

FREQUENCY DEVIATION INDEX FOR JULY 2020

Date of reporting:

05-Aug-20

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-Jul-20	8.33	79.81	11.85	20.19	4:50	49.99
02-Jul-20	6.34	83.50	10.16	16.50	3:57	49.99
03-Jul-20	7.33	81.76	10.91	18.24	4:22	49.99
04-Jul-20	3.39	71.50	25.10	28.50	6:50	50.01
05-Jul-20	2.57	46.94	50.49	53.06	12:44	50.06
06-Jul-20	5.05	73.30	21.66	26.70	6:24	50.00
07-Jul-20	4.98	80.81	14.21	19.19	4:36	50.00
08-Jul-20	9.71	76.89	13.40	23.11	5:32	49.99
09-Jul-20	3.30	81.16	15.54	18.84	4:31	50.00
10-Jul-20	1.66	78.66	19.69	21.34	5:07	50.01
11-Jul-20	2.93	70.49	26.59	29.51	7:05	50.02
12-Jul-20	4.20	61.96	33.84	38.04	9:07	50.03
13-Jul-20	18.62	75.86	5.52	24.14	5:47	49.96
14-Jul-20	25.65	70.65	3.70	29.35	7:02	49.94
15-Jul-20	15.16	76.52	8.32	23.48	5:38	49.97
16-Jul-20	10.52	76.61	12.87	23.39	5:36	49.99
17-Jul-20	7.22	80.51	12.27	19.49	4:40	49.99
18-Jul-20	8.59	84.07	7.34	15.93	3:49	49.98
19-Jul-20	0.47	77.62	21.91	22.38	5:22	50.02
20-Jul-20	3.70	74.53	21.77	25.47	6:06	50.01
21-Jul-20	5.58	81.18	13.24	18.82	4:31	50.00
22-Jul-20	1.44	87.84	10.73	12.16	2:55	50.00
23-Jul-20	4.59	84.41	11.00	15.59	3:44	50.00
24-Jul-20	3.19	84.57	12.23	15.43	3:42	50.00
25-Jul-20	6.28	85.19	8.53	14.81	3:33	49.99
26-Jul-20	6.03	80.63	13.34	19.38	4:39	50.00
27-Jul-20	6.93	84.25	8.82	15.75	3:46	49.98
28-Jul-20	9.39	81.78	8.83	18.22	4:22	49.98
29-Jul-20	2.15	83.13	14.72	16.88	4:03	50.00
30-Jul-20	5.14	79.07	15.79	20.93	5:01	50.00
31-Jul-20	7.56	87.62	4.83	12.38	2:58	49.98
July 2020	6.71	78.15	15.14	21.85	0.22	50.00

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

**POWER SYSTEM OPERATION CORPORATION LIMITED
NATIONAL LOAD DESPATCH CENTRE
NEW DELHI**

Date: 05-Aug-2020

System Reliability Indices Report for the month of July 2020

Percentage (%) of times ATC was violated

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	1	0.25	0.03
2	ER-NR	151	37.75	5.07
3	Import of NR	1	0.25	0.03
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	68	17.00	2.28
3	Import of NR	1	0.25	0.03
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.

क्र.स. 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.वो.) Maximum(kV)	निम्नतम(कि.वो.) Minimum(kV)	औसत (कि.वो.) Average(kV)
1	पूर्वी क्षेत्र ER	अंगल ANGUL	0%	100%	0%	0%	0	801	760	779
2		गया GAYA	0%	100%	0%	0%	0	794	749	772
3		झारसगढ़ JHARSUGUDA	0%	93%	7%	7%	50	806	778	793
4		रांची RANCHI	0%	100%	0%	0%	0	794	764	781
5		सासाराम SASARAM	0%	100%	0%	0%	1	799	719	764
6		दार्जिलिणी DARLIPALI	0%	100%	0%	0%	0	796	773	784
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	804	749	777
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	94%	6%	6%	44	807	762	786
3		अनूपरा सी ANPARA-C	0%	100%	0%	0%	0	778	755	766
4		अनूपरा डी ANPARA-D	0%	100%	0%	0%	0	779	754	766
5		अंता ANTA	0%	100%	0%	0%	0	798	760	779
6		बलिया BALLIA	0%	100%	0%	0%	0	793	743	770
7		बारा BARA	0%	100%	0%	0%	0	792	755	775
8		बिहारी BIHWANI	0%	99%	1%	1%	7	806	750	779
9		बरेली BAREILLY	0%	98%	2%	2%	11	805	743	776
10		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	796	735	766
11		ग्रेटर नोएडा GREATER NOIDA	0%	97%	3%	3%	19	809	750	779
12		झुंझिकर JHATIKARA	0%	100%	0%	0%	1	803	743	776
13		कानपुर जेआइएस KANPUR GIS	0%	100%	0%	0%	0	800	746	773
14		लखनऊ LUCKNOW	0%	100%	0%	0%	2	803	745	775
15		लालितपुर LALITPUR	0%	100%	0%	0%	0	790	761	777
16		मेरठ MEERUT	0%	98%	2%	2%	15	811	740	776
17		मोना MOGA	0%	100%	0%	0%	1	802	742	774
18		प्राग्गंज PHAGAJ	0%	100%	0%	0%	0	799	748	777
19		वाराणसी VARANASI	0%	100%	0%	0%	0	796	750	776
20		उन्नाव UNNAO	0%	100%	0%	0%	0	790	735	765
21		चित्तौड़गढ़ CHITTORGARH	0%	100%	0%	0%	3	805	753	778
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	1	801	746	774
23		अजमेर AJMER	0%	100%	0%	0%	1	811	747	776
24		हापड़ HAPUR	0%	100%	0%	0%	2	802	740	769
25		मैनपुरी MAINPURI	0%	96%	4%	4%	28	810	756	782
26		उरई ORAI	0%	98%	2%	2%	12	806	756	782
27	बीकानेर BIKANER	0%	100%	0%	0%	0	801	739	773	
28	भादवा BHAOLA	0%	100%	0%	0%	1	804	737	770	
29	कोशंबी KOTESHWAR	0%	94%	6%	6%	42	812	748	781	
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	99%	1%	1%	11	804	764	788
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	799	752	779
3		भोपाल (बीडीटीसीएच) BHOPAL (BDTCL)	0%	100%	0%	0%	0	788	752	771
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	788	763	775
5		बीना BINA	0%	100%	0%	0%	0	800	759	780
6		चापा CHAMPA	0%	100%	0%	0%	4	803	774	788
7		धर्मजयगढ़ DHARAMJAIGARH	0%	100%	0%	0%	0	789	766	777
8		धुले (बीडीटीसीएच) DHULE (BDTCL)	0%	100%	0%	0%	0	793	750	776
9		एकतुनी EKTUNI	0%	96%	4%	4%	33	806	763	788
10		ग्वालियर GWALIOR	0%	100%	0%	0%	2	805	749	780
11		इंदौर INDORE	0%	100%	0%	0%	0	786	749	779
12		जबलपुर JABALPUR	0%	99%	1%	1%	4	806	765	783
13		कोरगी KORADI	0%	100%	0%	0%	0	788	757	774
14		पुणे PUNE	0%	100%	0%	0%	0	800	752	784
15		रायगढ़ पुलिंग RAIGARH POOLING	0%	100%	0%	0%	0	798	774	786
16		रायपुर पुलिंग RAIPUR POOLING	0%	100%	0%	0%	0	789	765	778
17		सासन SASAN	0%	100%	0%	0%	0	785	760	772
18		सतना SATNA	0%	100%	0%	0%	0	793	756	775
19		सिवनी SEONI	0%	100%	0%	0%	0	796	762	782
20		सीपट SIPAT	0%	100%	0%	0%	0	787	766	776
21		सोलापुर SOLAPUR	0%	97%	3%	3%	23	806	757	788
22		तामना TAMNAR	0%	100%	0%	0%	0	798	776	786
23		तिरुठा TIRORA	0%	100%	0%	0%	0	784	753	770
24		वडोदा VADODARA	0%	100%	0%	0%	0	798	764	784
25		विन्ध्यचल पुलिंग VINDHYACHAL PS	0%	100%	0%	0%	0	786	760	773
26		वर्धा WARDHA	0%	100%	0%	0%	0	799	748	780
27		भुज BHUJ	0%	100%	0%	0%	0	789	732	771
28		बनसकला BANASKANTHA	0%	100%	0%	0%	0	793	758	777
29		गदरवाड़ा GADARWARA	0%	100%	0%	0%	0	800	771	784
30		पडघे PADGHE	0%	84%	16%	16%	120	807	765	791
31	परली PARLI	0%	89%	11%	11%	82	807	762	791	
32	राजनन्दगांव RAJNANDGAON	0%	100%	0%	0%	1	800	774	788	
33	रंजना RANGORA	0%	100%	0%	0%	0	798	762	784	
34	खण्डवा KHANDWA	0%	100%	0%	0%	0	780	749	767	
1	दक्षिणी क्षेत्र SR	कर्जुन KURNOL	0%	100%	0%	0%	2	803	746	778
2		नेल्लूर पुलिंग NELLORE PS	0%	100%	0%	0%	2	803	750	778
3		रायचूर RAICHUR	0%	99%	1%	1%	7	804	748	781
4		निजामाबाद NIZAMABAD	0%	96%	4%	4%	27	808	739	783
5		श्रीकाकुलम SRIKAKULAM	0%	95%	5%	5%	34	810	738	784
6		तिरुवलम THIRUVALEM	0%	100%	0%	0%	2	803	739	776
7		कडपा CUDDAPAH	0%	92%	8%	8%	63	810	753	787
8		महेश्वरम MAHESHWARAM	0%	100%	0%	0%	2	809	729	775
9		वेमगिरी VEMAGIRI	0%	79%	21%	21%	159	813	752	793
10		चिल्कलुरिपेटा CHILKALURIPETA	0%	91%	9%	9%	66	811	744	788
1	पूर्वोत्तर क्षेत्र NER	अजरा AZARA (400 kV)	0%	100%	0%	0%	0	413	401	407
2		बालीपारा BALIPARA (400 kV)	0%	100%	0%	0%	0	413	402	406
3		बिस्वनाथ चरियालि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	418	393	407
4		बोंगागाँव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	418	396	407
5		बोंगागाँव टीसीएच BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	0	420	399	410
6		बर्मिहाट BYRNHAT (400 kV)	0%	100%	0%	0%	0	413	401	407
7		पालाताना PALATANANA (400 kV)	0%	100%	0%	0%	0	420	386	411
8		रंगानदी RANGANADI (400 kV)	0%	96%	4%	4%	26	425	399	413
9		मिसा MISA (400 kV)	0%	100%	0%	0%	2	420	392	407
10		सिलचर SILCHAR (400 kV)	2%	98%	2%	2%	14	417	350	404
11		इम्फाल IMPHAL (400 kV)	0%	100%	0%	0%	0	419	392	407
12		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	419	380	405

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

