उपूक्षे का तिमाही सिस्टम स्टेटास रिपोर्ट

जनवरी'22 - मार्च'22

Quarterly System Operation Report of North Eastern Region January'22 - March'22

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

Power System Operation Corporation Limited

(A Government of India Enterprise)

उत्तर पूर्वी क्षेत्रीय भार प्रेषण केन्द्र

North Eastern Regional Load Despatch Centre

उपूक्षे का तिमाही सिस्टम स्टेटास रिपोर्ट

जनवरी'22 - मार्च'22

Quarterly System Operation Report of North Eastern Region

January'22 - March'22

जारी करने की तिथि / Date of Issue	संशोधन संख्या / Revision No
20 April 2022	0

उपक्षे का तिमाही सिस्टम स्टेटास रिपोर्ट / Quarterly Report of North Eastern Region

अवधि के लिए / for the period w.e.f 01-Jan-22 to 31-Mar-22

"पर जारी / Issued on : 20th Apr'22

ते प्रोफ़ाइल) / Quality of Power (Voltage and Frequency Profile) excerpt

ा प्रोफ़ाइल पीयू में / Voltage Profile in pu

माह / 'Month	मीसा 400 केवी / Misa 400 kV			बलीपारा 400 केवी / Balipara 400 kV			बोनगैगांव 400 केवी Bongaigaon 400 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.045	0.983	0.00%	1.045	0.988	0.00%	1.055	0.980	0.94%
February'2022	1.048	0.980	0.00%	1.048	0.990	0.00%	1.050	0.998	0.00%
March'2022	1.048	0.988	0.00%	1.045	0.978	0.00%	1.048	1.003	0.00%

माह / 'Month	रंगानदी 400 केवी Ranganadi 400 kV			पालटाना 400 केवी Palatana 400 kV			सिलचर 400 केवी' Silchar 400 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.065	0.990	1.63%	1.030	0.998	0.00%	1.053	0.995	0.03%
February'2022	1.058	0.978	0.24%	1.045	0.990	0.00%	1.055	0.985	0.28%
March'2022	1.053	0.975	0.08%	1.045	0.995	0.00%	1.048	0.995	0.00%

माह / 'Month	विश्वनाथ चाराली 400 केवी Biswanath Charali 400 kV			अज़रा' 400 केवी /Azara 400 kV			बीजीटीपीपी 400 केवी / BgTPP 400 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.055	0.988	0.02%	1.030	0.983	0.00%	1.060	1.005	6.51%
February'2022	1.048	0.988	0.00%	1.043	1.003	0.00%	1.055	1.003	1.57%
March'2022	1.043	0.975	0.00%	1.035	0.995	0.00%	1.050	1.008	0.00%

माह / 'Month	बारनीहाट 400 केवी / Byrnihat 400 kV			एम्फल 400 केवी/ Imphal 400 kV			सुरजमानीनगर 400 केवी/ Surajmaninagar 400 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.055	0.988	0.07%	1.053	0.985	0.04%	1.025	0.960	0.00%
February'2022	1.053	1.005	0.24%	1.055	0.993	0.09%	1.045	0.983	0.00%
March'2022	1.050	1.003	0.00%	1.063	0.983	0.01%	1.040	0.983	0.00%

माह / 'Month	न्यू कोहीमा 400 केवी/ New Kohima 400 kV			मरियानी 400 केवी / Mariani(PG) 400 kV			पीके बारी 400 केवी/ PK Bari(STERLITE) 400 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.053	0.975	0.06%	1.045	0.978	0.000%	1.033	0.978	0.00%
February'2022	1.055	0.988	0.04%	1.050	0.988	0.00%	1.043	0.985	0.00%
March'2022	1.058	0.985	0.07%	1.048	0.980	0.00%	1.033	0.985	0.00%

माह / 'Month	मोकोक्चुंग 220 केवी/ Mokokchung 220 kV			एजिबिपिपि' 220 केवी / AGBPP 220 kV			मीसा 220 केवी / Misa 220 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.050	0.968	0.00%	1.086	0.955	0.00%	1.041	0.973	0.00%
February'2022	1.050	0.959	0.00%	1.077	0.950	0.00%	1.036	0.986	0.00%
March'2022	1.050	0.991	0.00%	1.068	0.973	0.00%	1.036	0.964	0.00%

माह / 'Month	कहीलीपारा 132 केवी / Kahilipara 132 kV			निरजुली 132 केवी / Nirjuli 132 kV			एम्फल 132 केवी / Imphal 132 kV		
	Max	'Min	VDI	Max	Min	VDI	Max	'Min	VDI
January'2022	1.053	0.962	0.00%	1.057	0.924	0.00%	1.045	0.947	0.00%
February'2022	1.053	0.970	0.00%	1.030	0.924	0.00%	1.045	0.947	0.00%
March'2022	1.045	0.947	0.00%	1.030	0.947	0.00%	1.061	0.970	0.00%

माह / 'Month	आइजोल 132 केवी / Aizawl 132 kV		
	Max	'Min	VDI
January'2022	1.038	0.947	0.00%
February'2022	1.053	0.955	0.00%
March'2022	1.045	0.939	0.00%

ओं में अवधि) / Frequency Profile (in %) (Duration in different ranges)

माह / 'Month	f < 49.9 Hz	49.9 Hz < f < 50.05 Hz	50.05 Hz < f	FDI (% of Time)
January'2022	5.84	75.65	18.51	24.35
February'2022	5.97	76.72	17.30	23.28
March'2022	14.50	73.91	11.59	26.09

आपूर्ति की स्थिति / Power Supply Position

a) Peak Demand Met and Unrestricted Demand (MW)

MONTH	STATE	PK REQ	PK DMD MET	SHORTAGE %
January'2022	अरुणाचल प्रदेश / Arunachal Pradesh	164	164	0.0
	असम / Assam	1505	1505	0.0
	मणिपुर / Manipur	258	258	0.0
	मेघालय / Meghalaya	408	408	0.0
	मिजोरम / Mizoram	157	150	3.9
	नगालैंड / Nagaland	145	139	3.9
	त्रिपुरा / Tripura	224	224	0.0
	क्षेत्र / Region	2861	2849	0.4
February'2022	अरुणाचल प्रदेश / Arunachal Pradesh	197	168	14.5
	असम / Assam	1499	1499	0.0
	मणिपुर / Manipur	257	256	0.4
	मेघालय / Meghalaya	405	405	0.0
	मिजोरम / Mizoram	169	156	7.8
	नगालैंड / Nagaland	157	143	8.9
	त्रिपुरा / Tripura	227	227	0.0
	क्षेत्र / Region	2910	2853	1.9
March'2022	अरुणाचल प्रदेश / Arunachal Pradesh	143	143	0.0
	असम / Assam	1901	1855	2.4
	मणिपुर / Manipur	225	225	0.0
	मेघालय / Meghalaya	369	369	0.0
	मिजोरम / Mizoram	124	124	0.0
	नगालैंड / Nagaland	149	149	0.0
	त्रिपुरा / Tripura	285	285	0.0
	क्षेत्र / Region	3196	3150	1.4

b) Energy Met and Requirement (MU)

MONTH	STATE	Energy REQ	Energy MET	SHORTAGE %
January'2022	अरुणाचल प्रदेश / Arunachal Pradesh	74.720	74.720	0.0
	असम / Assam	701.560	701.560	0.0
	मणिपुर / Manipur	104.760	104.760	0.0
	मेघालय / Meghalaya	224.920	224.920	0.0
	मिजोरम / Mizoram	62.400	62.400	0.0
	नगालैंड / Nagaland	73.840	73.840	0.0
	त्रिपुरा / Tripura	171.200	171.090	0.0
	क्षेत्र / Region	1413.400	1413.290	0.0
February'2022	अरुणाचल प्रदेश / Arunachal Pradesh	70.03	70.03	0.0
	असम / Assam	616.36	616.36	0.0
	मणिपुर / Manipur	89.36	89.36	0.0
	मेघालय / Meghalaya	202.20	202.20	0.0
	मिजोरम / Mizoram	56.44	56.44	0.0
	नगालैंड / Nagaland	68.04	68.04	0.0
	त्रिपुरा / Tripura	156.87	156.87	0.0
	क्षेत्र / Region	1259.30	1259.30	0.0
March'2022	अरुणाचल प्रदेश / Arunachal Pradesh	72.910	72.910	0.0
	असम / Assam	811.660	811.380	0.0
	मणिपुर / Manipur	82.920	82.920	0.0
	मेघालय / Meghalaya	200.940	200.940	0.0
	मिजोरम / Mizoram	52.870	52.870	0.0
	नगालैंड / Nagaland	74.820	74.820	0.0
	त्रिपुरा / Tripura	209.802	209.792	0.0
	क्षेत्र / Region	1505.922	1505.632	0.0

ाामग्री विवरण / Water Level & Energy Content details

जलाशय / Reservoir	As on 31-Mar-21		As on 31-Mar-22	
	जलाशय स्तर / Water Level	एमयू सामग्री / MU Content	जलाशय स्तर / Water Level	एमयू सामग्री / MU Content
खांड़ोंग / Khandong	712.5	11.0	-	-
कोपिली / Kopili	0.0	-	-	-
लोकतक / Loktak	767.4	50.0	767.0	27.0
बारापानी / Barapani	971.3	19.0	972.6	22.0
गुमती / Gumti	0.0	-	0.0	-
डोयांग / Doyang	320.0	25.0	310.9	7.0

ाम वास्तविक ड्रॉ / Schedule vs Actual Drawl by States

Month	State	Schedule Drawl (MU)	Actual Drawl (MU)	Deviation (MU)
January'2022	अरुणाचल प्रदेश / Arunachal Pradesh	76.617	85.921	9.304
	असम / Assam	605.154	604.208	-0.946
	मणिपुर / Manipur	109.353	109.108	-0.245
	मेघालय / Meghalaya	183.289	185.467	2.178
	मिजोरम / Mizoram	49.440	47.303	-2.138
	नगालैंड / Nagaland	64.537	64.877	0.340
	त्रिपुरा / Tripura	71.585	61.800	-9.784
February'2022	अरुणाचल प्रदेश / Arunachal Pradesh	75.170	78.064	2.894
	असम / Assam	511.188	511.500	0.312
	मणिपुर / Manipur	95.862	94.433	-1.429
	मेघालय / Meghalaya	168.994	169.944	0.950
	मिजोरम / Mizoram	52.223	48.606	-3.616
	नगालैंड / Nagaland	61.125	60.434	-0.691
	त्रिपुरा / Tripura	60.791	51.586	-9.205
March'2022	अरुणाचल प्रदेश / Arunachal Pradesh	80.200	78.064	-2.136
	असम / Assam	577.500	577.800	0.300
	मणिपुर / Manipur	90.200	90.400	0.200
	मेघालय / Meghalaya	152.500	157.200	4.700
	मिजोरम / Mizoram	58.500	51.200	-7.300
	नगालैंड / Nagaland	72.500	73.500	1.000
	त्रिपुरा / Tripura	72.100	66.600	-5.500

ीय एक्सचेंज /Inter-Regional Exchanges during the quarter

Figures in MU

	220 KV		400 KV		400 KV	
	Birpara-Salakati D/C		Binaguri-B'gaon D/C		Alipurduar-B'gaon D/C	
MONTH	Exp	Imp	Exp	Imp	Exp	Imp
January'2022	13.319	7.998	0.263	38.775	31.735	41.750
February'2022	32.643	0.038	109.024	0.622	181.502	0.000
March'2022	15.739	13.271	12.205	47.618	28.429	69.257

ाश एक्सचेंज /Inter-Country Exchanges during the quarter

Figures in MU

	Bangladesh (in MU)		Bhutan (in MU)		Myanmar (in MU)	
MONTH	Exp	Imp	Exp	Imp	Exp	Imp
January'2022	62.210	0	5.150	1.070	0.681	0
February'2022	59.059	0	9.030	0.740	0.626	0
March'2022	85.722	0	3.410	8.280	0.775	0

6. एनईआर प्रणाली में ग्रिड घटनाएं Grid Incidents in NER system

The section may detail near miss situations, incidents of multiple elements outage, natural calamities affecting the power system, oscillations observed in the system etc.

A. Grid Disturbance

Sl No	Region	Outage		Event	Generation Generation	Load Loss(MW)	Category as per CEA Category as per CEA
		Date	Time				
1	NER	07-Jan-2022	07:39	Lumshnong area of Meghalaya Power System is connected with rest of NER grid through 132 kV Khleihriat-Lumshnong Line. 132 kV Panchgram - Lumshnong Line was under outage since 07:18 hrs on 07.01.22. At 07:39 hrs on 07.01.22, 132 kV Khleihriat-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 the area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Khleihriat-Lumshnong Line at 08:08 hrs on 07.01.22.	0	56	GD-I
2	NER	18-Jan-2022	07:09:00	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Panchgram -Lumshnong Line & 132 kV Khleihriat-Lumshnong Line At 07:09 hrs on 18.01.22, 132 kV Panchgram -Lumshnong Line and 132 kV Khleihriat-Lumshnong Line tripped. Due to tripping of these elements, Lumshnong area of Meghalaya Power System got separated from rest of NER Grid and subsequently collapsed due to no source in the area. Power supply was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Khleihriat-Lumshnong Line at 07:24 hrs. on 18.01.22.	0	41	GD-I
3	NER	20-Jan-2022	16:30	Lumshnong area of Meghalaya Power System was connected with rest of NER grid through 132 kV Khleihriat-Lumshnong Line. 132 kV Panchgram - Lumshnong Line was under outage since 16:07 hrs on 20.01.2022 At 16:30 hrs on 20.01.22, 132 kV Khleihriat-Lumshnong Line tripped. Due to tripping of this element, Lumshnong area of Meghalaya Power System got separated from rest of NER Grid and subsequently collapsed due to no source in the area. Power was extended to Lumshnong area of Meghalaya Power System by charging 132 kV Khleihriat-Lumshnong Line at 16:38 hrs on 20.01.2022	0	35	GD-I
4	NER	25-Jan-2022	18:20	Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System were connected with the rest of NER Grid through 132 kV Along - Pasighat Line. At 18:20 hrs on 25.01.2022,132 kV Along - Pasighat Line tripped. Due to tripping of this element, Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System were separated from the rest of NER Grid and subsequently collapsed due to no source available in these areas. Power was extended to Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System by charging 132 kV Along - Pasighat Line at 19:48 hrs on 25.01.2022.	0	15	GD-I
5	NER	31-Jan-2022	07:32:00	Zuangtui, Serchhip and Saitual areas of Mizoram Power System were connected with the rest of NER Grid through 132 kV Melriat(PG) - Zuangtui Line. 132 kV Serchip - Lunglei (Khawiva) Line was in opened condition since 15:30 hrs on 29.09.2021 to avoid overloading of 132 kV Aizawl - Luangmual Line and 132kV Melriat(PG) - Zuangtui Line At 07:32 hrs on 31.01.2022, 132 kV Melriat - Zuangtui Line tripped. Due to tripping of this element, Zuangtui, Serchhip and Saitual areas of Mizoram Power System were separated from the rest of NER Grid and subsequently collapsed due to no source available in these areas. Power was extended to Zuangtui, Serchhip and Saitual areas of Mizoram Power System by charging 132 kV Melriat(PG) - Zuangtui Line at 13:47 hrs on 31.01.2022	0	52	GD-I

6	NER	13-Feb-2022	05:57	Surajmaninagar(TSECL) Area of Tripura Power System including South Comilla (Bangladesh) load was connected with the rest of NER Grid through 132 kV Palatana - Surajmaninagar line, 132 kV Agartala - Surajmaninagar D/C lines, 132 kV Budhjungnagar - Surajmaninagar line and 132 kV Surajmaninagar(ST)-Surajmaninagar Line. At 05:57 Hrs dtd 13.02.2022, 132 kV Bus of Surajmaninagar S/S of Tripura became dead due to tripping of all the connected lines on LBB protection at Surajmaninagar end. Due to tripping of these elements,Surajmaninagar(TSECL) Area of Tripura Power System including South Comilla (Bangladesh) load was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Power Supply to Surajmaninagar(TSECL) Area of Tripura Power System was restored by charging 132 kV Agartala-Surajmaninagar(TSECL) D/C at 08:55 hrs on 13.02.2022. Further power was extended to Bangladesh at 12:28 hrs on 13.02.2022.	0	81	GD-I
7	NER	17-Feb-2022	01:16	Luangmual, Melriat & Lunglei areas of Mizoram Power System were connected with the rest of NER Grid through132 kV Aizawl(PG)- Luangmual Line. 132 kV Serchip-Lunglei was under out of service to avoid overloading of 132 kV Aizawl-Lungmual line. At 01:16 hrs on 17.02.2022, 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 03:51 hrs on 17.02.2022.	0	26	GD-I
8	NER	24-Feb-2022	12:52:00	Bornagar area of Assam Power System was connected with the rest of NER Grid through 132 kV Dhaligaon-Bornagar Line. 132 kV Bornagar-Rangia line was under shutdown due to Corridor clearance. At 12:52 hrs on 24.02.2022, 132 kV Dhaligaon-Bornagar line tripped . Due to tripping of this element, Bornagar area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source available in this area. Power was extended to Bornagar area of Assam Power System by charging 132 kV Dhaligaon-Bornagar Line at 13:05 Hrs on 24.02.2022.	0	41	GD-I
9	NER	24-Feb-2022	22:22	Nongstoin and Mawngap areas of Meghalaya Power System was connected with the rest of NER Grid through 132kV Nangalbibra - Nongstoin line, 132kV Umiam I - Mawngap D/C lines. 132kV Mawlai - Mawngap line were under outage to control the overloading of 132kV Umiam III - Umiam I D/C lines. At 22:22 hrs on 24.02.2022, 132kV Nangalbibra - Nongstoin line, 132kV Umiam I - Mawngap D/C lines tripped. Due to tripping of these elements, Nongstoin and Mawngap areas of Meghalaya Power System were separated from rest of NER Grid and subsequently collapsed due to no source available in these areas. Power was extended to Nongstoin and Mawngap areas of Meghalaya Power System by charging 132 kV Nangalbibra - Nongstoin line at 23:31 Hrs on 24.02.2022.	0	24	GD-I
10	NER	25-Feb-2022	17:12	Kohima area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima - Wokha line and 132 kV Karong -Kohima line. 132 kV Dimapur-Kohima line was under emergency shutdown for rectification of CB of 132 kV Dimapur - Kohima line at Kohima due to malfunctioning of mechanical gears. At 17:12 Hrs on 25.02.2022, 132 kV Kohima - Meluri line, 132 kV Kohima - Wokha line and 132 kV Karong - Kohima line tripped . Due to tripping of these elements, 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 was extended to Kohima area by charging 132 kV KarongKohima line at 17:44 Hrs on 25.02.2022.	0	28	GD-I

11	NER	25-Feb-2022	19:11	Capital load (Shillong) along with Nehu, Mawlai, Neighrihms, Umiam, Cherrapunji areas of Meghalaya Power System were connected with the rest of NER Grid through 132 kV Umiam III-Umiam I D/C lines, 132 kV Neighrihms-Khleihriat line and 132 kV Umiam I-Mawngap D/C lines. 132 kV Mawngap- Mawlai line were opened to reduce overloading of 132 kV Umiam III - Umiam I D/C lines. 132 kV Nehu-Mawlyndep line was opened to reduce overloading of 132 kV Khleiriat-Mustem line. At 19:11 hrs on 25.02.2022, 132 kV Umiam III-Umiam I D/C lines, 132 kV Neighrihms-Khleihriat line and 132 kV Umiam I-Mawngap D/C lines tripped . Due to tripping of these elements, Capital load (Shillong) along with Nehu, Mawlai, Neighrihms, Umiam, Cherrapunji areas of Meghalaya Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas. Power was extended to Nehu by charging 132kV Umiam III - Umaim I 1 line at 19:21 Hrs, 132 kV Umiam I - Umiam line at 19:23 hrs and 132kV Umiam - Nehu line at 19:24 Hrs on 25.02.2022.	13	91	GD-I
12	NER	25-Feb-2022	22:05	Kohima area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima - Wokha line and 132 kV Karong - Kohima line. 132 kV Dimapur-Kohima line was under emergency shutdown for rectification of CB at Kohima end due to malfunctioning of mechanical gears. At 22:05 Hrs on 25.02.2022, 132 kV Kohima - Meluri line, 132 kV Kohima - Wokha line and 132 kV Karong - Kohima line tripped . Due to tripping of these elements, 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 was extended to Kohima area of Nagaland Power System by charging 132 kV Karong-Kohima line at 22:52 Hrs on 25.02.2022.	0	15	GD-I
13	NER	05-Mar-2022	13:31	Kakching, Thoubal, Chandel and Moreh areas of Manipur Power System were connected with the rest of NER Grid through 132 kV Kakching - Churachandpur, 132 kV Kakching - Elangkangpokpi, 400kV/132kV, 315MVA ICT New Thoubal and 132 kV New Thoubal - Kongba D/C lines. At 13:31 Hrs on 05.03.2022, 132 kV Kakching - Churachandpur, 132 kV Kakching - Elangkangpokpi and 132 kV New Thoubal - Kongba D/C lines tripped . Due to tripping of these elements, Kakching, Thoubal, Chandel and Moreh areas of Manipur Power System were separated from rest of NER Grid and subsequently collapsed due to no source available in these area. Power was extended to Kakching, Thoubal, Chandel and Moreh areas of Manipur Power System by charging 132 kV Elangkangpokpi - Kakching at 13:43 Hrs on 05.03.2022 and to New Thoubal by charging 132 kV New Thoubal - Kongba II and ICT of New Thoubal at 13:47 Hrs on 05.03.2022.	0	19	GD-I
14	NER	10-Mar-2022	08:11	Karong area of Manipur Power System was connected with rest of NER grid through 132 kV Yurembam-Karong & 132 kV Kohima-Karong lines At 08:11 Hrs on 10.03.22, 132 kV Yurembam-Karong & 132 kV Kohima-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 in this area. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Yurembam-Karong line at 08:35 Hrs on 10.03.22	0	18	GD-I
15	NER	10-Mar-2022	16:13	Karong area of Manipur Power System was connected with rest of NER grid through 132 kV Yurembam-Karong & 132 kV Kohima-Karong lines. At 16:13 Hrs on 10.03.22, 132 kV Yurembam-Karong & 132 kV Kohima-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 in this area. Power supply was extended to Karong area of Manipur Power System by charging 132 kV Yurembam-Karong line at 16:30 Hrs. on 10.03.22	0	17	GD 1

16	NER	15-03-2022	14:47	Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System were connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 14:47 Hrs on 15.03.2022,132 kV Along - Pasighat line tripped. Due to tripping of this element, Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System were separated from the rest of NER Grid and subsequently collapsed due to no source available in these areas. Power was extended to Pasighat, Roing, Tezu and Namsai areas of Arunachal Pradesh Power System by charging 132 kV Along - Pasighat line at 15:12 Hrs on 15.03.22	0	12	GD 1
17	NER	18-Mar-2022	23:38	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 23:38 Hrs on 18.03.2022,132 kV Balipara - Tenga line tripped. Due to tripping of this element, Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were separated from the rest of NER Grid and subsequently collapsed due to load-generation mismatched in these areas. At 23:53 Hrs on 18.03.2022,132 kV Balipara - Tenga line was declared faulty.	7	18	GD-I
18	NER	24-03-2022	12:40	Rangia, Nalabari, Sipajhar, Kamalpur areas of Assam Power System were connected with the rest of NER Grid through 132 kV Motonga (Bhutan) - Rangia, 220 kV BTPS - Rangia 1 and 220 kV BTPS - Rangia 2 lines. 132 kV Nalbari-Dhaligaon line was under shutdown to avoid overloading of 132 kV BTPS-Dhaligaon 1 & 2 lines, 132 kV Rowta - Rangia and 132 kV Sipajhar - Rowta were under shutdown to avoid overloading of 132 kV Sonabil-Depota and 132kV Kamalpur-Kahelipara was under shutdown to avoid overloading of lines. At 12:40 Hrs on 24.03.2022, 132 kV Motonga (Bhutan) - Rangia, 220 kV BTPS - Rangia 1 and 220 kV BTPS - Rangia 2 lines tripped. Due to tripping of these elements, Rangia, Nalabari, Sipajhar, Kamalpur areas of Assam Power System were separated from the rest of NER Grid and subsequently collapsed due to no load in these areas. Power was extended to Rangia, Nalabari, Sipajhar, Kamalpur areas of Assam Power System at 13:19 Hrs on 24.03.2022 by charging 220 kV BTPS - Rangia 1 line	0	120	GD-I
19	NER	24-03-2022	15:00	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 15:00 Hrs on 24.03.2022, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were separated from the rest of NER Grid and subsequently collapsed due to load-generation mismatched in these areas. Power was extended to Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP at 15:51 Hrs on 24.03.2022 by charging 132 kV Balipara - Tenga line	7	19	GD-I
20	NER	24-03-2022	17:51	Mokokchung area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland) 1 and 132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland) 2 lines. 132kV Doynag-Mokokchung line was under forced outage since 17:43 Hrs on 24.03.2022. At 17:51 Hrs on 24.03.2022, 132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland) 1 and 132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland) 2 lines tripped. Due to tripping of these elements, Mokokchung area of Nagaland Power System was separated from the rest of NER Grid and subsequently collapsed due to no load in this area. Power was extended to Mokokchung area of Nagaland Power System at 18:22 Hrs on 24.03.2022 by charging 132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland) 2 line	0	16	GD-I

21	NER	24-03-2022	18:22	Karong area of Manipur Power System and Kohima area of Nagaland Power System were connected with the rest of NER Grid through 132 kV Imphal (MSPCL) - Karong line. 132 kV Dimapur-Kohima was declared faulty and 132 kV Wokha-Kohima was under forced outage since 17:43 Hrs of 24.03.2022. At 18:22 Hrs on 24.03.2022, 132 kV Imphal (MSPCL) - Karong line tripped. Due to tripping of this element, Karong area of Manipur Power System and Kohima area of Nagaland Power System were separated from the rest of NER Grid and subsequently collapsed due to no load in this area. Power was extended to Karong area of Manipur Power System at 18:31 Hrs on 24.03.2022 by charging 132 kV Imphal (MSPCL) - Karong line and to Kohima area of Nagaland Power System by charging 132 kV Karong-Kohima line at 18:48 Hrs on 24.03.2022	0	32	GD-I
22	NER	26-03-2022	01:36	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 01:36 Hrs on 26.03.2022, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were separated from the rest of NER Grid and subsequently collapsed due to load-generation mismatched in these areas. Power was extended to Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP at 01:48 Hrs on 26.03.2022 by charging 132 kV Balipara - Tenga line	5	16	GD-I
23	NER	26-03-2022	02:10	Lunshnong area of Meghalaya Power System was connected the rest of NER Grid through 132 kV Lumshnong-Panchgram & 132 kV Khleihriat-Lumshnong lines. At 02:10 Hrs on 26.03.2022, 132 kV Lumshnong-Panchgram & 132 kV Khleihriat-Lumshnong lines tripped. Due to tripping of these elements, Lunshnong area of Meghalaya Power System was separated from the rest of NER Grid and subsequently collapsed due to no load in this area. Power was extended to Lunshnong area of Meghalaya Power System at 02:30 Hrs on 26.03.2022 by charging 132 kV Lumshnong-Panchgram line.	0	20	GD-I
24	NER	26-03-2022	16:01	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal (MSPCL) - Karong & 132 kV Kohima-Karong lines. At 16:01 Hrs on 26.03.2022, 132 kV Imphal (MSPCL) - Karong & 132 kV Kohima-Karong lines tripped. Due to tripping of these elements, Karong area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no load in this area. Power was extended to Karong area of Manipur Power System at 16:18 Hrs on 26.03.2022 by charging 132 kV Imphal (MSPCL) - Karong line.	0	10	GD-I
25	NER	27-Mar-2022	09:01	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Kohima-Karong line.132 kV Yurembam-Karong line was under ESD (due to current imbalance). At 09:01 Hrs on 27.03.2022, 132 kV Kohima-Karong line tripped. Due to tripping of this element, Karong area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no load in this area. Power was extended to Karong area of Manipur Power System at 09:54 Hrs on 27.03.2022 by charging 132 kV Kohima-Karong line at 09:54 Hrs.	0	12	GD-I
26	NER	30-03-2022	17:06	Loktak Power Station of Manipur Power System was connected with the rest of NER Grid through 132 kV Loktak-Jiribam(PG) line, 132 kV Loktak-Ningthoukhong line and 132 kV Loktak-Imphal(PG) line. 132 kV Loktak Rengpang line tripped at 17:02 hrs on 30.03.2022 At 17:06 Hrs on 30.03.2022, 132 kV Loktak-Jiribam(PG) line, 132 kV Loktak-Ningthoukhong and 132 kV Loktak-Imphal(PG) line tripped. Due to tripping of these elements, Loktak Power Station of Manipur Power System was separated from the rest of NER Grid due to loss of evacuation path. Power was extended to Loktak Power Station of Manipur Power System at 17:28 Hrs on 30.03.2022 by charging 132 kV Loktak-Imphal(PG) line.	69	0	GD-I

B. Grid Incidence

Sl No	Region	Outage		Event	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
		Date	Time				
1	NER	03-01-2022	06:17:00	AGTCCPP Unit-3 tripped at 06:17 hours on 03-01-22 due to inlet air differential pressure high . Revision done from Block No. 33 on 03-01-22	30	0	GI-I
2	NER	10-01-2022	05:15	AGTCCPP Unit 1, 2, 3, 4, 5 & 6 tripped at 05:15 hours on 10-01-22 due to sudden low gas pressure alarm. Revision done from Block No. 29 on 10-01-22.	130	0	GI-I
3	NER	26-01-2022	14:49	AGBPP Unit 2 tripped at 14:49 hours on 26-01-22 due to tripping of Gas Compressor 1. Revision done from Block No. 67 on 26-01-22.	60	0	GI-II
4	NER	04-03-2022	06:58:00	Palatana STG-1 & Palatana GTG-1 tripped at 06:58 hours on 04-03-22 due to Due to GT air inlet filter differential pressure high.. Revision done from Block No. 35 on 04-03-22.	167	0	GI-II

7. High Voltage

The following lines were opened to maintain voltage profile of 400 kV Bus(s) at Misa, Balipara, Bongaigaon, Biswanath Chariali & Ranganadi within IEGC band:-

a	400KV-BONGAIGAON-ALIPURDUAR-1
b	400KV-BALIPARA-BONGAIGAON-4
c	400KV-BISWANATH CHARIALI-RANGANADI-1

8. Lines/ICTs opened to control overloading :

a	132 kV Kamalpur – Ambassa line
b	132kV Nirjuli-Gohpur Line
c	132 kV Umtru – Kahilipara D/C and 132 kV Umtru Sarusajai D/C
d	400/132 kV, 2x315 MVA ICT I or II at Surajmaninagar (Sterlite)
e	400/132 kV, 2x315 MVA ICT I or II at PK Bari(Sterlite)

9. Transmission lines under long outage :

a	132 kV Panchgram-Srikona line (out since 14.01.2019)
b	132kV Jiribam – Rengpang
c	132 kV Mariani – Mokokchung (out since July'2008)
d	400 kV Thouabl – Imphal I

10. Transformers/ICTs/Reactor under long outage :

a	420 kV, 63 MVAR Bus Reactor at Byrnihat

11. Transmission line constraint :

a	220 kV BTPS-Salakati I & II lines(POWERGRID)
b	132 kV Biswanath Chariali (PG) – Biswanath Chariali (Pavoi) (AEGCL) I & II lines (PowerGrid)
c	220 kV Misa- Samaguri DC
d	220 kV Balipara-Sonabil line
e	220 kV Azara-Sarusajai DC

12. Transformation Constraints :

Transformation capacity at the following location is inadequate as these transformers were overloaded frequently during peak hours:-

a	220/132 kV, 2 x100 MVA ICT at Rangia
b	220/132 kV, 2 x160 MVA ICT at BTPS(AS)

13.'N-1 criterion not satisfied for the following Transformers :

a	220/132 kV, 2 x100 MVA ICT at Rangia
b	220/132 kV, 2 x160 MVA ICT at BTPS(AS)

14. Generation Constraints

Major Generation outage :

Sl No	Name of Power Station	Unit No	Rating in MW	Owner	Outage		Restoration		Reason/Remarks
					Date	Time (Hrs)	Date	Time (Hrs)	
1	NRPP - UNIT 1	1	62.50	ASSAM	22/Mar/2022	20:52	23/Mar/2022	23:10	Due to tripping of gas compressor
2	Monarchak(Thermal) - UNIT 2	2	35.58	NEEPCO	16/Mar/2022	19:28	17/Mar/2022	12:16	Due to tripping of GTG
3	Palatana - UNIT 2	2	130.91	OTPCL	04/Mar/2022	06:58	05/Mar/2022	09:35	Due to tripping of GTG
4	Palatana - UNIT 1	1	232.39	OTPCL	04/Mar/2022	06:58	05/Mar/2022	06:44	Due to GT air inlet filter differential pressure high.
5	Doyang - UNIT 3	3	25.0	NEEPCO	04/Feb/2022	18:20	05/Feb/2022	16:47	Stator winding High temperature
6	Agtccpp - UNIT 6	6	25.50	NEEPCO	10/Jan/2022	05:16	13/Jan/2022	19:24	Tripped due to non availability of GTG-3 & 4
7	Agbpp - UNIT 5	5	33.50	NEEPCO	30/Dec/2021	10:33	26/Feb/2022	18:54	Due to tripping of GBC

15. Generation Capacity Addition :

During Jan'22-Mar'22

Sl No	पावर स्टेशन का नाम / Name of Power Station	यूनिट संख्या / Unit No	मेगावाट क्षमता / Capacity in MW	Owner / स्वामी	चालू तिथि / Commissioning Date
1	Solar Power Plant at Rowta	-	25	M/s Azure	-
2	Solar Power Plant at Boko	-	25	M/s Azure	-
3	Solar Power Plant at Samaguri	-	15	M/s Azure	-
4	Solar Power Plant at Pailapool	-	25	M/s Azure	-
5	Solar Power Plant at Samaguri	-	10	M/s Maheshwari	-
6	Solar Power Plant at Ghoramari	-	4	M/s Patanjali	-
7	Solar Power Plant at Balipara	-	5	M/s Suryatap	-

16. Transmission/Transformation/Reactive Capacity Addition :

During Jan'22-Mar'22

Sl. No.	तत्व का नाम / Name of Element	केवी में वोल्टेज स्तर / Voltage level in kV	उपयोगिता / Utility	चार्ज करने की तारीख / Charging date
1	**220/132 kV, 160 MVA ICT 1 at Dimapur SS**	**220/132**	**POWERGRID**	**19.01.2022**
2	**220/132 kV, 160 MVA ICT 2 at Dimapur SS**	**220/132**	**POWERGRID**	**20.01.2022**
3	**220 kV New Mariani (PG) - Mariani (AEGCL)**	**220**	**POWERGRID**	**29.01.2022**
4	**132/33 kV, 50 MVA ICT 2 at KHALOIGAON GSS**	**132/33**	**AEGCL**	**04.02.2022**
5	**220/132 kV, 3x 10 MVA ICT 3 at Mokokchung (PG) GSS**	**220/132**	**POWERGRID**	**05.03.2022**