

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

Date: 03-Jan-2020

System Reliability Indices Report for the month of December 2019

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	25	6.25	0.84
3	Import of NR	0	0.00	0.00
4	NEW-SR	53	13.25	1.78
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	4	1.00	0.13
3	Import of NR	0	0.00	0.00
4	NEW-SR	1	0.25	0.03
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 DECEMBER 2019

Date of reporting:

03-Jan-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-Dec-19	4.71	76.93	18.36	23.07	5:32	50.00
02-Dec-19	3.07	79.36	17.57	20.64	4:57	50.00
03-Dec-19	4.95	71.67	23.38	28.33	6:48	50.01
04-Dec-19	3.06	65.30	31.64	34.70	8:19	50.02
05-Dec-19	5.30	70.08	24.62	29.92	7:10	50.01
06-Dec-19	3.98	77.87	18.15	22.13	5:18	50.00
07-Dec-19	4.56	71.78	23.66	28.22	6:46	50.01
08-Dec-19	3.90	66.26	29.84	33.74	8:05	50.02
09-Dec-19	15.35	73.33	11.32	26.67	6:24	49.97
10-Dec-19	8.68	80.75	10.57	19.25	4:37	49.98
11-Dec-19	15.89	69.56	14.55	30.44	7:18	49.98
12-Dec-19	7.21	69.19	23.60	30.81	7:23	50.00
13-Dec-19	6.18	65.22	28.60	34.78	8:20	50.02
14-Dec-19	1.37	75.31	23.32	24.69	5:55	50.02
15-Dec-19	5.29	60.78	33.94	39.22	9:24	50.03
16-Dec-19	8.78	55.37	35.84	44.63	10:42	50.01
17-Dec-19	3.95	75.43	20.63	24.57	5:53	50.01
18-Dec-19	4.93	73.53	21.54	26.47	6:21	50.00
19-Dec-19	6.50	67.60	25.89	32.40	7:46	50.01
20-Dec-19	14.77	69.58	15.65	30.42	7:18	49.98
21-Dec-19	3.04	79.40	17.56	20.60	4:56	50.01
22-Dec-19	4.94	78.37	16.69	21.63	5:11	50.00
23-Dec-19	10.22	74.13	15.65	25.87	6:12	49.99
24-Dec-19	6.69	80.49	12.82	19.51	4:41	49.99
25-Dec-19	7.35	76.74	15.91	23.26	5:35	49.99
26-Dec-19	1.10	61.12	37.78	38.88	9:19	50.04
27-Dec-19	2.05	67.80	30.15	32.20	7:43	50.02
28-Dec-19	2.09	71.75	26.16	28.25	6:46	50.01
29-Dec-19	3.41	70.37	26.22	29.63	7:06	50.01
30-Dec-19	14.73	73.51	11.76	26.49	6:21	49.97
31-Dec-19	12.70	73.23	14.07	26.77	6:25	49.98
December 2019	6.48	71.67	21.85	28.33	0.28	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.वी.) Maximum(kV)	निम्नतम(कि.वी.) Minimum(kV)	औसत (कि.वी.) Average(kV)
1	पूर्वी क्षेत्र ER	अंगुल ANGUL	0%	100%	0%	0%	0	799	765	781
2		गया GAYA	0%	100%	0%	0%	0	800	753	777
3		झारसुगुडा JHARSUGUDA	0%	96%	4%	4%	30	805	775	794
4		रांची RAANCHI	0%	100%	0%	0%	0	794	762	782
5		सासाराम SASARAM	0%	100%	0%	0%	0	792	726	767
6		दार्जिलिगंजी DARLIPALI	0%	100%	0%	0%	0	796	770	783
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	800	748	783
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	93%	7%	7%	49	813	733	787
3		अनूपरा सी ANPARA-C	0%	100%	0%	0%	0	785	755	769
4		अनूपरा डी ANPARA-D	0%	100%	0%	0%	0	774	743	759
5		अंता ANTA	0%	100%	0%	0%	0	799	755	782
6		बलिया BALLIA	0%	100%	0%	0%	0	798	752	778
7		बारा BARA	0%	100%	0%	0%	0	796	758	780
8		भिवानी BHIWANI	0%	99%	1%	1%	11	804	748	785
9		बरेली BAREILLY	0%	83%	17%	17%	128	816	751	785
10		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	795	737	770
11		ग्रेटर नोएडा GREATER NOIDA	0%	84%	16%	16%	117	810	751	791
12		झाटिकर JHATIKARA	0%	99%	1%	1%	8	804	744	784
13		कानपुर जीआइएस KANPUR GIS	0%	100%	0%	0%	0	799	752	780
14		लखनऊ LUCKNOW	0%	90%	10%	10%	78	812	753	787
15		ललितपुर LALITPUR	0%	100%	0%	0%	4	813	716	772
16		मेरठ MERUT	0%	98%	2%	2%	13	809	739	783
17		मोहा MOGA	0%	100%	0%	0%	0	880	743	775
18		फागी PHAGI	0%	99%	1%	1%	8	804	747	783
19		वाराणसी VARANASI	0%	100%	0%	0%	1	802	756	783
20		उन्नाव UNNAO	0%	100%	0%	0%	0	793	739	769
21		चित्तौड़गढ़ CHITTOORGARH	0%	99%	1%	1%	7	804	747	781
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	0	800	746	781
23		अजमेर AJMER	0%	99%	1%	1%	6	804	740	776
24		हापड़ HAPUR	0%	96%	4%	4%	27	805	749	786
25		मैनपुरी MAINPURI	0%	96%	4%	4%	29	807	767	790
26		उरई ORAI	0%	99%	1%	1%	8	805	757	787
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	796	748	774
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	1	803	756	782
3		भोपाळ (बीडीटीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	793	745	772
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	789	761	776
5		बीना BINA	0%	100%	0%	0%	0	799	753	781
6		चम्पा CHAMPA	0%	100%	0%	0%	1	801	771	788
7		धर्मपुर धरम जागर DHARAM JAIGARH	0%	100%	0%	0%	0	789	753	774
8		धुल (बीडीटीएल) DHULE (BDTCL)	0%	100%	0%	0%	0	791	751	773
9		एकतुली EKTUNI	0%	100%	0%	0%	0	794	744	774
10		ग्वालियर GWALIOR	0%	100%	0%	0%	1	802	749	783
11		इंदौर INDORE	0%	100%	0%	0%	0	792	740	770
12		जबलपुर JABALPUR	0%	99%	1%	1%	4	805	758	784
13		कोरडी KORADI	0%	100%	0%	0%	0	782	745	765
14		पुणे PUNE	0%	100%	0%	0%	0	800	746	782
15		रायगड पुलिंग RAIGARH POOLING	0%	100%	0%	0%	1	801	769	786
16		रायपुर पुलिंग RAIPUR POOLING	0%	100%	0%	0%	0	794	759	780
17		सासन SASAN	0%	100%	0%	0%	0	782	755	770
18		सतना SATNA	0%	100%	0%	0%	0	791	751	775
19		सिलोनी SEONI	0%	100%	0%	0%	0	801	761	783
20		सिपाट SIPAT	0%	100%	0%	0%	0	789	763	776
21		सोलापुर SOLAPUR	0%	93%	7%	7%	62	809	759	789
22		तामनार TAMNAR	0%	100%	0%	0%	0	799	770	786
23		तिरुछा TIROHA	0%	100%	0%	0%	0	776	749	762
24		वडोदरा VADODARA	0%	100%	0%	0%	0	798	763	782
25		विंध्याचल पुलिंग VINDHYACHAL PS	0%	100%	0%	0%	0	783	757	771
26		वर्धा WARDHA	0%	100%	0%	0%	3	803	757	784
27		भुज BHUJ	0%	100%	0%	0%	0	788	744	770
28		बनसकांठा BANASKANTHA	0%	100%	0%	0%	0	793	756	778
29		गदरवाड़ा GADARWARA	0%	100%	0%	0%	2	801	767	785
30		पडरुधे PADGHE	0%	97%	3%	3%	19	805	763	786
31		परली PARLI	0%	96%	4%	4%	30	805	763	788
32		राजनन्दगांव RAJNANDGAON	0%	99%	1%	1%	10	805	770	788
33		रावरा WARORA	0%	96%	4%	4%	30	808	761	787
1	दक्षिणी क्षेत्र SR	कुर्नूल KURNOOL	0%	100%	0%	0%	0	798	743	778
2		नेल्लोर पुलिंग NELLORE PS	0%	100%	0%	0%	1	805	744	775
3		रायचूर RAICHUR	0%	100%	0%	0%	0	799	749	781
4		निजामाबाद NIZAMABAD	0%	91%	9%	9%	63	808	752	789
5		श्रीकाकुलम SRIKAKULAM	0%	91%	9%	9%	66	811	752	789
6		तिरुवल्लम THIRUVALEM	0%	100%	0%	0%	2	801	723	779
7		कुड्डापहा CUDDAPAH	0%	83%	17%	17%	127	811	749	790
8		महेश्वरम MAHESWARAM	0%	100%	0%	0%	0	802	736	779
9		वेमगिरी VEMAGIRI	0%	100%	0%	0%	0	779	738	765
1	पूर्वोत्तर क्षेत्र NER	अजारा AZARA (400 kV)	0%	100%	0%	0%	0	414	402	409
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	1	424	392	408
3		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	422	390	407
4		बोंगागांव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	416	398	407
5		बोंगागांव टीपीएस BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	0	419	398	409
6		बर्निहाट BYRNIHAT (400 kV)	0%	100%	0%	0%	0	414	402	409
7		पालाताना PALATANA (400 kV)	0%	100%	0%	0%	3	421	399	414
8		रांगानादी RANGANADI (400 kV)	0%	68%	32%	32%	235	433	400	417
9		मिसा MISA (400 kV)	0%	99%	1%	1%	6	424	393	410
10		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	0	419	398	410
11		इम्फाल IMPHAL (400 kV)	0%	98%	2%	2%	12	422	398	411
12		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	423	389	406

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

