

पावर सिस्टम ऑपरेशन कॉर्पोरेशन लिमिटेड
(भारत सरकार का उद्यम)
POWER SYSTEM OPERATION CORPORATION LIMITED
(A Government of India Enterprise)



उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र : लोअर नंगरा, लापालांग, शिलांग-793006, (मेघालय)
North Eastern Regional Load Despatch Centre: Lower Nongrah, Lapalang, Shillong - 793006, (Meghalaya)
Ph : 0364-2537470, 2537427, Fax - 2537486 Website : www.nerldc.org, Email - nerldc@posoco.in, CIN : U40105DL2009GOI188682

संदर्भ: उपक्षेत्रीय/ एस.ओ-2/ 2021/12/1146

दिनांक/Date: 25.03.21

सेवा में/To:

वितरण सूची के अनुसार / As per Distribution List

प्रतिलिपि/Copy to:

Member Secretary, NERPC, NERPC Complex, Dong Parmaw, Shillong – 793006

विषय/Sub:

फ़रवरी '21 महीने के लिए उत्तर-पूर्वी क्षेत्रीय ग्रिड में ग्रिड व्यवधान और ग्रिड घटनाओं की रिपोर्ट, मूल कारण विश्लेषण और उपचार उपायों का सुझाव / Report on Grid Disturbances & Grid Incidents of North-Eastern Regional Grid, Root cause analysis and suggested remedial measures for February'21

महोदय / Sir,

उत्तर-पूर्वी क्षेत्रीय ग्रिड में ग्रिड व्यवधान और ग्रिड घटनाओं की रिपोर्ट मासिक आधार पर तैयार और अपलोड किया जा रहा है। फ़रवरी '21 महीने के लिए उत्तर-पूर्वी क्षेत्रीय ग्रिड में ग्रिड व्यवधान और ग्रिड घटनाओं की रिपोर्ट उ.पू.क्षे.भा.प्रे.के. के वेब साईट <https://www.nerldc.in/grid-disturbance-report/> में उपलब्ध है।

तत्वों की ट्राइपिंग, ग्रिड व्यवधान और ग्रिड घटनाओं का मूल कारण बिजली उपयोगिताओं द्वारा प्रस्तुत आंकड़ों के आधार पर पहचाना जाता है और तदनुसार इन घटनाओं के लिए उपचारात्मक उपायों का सुझाव दिया जाता है। आपके अंत में विश्लेषण के अनुसार मूल कारणों में किसी भी अंतर के मामले में, आपको 1 सप्ताह के भीतर जरूरी औचित्य के साथ मूल कारणों को अवगत कराने का अनुरोध किया जाता है।

Report on Grid Disturbances & Grid Incidents of North-Eastern Regional Grid is being prepared and uploaded in NERLDC website on monthly basis. Report on Grid Disturbances & Grid Incidents of North-Eastern Regional Grid for the month of **February'21** is available at <https://www.nerlhc.in/grid-disturbance-report/>.

Root causes of tripping of elements, Grid Disturbances & Grid Incidents are identified based on the data submitted by Power Utilities and accordingly remedial measures are suggested for these events. In case of any difference in root cause as per analysis at your end, you are requested to intimate us the root cause with necessary justifications within 1 week.

सादर/With Regards

भवदीय /Yours faithfully

**SAMAR
CHANDRA
DE**

Digitally signed by SAMAR CHANDRA DE
DN: c=IN, o=Power System Operation
Corporation Ltd, ou=North Eastern
Regional Load Dispatch Center,
postalCode=795006, st=Meghalaya,
2.5.4.20=c4b21915deb5ecaed733f8caee9
77b1b104da96b4d3f465533919b577a825ff
serialNumber=8a218911319e13b99b20ed
9ce63d99f9514804e29d3b877b453ec226f
e1e4a37, cn=SAMAR CHANDRA DE
Date: 2021.03.25 15:03:06 +05'30'

(एस सी डे / S.C. De)

महाप्रबंधक (एस.ओ-2) G.M. (S.O.-II)

उपक्षेत्राधिकारी, शिलांग / NERLDC, Shillong

वितरण सूची / Distribution List:

1. Sr. Executive Engineer, SLDC T&D Division-2, Department of Power, Arunachal Pradesh- 791111
2. CGM, SLDC Assam, AEGCL, Near 132 kV Grid Substation, Kahilipara, Guwahati – 781019
3. GM, SLDC Manipur, MSPCL, Keishampat, Imphal West, Manipur - 795001
4. Superintending Engineer (SLDC), SLDC Meghalaya, NEHU Substation, Shillong – 793022
5. Superintending Engineer, SLDC Mizoram, Power House, Electric Veng, Aizawl, Mizoram – 796001
6. Executive Engineer (Transmission), SLDC Nagaland, DoP Nagaland, Electricity Colony, Full Nagarjan, Dimapur, Nagaland – 797112
7. DGM (System Operation), SLDC Agartala, TSECL, 79-Tilla, Tripura (West), Agartala – 799006
8. DGM(MRT), MRT Circle, AEGCL, Narengi, Guwahati
9. DGM (Substation Division No. 1), MSPCL, Keishampat, Imphal
10. Executive Engineer (System Protection), MePTCL, Umiam
11. Executive Engineer (MRT), Power & Electricity Department, Mizoram, Aizawl
12. SDO (Testing & Communication), Department of Power, Govt. of Nagaland, Kohima
13. DGM (Testing & Communication), TSECL, Agartala, Tripura
14. Executive Director, NERTS, Shillong, POWERGRID
15. Director (Project), NETC, Delhi
16. Manager (Electronics & Communication), Loktak Power House, NHPC, Manipur
17. Sr. Mgr (Electrical), OTPC, Palatana, Tripura
18. Additional General Manager (Electrical & Maintenance), BgTPP, Salakati, Kokrajhar, Assam - 783369
19. Sr. Mgr, PH & SY, (O&M) , Ranganadi, Hoz, Yayee, Arunachal Pradesh
20. Sr. Mgr (Electrical), Kopili Power House Maintenance, Umrangshu, Dimahasao, Assam
21. Sr. Mgr (Electronics & Control and Instrumentation), TGBP, Monarchak, Tripura
22. Sr. Mgr (Operations), AGTCCPP, R.C.Nagar, Tripura
23. Dy. Manager (Maintenance), Khandong, Umrangshu, Assam
24. Manager (Generation & Switchyard Division), Doyang, Wokha, Nagaland
25. Sr. Mgr (Electrical), PEM Division, AGBPP, NEEPCO, Bokuloni Chariali, Assam
26. Engineer(O&M), Sterlite Power Transmission limited, Bhopal, MP-462023
27. Dy Manager (Project's) KOHIMA Mariani Transmission Ltd.
28. Vice President, AM, Sterlite Power Transmission limited, Bhopal, MP-462023
29. C.E.O. (Project's) KOHIMA Mariani Transmission Ltd. GUWAHATI, ASSAM

Grid Disturbances in NER Grid from 01-February-2021 to 28-February-2021														
Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards	Fault Clearing Time in msec	Violation of Regulation / Standard
1	NER	132 kV Along-Daporijo	DoP,AP	08-Feb-21 15:15	08-Feb-21 15:55	00:40:00	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Daporijo- Along line. At 15:15 Hrs on 08.02.2021, 132 kV Daporijo- Along line tripped. Due to tripping of this element, Along area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area. Power supply was extended to Along area of Arunachal Pradesh Power System by charging of 132 kV Daporijo - Along at 15:55 hrs on 08.02.21	0	11	0	0.0073	GD 1	120	5.2 (R) of IEGC
2	NER	132 kV Along-Daporijo	DoP, AP	09-Feb-21 19:13	09-Feb-21 19:43	00:30:00	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Daporijo- Along line. At 19:13 Hrs on 09.02.2021, 132 kV Daporijo- Along line tripped. Due to tripping of this element, Along area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area. Line was declared faulty at 19:43 hours on 09.02.2021 due to conductor snap.132 kV Along-Daporijo line was restored at 18:15 hrs on 10.02.21	0	26	0	0.013	GD 1	480	5.2 (R) of IEGC & 3 (e) of CEA Grid Standard Regulations
3	NER	132 kV Lumshnong - Panchgram line	AEGCL/MePTCL	17-Feb-21 11:04	17-Feb-21 11:34	00:30:00	Lumshnong Area of Meghalaya Power System was connected to the rest of NER grid through 132 kV Lumshnong - Panchgram line. 132 kV Khliehriat(MePTCL) - Lumshnong line was kept open to maintain Silchar gate flow during the shutdown of 400 kV Silchar-Killing line. At 11:04 Hrs on 17.02.2021, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong Area of Meghalaya Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area. Power was extended to 132 kV Lumshnong S/S by charging 132 kV Khliehriat(MePTCL)-Lumshnong line at 11:34 hrs on 17.02.21. 132 kV Lumshnong - Panchgram line was restored at 17:04 hrs on 17.02.21.	0	19	0	0.0095	GD 1	240	3 (e) of CEA Grid Standard Regulations
4	NER	132 kV Lumshnong - Panchgram line & 132 kV Hailakandi-Panchgram line	AEGCL/MePTCL	18-Feb-21 14:54	18-Feb-21 16:15	01:21:00	Panchgram Area of Assam Power System was connected to the rest of NER grid through 132 kV Lumshnong - Panchgram line & 132 kV Hailakandi-Panchgram line. 132 kV Badarpur-Panchgram line was kept under emergency shutdown for replacement of R-ph Male & Female contact of the line isolator installed in PG Bay at Panchgram S/S . At 14:54 hrs on 18.02.2021, 132 kV Lumshnong - Panchgram line & 132 kV Hailakandi-Panchgram line tripped. Due to tripping of these elements, Panchgram Area of Assam Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area. Power was extended to 132 kV Panchgram S/S by charging 132 kV Badarpur-Panchgram line at 16:15 hrs on 18.02.21. 132 kV Hailakandi-Panchgram line has been declared faulty. 132 kV Lumshnong - Panchgram line was restored at 16:44 hrs on 18.02.21	0	24	0	0.0084	GD 1	1000	3 (e) of CEA Grid Standard Regulations
5	NER	132 kV Ningthoukong - Churachandpur D/C, 132 kV Churachandpur - Elangkangpokpi, 132 kV Churachandpur - Kakching, 132 kV Elangkangpokpi - Kakching	MSPCL	19-Feb-21 15:06	19-Feb-21 15:12	00:06:00	Churachandpur area of Manipur Power System was connected with the rest of NER Grid through 132 kV Ningthoukong-Churachandpur D/C. 132 kV Kakching - Thoubal T/L was in open condition due to system requirement. At around 15:06 Hrs on 19.02.2021, 132 kV Ningthoukong - Churachandpur D/C tripped. Due to tripping of these elements, Churachandpur area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Power was extended to Churachandpur by charging 132 kV Ningthoukong - Churachandpur I & II at 15:12 hrs and 15:13 hrs on 19.02.21 respectively. Subsequently the radially connected substations were restored by 15:18 hrs on 19.02.21 except 132 kV Churachandpur - Elangkangpokpi & 132 kV Elangkangpokpi - Kakching lines. Also power supply to Tamu (Mayanmar) was restored at 15:18 hrs on 19.02.21.	0	26	0	0.0026	GD 1	120	-

Grid Disturbances in NER Grid from 01-February-2021 to 28-February-2021														
Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards	Fault Clearing Time in msec	Violation of Regulation / Standard
6	NER	132kV Loktak-Jiribam, 132kV Loktak-Imphal, 132kV Loktak-Ningthoukhong, 132kV Loktak-Rengpang, Loktak Unit-I ,II & III	POWERGRID	24-Feb-21 18:50	24-Feb-21 19:11	00:21:00	Loktak area of Manipur Power System was connected with the rest of NER Grid through 132kV Loktak-Jiribam, 132kV Loktak-Imphal, 132kV Loktak-Ningthoukhong, 132kV Loktak-Rengpang. 132 kV Jiribam-Rengpang was under prolonged outage. At around 18:50 Hrs on 24.02.2021, 132kV Loktak-Jiribam, 132kV Loktak-Imphal, 132kV Loktak-Ningthoukhong, 132kV Loktak-Rengpang, Loktak Unit-I ,II & III tripped. Due to tripping of these elements, Loktak area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Power was extended to Loktak substation by charging 132 kV Loktak-Imphal at 19:11 hrs on 24.02.21	104	2	0.0364	0.0007	GD 1	120	5.2 (R) of IEGC
7	NER	132 KV Aizawl-Luangmual line	P&ED Mizoram	28-02-2021 11:21	28-02-2021 12:45	01:24:00	Luangmual, Melriat & Lunglei areas of Mizoram Power System were radially connected with the rest of NER Grid through 132kV Aizawl-Luangmual line. 132 kV Serchhip-Lunglei line was under open condition to avoid overloading of 132 KV Aizawl-Luangmual line. At around 11:21 Hrs on 28.02.2021, 132 KV Aizawl-Luangmual line tripped due to puncture of 33 kV LT cable of 132/33 kV, 12.5 MVA Transformer at Luangmual. Due to tripping of this element, Luangmual, Melriat & Lunglei areas of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Power was extended to Luangmual, Melriat & Lunglei S/S by charging 132 KV Aizawl-Luangmual line at 12:45 hrs on 28.02.21	0	31	0	0.0434	GD 1	120	5.2 (R) of IEGC

Grid Incidents in NER Grid from 01-February-2021 to 28-February-2021

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	AGBPP Unit 5	NEEPCO	05-02-2021 13:40	05-02-2021 15:30	01:50:00	AGBPP Unit-5 tripped at 13:40 Hrs on 05-02-21 due to High temperature in Lubricant oil . Revision done from Block No.63 on 05-02-21	28.8	0	0.13	0	GI 2
2	NER	AGBPP Unit 6	NEEPCO	14-02-2021 12:11	14-02-2021 13:30	01:19:00	AGBPP Unit-6 tripped at 12:11 Hrs on 14-02-21 due to tripping of auxilliary unit . Revision done from Block No.55 on 14-02-21	30.6	0	0.04	0	GI 2
3	NER	BGTPP Unit 2	NTPC	16-02-2021 17:59	16-02-2021 19:30	01:31:00	BGTPP Unit 2 tripped at 17:59 Hrs on 16-02-21 due to tripping of forced draft fan. Revision done from Block No.79 on 16-02-21	227.5	0	0.35	0	GI 2
4	NER	BgTPP Unit 1	NTPC	20-02-2021 11:54	20-02-2021 13:30	01:36:00	BGTPP Unit 1 tripped at 11:54 Hrs on 20-02-21 due to DC electrical fault (mal-operation). Revision done from Block No.55 on 20-02-21	125	0	0.2	0	GI 2
5	NER	BgTPP Unit 3	NTPC	28-02-2021 17:37	28-02-2021 19:00	01:23:00	BGTPP Unit 3 tripped at 17:37 hours on 28-02-21 due to flame failure. Revision done from Block No. 77 on 28-02-21	130	0	0.179	0	GI 2

Note: Root Cause and Remedial Measures for these events is available in the following link: <https://www.nerldc.in/root-cause-remedial-measures-of-grid-events/>

The following numbers of Grid Disturbances(GD) & Grid Incidents (GI) occurred in NER during the period w.e.f 01-February-2021 to 28-February-2021 as per CEA Grid Standards

Sl. No.	Category of GD	Total Counts
1	GI 1	0
2	GI 2	5
3	GD 1	7
4	GD 2	0
5	GD 3	0
6	GD 4	0
7	GD 5	0

Note: Root Cause and Remedial Measures for these events is available in the following link:
<https://www.nerldc.in/root-cause-remedial-measures-of-grid-events/>