

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)

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संदर्भ : उपक्षेभाप्रेके/ एस.ओ-2/ 2022/12/3235

दिनांक/Date:30.05.22

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: अप्रैल'22 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 April'22

महोदय / Sir,

उत्तर-पूर्वी क्षेत्रीय ग्रिड में ग्रिड व्यवधान और ग्रिड घटनाओं की रिपोर्ट मासिक आधार पर तैयार और अपलोड किया जा रहा है। अप्रैल '22 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 April'22 is available at <https://www.nerldc.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

for
To
30.6.22
B. Swain
Chief Manager
SO-2

(एस सी डे / S.C. De)

वरिष्ठ महाप्रबंधक (एस.ओ)/ Sr. G.M. (S.O)
उपक्षेत्राधिकारी, शिलांग / NERLDC, Shillong

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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. Vice President, AM, Sterlite Power Transmission limited, Bhopal, MP-462023
28. C.E.O. (Project's) Kohima Mariani Transmission Ltd. Guwahati, Assam

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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	Luangmual, Melriat & Lunglei areas of Mizoram Power System	P&ED, Mizoram	03.04.22 15:37:00	03.04.22 16:29:00	00:52	Luangmual, Melriat & Lunglei areas of Mizoram Power System were connected with the rest of NER Grid through 132 kV Aizawl(PG)- Luangmual line. 132 kV Serchip-Lunglei line was under out of service to avoid overloading of 132 kV Aizawl-Luangmual line. At 15:37 hrs on 03.04.22, 132 kV Aizawl(PG) -Luangmual line tripped. Due to tripping of this element, Luangmual, Melriat & Lunglei areas of Mizoram Power System were separated from rest of NER Grid and subsequently collapsed due to no source available in these areas. Power supply was extended to Luangmual, Melriat & Lunglei areas of Mizoram Power System by charging 132 kV Aizawl(PG) -Luangmual line at 16:29 hrs on 03.04.22.	0	39	0	0.0338	GD-I	240	3 (e) of CEA Grid Standard Regulations
2	NER	Lumshnong area of Meghalaya Power System	MePTCL	03.04.22 20:21:00	03.04.22 21:21:00	01:00	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Panchgram -Lumshnong line. 132 kV Khleihriat-Lumshnong line tripped at 20:11 hrs on 03.04.22 At 20:21 hrs on 03.04.22, 132 kV Panchgram-Lumshnong line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Khleihriat-Lumshnong line at 21:21 hrs on 03.04.22.	0	14	0	0.0140	GD-I	240	5.2(R) and 5.9.6 (a) of IEGC & 3 (e) of CEA Grid Standard Regulations
3	NER	Karong area of Manipur Power System	MSPCL	04.04.22 13:52	04.04.22 15:03	01:11	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Kohima-Karong & 132 kV Imphal - Karong lines. At 13:52 hrs on 04.04.22, 132 kV Kohima-Karong & 132 kV Imphal - Karong lines tripped . Due to tripping of these elements, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this areas. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 15:03 hrs on 04.04.22.	0	11	0	0.0130	GD-I	280	3 (e) of CEA Grid Standard Regulations
4	NER	Karong area of Manipur Power System	MSPCL	05.04.22 14:07	05.04.22 14:38	00:31	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Kohima-Karong & 132 kV Imphal - Karong lines. At 14:07 hrs on 05.04.22, 132 kV Kohima-Karong & 132 kV Imphal - Karong lines tripped . Due to tripping of these elements, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 14:38 hrs. on 05.04.22.	0	10	0	0.0052	GD-I	360	3 (e) of CEA Grid Standard Regulations
5	NER	Chimpu area of Arunachal Pradesh Power System	DoP, Arunachal Pradesh	09.04.22 23:54	10.04.22 01:13	01:19	Chimpu area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Biswanath Chariali - Chimpu 1 & 132 kV Biswanath Chariali - Chimpu 2 lines. 132 kV Ranganadi - Itanagar(Chimpu) Line , 132 kV Pare- Itanagar(Chimpu) Line & 132 kV Lekhi- Itanagar(Chimpu) Line were under planned shutdown at 07:00 hrs on 05.03.22. At 23:54 hrs on 09.04.22,132 kV Biswanath Chariali - Chimpu 1 & 132 kV Biswanath Chariali - Chimpu 2 lines tripped. Due to tripping of these elements, Chimpu area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Chimpu area of Arunachal Pradesh Power System by charging 132 kV Biswanath Chariali - Chimpu 1 Line at 01:13 hrs. on 10.04.22.	0	12	0	0.0158	GD-I	80	-
6	NER	Karong area of Manipur Power System	MSPCL	10.04.22 15:59	10.04.22 16:03	00:04	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal - Karong line. 132 kV Kohima-Karong line was declared faulty. At 15:59 hrs on 10.04.22, 132 kV Imphal - Karong line tripped. Due to tripping of this element, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 16:03 hrs on 10.04.22.	0	13	0	0.0009	GD-I	160	-

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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
7	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	13.04.22 00:02	13.04.22 00:31	00:29	Myndtu Leshka Generating Station of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Khleiriati(ME) - Leshka D/C lines. At 00:02 hrs on 13.04.22, 132 kV Khleiriati(ME) - Leshka D/C lines tripped . Due to tripping of these elements, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path in this area. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka 1 line at 00:31 hrs on 13.04.22.	76	0	0.036733333	0.0000	GD-1	80	-
8	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	13.04.22 07:25	13.04.22 08:24	00:59	Myndtu Leshka Generating Station of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Khleiriati(ME) - Leshka D/C lines. At 07:25 hrs on 13.04.22, 132 kV Khleiriati(ME) - Leshka D/C lines tripped . Due to tripping of these elements, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path in this area. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka 1 line at 08:24 hrs on 13.04.22.	90	0	0.0885	0.0000	GD-1	80	-
9	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	14.04.22 17:43	14.04.22 18:17	00:34	Myndtu Leshka Generating Station of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Khleiriati(ME) - Leshka D/C lines. At 17:43 hrs on 14.04.22, 132 kV Khleiriati(ME) - Leshka D/C lines tripped . Due to tripping of these elements, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path in this area. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka 2 line at 18:17 hrs on 14.04.22.	84	0	0.0476	0.0000	GD-1	80	-
10	NER	Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Pwer System	DoP, Arunachal Pradesh and DEPL	14.04.22 21:59	14.04.22 22:27	00:28	Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System were connected with the rest of NER Grid through 132 kV Balipara- Tenga line. At 21:59 hrs on 14.04.22, 132 kV Balipara- Tenga line tripped. Due to tripping of this element, Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas. At 22:27 hrs of 14.04.22, 132 kV Balipara - Tenga line was declared faulty by DoP, Arunachal Pradesh. Power supply was extended to Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System by charging 132 kV Balipara - Tenga line at 17:14 hrs on 17.04.22.	6	18	0.0028	0.0084	GD-1	80	-
11	NER	Umrangsho area of Assam Power System	AEGCL	14.04.22 22:41	14.04.22 23:09	00:28	Umrangsho area of Assam Power System was connected with the rest of NER Grid through 132 kV Haflong - Umrangsho line. 132 kV Khandong - Umrangsho line was under shutdown due to critical emergency at Khandong HEP on 26.03.22. At 22:41 hrs of 14.04.22, 132 kV Haflong - Umrangsho line tripped. Due to tripping of this element, Umrangsho area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Umrangsho area of Assam Power System by charging 132 kV Haflong - Umrangsho line at 23:09 hrs on 14.04.22.	0	11	0	0.0051	GD-1	120	5.2(R) and 5.9.6 (a) of IEGC
12	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	14.04.22 23:29	15.04.22 00:30	01:01	Myndtu Leshka Generating Station of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Khleiriati(ME) - Leshka D/C lines. At 23:29 hrs on 14.04.22, 132 kV Khleiriati(ME) - Leshka D/C lines tripped . Due to tripping of these elements, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path in this area. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka 1 line at 00:30 hrs. on 15.04.22.	48	0	0.0488	0.0000	GD-1	80	5.2(R) and 5.9.6 (a) of IEGC

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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
13	NER	Lumshnong area of Meghalaya Power System	MePTCL	15.04.22 06:59	15.04.22 07:22	00:23	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Panchgram -Lumshnong line. 132 kV Khleihriat-Lumshnong line was declared faulty at 22:11 hrs on 14.04.22. At 06:59 hrs on 15.04.22, 132 kV Panchgram -Lumshnong line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Panchgram -Lumshnong line at 07:22 hrs. on 15.04.22.	0	22	0	0.0084	GD-1	200	5.2(R) and 5.9.6 (a) of IEGC & 3 (e) of CEA Grid Standard Regulations
14	NER	Lumshnong area of Meghalaya Power System	MePTCL	15.04.22 19:28	15.04.22 19:37	00:09	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Panchgram -Lumshnong line. 132 kV Khleihriat-Lumshnong line was declared faulty at 22:11 hrs on 14.04.22. At 19:28 hrs on 15.04.22, 132 kV Panchgram -Lumshnong line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Panchgram -Lumshnong line at 19:37 hrs. on 15.04.22.	0	16	0	0.0024	GD-1	160	5.2(R) and 5.9.6 (a) of IEGC
15	NER	Haflong & Umrangsho areas of Assam Power System	AEGCL	15.04.22 21:24	15.04.22 22:50	01:26	Haflong & Umrangsho areas of Assam Power System were connected with the rest of NER Grid through 132 kV Haflong - Jiribam line. 132 kV Khandong - Umrangsho line was under shutdown due to critical emergency at Khandong HEP on 26.03.22. At 21:24 hrs on 15.04.22, 132 kV Haflong - Jiribam line tripped. Due to tripping of this element, Haflong & Umrangsho areas of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source available in these areas. At 22:50 hrs on 15.04.22, 132 kV Haflong - Jiribam line was declared faulty. Power supply was extended to Haflong & Umrangsho areas of Assam Power System by charging 132 kV Haflong - Jiribam line at 12:31 hrs on 16.04.22	0	10	0	0.0143	GD-1	120	-
16	NER	Lumshnong area of Meghalaya Power System	MePTCL	15.04.22 22:18	15.04.22 22:41	00:23	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Panchgram -Lumshnong line. 132 kV Khleihriat-Lumshnong line was declared faulty at 22:11 hrs on 14.04.22. At 22:18 hrs on 15.04.22, 132 kV Panchgram -Lumshnong line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Panchgram -Lumshnong line at 22:41 hrs. on 15.04.22.	0	17	0	0.0065	GD-1	80	5.2(R) and 5.9.6 (a) of IEGC
17	NER	Churachandpur area of Manipur Power system	MSPCL	15.04.22 23:46	15.04.22 23:59	00:13	Churachandpur area of Manipur Power System was connected with the rest of NER Grid through 132 kV Ningthoukhong-Churachandpur D/C and 132 kV Kakching - New Thoubal lines. At 23:46 hrs on 15.04.22, 132 kV Ningthoukhong-Churachandpur D/C and 132 kV New Thoubal - Kakching lines 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 available in this area. Power was extended to Churachandpur area of Manipur Power System by charging 132 kV Ningthoukhong - Churachandpur 1 line at 23:59 hrs on 15.04.22.	0	12	0	0.0026	GD-1	80	-
18	NER	Kolasib area of Mizoram Power System	P&ED, Mizoram	16.04.22 15:28	16.04.22 16:25	00:57	Kolasib area of Mizoram Power System was connected with rest of NER grid through 132 kV Kolasib-Aizawl line. 132 kV Badarpur-Kolasib line was under outage since 15:24 hrs on 16.04.22. At 15:28 hrs on 16.04.22, 132 kV Kolasib-Aizawl line tripped. Due to tripping of this element, Kolasib area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area. Power supply was extended to Kolasib area of Mizoram Power System by charging 132 kV Kolasib-Aizawl line at 16:25 hrs on 16.04.22.	16	1	0.0152	0.0010	GD-1	240	3 (e) of CEA Grid Standard Regulations

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/>

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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
19	NER	Karong area of Manipur Power System	MSPCL	16.04.22 18:13	16.04.22 18:15	00:02	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal - Karong line. 132 kV Karong - Kohima line was under outage since 14:07 hrs on 05.04.22. At 18:13 hrs of 16.04.22, 132 kV Imphal - Karong line tripped. Due to tripping of this element, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 18:15 hrs on 16.04.22.	0	13	0	0.0004	GD-I	80	-
20	NER	Karong area of Manipur Power System	MSPCL	16.04.22 19:04	16.04.22 19:11	00:07	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal - Karong line. 132 kV Karong - Kohima line was under outage since 14:07 hrs on 05.04.22. At 19:04 hrs of 16.04.22, 132 kV Imphal - Karong line tripped. Due to tripping of this element, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 19:11 hrs on 16.04.22.	0	12	0	0.0014	GD-I	320	3 (e) of CEA Grid Standard Regulations
21	NER	Kohima area of Nagaland Power System	DoP, Nagaland	17.04.22 08:53	17.04.22 09:16	00:23	Kohima area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima-Wokha line. 132 kV Dimapur - Kohima line was under outage since 08:04 hrs on 17.04.22 and 132 kV Karong-Kohima was under outage since 13:14 hrs on 06.04.22 At 08:53 hrs of 17.04.22, 132 kV Kohima-Wokha line tripped. Due to tripping of this element, Kohima area of Nagaland Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Kohima area of Nagaland Power System by charging 132 kV Kohima-Wokha line at 09:16 hrs on 17.04.22.	0	13	0	0.0050	GD-I	80	-
22	NER	Lumshnong area of Meghalaya Power System	MePTCL	18.04.22 00:04	18.04.22 00:45	00:41	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Khleiriat-Lumshnong line. 132 kV Lumshnong-Panchgram line was under outage since 23:24 hrs on 17.04.22 At 00:04 hrs on 18.04.22, 132 kV Khleiriat-Lumshnong line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132kV Lumshnong - Panchgram line at 00:45 hrs on 18.04.22.	0	33	0	0.0226	GD-I	120	-
23	NER	Kohima area of Nagaland Power System and Karong area of Manipur Power System	DoP, Nagaland and MSPCL	18.04.22 01:08	18.04.22 01:35	00:27	Kohima area of Nagaland Power System and Karong area of Manipur Power System were connected with the rest of NER Grid through 132 kV Kohima-Wokha, 132 kV Karong- Kohima and 132 kV Imphal - Karong lines. 132 kV Dimapur - Kohima line was under outage since 08:04 hrs on 17.04.22. At 01:08 hrs of 18.04.22, 132 kV Kohima-Wokha, 132 kV Karong-Kohima and 132 kV Imphal - Karong lines tripped. Due to tripping of these elements, Kohima area of Nagaland Power System and Karong area of Manipur Power System were separated from rest of NER Grid and subsequently collapsed due to no source available in these areas. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Imphal - Karong line at 01:35 hrs on 18.04.22 and Kohima area of Nagaland Power System by charging 132 kV Karong - Kohima line at 01:50 hrs on 18.04.22.	0	13	0	0.0059	GD-I	400	3 (e) of CEA Grid Standard Regulations

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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
24	NER	Monarchak area of Tripura Power System	TSECL and NEPCO	20.04.22 07:20	20.04.22 08:14	00:54	Monarchak area of Tripura Power System was connected with rest of NER grid through 132 kV Monarchak - Udaipur line. 132kV Monarchak - Rokhia line was under outage since 07:13 hrs on 20.04.22. Monarchak STG was desynced at 07:13 hrs of 20.04.22 in SPS operation. At 07:20 hrs on 20.04.22, 132 kV Monarchak - Udaipur line tripped and Monarchak GTG tripped due to loss of evacuation path. Due to tripping of these elements, Monarchak area of Tripura Power System was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area. Power supply was extended to Monarchak area of Tripura Power System by charging 132 kV Monarchak - Rokhia line at 08:14 hrs on 20.04.22	85	5	0.0765	0.0045	GD-I	120	5.2(R) and 5.9.6 (a) of IEGC
25	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	27.04.22 01:09	27.04.22 01:50	00:41	Myndtu Leshka Generating Station of Meghalaya Power System was connected with rest of NER grid through 132 kV Khleiriati(ME) - Leshka 1 line. 132 kV Khleiriati(ME) - Leshka 2 line was under outage condition since 00:57 hrs on 27.04.22. At 01:09 hrs on 27.04.22, 132 kV Khleiriati(ME) - Leshka 1 line tripped. Due to tripping of this element, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka 1 line at 01:50 hrs on 27.04.22.	12	0	0.0082	0.0000	GD-I	120	5.2(R) and 5.9.6 (a) of IEGC
26	NER	Kolasib and Bairabi areas of Mizoram Power System	P&ED, Mizoram	27.04.22 16:50	27.04.22 17:19	00:29	Kolasib and Bairabi areas of Mizoram Power System were connected with rest of NER grid through 132 kV Badarpur-Kolasib and 132 kV Kolasib-Aizawl lines. At 16:50 hrs on 27.04.22, 132 kV Badarpur-Kolasib and 132 kV Kolasib-Aizawl lines tripped. Due to tripping of these elements, Kolasib and Bairabi areas of Mizoram Power System were separated from rest of NER Grid and subsequently collapsed due to load-generation mismatch in these areas. Power supply was extended to Kolasib and Bairabi areas of Mizoram Power System by charging 132 kV Kolasib-Aizawl line at 17:19 hrs on 27.04.22.	17	9	0.008216667	0.0044	GD-I	264	3 (e) of CEA Grid Standard Regulations
27	NER	Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System	DoP, Arunachal Pradesh and DEPL	29.04.22 12:31	29.04.22 12:54	00:23	Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System were connected with the rest of NER Grid through 132 kV Balipara- Tenga line. At 12:31 hrs on 29.04.22, 132 kV Balipara- Tenga line tripped. Due to tripping of this element, Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area. Power supply was extended to Tenga, Khupi areas & Dikshi HEP of Arunachal Pradesh Power System by charging 132 kV Balipara - Tenga line at 12:54 hrs of 29.04.22.	4	15	0.001533333	0.0058	GD-I	120	-
28	NER	Dhaligaon area of Assam Power System	AEGCL	29.04.22 16:31	29.04.22 17:15	00:44	Dhaligaon area of Assam Power System was connected with the rest of NER Grid through 132 kV Bongaigaon - Dhaligaon D/C lines. At 16:31 hrs on 29.04.22, 132 kV Bongaigaon - Dhaligaon D/C lines tripped. Due to tripping of these elements, Dhaligaon area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Power supply was extended to Dhaligaon area of Assam Power System by charging 132 kV Bongaigaon - Dhaligaon D/C lines at 17:15 hrs on 29.04.22.	0	60	0	0.0440	GD-I	80	5.9.6 (a) of IEGC
29	NER	Myndtu Leshka Generating Station of Meghalaya Power System	MePTCL and MePGCL	29.04.22 23:58	30.04.22 01:37	01:39	Myndtu Leshka Generating Station of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Khleiriati(ME) - Leshka D/C lines. At 23:58 hrs on 29.04.22, 132 kV Khleiriati(ME) - Leshka D/C lines tripped. Due to tripping of these elements, Myndtu Leshka Generating Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to loss of evacuation path in this area. Power supply was extended to Myndtu Leshka Generating Station of Meghalaya Power System by charging 132 kV Khleiriati(ME) - Leshka D/C lines at 01:37 hrs. on 30.04.22.	12	0	0.0198	0.0000	GD-I	80	5.2(R) and 5.9.6 (a) of IEGC

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

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022														
Sl. No.	Region	Affected Areas	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
30	NER	Lumshnong area of Meghalaya Power System	MePTCL	30.04.22 00:25	30.04.22 01:24	00:59	<p>Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Khleiriati-Lumshnong and 132 kV Lumshnong-Panchgram lines.</p> <p>At 00:25 hrs on 30.04.22, 132 kV Khleiriati-Lumshnong and 132 kV Lumshnong-Panchgram lines tripped. Due to tripping of these elements, Lumshnong area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area.</p> <p>Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Khleiriati-Lumshnong line at 01:24 hrs on 30.04.22.</p>	0	14	0	0.0138	GD-I	80	-

Grid Disturbances in NER Grid from 01-April-2022 to 30-April-2022

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 1,3,4,5,6,7,8 & 9	NEEPCO	04-04-2022 13:22	04-04-2022 15:00	01:38	AGBPP Unit 1,3,4,5,6,7,8 & 9 tripped at 13:22 hours on 04-04-22 due to tripping of Gas Compressor. Revision done from Block No. 61 on 04-04-22.	204	0	0.3332	0	GI-II
2	NER	Loktak Unit 3	NHPC	07-04-2022 18:00	07-04-2022 19:45	01:45	Loktak Unit 3 tripped at 18:00 hours on 07-04-22 due to high thrust bearing temperature. Revision done from Block No. 80 on 07-04-22.	30	0	0.0525	0	GI-I
3	NER	BGTPP - UNIT 1	NTPC	12-04-2022 10:23	12-04-2022 12:00	01:37	BGTPP - UNIT 1 tripped at 10:23 Hrs on 12-04-22 due to low drum level on account of increased Boiler Tube Leakage. Revision done from Block No. 49 on 12-04-22.	127	0	0.2053167	0	GI-2
4	NER	AGBPP - UNIT 7	NEEPCO	16-04-2022 01:40	16-04-2022 03:30	01:50	AGBPP - UNIT 2 tripped at 01:40 Hrs on 16-04-22 due to Tripping of Gas Compressor 1. Revision done from Block No. 15 on 16-04-22.	75	0	0.1375	0	GI-2
5	NER	AGBPP - UNIT 7	NEEPCO	28-04-2022 11:01	28-04-2022 12:30	01:29	AGBPP - UNIT 7 tripped at 11:01 Hrs on 28-04-22 due to master trip relay operated. Revision done from Block No. 51 on 28-04-22.	18	0	0.0267	0	GI-2
6	NER	AGBPP - UNIT 7	NEEPCO	30-04-2022 11:03	30-04-2022 12:30	01:27	AGBPP - UNIT 7 tripped at 11:03 Hrs on 28-04-22 due to increase in water level of Boiler. Revision done from Block No. 51 on 30-04-22.	29	0	0.04205	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-April-2022 to 30-April-2022 as per CEA Grid Standards

Sl. No.	Category of GD	Total Counts
1	GI 1	1
2	GI 2	5
3	GD 1	30
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/>