

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

**System Reliability Indices Report for the month of December 2017**

Date: 5-Jan-2018

**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	0	0.00	0.00
3	Import of NR	0	0.00	0.00
4	NEW-SR	30	7.50	1.01
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	2	0.50	0.07
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.

विद्युत विभव रूपरेखा माह – दिसम्बर 2017

VOLTAGE PROFILE - DECEMBER 2017

Date of reporting: 05-Jan-18

क्र.स. SI. 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)	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%	801	771	788
2		गया GAYA	0%	100%	0%	0%	798	754	776
3		झारसगुडा JHARSUGUDA	0%	99%	1%	1%	803	776	790
4		रांची RANCHI	0%	100%	0%	0%	799	767	784
5		सासाराम SASARAM	0%	100%	0%	0%	797	722	756
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	803	759	785
2		आगरा (फतेहाबाद) AGRA (FATEHABAD)	0%	100%	0%	0%	760	758	759
3		अनपरा सी ANPARA-C	0%	100%	0%	0%	790	765	775
4		अनपरा डी ANPARA-D	0%	100%	0%	0%	790	764	775
5		अंता ANTA	0%	100%	0%	0%	800	750	782
6		बलिया BALLIA	0%	100%	0%	0%	798	750	778
7		भिवानी BHIWANI	0%	82%	18%	18%	812	769	793
8		बरेली BAREILLY	0%	100%	0%	0%	760	735	742
9		फतेहपुर FATEHPUR	0%	100%	0%	0%	789	746	771
10		ग्रेटर नोएडा GREATER NOIDA	0%	83%	17%	17%	812	776	794
11		झटिकरा JHATIKARA	0%	79%	21%	21%	810	766	793
12		कानपुर जेआइएस KANPUR GIS	15%	85%	0%	15%	760	721	747
13		लखनऊ LUCKNOW	0%	99%	1%	1%	806	761	783
14		ललितपुर LALITPUR	0%	100%	0%	0%	796	745	772
15		मेरठ MEERUT	0%	80%	20%	20%	817	770	794
16		मोगा MOGA	0%	99%	1%	1%	807	757	782
17		फागी PHAGI	0%	99%	1%	1%	804	755	784
18		वाराणसी VARANASI	0%	100%	0%	0%	802	764	783
19		उन्नाव UNNAO	0%	100%	0%	0%	790	745	766
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	794	752	774
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	802	747	778
3		भोपाल (बीडीटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	795	746	772
4		बिलासपुर BILASPUR	0%	100%	0%	0%	779	753	766
5		बीना BINA	0%	100%	0%	0%	797	749	776
6		चाण CHAMPA	0%	83%	17%	17%	809	779	796
7		धर्मजयगढ़ DHARAMJAIGARH	0%	100%	0%	0%	792	762	776
8		धुले (बीडीटीसीएल) DHULE (BDTCL)	0%	100%	0%	0%	801	743	779
9		एकतुनी EKTUNI	0%	100%	0%	0%	795	747	775
10		ग्वालियर GWALIOR	0%	100%	0%	0%	803	759	782
11		इंदौर INDORE	0%	100%	0%	0%	796	747	774
12		जबलपुर JABALPUR	0%	100%	0%	0%	800	759	781
13		कोरडी KORADI	0%	100%	0%	0%	783	752	767
14		पुणे PUNE	0%	100%	0%	0%	800	743	773
15		रायगढ़ पूलिंग RAIGARH POOLING	0%	82%	18%	18%	807	781	796
16		रायपुर पूलिंग RAIPUR POOLING	0%	98%	2%	2%	803	772	788
17		सासन SASAN	0%	100%	0%	0%	778	750	764
18		सतना SATNA	0%	100%	0%	0%	788	744	766
19		सिवनी SEONI	0%	100%	0%	0%	795	758	778
20		सीपट SIPAT	0%	100%	0%	0%	776	754	765
21		सोलापुर SOLAPUR	0%	96%	4%	4%	807	755	787
22		तामनार TAMNAR	0%	94%	6%	6%	805	780	795
23		तिरुंगी TIRORA	0%	100%	0%	0%	776	751	764
24		वडोदरा VADODARA	0%	100%	0%	0%	802	758	783
25		विन्ध्याचल पूलिंग VINDHYACHAL PS	0%	100%	0%	0%	781	753	766
26		वर्धा WARDHA	0%	99%	1%	1%	804	752	783
1	दक्षिणी क्षेत्र SR	कर्नूल KURNOOL	0%	94%	6%	6%	810	749	786
2		नल्लूर पूलिंग NELLORE PS	0%	93%	7%	7%	812	763	787
3		रायचूर RAICHUR	0%	96%	4%	4%	808	753	786
4		निजामाबाद NIZAMABAD	0%	95%	5%	5%	810	753	786
5		श्रीकाकुलम SRIKAKULAM	0%	93%	7%	7%	810	745	786
6		तिरुवल्लम THIRUVALEM	0%	48%	52%	52%	821	771	800
1	पूर्वोत्तर क्षेत्र NER	अज़ारा AZARA (400 kV)	0%	100%	0%	0%	412	400	408
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	424	391	410
3		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	423	382	409
4		बोंगाईगाव BONGAIGAON (400 kV)	0%	100%	0%	0%	420	391	410
5		बोंगाईगाव टीपीएस BONGAIGAON TPS (400 kV)	0%	96%	4%	4%	424	396	414
6		बर्निहाट BYRNHAT (400 kV)	0%	100%	0%	0%	412	400	408
7		पालाटाना PALATANA (400 kV)	0%	91%	9%	9%	422	401	416
8		रंगानदी RANGANADI (400 kV)	0%	88%	12%	12%	431	389	410
9		मिसा MISA (400 kV)	0%	97%	3%	3%	426	393	412
10		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	419	396	411

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

## FREQUENCY DEVIATION INDEX FOR DECEMBER 2017

Date of reporting: 05-Jan-18

Date	Percentage of time frequency is			Freq Deviation Index* (FDI)	Average Frequency (Hz)
	<49.9 Hz	49.9 - 50.05 Hz	>50.05 Hz		
01-Dec-17	9.03	72.15	18.82	27.85	49.99
02-Dec-17	7.40	75.29	17.31	24.71	49.99
03-Dec-17	9.95	71.01	19.04	28.99	49.99
04-Dec-17	13.94	71.75	14.32	28.25	49.98
05-Dec-17	8.45	75.93	15.63	24.07	49.99
06-Dec-17	10.21	75.50	14.29	24.50	49.98
07-Dec-17	7.40	76.09	16.52	23.91	49.99
08-Dec-17	7.33	77.00	15.67	23.00	49.99
09-Dec-17	21.57	70.19	8.24	29.81	49.95
10-Dec-17	16.33	71.79	11.88	28.21	49.97
11-Dec-17	14.64	74.47	10.89	25.53	49.97
12-Dec-17	22.89	69.97	7.14	30.03	49.95
13-Dec-17	34.25	60.46	5.29	39.54	49.93
14-Dec-17	22.28	70.89	6.83	29.11	49.96
15-Dec-17	23.94	65.36	10.71	34.64	49.96
16-Dec-17	5.95	74.86	19.19	25.14	50.00
17-Dec-17	6.39	68.02	25.59	31.98	50.01
18-Dec-17	13.00	68.33	18.67	31.67	49.99
19-Dec-17	10.81	76.09	13.10	23.91	49.98
20-Dec-17	8.26	83.80	7.94	16.20	49.98
21-Dec-17	5.67	79.14	15.19	20.86	49.99
22-Dec-17	15.05	77.65	7.30	22.35	49.97
23-Dec-17	22.47	70.71	6.83	29.29	49.95
24-Dec-17	14.42	77.64	7.94	22.36	49.97
25-Dec-17	13.15	77.14	9.71	22.86	49.97
26-Dec-17	9.13	77.78	13.09	22.22	49.98
27-Dec-17	13.07	72.89	14.04	27.11	49.98
28-Dec-17	4.02	77.30	18.68	22.70	50.00
29-Dec-17	8.60	80.23	11.17	19.77	49.98
30-Dec-17	12.62	73.37	14.02	26.63	49.98
31-Dec-17	6.53	76.74	16.74	23.26	50.00
<b>December 2017</b>	<b>12.86</b>	<b>73.86</b>	<b>13.28</b>	<b>26.14</b>	<b>49.98</b>

\*FDI is defined as percentage of time for which frequency is outside IEGC band (49.9-50.05 Hz)



Standard Chart

Legend:

- IMPHAL
- NTPC-VINDHYACHAL
- RANCHI
- THRISSUR
- BALLIA
- BASSI
- CGPL Mundra
- BALIPARA
- BVT

Voltage 1 Angle    NTPC-VINDHYACHAL

