

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

Date: 05-Apr-2021

System Reliability Indices Report for the month of March 2021

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	5	1.25	0.17
3	Import of NR	0	0.00	0.00
4	NEW-SR	73	18.25	2.45
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	3	0.75	0.10
4	NER Import	0.5	0.13	0.02

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 MARCH 2021

Date of reporting:

05-Apr-21

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-Mar-21	3.95	74.88	21.17	25.12	6:01	50.01
02-Mar-21	2.63	71.06	26.31	28.94	6:56	50.02
03-Mar-21	2.88	70.91	26.20	29.09	6:58	50.02
04-Mar-21	6.47	76.42	17.11	23.58	5:39	50.00
05-Mar-21	8.89	79.34	11.77	20.66	4:57	49.98
06-Mar-21	10.37	73.22	16.41	26.78	6:25	49.99
07-Mar-21	1.11	72.91	25.98	27.09	6:30	50.02
08-Mar-21	10.19	79.13	10.68	20.87	5:00	49.98
09-Mar-21	11.48	74.87	13.65	25.13	6:01	49.99
10-Mar-21	12.82	75.24	11.93	24.76	5:56	49.99
11-Mar-21	2.57	71.83	25.60	28.17	6:45	50.02
12-Mar-21	2.18	72.30	25.52	27.70	6:38	50.02
13-Mar-21	8.99	70.88	20.13	29.12	6:59	50.00
14-Mar-21	6.08	76.81	17.12	23.19	5:34	50.00
15-Mar-21	7.38	71.30	21.32	28.70	6:53	50.00
16-Mar-21	10.57	76.59	12.85	23.41	5:37	49.98
17-Mar-21	27.31	65.21	7.48	34.79	8:21	49.95
18-Mar-21	9.46	79.65	10.89	20.35	4:53	49.98
19-Mar-21	7.44	69.14	23.41	30.86	7:24	50.00
20-Mar-21	5.10	65.96	28.94	34.04	8:10	50.02
21-Mar-21	6.71	71.83	21.46	28.17	6:45	50.00
22-Mar-21	14.21	72.62	13.17	27.38	6:34	49.98
23-Mar-21	1.26	71.05	27.69	28.95	6:56	50.03
24-Mar-21	6.20	73.99	19.80	26.01	6:14	50.00
25-Mar-21	2.97	72.20	24.83	27.80	6:40	50.01
26-Mar-21	16.44	72.36	11.20	27.64	6:38	49.98
27-Mar-21	2.60	72.63	24.77	27.37	6:34	50.02
28-Mar-21	0.81	76.16	23.03	23.84	5:43	50.03
29-Mar-21	5.31	72.97	21.71	27.03	6:29	50.01
30-Mar-21	4.99	64.50	30.51	35.50	8:31	50.02
31-Mar-21	1.68	68.26	30.06	31.74	7:37	50.02
March 2021	7.13	72.78	20.09	27.22	202:30	50.00

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

क्र.सं. 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.वोल्ट.) Maximum(kV)	निम्नतम(कि.वोल्ट.) Minimum(kV)	औसत (कि.वोल्ट.) Average(kV)	
1	पूर्वी क्षेत्र ER	अंगल ANGUL	0%	100%	0%	0%	0	799	744	773	
2		गया GAYA	0%	100%	0%	0%	0	785	747	766	
3		झारसुगुड़ा JHARSUGUDA	0%	99%	1%	1%	4	809	773	789	
4		रान्ची RANCHI	0%	100%	0%	0%	0	788	759	776	
5		सासारम SASARAM	0%	100%	0%	0%	0	792	741	760	
6		दरलपल्ली DARLPALI	0%	100%	0%	0%	0	796	740	760	
7		मिदिनपुर MEDINIPUR	0%	100%	0%	0%	0	778	741	757	
1	उत्तरी क्षेत्र NR	आगरा AGRA	0%	100%	0%	0%	0	801	758	780	
2		आगरा (फतेहबाद) AGRA (FATEHABAD)	0%	99%	1%	1%	5	805	742	764	
3		अनपरा सी ANPARA-C	0%	100%	0%	0%	0	786	759	769	
4		अनपरा डी ANPARA-D	0%	100%	0%	0%	0	783	757	767	
5		अन्ता ANTA	0%	100%	0%	0%	2	802	761	783	
6		बलिया BALLIA	0%	100%	0%	0%	0	788	743	767	
7		बारा BARA	0%	100%	0%	0%	0	800	756	780	
8		भिवानी BHIWANI	0%	100%	0%	0%	3	803	761	785	
9		बरेली BAREILLY	0%	99%	1%	1%	4	806	746	779	
10		बरेली FATEHPUR	0%	100%	0%	0%	0	793	745	767	
11		ग्रेटर नोडा GREATER NOIDA	0%	97%	3%	3%	22	806	756	788	
12		झुंझिकर JHATIKARA	0%	100%	0%	0%	0	801	758	784	
13		कानपुर जेआरएस KANPUR GIS	0%	100%	0%	0%	0	797	742	772	
14		लखनऊ LUCKNOW	0%	100%	0%	0%	0	801	748	775	
15		ललितपुर LALITPUR	0%	100%	0%	0%	0	796	735	775	
16		मेरठ MEERUT	0%	100%	0%	0%	1	801	743	780	
17		मोहा MOGA	0%	100%	0%	0%	1	804	744	774	
18		फाजी PHAGI	0%	99%	1%	1%	9	808	757	785	
19		वारानसी VARANASI	0%	100%	0%	0%	0	794	754	774	
20		लुनावा UNAO	0%	100%	0%	0%	0	789	738	763	
21		चित्तौड़गढ़ CHITTORGARH	0%	100%	0%	0%	0	801	761	784	
22		अलीगढ़ ALIGARH	0%	100%	0%	0%	1	801	752	782	
23		अजमेर AJMER	0%	100%	0%	0%	0	799	751	780	
24		हापड़ HAPUR	0%	99%	1%	1%	10	806	753	786	
25		मैनपुरी MAINPURI	0%	96%	4%	4%	28	805	757	788	
26		उरुई ORAI	0%	100%	0%	0%	4	803	765	788	
27		बीकानेर BIKANER	0%	100%	0%	0%	0	798	741	771	
28		भादवा BHADLA	0%	100%	0%	0%	0	800	733	770	
29		कोशंबा KOTESHWAR	0%	100%	0%	0%	0	784	747	778	
1		पश्चिमी क्षेत्र WR	अकोला AKOLA	0%	100%	0%	0%	0	800	759	773
2			औरंगाबाद AURANGABAD	0%	100%	0%	0%	0	799	748	777
3			भोपाल (बीडीटीसीएल) BHOPAL (BDTCL)	0%	100%	0%	0%	0	790	750	771
4			बिलासपुर BILASPUR	0%	100%	0%	0%	0	786	761	773
5			बीना BINA	0%	100%	0%	0%	0	798	763	782
6	चापा CHAMPA		0%	100%	0%	0%	0	801	773	788	
7	धर्मनगढ़ DHARAMJAIGARH		0%	100%	0%	0%	0	792	766	777	
8	धुल (बीडीटीसीएल) DHULE (BDTCL)		0%	100%	0%	0%	0	801	746	771	
9	एकमी EKTUNI		0%	100%	0%	0%	0	795	748	768	
10	ग्वाल्हेर GWALIOR		0%	100%	0%	0%	0	800	763	785	
11	इंदौर INDORE		0%	100%	0%	0%	0	790	749	770	
12	जबलपुर JABALPUR		0%	100%	0%	0%	0	801	765	785	
13	कोरडी KORADI		0%	100%	0%	0%	0	793	759	771	
14	पुणे PUNE		0%	100%	0%	0%	0	800	747	780	
15	रायगढ़ पलिंग RAIGARH POOLING		0%	100%	0%	0%	0	797	776	787	
16	रायपुर पलिंग RAIPUR POOLING		0%	100%	0%	0%	0	797	766	782	
17	सासन SASAN		0%	100%	0%	0%	0	782	761	772	
18	सातना SATNA		0%	100%	0%	0%	0	792	762	777	
19	सेवनी SEONI		0%	100%	0%	0%	0	795	761	778	
20	सीपट SIPAT		0%	100%	0%	0%	0	786	764	774	
21	सोलापुर SOLAPUR		0%	98%	2%	2%	15	805	749	779	
22	तामनार TAMNAR		0%	100%	0%	0%	0	795	777	786	
23	तिरुंगा TIRORA		0%	100%	0%	0%	0	783	758	766	
24	वडोदरा VADODARA		0%	100%	0%	0%	0	793	753	774	
25	विंध्याचल पलिंग VINHYACHAL PS		0%	100%	0%	0%	0	784	763	774	
26	वर्धा WARDHA		0%	99%	1%	1%	9	805	760	783	
27	भुज BHUJ		1%	99%	0%	1%	6	782	698	764	
28	बनारका BANASKANTHA		0%	100%	0%	0%	0	792	767	770	
29	गदरवाडा GADARWARA		0%	100%	0%	0%	0	794	766	787	
30	पडरु पाडगे PADGHE		0%	98%	0%	0%	0	803	751	789	
31	परली PARLI		0%	100%	0%	0%	0	799	757	779	
32	राजनन्दगांव RAJNANDGAON		0%	100%	0%	0%	0	801	772	789	
33	वरौर WARORA		0%	100%	0%	0%	0	795	764	780	
34	खडवा KHANDWA		0%	100%	0%	0%	0	789	756	771	
1	दक्षिणी क्षेत्र SR	कन्नूर KUNNOOL	0%	100%	0%	0%	0	799	745	771	
2		कन्नूर पलिंग NELLORE PS	0%	100%	0%	0%	0	798	743	770	
3		रायचूर RAICHUR	0%	100%	0%	0%	1	803	749	773	
4		निजाामाबाद NIZAMABAD	0%	91%	9%	9%	66	812	748	790	
5		श्रीकाकुलम SRIKAKULAM	0%	90%	10%	10%	71	813	749	781	
6		तिरुवलम THIRUVALEM	0%	100%	0%	0%	1	804	745	777	
7		कुडपा CUDDAPAH	0%	94%	6%	6%	42	816	754	784	
8		महेश्वरम MAHESWARAM	0%	99%	1%	1%	9	809	735	771	
9		वेमगिरी VEMAGIRI	0%	98%	2%	2%	18	809	746	783	
10		चिक्कलुरीपेट चिलकालुरिपेटा CHILAKALURIPETA	0%	95%	5%	5%	38	817	746	781	
1		पूर्वी क्षेत्र NER	अजारा AZARA (400 kV)	0%	100%	0%	0%	0	410	405	409
2			बालीपारा BALIPARA (400 kV)	0%	100%	0%	0%	0	417	392	405
3			बिसुवानथ चारियाल BISHWANATH CHARIALI (400 kV)	0%	100%	0%	0%	0	415	392	404
4			बोनागागांव BONGAIGAON (400 kV)	0%	100%	0%	0%	0	419	399	408
5			बोनागागांव टीपीएस BONGAIGAON TPS (400 kV)	0%	100%	0%	0%	1	421	401	410
6	बर्निहाट BYRNIHAT (400 kV)		0%	100%	0%	0%	0	410	405	409	
7	पालाताना PALATANA (400 kV)		0%	100%	0%	0%	0	415	399	408	
8	रंगानदी RANGANADI (400 kV)		0%	97%	3%	3%	20	426	391	408	
9	मिसा MISA (400 kV)		0%	100%	0%	0%	0	415	392	405	
10	सिलचर SILCHAR (400 kV)		6%	93%	0%	7%	50	422	354	408	
11	इम्फाल IMPHAL (400 kV)		0%	100%	0%	0%	0	422	390	409	
12	कामेंग KAMENG (400 kV)		0%	100%	0%	0%	0	417	389	404	
13	न्यू कोहिमा NEW KOHIMA (400 kV)		0%	100%	0%	0%	0	421	389	406	
14	पूर्वकचनवारी PK BARI (400 kV)		0%	100%	0%	0%	0	420	386	407	
15	सुर्ययामगिनगर SURJYAMANINAGAR (400 kV)		0%	100%	0%	0%	0	420	391	407	

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. Bongaigaon

