

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

Date: 04-Dec-2020

System Reliability Indices Report for the month of November 2020

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	4	1.00	0.14
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 2020

Date of reporting:

04-Dec-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-Nov-20	2.43	82.55	15.02	17.45	4:11	50.01
02-Nov-20	5.38	79.43	15.19	20.57	4:56	50.00
03-Nov-20	1.71	80.35	17.94	19.65	4:43	50.02
04-Nov-20	3.60	82.81	13.59	17.19	4:07	50.00
05-Nov-20	7.03	77.51	15.46	22.49	5:23	50.00
06-Nov-20	2.05	78.43	19.53	21.57	5:10	50.01
07-Nov-20	2.77	83.30	13.94	16.70	4:00	50.00
08-Nov-20	2.57	84.19	13.24	15.81	3:47	50.00
09-Nov-20	2.64	81.84	15.52	18.16	4:21	50.01
10-Nov-20	1.48	80.13	18.39	19.87	4:46	50.01
11-Nov-20	2.80	85.08	12.12	14.92	3:34	50.00
12-Nov-20	8.47	79.22	12.30	20.78	4:59	49.99
13-Nov-20	2.43	78.73	18.84	21.27	5:06	50.01
14-Nov-20	7.78	73.58	18.65	26.42	6:20	49.99
15-Nov-20	10.38	80.28	9.34	19.72	4:44	49.98
16-Nov-20	5.79	74.06	20.15	25.94	6:13	50.00
17-Nov-20	2.73	81.23	16.04	18.77	4:30	50.00
18-Nov-20	4.20	82.25	13.55	17.75	4:15	50.00
19-Nov-20	4.19	83.13	12.69	16.88	4:03	50.00
20-Nov-20	2.93	83.09	13.98	16.91	4:03	50.00
21-Nov-20	5.61	78.04	16.34	21.96	5:16	50.00
22-Nov-20	8.48	78.78	12.73	21.22	5:05	49.99
23-Nov-20	10.38	75.84	13.77	24.16	5:47	49.99
24-Nov-20	5.67	77.28	17.05	22.72	5:27	50.00
25-Nov-20	2.07	79.63	18.30	20.37	4:53	50.01
26-Nov-20	3.84	73.32	22.84	26.68	6:24	50.01
27-Nov-20	6.83	78.51	14.66	21.49	5:09	50.00
28-Nov-20	3.55	81.22	15.23	18.78	4:30	50.00
29-Nov-20	6.41	79.80	13.78	20.20	4:50	49.99
30-Nov-20	2.75	83.63	13.61	16.37	3:55	50.00
November 2020	4.63	79.91	15.46	20.09	144:39	50.00

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

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	798	753	777
2		गया GAYA	0%	100%	0%	0%	0	793	748	777
3		झारसगुडा JHARSUGUDA	0%	95%	5%	5%	33	806	775	792
4		रांची RANCHI	0%	100%	0%	0%	0	799	753	780
5		सासाराम SASARAM	0%	99%	1%	1%	6	803	737	766
6		दार्जिलिगंजी DARJILINGI	0%	100%	0%	0%	0	794	770	785
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	805	740	780
2		आगरा (फतेहाबाद) AGRA (FATEHABAD)	0%	98%	2%	2%	14	812	736	783
3		अनपरा सी ANPARA-C	0%	100%	0%	0%	0	781	756	770
4		अनपरा डी ANPARA-D	0%	100%	0%	0%	0	782	755	768
5		अंता ANTA	0%	100%	0%	0%	0	796	749	779
6		बलिया BALLIA	0%	100%	0%	0%	0	794	743	776
7		बारा BARA	0%	100%	0%	0%	0	792	760	779
8		भिवानी BHIWANI	0%	98%	1%	1%	8	807	745	782
9		बरेली BAREILLY	0%	97%	3%	3%	24	807	741	786
10		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	796	734	767
11		ग्रेटर नोडा GREATER NOIDA	0%	94%	6%	6%	45	812	748	788
12		झाड़कवा JHATIKARA	0%	99%	1%	1%	5	804	743	782
13		कानपुर जीआईएस KANPUR GIS	0%	100%	0%	0%	0	798	741	773
14		लखनऊ LUCKNOW	0%	99%	1%	1%	6	805	743	783
15		ललितपुर LALITPUR	0%	98%	0%	2%	12	811	713	765
16		मेरठ MEERUT	0%	99%	1%	1%	5	810	738	782
17		मोगा MOGA	0%	100%	0%	0%	2	808	741	770
18		फागी PHAGI	0%	100%	0%	0%	0	800	737	778
19		वाराणसी VARANASI	0%	100%	0%	0%	0	799	748	780
20		उन्नाव UNNAO	0%	100%	0%	0%	0	792	735	768
21		चित्तौड़गढ़ CHITTOORGARH	0%	100%	0%	0%	0	806	743	779
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	0	798	742	779
23		अजमेर AJMER	0%	100%	0%	0%	0	803	739	776
24		हापड़ HAPUR	0%	100%	0%	0%	3	803	740	781
25	मैनपुरी MAINPURI	0%	93%	7%	7%	54	809	750	789	
26	उरई ORAI	0%	100%	0%	0%	2	801	750	783	
27	बिकानेर BIKANER	0%	100%	0%	0%	2	805	704	769	
28	भाड़ला BHADLA	0%	100%	0%	0%	1	801	731	766	
29	कोटेश्वर KOTESHWAR	0%	100%	0%	0%	3	803	743	781	
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	793	753	776
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	799	751	779
3		भोपाळ (बीडीटीसीएस) BHOPAL (BDTCL)	0%	100%	0%	0%	0	795	746	773
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	790	762	777
5		बीना BINA	0%	100%	0%	0%	0	799	748	779
6		चापा CHAMPA	0%	99%	1%	1%	7	804	774	791
7		धर्मजयगढ़ DHARAMJAIGARH	0%	100%	0%	0%	0	793	762	779
8		धुले (बीडीटीसीएस) DHULE (BDTCL)	0%	100%	0%	0%	0	795	749	775
9		एतुनी EKTUNI	0%	100%	0%	0%	0	793	746	776
10		ग्वालियर GWALIOR	0%	100%	0%	0%	0	799	741	781
11		इंदौर INDORE	0%	100%	0%	0%	0	793	748	772
12		जबलपुर JABALPUR	0%	99%	1%	1%	4	806	757	783
13		कोरडी KORADI	0%	100%	0%	0%	0	782	750	767
14		पुणे PUNE	0%	100%	0%	0%	0	800	740	777
15		रायगढ़ पुलिंग RAIGARH POOLING	0%	100%	0%	0%	2	801	775	789
16		रायपुर पुलिंग RAIPUR POOLING	0%	100%	0%	0%	0	798	770	789
17		सासन SASAN	0%	100%	0%	0%	0	781	751	768
18		सतना SATNA	0%	100%	0%	0%	0	789	749	773
19		सिवनी SEONI	0%	100%	0%	0%	0	801	759	781
20		सीपत SIPAT	0%	100%	0%	0%	0	789	764	777
21		सोलापूर SOLAPUR	0%	100%	0%	0%	2	803	758	782
22		तामनार TAMNAR	0%	100%	0%	0%	0	801	778	789
23		तिरुचूर TIRUCHUR	0%	100%	0%	0%	0	794	749	782
24		वडोदरा VADODARA	0%	100%	0%	0%	0	798	758	782
25		विंध्याचल पुलिंग VINHYACHAL PS	0%	100%	0%	0%	0	784	753	770
26		वर्धा WARDHA	0%	99%	1%	1%	5	805	765	786
27		भुज BHUJ	0%	100%	0%	0%	0	795	730	771
28		बनसकण BANASKANTHA	0%	100%	0%	0%	0	794	756	777
29		गदरवाड़ा GADARWARA	0%	100%	0%	0%	2	803	765	784
30		पडघे PADGHE	0%	98%	2%	2%	11	805	752	782
31		परली PARLI	0%	99%	1%	1%	6	802	766	785
32		राजनन्दगांव RAJNANDGAON	0%	97%	3%	3%	25	806	775	791
33		वरीया WARORA	0%	100%	0%	0%	2	801	766	784
34		खडवा KHANDWA	0%	100%	0%	0%	0	790	753	773
1	दक्षिणी क्षेत्र SR	कूर्नूल KURNOOL	0%	100%	0%	0%	1	800	743	777
2		नेल्लोर पुलिंग NELLORE PS	0%	100%	0%	0%	0	798	742	772
3		रायचूर RAICHUR	0%	100%	0%	0%	0	801	747	778
4		निजामाबाद NIZAMABAD	0%	90%	10%	10%	69	810	767	791
5		श्रीकाकुलम SRIKAKULAM	0%	89%	11%	11%	77	813	766	792
6		तिरुवल्लम THIRUVALLEM	0%	98%	2%	2%	17	808	746	779
7		कुड्डापह CUDDAPAH	0%	89%	11%	11%	79	813	748	785
8		महेश्वरम MAHESWARAM	0%	99%	1%	1%	9	805	748	779
9		वेमगिरी VEMGIRI	0%	84%	16%	16%	115	812	748	789
10		चिलकालुरिपेटा CHILAKALURIPETA	0%	98%	2%	2%	16	809	733	780
1	पूर्वोत्तर क्षेत्र NER	अजारा AZARA (400 kV)	0%	100%	0%	0%	0	412	400	407
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	0	416	392	406
3		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	417	394	406
4		बोंगाईगाव BONGAIGAOON (400 kV)	0%	100%	0%	0%	0	419	400	412
5		बोंगाईगाव टीपीएस BONGAIGAOON TPS (400 kV)	0%	98%	2%	2%	13	421	402	415
6		बर्निहट BYRNIHAT (400 kV)	0%	100%	0%	0%	0	412	400	407
7		पालाटाना PALATANA (400 kV)	0%	100%	0%	0%	0	419	399	414
8		रांगानादी RANGANADI (400 kV)	0%	100%	0%	0%	0	413	388	402
9		मैसा MISA (400 kV)	0%	100%	0%	0%	0	417	392	406
10		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	0	416	397	408
11		इम्फाल IMPHAL (400 kV)	0%	100%	0%	0%	1	421	392	407
12		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	417	387	406

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

Angular Difference of Important Nodes w.r.t. Agra

