

**GRID CONTROLLER OF INDIA LIMITED  
NATIONAL LOAD DESPATCH CENTRE  
NEW DELHI**

Date: 05-Dec-2023

**System Reliability Indices Report for the month of November 2023**

**Percentage (%) of times ATC was violated**

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	0	0.00	0.00
2	ER-NR	1	0.25	0.03
3	Import of NR	0	0.00	0.00
4	NEW-SR	0	0.00	0.00
5	NER Import	0	0.00	0.00

**Percentage(%) of times (N-1) Criteria was violated**

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	0	0.00	0.00
2	ER-NR	0	0.00	0.00
3	Import of NR	0	0.00	0.00
4	NEW-SR	0	0.00	0.00
4	NER Import	0	0.00	0.00

Remarks: Flows crossing Total Transfer Capability (TTC) on interregional corridors has been worked out as a proxy for (N-1) violation.

## FREQUENCY DEVIATION INDEX FOR NOVEMBER 2023

Date of reporting:

05-Dec-23

Date	Percentage of time frequency is			Freq Deviation Index* (FDI)	No. of hours frequency is outside 49.95-50.05 Hz	Average Frequency (Hz)
	<49.90 Hz	49.90 - 50.05 Hz	>50.05 Hz			
01-Nov-23	5.89	79.58	14.53	20.42	4:54	49.99
02-Nov-23	10.67	79.49	9.84	20.51	4:55	49.98
03-Nov-23	10.66	78.62	10.72	21.38	5:07	49.98
04-Nov-23	10.51	76.18	13.31	23.82	5:43	49.99
05-Nov-23	5.09	82.22	12.69	17.78	4:16	50.00
06-Nov-23	2.47	77.51	20.02	22.49	5:23	50.01
07-Nov-23	6.74	79.94	13.32	20.06	4:48	49.99
08-Nov-23	10.71	75.64	13.66	24.36	5:50	49.98
09-Nov-23	13.19	75.41	11.40	24.59	5:54	49.98
10-Nov-23	1.97	72.43	25.60	27.57	6:37	50.02
11-Nov-23	4.61	73.19	22.20	26.81	6:26	50.01
12-Nov-23	4.16	67.88	27.96	32.12	7:42	50.02
13-Nov-23	7.14	70.72	22.14	29.28	7:01	50.01
14-Nov-23	7.88	71.74	20.38	28.26	6:47	50.00
15-Nov-23	3.59	72.62	23.80	27.38	6:34	50.01
16-Nov-23	5.49	71.27	23.24	28.73	6:53	50.01
17-Nov-23	8.91	73.48	17.60	26.52	6:21	50.00
18-Nov-23	15.63	74.09	10.29	25.91	6:13	49.97
19-Nov-23	3.76	76.22	20.02	23.78	5:42	50.01
20-Nov-23	1.94	78.29	19.77	21.71	5:12	50.01
21-Nov-23	11.85	69.27	18.88	30.73	7:22	49.99
22-Nov-23	11.04	72.82	16.13	27.18	6:31	49.99
23-Nov-23	8.29	79.93	11.78	20.07	4:49	49.98
24-Nov-23	2.94	75.50	21.56	24.50	5:52	50.01
25-Nov-23	5.30	67.60	27.09	32.40	7:46	50.01
26-Nov-23	1.84	75.25	22.91	24.75	5:56	50.01
27-Nov-23	8.45	70.20	21.35	29.80	7:09	50.01
28-Nov-23	5.67	67.26	27.07	32.74	7:51	50.02
29-Nov-23	3.25	74.64	22.11	25.36	6:05	50.01
30-Nov-23	5.25	71.86	22.88	28.14	6:45	50.01
<b>November 2023</b>	<b>6.83</b>	<b>74.36</b>	<b>18.81</b>	<b>25.64</b>	<b>184:35</b>	<b>50.00</b>

\*FDI is defined as percentage of time for which frequency is outside IEGC band (49.90-50.05 Hz)

क्र.स. No.	क्षेत्र REGION	उपकेंद्र SUBSTATION	VOLTAGE < V(lower)* (V=380,728 kV)	V(lower) < VOLTAGE < V(upper)*	VOLTAGE > V(upper)* (V=420,800 kV)	Voltage Deviation Index (%age of time voltage is outside range)	Number of hours voltage was outside IEGC band during month	उच्चतम (कि.वो.) Maximum(kV)	निम्नतम(कि.वो.) Minimum(kV)	औसत (कि.वो.) Average(kV)
1	पूर्वी क्षेत्र ER	अंगुल ANGUL	0%	100%	0%	0%	0	789	752	773
2		दार्लिपली DARLIPALI	0%	100%	0%	0%	0	790	764	777
3		गया GAYA	0%	100%	0%	0%	0	785	746	771
4		जेरत JEERAT	0%	100%	0%	0%	0	781	736	758
5		झारसगंज JHARSUGUDA	0%	100%	0%	0%	1	801	771	787
6		मिदुनापुर MEDINIPUR	0%	100%	0%	0%	0	787	749	768
7		रांची RANCHI	0%	100%	0%	0%	0	796	764	781
8		ससारायम SASARAM	0%	99%	1%	1%	9	802	741	764
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	799	741	777
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	100%	0%	0%	1	802	738	778
3		अजमेर AJMER	0%	100%	0%	0%	1	801	749	778
4		अलीगढ़ ALIGARH	0%	100%	0%	0%	0	794	736	773
5		अनूपरा सी ANPARA-C	0%	100%	0%	0%	0	781	757	770
6		अनूपरा डी ANPARA-D	0%	100%	0%	0%	0	779	756	768
7		अन्ता ANTA	0%	100%	0%	0%	0	796	756	778
8		बलिया BALLIA	0%	100%	0%	0%	0	767	755	762
9		बारा BARA	0%	100%	0%	0%	0	791	756	773
10		भादला BHADLA	0%	100%	0%	0%	0	791	751	773
11		भादला-2 BHADLA-2	0%	100%	0%	0%	0	796	754	775
12		भिवानी BHIWANI	0%	100%	0%	0%	2	803	756	782
13		बीकानेर BIKANER	0%	100%	0%	0%	0	794	751	774
14		बरेली BAREILLY	0%	100%	0%	0%	0	801	735	777
15		चित्तौड़गढ़ CHITTORGARH	0%	100%	0%	0%	0	801	744	779
16		फतेहगढ़-2 FATEHGARH-2	0%	100%	0%	0%	0	790	752	774
17		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	796	738	767
18		घाटमपुर GHATAMPUR	0%	99%	1%	1%	6	806	747	783
19		ग्रेटर नोएडा GREATER NOIDA	0%	100%	0%	0%	0	799	746	780
20		हापुर HAPUR	0%	100%	0%	0%	0	802	744	778
21		जाहलपुर JAWAHARPUR	0%	100%	0%	0%	0	794	739	774
22		झटिकरा JHATIKARA	0%	100%	0%	0%	0	796	750	777
23		कानपुर जेआइएसएन KANPUR GIS	0%	100%	0%	0%	0	793	738	772
24		खेतरा KHETRI	0%	100%	0%	0%	0	801	754	779
25		कोटेश्वर KOTESHWAR	0%	100%	0%	0%	0	799	746	775
26		ललितपुर LALITPUR	0%	100%	0%	0%	0	778	734	761
27		लखनऊ LUCKNOW	0%	100%	0%	0%	0	796	742	772
28		मैनपुरी MAINPURI	0%	100%	0%	0%	0	795	737	765
29		मेरठ MEERUT	0%	100%	0%	0%	2	804	750	780
30		मेरठ(UP) MEERUT (UP)	0%	100%	0%	0%	0	801	743	777
31		मोगा MOGA	0%	100%	0%	0%	0	803	733	770
32		ओबरा सी OBRA C	0%	100%	0%	0%	0	782	752	766
33	उरई ORAI	0%	100%	0%	0%	1	803	749	784	
34	फागी PHAGI	0%	100%	0%	0%	0	798	750	778	
35	रामपुर RAMPUR	0%	99%	1%	1%	5	807	722	764	
36	उनाओ UNAO	0%	100%	0%	0%	0	795	735	764	
37	वाराणसी VARANASI	0%	100%	0%	0%	0	782	751	775	
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	794	752	774
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	797	746	777
3		भोपाल (बीडीसीएसएन) BHOPAL (BDTCL)	0%	100%	0%	0%	0	792	744	770
4		भुलु BHULU	0%	100%	0%	0%	0	792	752	776
5		भुलु-2 BHULU-2	0%	100%	0%	0%	0	786	748	771
6		बिलासपुर BILASPUR	0%	100%	0%	0%	0	788	757	772
7		बिना BINA	0%	100%	0%	0%	0	801	750	779
8		बनसकन्धा BANASKANTHA	0%	100%	0%	0%	1	803	760	783
9		चाम्पा CHAMPA	0%	93%	7%	7%	48	808	773	790
10		धुले (बीडीसीएसएन) DHULE (BDTCL)	0%	100%	0%	0%	0	797	745	775
11		धर्मजयगढ़ DHARAMJAGARH	0%	100%	0%	0%	0	792	756	776
12		रायपुर पोलिंग RAIPUR POOLING	0%	100%	0%	0%	0	794	765	782
13		एकतुनी EKTUNI	0%	100%	0%	0%	0	795	744	770
14		गदरवाड़ा GADARWARA	0%	99%	1%	1%	4	802	765	784
15		ग्वालियर GWALIOR	0%	100%	0%	0%	0	801	747	780
16		इंदौर INDORE	0%	100%	0%	0%	0	797	743	773
17		जबलपुर JABALPUR	0%	99%	1%	1%	10	805	760	785
18		खजवा KHANDWA	0%	100%	0%	0%	0	798	747	775
19		कोरडी KORADI	0%	100%	0%	0%	0	784	752	769
20		लखनविक्रम LAKADIVA	0%	100%	0%	0%	1	800	760	782
21		रायपुर पोलिंग RAIGARH POOLING	0%	100%	0%	0%	0	800	772	786
22		पडुबे PADGHE	0%	99%	1%	1%	4	806	743	779
23		पार्ली PARLI	0%	98%	2%	2%	14	805	750	784
24		पुणे PUNE	0%	99%	1%	1%	5	805	740	778
25		राजनन्दगाँव RAJNANDGAON	0%	96%	4%	4%	29	810	765	788
26		सासन SASAN	0%	100%	0%	0%	0	789	760	777
27		सतना SATNA	0%	100%	0%	0%	0	800	758	782
28		सिवनी SEONI	0%	100%	0%	0%	0	797	751	775
29		सीपत SIPAT	0%	100%	0%	0%	0	788	758	773
30		सोलापुर SOLAPUR	0%	98%	2%	2%	14	806	752	785
31		तिरौड़ा TIRODA	0%	100%	0%	0%	0	783	750	766
32		तामनार TAMNAR	0%	100%	0%	0%	0	798	769	784
33	वडोदरा VADODARA	0%	100%	0%	0%	3	803	740	779	
34	विन्ध्यचल पोलिंग VINDHYACHAL PS	0%	100%	0%	0%	0	793	767	780	
35	वर्धा WARDHA	0%	100%	0%	0%	0	796	750	777	
36	वरार WARORA	0%	99%	1%	1%	4	803	755	784	
1	दक्षिणी क्षेत्र SR	कडपा CDDAPAH	0%	93%	7%	7%	54	812	756	785
2		चिक्कलरीचेट CHILKALURIPETA	0%	93%	7%	7%	53	811	756	786
3		कुर्नूल KURNOOL	0%	100%	0%	0%	0	799	747	776
4		महेश्वरम MAHESHWARAM	0%	81%	19%	19%	134	812	757	790
5		निजामाबाद NIZAMABAD	0%	85%	15%	15%	106	813	758	790
6		नेल्लूर पोलिंग NELLORE PS	0%	100%	0%	0%	0	795	750	774
7		रायपुर RAICHUR	0%	100%	0%	0%	0	801	752	780
8		श्रीकाकुलम SRIKAKULAM	0%	97%	3%	3%	24	806	757	785
9		थिरुवलम THIRUVALEM	0%	100%	0%	0%	0	796	738	770
10		वेमगिरी VEMAGIRI	0%	86%	14%	14%	103	810	760	788
11		वरंगल WARANGAL	0%	85%	15%	15%	109	810	758	789
1	पूर्वोत्तरी क्षेत्र NER	बालिपारा BALIPARA (400 kV)	0%	0%	0%	0%	0	0	0	0
2		बिन्धनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	419	393	408
3		बोंगाईगाँव BONGAIGAOON (400 kV)	0%	100%	0%	0%	0	417	400	409
4		बोंगाईगाँव टीपीएस BONGAIGAOON TPS (400 kV)	0%	100%	0%	0%	0	420	401	411
5		इम्फाल IMPHAL (400 kV)	0%	100%	0%	0%	0	416	396	406
6		बय्रिहाट BYRNIHAT (400 kV)	0%	99%	1%	1%	5	421	402	412
7		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	414	392	404
8		अज़ारा AZARA (400 kV)	0%	100%	0%	0%	0	402	391	397
9		मिसा MISA (400 kV)	0%	100%	0%	0%	0	413	393	404
10		न्यू मरियानी NEW MARIANI (400 kV)	0%	100%	0%	0%	0	416	396	406
11		न्यू कोहिमा NEW KOHIMA (400 kV)	0%	100%	0%	0%	0	419	395	407
12		पालाताना PALATANA (400 kV)	0%	100%	0%	0%	0	413	402	409
13		पुर्बोचनारी PKBARI (400 kV)	0%	100%	0%	0%	0	412	393	405
14		रंगानादी RANGANADI (400 kV)	0%	99%	1%	1%	7	423	396	411
15		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	0	418	399	409
16		सुबानसिरी SUBANSIRI (400 kV)	0%	0%	0%	0%	0	0	0	0
17		सूर्ययामनिनगर SURJYAMANINAGAR (400 kV)	0%	100%	0%	0%	0	410	394	404
18		थोबाल THOUBAL (400 kV)	0%	100%	0%	0%	0	413	380	398

All listed stations are 765 kV stations unless otherwise mentioned  
\*Percentage is calculated w.r.t. Time of one month.

# Monthly Angular spread w.r.to Vindhyachal\_Nov-2023

AGRA\_PG ALIPU\_PG BACHU\_PG BONGA\_PG CHDPR\_MH DURG4\_WB FARAK\_PG GIJKA\_PG  
HOSUR\_PG KALW4\_MH KISNP\_PG KOLAR\_PG KOTA\_PG KSTPS\_GS KZKDE\_PG MOGA\_PG  
PATNA\_PG PURNW\_PG RHNHV\_PG SILCR\_PG TALCH\_PG TCHRN\_PG VINDP\_PG

