	Revised TTC/ATC due to extension of shutdown of 765kV Wardha-Aurangabad-3&4	WR-SR/ER-SR/SR Import

ASSUMPTIONS IN BASECASE					
				Month : November 2021	
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	10744	10867	3971	3971
2	Haryana	9492	9088	2701	2701
3	Rajasthan	10485	9635	8259	8259
4	Delhi	5321	5152	796	795
5	Uttar Pradesh	20631	20099	10623	10689
6	Uttarakhand	2124	1886	928	939
7	Himachal Pradesh	1354	1114	783	769
8	Jammu & Kashmir	2363	1962	884	883
9	Chandigarh	313	249	0	0
10	ISGS/PPs	48	48	21958	20013
	Total NR	62875	60100	50903	49019
II	EASTERN REGION				
1	Bihar	6537	5617	356	349
2	Jharkhand	1958	1503	511	501
3	Damodar Valley Corporation	2985	2723	5856	4190
4	Orissa	4513	4310	3998	3798
5	West Bengal	9704	8401	7033	6210
6	Sikkim	119	116	0	0
7	Bhutan	181	181	2325	2325
8	ISGS/PPs	810	810	15771	11533
	Total ER	26808	23662	35850	28906
III	WESTERN REGION				
1	Maharashtra	17405	16509	11624	10789
2	Gujarat	13918	11320	8601	7246
3	Madhya Pradesh	9254	8534	3596	3845
4	Chattisgarh	4309	3965	2531	2835
5	Daman and Diu	276	236	0	0
6	Dadra and Nagar Haveli	744	870	0	0
7	Goa-WR	534	420	0	0
8	ISGS/PPs	1784	3263	36712	32338
	Total WR	48224	45117	63064	57053
IV	SOUTHERN REGION				
1	Andhra Pradesh	8024	7220	6268	5204
2	Telangana	9100	8117	5196	5078
3	Karnataka	8396	6654	6023	4850
4	Tamil Nadu	15210	13068	7256	6376
5	Kerala	3778	2349	1614	961
6	Pondy	264	264	0	0
7	Goa-SR	82	82	0	0
8	ISGS/PPs	37	37	14805	14794
	Total SR	44891	37791	41162	37263
V	NORTH-EASTERN REGION				
1	Arunachal Pradesh	140	95	118	118
2	Assam	1849	1588	615	574
3	Manipur	207	86	105	103
4	Meghalaya	315	255	302	229
5	Mizoram	150	55	60	60
6	Nagaland	173	155	96	93
7	Tripura	435	260	300	300
8	ISGS/PPs	0	0	2371	2370
	Total NER	3269	2494	3967	3847
	Total All India	186067	169164	194946	176088