

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

Date: 05-Aug-2019

System Reliability Indices Report for the month of July 2019

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	21	5.25	0.71
3	Import of NR	51	12.75	1.71
4	NEW-SR	6	1.50	0.20
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	9	2.25	0.30
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 JULY 2019

Date of reporting:

05-Aug-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-Jul-19	7.31	73.53	19.16	26.47	6:21	50.00
02-Jul-19	4.69	78.40	16.91	21.60	5:11	50.00
03-Jul-19	12.59	70.08	17.33	29.92	7:10	49.99
04-Jul-19	11.02	60.54	28.44	39.46	9:28	50.00
05-Jul-19	5.11	68.78	26.11	31.22	7:29	50.01
06-Jul-19	3.81	68.39	27.80	31.61	7:35	50.02
07-Jul-19	2.75	61.89	35.36	38.11	9:08	50.03
08-Jul-19	3.70	66.85	29.44	33.15	7:57	50.02
09-Jul-19	1.45	65.21	33.34	34.79	8:21	50.03
10-Jul-19	1.55	59.03	39.42	40.97	9:50	50.03
11-Jul-19	11.83	53.56	34.61	46.44	11:08	50.01
12-Jul-19	18.52	63.07	18.41	36.93	8:51	49.98
13-Jul-19	3.25	73.07	23.68	26.93	6:27	50.01
14-Jul-19	1.98	68.78	29.24	31.22	7:29	50.02
15-Jul-19	2.67	61.82	35.51	38.18	9:09	50.03
16-Jul-19	2.73	68.11	29.16	31.89	7:39	50.03
17-Jul-19	20.90	67.35	11.75	32.65	7:50	49.96
18-Jul-19	17.72	76.16	6.12	23.84	5:43	49.96
19-Jul-19	3.31	74.36	22.33	25.64	6:09	50.01
20-Jul-19	5.16	70.20	24.64	29.80	7:09	50.01
21-Jul-19	10.14	70.67	19.19	29.33	7:02	49.99
22-Jul-19	15.31	72.25	12.44	27.75	6:39	49.98
23-Jul-19	14.54	71.06	14.40	28.94	6:56	49.98
24-Jul-19	2.04	63.08	34.88	36.92	8:51	50.03
25-Jul-19	3.01	67.41	29.58	32.59	7:49	50.02
26-Jul-19	5.79	69.98	24.24	30.02	7:12	50.01
27-Jul-19	4.54	68.43	27.04	31.57	7:34	50.01
28-Jul-19	1.27	67.85	30.88	32.15	7:43	50.03
29-Jul-19	2.79	71.25	25.96	28.75	6:54	50.01
30-Jul-19	11.57	75.61	12.81	24.39	5:51	49.99
31-Jul-19	6.79	69.54	23.67	30.46	7:18	50.01
July 2019	7.09	68.27	24.64	31.73	0.32	50.01

*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%	99%	1%	1%	4	802	770	784
2		गया GAYA	0%	100%	0%	0%	0	790	743	773
3		झारसुगुडा JHARSUGUDA	0%	94%	6%	0%	47	805	761	794
4		रांची RANCHI	0%	100%	0%	0%	0	794	765	781
5		सासाराम SASARAM	0%	100%	0%	0%	0	798	739	769
6		दार्जिलिंग DARJILING	0%	100%	0%	0%	0	799	762	787
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	800	755	784
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	96%	4%	4%	27	815	764	789
3		अनपरा सी ANPARA-C	0%	100%	0%	0%	0	785	749	773
4		अनपरा डी ANPARA-D	0%	100%	0%	0%	0	783	749	770
5		अंता ANTA	0%	100%	0%	0%	1	801	766	782
6		बलिया BALLIA	0%	100%	0%	0%	0	794	737	777
7		बारा BARA	0%	100%	0%	0%	0	790	759	776
8		भिवानी BHIWANI	0%	100%	0%	0%	1	803	751	782
9		बरेली BAREILLY	0%	100%	0%	0%	0	760	744	757
10		फतेहपुर FATEHPUR	0%	100%	0%	0%	0	793	743	774
11		ग्रेटर नोएडा GREATER NOIDA	0%	99%	1%	1%	10	812	757	785
12		झाड़कंडा JHATIKARA	0%	100%	0%	0%	0	800	747	778
13		कानपुर जीआइएस KANPUR GIS	0%	100%	0%	0%	0	795	747	779
14		लखनऊ LUCKNOW	0%	100%	0%	0%	1	803	741	782
15		ललितपुर LALITPUR	0%	100%	0%	0%	0	795	762	778
16		मेरठ MERUT	0%	99%	1%	1%	7	807	743	783
17		मोहा MOGA	0%	100%	0%	0%	0	795	744	772
18		फागी PHAGI	0%	100%	0%	0%	3	805	760	783
19		वाराणसी VARANASI	0%	100%	0%	0%	0	797	749	780
20		उन्नाव UNNAO	0%	100%	0%	0%	0	781	729	764
21		चित्तौड़गढ़ CHITTOORGARH	0%	99%	1%	1%	11	805	755	784
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	0	799	750	777
23		अजमेर AJMER	0%	100%	0%	0%	3	804	744	780
24		हापड़ HAPUR	0%	100%	0%	0%	1	807	746	774
25		मैनपुरी MAINPURI	0%	97%	3%	3%	21	807	764	785
26		उरई ORAI	0%	100%	0%	0%	3	802	762	784
1	पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	798	762	783
2		औरंगाबाद AURANGABAD	0%	99%	1%	1%	5	802	764	787
3		भोपाल (सीईटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	784	750	773
4		बिलासपुर BILASPUR	0%	100%	0%	0%	0	788	770	780
5		बीना BINA	0%	100%	0%	0%	0	794	761	781
6		चम्पा CHAMPA	0%	97%	3%	3%	19	807	779	792
7		धरमपुरा DHARAMJAIGARH	0%	100%	0%	0%	0	793	774	783
8		धुले (सीईटीसीएल) DHULE (BDTCL)	0%	100%	0%	0%	0	792	743	775
9		एकतुली EKTUNI	0%	100%	0%	0%	0	800	760	784
10		ग्वालियर GWALIOR	0%	100%	0%	0%	0	802	759	783
11		इंदौर INDORE	0%	100%	0%	0%	0	780	747	765
12		जबलपुर JABALPUR	0%	100%	0%	0%	0	801	771	789
13		कोरडी KORADI	0%	100%	0%	0%	0	782	756	771
14		पुणे PUNE	0%	100%	0%	0%	0	800	736	768
15		रायगड पल्लिंग RAIGARH POOLING	0%	100%	0%	0%	4	802	780	792
16		रायपुर पल्लिंग RAIPUR POOLING	0%	100%	0%	0%	0	794	773	785
17		सासन SASAN	0%	100%	0%	0%	0	784	762	772
18		सतना SATNA	0%	100%	0%	0%	0	790	760	776
19		सिलोनी SEONI	0%	100%	0%	0%	0	793	773	788
20		सिपाही SIPAHI	0%	100%	0%	0%	0	786	770	780
21		सोलापुर SOLAPUR	0%	95%	5%	5%	41	805	769	789
22		तामनार TAMNAR	0%	100%	0%	0%	1	801	781	792
23		तिरुछा TIRORA	0%	100%	0%	0%	0	773	753	765
24		वडोदरा VADODARA	0%	100%	0%	0%	0	795	754	779
25		विंध्याचल पल्लिंग VINDHYACHAL PS	0%	100%	0%	0%	0	785	764	772
26		वर्धा WARDHA	0%	99%	1%	1%	6	806	769	790
27		भुज BHUJ	0%	100%	0%	0%	0	793	751	773
28		बनसकांठा BANASKANTHA	0%	99%	1%	1%	4	813	762	781
29		गदरवाड़ा GADARWARA	0%	100%	0%	0%	0	798	775	787
30		पडरुघे PADGHE	0%	94%	6%	6%	45	807	764	788
31	परली PARLI	0%	92%	8%	8%	62	805	766	792	
32	राजनन्दगांव RAJNANDGAON	0%	98%	2%	2%	15	805	782	793	
33	वरदा WARDARA	0%	71%	29%	29%	216	809	779	797	
1	दक्षिणी क्षेत्र SR	कुर्नूल KURNOOL	0%	100%	0%	0%	0	800	752	778
2		नेल्लूर पल्लिंग NELLORE PS	0%	100%	0%	0%	0	800	754	777
3		रायचूर RAICHUR	0%	100%	0%	0%	0	799	754	780
4		निजामाबाद NIZAMABAD	0%	87%	13%	13%	95	813	755	791
5		श्रीकाकुलम SRIKAKULAM	0%	86%	14%	14%	102	814	755	791
6		तिरुवल्लम THIRUVALLEM	0%	99%	1%	1%	9	808	751	779
7		कुड्डापहा CUDDAPAH	0%	79%	21%	21%	155	818	761	791
8		महेश्वरम MAHESWARAM	0%	96%	4%	4%	31	810	739	779
9		वेमगिरी VEMAGIRI	0%	100%	0%	0%	0	784	753	771
1	पूर्वोत्तर क्षेत्र NER	अजारा AZARA (400 kV)	0%	100%	0%	0%	0	410	401	407
2		बालिपारा BALIPARA (400 kV)	0%	100%	0%	0%	0	415	391	406
3		बिस्वनाथ चरिआलि BISWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	418	391	406
4		बोंगाईगांव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	407	388	402
5		बोंगाईगांव टीपोरस BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	0	415	395	409
6		बर्नihat BYRNihat (400 kV)	0%	100%	0%	0%	0	410	401	407
7		पालाताना PALATANA (400 kV)	0%	100%	0%	0%	0	415	406	413
8		रांगानादी RANGANADI (400 kV)	0%	99%	1%	1%	7	427	411	421
9		मिसा MISA (400 kV)	0%	100%	0%	0%	0	419	395	409
10		सिलचर SILCHAR (400 kV)	0%	100%	0%	0%	3	420	395	408
11		इम्फाल IMPHAL (400 kV)	0%	99%	1%	1%	7	424	392	408
12		कामेंग KAMENG (400 kV)	0%	100%	0%	0%	0	416	396	401

All listed stations are 765 kV stations unless otherwise mentioned

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

