

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

Date: **05-Oct-2023**

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

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

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	92	23.00	3.19
2	ER-NR	3	0.75	0.10
3	Import of NR	17	4.25	0.59
4	NEW-SR	2	0.50	0.07
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	35	8.75	1.22
2	ER-NR	4	1.00	0.14
3	Import of NR	4	1.00	0.14
4	NEW-SR	3	0.75	0.10
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 SEPTEMBER 2023

Date of reporting:

05-Oct-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-Sep-23	20.34	70.29	9.38	29.71	7:07	49.96
02-Sep-23	4.49	80.91	14.59	19.09	4:34	50.00
03-Sep-23	1.66	77.14	21.20	22.86	5:29	50.02
04-Sep-23	4.10	61.20	34.70	38.80	9:18	50.03
05-Sep-23	1.12	78.88	20.00	21.12	5:04	50.01
06-Sep-23	1.96	82.88	15.16	17.12	4:06	50.00
07-Sep-23	2.18	80.08	17.74	19.92	4:46	50.01
08-Sep-23	2.70	82.88	14.42	17.12	4:06	50.01
09-Sep-23	5.22	83.33	11.45	16.67	4:00	49.99
10-Sep-23	3.65	83.44	12.92	16.56	3:58	50.00
11-Sep-23	1.15	82.37	16.48	17.63	4:13	50.01
12-Sep-23	7.01	82.01	10.97	17.99	4:19	49.99
13-Sep-23	5.71	85.86	8.44	14.14	3:23	49.99
14-Sep-23	11.64	81.69	6.67	18.31	4:23	49.98
15-Sep-23	5.83	75.96	18.21	24.04	5:46	50.00
16-Sep-23	6.62	75.07	18.31	24.93	5:59	50.00
17-Sep-23	6.08	65.38	28.54	34.62	8:18	50.01
18-Sep-23	2.30	73.89	23.81	26.11	6:16	50.02
19-Sep-23	5.46	75.31	19.22	24.69	5:55	50.01
20-Sep-23	3.45	79.41	17.14	20.59	4:56	50.00
21-Sep-23	2.33	72.62	25.06	27.38	6:34	50.02
22-Sep-23	1.06	83.08	15.86	16.92	4:03	50.01
23-Sep-23	4.61	80.39	15.00	19.61	4:42	50.00
24-Sep-23	3.16	64.97	31.88	35.03	8:24	50.03
25-Sep-23	3.89	87.40	8.72	12.60	3:01	49.99
26-Sep-23	8.48	79.69	11.83	20.31	4:52	49.99
27-Sep-23	12.53	75.88	11.59	24.12	5:47	49.98
28-Sep-23	4.48	81.30	14.22	18.70	4:29	50.00
29-Sep-23	7.33	77.13	15.54	22.87	5:29	50.00
30-Sep-23	7.40	76.49	16.11	23.51	5:38	49.99
<b>September 2023</b>	<b>5.26</b>	<b>77.90</b>	<b>16.84</b>	<b>22.10</b>	<b>159:08</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.सं. Sl. 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.वॉ.) Maximum(kV)	निम्नतम(कि.वॉ.) Minimum(kV)	औसत (कि.वॉ.) Average(kV)	
1	पूर्वी क्षेत्र ER	अंगुल ANGUL	0%	100%	0%	0%	0	800	753	771	
2		दालिपली DARLIPALI	0%	100%	0%	0%	0	795	764	777	
3		नया GAYA	0%	100%	0%	0%	0	795	752	776	
4		जौरत JERAT	0%	100%	0%	0%	0	793	738	763	
5		झारसुगुडा JHARSUGUDA	0%	100%	0%	0%	3	805	772	786	
6		मिदिनपुर MEDINIPUR	0%	100%	0%	0%	0	792	746	770	
7		रान्ची RANCHI	0%	100%	0%	0%	0	796	764	782	
8		सासाराम SASARAM	0%	100%	0%	0%	0	789	749	771	
1		उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	798	747	777
2			आगरा (फतेहगढ़) AGRA (FATEHABAD)	0%	100%	0%	0%	0	795	757	767
3	अजमेर AJMER		0%	100%	0%	0%	1	801	756	780	
4	अलीगढ़ ALIGARH		0%	100%	0%	0%	0	795	733	770	
5	अनूपरा सी ANPARA-C		0%	100%	0%	0%	0	783	758	769	
6	अनूपरा डी ANPARA-D		0%	100%	0%	0%	0	782	754	767	
7	अंता ANTA		0%	100%	0%	0%	0	794	757	779	
8	बलिया BALLIA		0%	100%	0%	0%	0	785	740	766	
9	बारा BARA		0%	100%	0%	0%	0	783	754	769	
10	भाडला BHADLA		0%	100%	0%	0%	0	790	751	772	
11	भाडला-2 BHADLA-2		0%	100%	0%	0%	0	796	755	775	
12	भिवानी BHIWANI		0%	100%	0%	0%	0	799	750	777	
13	बीकानेर BIKANER		0%	100%	0%	0%	0	796	753	774	
14	बरौली BAREILLY		0%	99%	1%	1%	4	807	741	773	
15	चित्तौड़गढ़ CHITTORGARH		0%	100%	0%	0%	3	803	760	782	
16	फतेहगढ़-2 FATEHGARH-2		0%	100%	0%	0%	0	796	746	773	
17	फतेहपुर FATEHPUR		0%	100%	0%	0%	0	799	740	772	
18	ग्रेटर नोइडा GREATER NOIDA		0%	100%	0%	0%	0	799	738	772	
19	हावड़ा HAPUR		0%	100%	0%	0%	3	810	730	770	
20	जाहानपुर JAWAHARPUR		0%	100%	0%	0%	0	809	742	770	
21	झाड़कपुर JHATIKARA		0%	100%	0%	0%	0	792	743	770	
22	कानपुर जीआरएस KANPUR GIS		0%	100%	0%	0%	0	794	748	772	
23	खैतरी KHETRI		0%	100%	0%	0%	0	795	748	774	
24	कोटेश्वर KOTESHWAR		0%	100%	0%	0%	0	792	741	769	
25	ललितपुर LALITPUR		0%	100%	0%	0%	0	781	740	756	
26	लखनऊ LUCKNOW		0%	100%	0%	0%	0	798	742	771	
27	मैनपुरी MAINPURI		0%	100%	0%	0%	0	794	739	768	
28	मेरठ MEERUT		0%	100%	0%	0%	0	798	743	774	
29	मोगा MOGA		0%	100%	0%	0%	0	803	741	770	
30	ओबरा सी OBRA C		0%	100%	0%	0%	0	782	753	765	
31	उरई ORAI	0%	100%	0%	0%	2	804	758	782		
32	फागी PHAGI	0%	100%	0%	0%	0	799	751	779		
33	उन्नाव UNNAO	0%	100%	0%	0%	0	788	738	763		
34	वाराणसी VARANASI	0%	100%	0%	0%	0	794	759	777		
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	791	755	774	
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	796	753	778	
3		भोपाल (बीडीटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	790	747	770	
4		भुज BHUJ	0%	100%	0%	0%	0	799	755	782	
5		भुवनेश्वर-2 BHUJ-II	0%	100%	0%	0%	0	790	751	775	
6		बिलासपुर BILASPUR	0%	100%	0%	0%	0	789	762	776	
7		बीना BINA	0%	100%	0%	0%	0	796	757	778	
8		बनारसकांठा BANASKANTHA	0%	99%	1%	1%	10	804	764	787	
9		चम्पा CHAMPA	0%	97%	3%	3%	20	807	757	788	
10		धुले (बीडीटीसीएल) DHULE (BDTCL)	0%	100%	0%	0%	0	798	752	777	
11		धर्मजयगढ़ DHARAMJAI GARH	0%	100%	0%	0%	0	790	761	775	
12		रायपुर पूलिंग RAIPUR POOLING	0%	100%	0%	0%	0	793	754	782	
13		एकतुनी EKTUNI	0%	100%	0%	0%	0	792	749	772	
14		गदरवाड़ा GADARWARA	0%	100%	0%	0%	0	799	772	786	
15		ग्वालियर GWALIOR	0%	100%	0%	0%	0	800	754	780	
16		इंदौर INDORE	0%	100%	0%	0%	0	793	749	775	
17		जबलपुर JABALPUR	0%	100%	0%	0%	0	802	768	786	
18		खडवा KHANDWA	0%	100%	0%	0%	0	796	752	777	
19		कोरडी KORADI	0%	100%	0%	0%	0	782	752	767	
20		लकडिआ LAKADIYA	0%	96%	4%	4%	27	807	760	787	
21		ससायन पूलिंग RAIGARH POOLING	0%	100%	0%	0%	0	798	772	786	
22		पाण्डे PADGHE	0%	100%	0%	0%	2	803	748	780	
23		पार्ली PARLI	0%	98%	2%	2%	14	805	761	786	
24		पुणे PUNE	0%	99%	1%	1%	7	805	744	779	
25		राजनन्दगाँव RAJNANDGAON	0%	99%	1%	1%	6	804	772	790	
26		सासन SASAN	0%	100%	0%	0%	0	792	768	780	
27		सतना SATNA	0%	100%	0%	0%	1	800	722	784	
28		सिवनी SEONI	0%	100%	0%	0%	0	795	762	779	
29		सीपत SIPAT	0%	100%	0%	0%	0	790	765	777	
30		सोलापुर SOLAPUR	0%	97%	3%	3%	24	805	763	787	
31		तिरुओ TIRORA	0%	100%	0%	0%	0	776	754	766	
32		तामनार TAMNAR	0%	100%	0%	0%	0	797	772	785	
33		वडोदरा VADODARA	0%	100%	0%	0%	3	802	746	780	
34		विंध्याचल पूलिंग VINDHYACHAL PS	0%	100%	0%	0%	0	795	771	783	
35		वर्धा WARDHA	0%	100%	0%	0%	0	797	758	781	
36		वरार WARORA	0%	100%	0%	0%	0	800	765	785	
1	दक्षिणी क्षेत्र SR	कडपा CUDDAPAH	0%	95%	5%	5%	35	812	755	785	
2		चिल्कलरीपेट CHILAKALURIPETA	0%	100%	0%	0%	0	794	746	769	
3		कुरील KURNOOL	0%	100%	0%	0%	0	798	746	776	
4		महेश्वर MAHESHWARAM	0%	95%	5%	5%	37	808	746	783	
5		निजामाबाद NIZAMABAD	0%	87%	13%	13%	93	814	750	788	
6		नेल्लोर पूलिंग NELLORE PS	0%	100%	0%	0%	0	788	745	770	
7		रायचूर RAICHUR	0%	100%	0%	0%	0	799	751	780	
8		श्रीकाकुलम SRIKAKULAM	0%	99%	1%	1%	9	809	753	780	
9		तिरुवल्लूर THIRUVALEM	0%	100%	0%	0%	0	795	735	768	
10		वेमगिरी VEMAGIRI	0%	98%	2%	2%	15	808	744	774	
1	पूर्वोत्तर क्षेत्र NER	बालिपारा BALIPARA (400 kV)	0%	0%	0%	0%	0	0	0	0	
2		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	419	398	409	
3		बोंगाईगाँव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	411	397	405	
4		बोंगाईगाँव टीपीएस BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	0	415	401	409	
5		इम्फाल IMPHAL (400 kV)	0%	100%	0%	0%	0	416	395	405	
6		बर्निहाट BYRNihat (400 kV)	0%	100%	0%	0%	0	418	400	411	
7		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	412	395	403	
8		अजरा AZARA (400 kV)	0%	100%	0%	0%	0	399	389	395	
9		मिसा MISA (400 kV)	0%	100%	0%	0%	0	413	391	403	
10		न्यू मरियानी NEW MARIANI (400 kV)	0%	100%	0%	0%	0	417	397	405	
11		न्यू कोहिमा NEW KOHIMA (400 kV)	0%	100%	0%	0%	0	411	380	394	
12		पालाटाना PALATANA (400 kV)	0%	100%	0%	0%	0	413	401	407	
13		पूबकचनवारी PK BARI (400 kV)	0%	100%	0%	0%	0	411	393	403	
14		रंगानादी RANGANADI (400 kV)	0%	98%	2%	2%	12	424	401	412	
15		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	0	415	397	407	
16		सुबान्सिरी SUBANSIRI (400 kV)	0%	0%	0%	0%	0	0	0	0	
17		सुरज्यामनिनगर SURJYAMANINAGAR (400 kV)	0%	100%	0%	0%	0	411	393	402	
18		थोउबाल THOUBAL (400 kV)	0%	100%	0%	0%	0	412	390	398	

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

# Montly Angular Spread w.r.to Vindhyachal\_Sep-2023

- AGRA
- HISAR
- MOGA PG
- BINA 400
- KALWA 400
- SATNA
- VINDHYACHAL
- KORBA STPS
- TRICHUR NORTH
- KOLAR
- GAZUWAKA
- TALCH
- FARAK
- PATNA
- BALIPARA
- BONGAIGAON
- SILCHAR
- KAYAMKULAM

