

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

Date: **04-Oct-2019**

**System Reliability Indices Report for the month of September 2019**

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

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	125	31.25	4.34
2	ER-NR	5	1.25	0.17
3	Import of NR	142	35.50	4.93
4	NEW-SR	0	0.00	0.00
5	NER Import	84	21.00	2.92

**Percentage(%) of times (N-1) Criteria was violated**

S.No.	Corridor	Number of Blocks Violated	Number of Hours Violated	%Violation
1	WR-NR	18	4.50	0.63
2	ER-NR	0	0.00	0.00
3	Import of NR	10	2.50	0.35
4	NEW-SR	0	0.00	0.00
4	NER Import	58	14.50	2.01

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 2019

Date of reporting:

04-Oct-19

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-19	0.37	71.91	27.72	28.09	6:44	49.99
02-Sep-19	4.32	70.34	25.35	29.66	7:07	49.99
03-Sep-19	6.66	76.78	16.56	23.22	5:34	49.99
04-Sep-19	3.06	80.53	16.41	19.47	4:40	50.01
05-Sep-19	1.91	81.05	17.04	18.95	4:32	50.01
06-Sep-19	1.56	84.71	13.73	15.29	3:40	50.03
07-Sep-19	2.06	82.25	15.69	17.75	4:15	50.02
08-Sep-19	4.06	72.44	23.50	27.56	6:36	49.99
09-Sep-19	15.87	78.48	5.65	21.52	5:09	50.00
10-Sep-19	8.01	77.91	14.09	22.09	5:18	49.99
11-Sep-19	9.03	78.22	12.75	21.78	5:13	49.98
12-Sep-19	5.37	80.88	13.75	19.12	4:35	49.99
13-Sep-19	4.16	76.15	19.70	23.85	5:43	50.02
14-Sep-19	1.56	79.50	18.94	20.50	4:55	50.02
15-Sep-19	3.61	78.82	17.57	21.18	5:05	50.06
16-Sep-19	6.90	80.58	12.52	19.42	4:39	50.02
17-Sep-19	2.63	75.69	21.68	24.31	5:50	49.99
18-Sep-19	8.63	76.67	14.70	23.33	5:36	49.98
19-Sep-19	3.26	81.76	14.98	18.24	4:22	49.99
20-Sep-19	9.27	82.36	8.37	17.64	4:14	49.97
21-Sep-19	6.85	78.81	14.34	21.19	5:05	50.00
22-Sep-19	2.66	74.75	22.59	25.25	6:03	50.00
23-Sep-19	4.33	78.47	17.20	21.53	5:10	50.01
24-Sep-19	1.13	75.51	23.36	24.49	5:52	50.01
25-Sep-19	1.75	70.53	27.72	29.47	7:04	50.01
26-Sep-19	2.87	66.20	30.93	33.80	8:06	50.01
27-Sep-19	0.98	69.11	29.91	30.89	7:24	49.97
28-Sep-19	1.48	65.21	33.31	34.79	8:21	50.00
29-Sep-19	3.33	52.27	44.40	47.73	11:27	50.00
30-Sep-19	9.87	60.28	29.85	39.72	9:32	50.00
<b>September 2019</b>	<b>4.59</b>	<b>75.27</b>	<b>20.14</b>	<b>24.73</b>	<b>0.25</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.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	अंगल ANGUL	0%	97%	3%	3%	22	803	771	787
2		गया GAYA	0%	100%	0%	0%	0	793	753	774
3		झारसुगड़ JHARSUGUDA	0%	89%	0%	11%	78	808	779	794
4		रांची RAUCHI	0%	100%	0%	0%	0	790	765	781
5		सासाराम SASARAM	0%	100%	0%	0%	0	787	737	766
6		दार्जिलिगंजी DARJILALI	0%	100%	0%	0%	0	797	773	785
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	802	753	781
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	91%	9%	9%	66	808	743	789
3		अनपरा सी ANPARA-C	0%	100%	0%	0%	0	788	754	771
4		अनपरा डी ANPARA-D	0%	100%	0%	0%	0	788	752	769
5		अंता ANTA	0%	100%	0%	0%	0	798	759	781
6		बलिया BALLIA	0%	100%	0%	0%	0	798	749	776
7		बारा BARA	0%	100%	0%	0%	0	792	763	778
8		भिवानी BHIWANI	0%	100%	0%	0%	2	804	757	780
9		बरेली BAREILLY	0%	100%	0%	0%	0	760	734	759
10		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	794	743	770
11		ग्रेटर नोएडा GREATER NOIDA	0%	99%	1%	1%	5	804	755	782
12		झाटिकरा JHATIKARA	0%	100%	0%	0%	0	800	748	775
13		कानपुर जीआइएस KANPUR GIS	0%	100%	0%	0%	0	796	754	778
14		लखनऊ LUCKNOW	0%	100%	0%	0%	2	803	748	779
15		ललितपुर LALITPUR	0%	100%	0%	0%	3	805	725	780
16		मेरठ MERUT	0%	99%	1%	1%	7	803	754	781
17		मोहा MOGA	0%	100%	0%	0%	0	800	751	774
18		फागी PHAGI	0%	100%	0%	0%	1	803	758	782
19		वाराणसी VARANASI	0%	100%	0%	0%	0	801	758	780
20		उन्नाव UNNAO	0%	100%	0%	0%	0	786	739	765
21		चित्तौड़गढ़ CHITTOORGARH	0%	98%	2%	2%	11	805	761	787
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	0	797	753	778
23		अजमेर AJMER	0%	100%	0%	0%	1	806	748	781
24		हापड़ HAPUR	0%	100%	0%	0%	0	798	743	774
25		मैनपुरी MAINPURI	0%	99%	1%	1%	4	804	761	788
26		उरई ORAI	0%	100%	0%	0%	1	801	762	785
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	798	771	788
2		औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	800	759	783
3		भोपाल (बीडीटीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	789	759	773
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	789	769	780
5		बीना BINA	0%	100%	0%	0%	0	800	763	784
6		चम्पा CHAMPA	0%	100%	0%	0%	1	801	773	788
7		धर्मपुरगढ़ DHARAMJAIGARH	0%	100%	0%	0%	0	793	765	778
8		धुले (बीडीटीएल) DHULE (BDTCL)	0%	100%	0%	0%	0	790	732	771
9		एकतुली EKTUNI	0%	100%	0%	0%	1	800	769	787
10		ग्वालियर GWALIOR	0%	100%	0%	0%	1	801	759	783
11		इंदौर INDORE	0%	100%	0%	0%	0	783	747	766
12		जबलपुर JABALPUR	0%	100%	0%	0%	1	802	770	787
13		कोरगी KORADI	0%	100%	0%	0%	0	787	764	776
14		पुणे PUNE	0%	100%	0%	0%	0	800	729	782
15		रायगढ़ पल्लिग RAIGARH POOLING	0%	100%	0%	0%	0	798	776	787
16		रायपुर पल्लिग RAIPUR POOLING	0%	100%	0%	0%	0	790	768	779
17		सासन SASAN	0%	100%	0%	0%	0	787	763	774
18		सतना SATNA	0%	100%	0%	0%	0	793	761	779
19		सिलोनी SEONI	0%	100%	0%	0%	0	801	774	789
20		सिपाह SIPAT	0%	100%	0%	0%	0	788	771	781
21		सोलापुर SOLAPUR	0%	94%	6%	6%	43	808	766	790
22		तामनार TAMNAR	0%	100%	0%	0%	0	797	777	788
23		तिरुछा TIRORA	0%	100%	0%	0%	0	778	752	770
24		वडोदरा VADODARA	0%	100%	0%	0%	0	797	756	780
25		विंध्याचल पल्लिग VINDHYACHAL PS	0%	100%	0%	0%	0	786	763	775
26		वर्धा WARDHA	0%	100%	0%	0%	2	804	761	786
27		भुज BHUJ	0%	100%	0%	0%	0	791	757	776
28		बनसकांठ BANASKANTHA	0%	100%	0%	0%	0	800	766	784
29		गदरवाड़ा GADARWARA	0%	100%	0%	0%	0	799	769	788
30		पडरुघे PADGHE	0%	97%	3%	3%	20	805	755	783
31		परली PARLI	0%	100%	0%	0%	3	803	767	788
32		राजनन्दगांव RAJNANDGAON	0%	100%	0%	0%	0	799	779	790
33	वराण WARDORA	0%	100%	0%	0%	1	803	775	790	
1	दक्षिणी क्षेत्र SR	कुर्नूल KURNOOL	0%	100%	0%	0%	0	797	753	778
2		नेल्लोर पल्लिग NELLORE PS	0%	100%	0%	0%	0	790	753	773
3		रायचूर RAICHUR	0%	100%	0%	0%	0	802	758	783
4		निजामाबाद NIZAMABAD	0%	97%	3%	3%	23	809	722	787
5		श्रीकाकुलम SRIKAKULAM	0%	96%	4%	4%	30	807	764	787
6		तिरुवल्लम THIRUVALEM	0%	98%	2%	2%	12	805	749	777
7		कुड्डापह CUDDAPAH	0%	86%	14%	14%	98	810	760	790
8		महेश्वरम MAHESWARAM	0%	100%	0%	0%	1	802	746	775
9		वेमगिरी VEMAGIRI	0%	100%	0%	0%	0	791	762	773
1	पूर्वोत्तर क्षेत्र NER	अज़ारा AZARA (400 kV)	0%	100%	0%	0%	0	413	399	407
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	0	418	391	407
3		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	420	391	407
4		बोंगाईगांव BONGAIGAO (400 kV)	0%	100%	0%	0%	0	413	389	402
5		बोंगाईगांव टीपोरस BONGAIGAO TPS (400 kV)	0%	100%	0%	0%	2	421	396	409
6		बर्निहट BYRNIHAT (400 kV)	0%	100%	0%	0%	0	413	399	407
7		पालाटाना PALATANA (400 kV)	0%	0%	0%	0%	0	420	395	414
8		रांगानादी RANGANADI (400 kV)	0%	92%	8%	8%	58	429	402	414
9		मिसा MISA (400 kV)	0%	100%	0%	0%	1	422	393	409
10		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	1	423	394	408
11		इम्फाल IMPHAL (400 kV)	0%	100%	0%	0%	2	425	395	409
12		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	420	386	403

All listed stations are 765 kV stations unless otherwise mentioned

\*Percentage is calculated w.r.t. Time of one month.

