North Eastern Regional Power Committee

Agenda For

43rd PCC Sub-Committee Meeting

Time of meeting: 10:00 Hrs.

Date of meeting: 13th July, 2016 (Wednesday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 42nd MEETING OF PROTECTION SUB-COMMITTEE OF NERPC.

The minutes of 42nd meeting of Protection Sub-committee held on 6th May, 2016 at Guwahati were circulated vide letter No. NERPC/SE (O)/PCC/2015/4520-4555 dated 20th May, 2016.

No comments/observations were received from the constituents, the Subcommittee may kindly confirm the minutes of 42^{nd} PCCM of NERPC.

ITEMS FOR DISCUSSION

A.1 <u>Implementation of 3-Phase Auto Reclosure Scheme of Radially fed</u> 132kV Lines connected to Ranganadi HEP:

At present, the power flows to Nirjuli, Gohpur and Ziro radially from Ranganadi HEP and any transient fault in line causes undesirable outages. Hence, to avoid outages during transient fault it is essential to implement 3- Phase Dead Line charging of following 132kV Lines.

- a) 132kV Ranganadi Nirjuli Line (Dead Line Charging at RHEP)
- b) 132kV Nirjuli Gohpur Line (Dead Line Charging at Nirjuli)
- c) 132kV Ranganadi Ziro Line (Dead Line Charging at RHEP)

During 41st PCC meeting, it was agreed that shutdown of 132 kV Ranganadi – Lekhi Line and 132 kV Ranganadi – Ziro Line would be accorded on suitable date(s) as decided by 117th OCC with the consent of DoP, AP. Further Assam will support to meet the loads of Arunachal Pradesh during Shut Down through 132kV Gohpur – Nirjuli Line.

NEEPCO/Ar. Pradesh/NERTS may kindly intimate the status.

A.2 <u>Implementation of 3-phase</u> <u>Auto Reclosure Scheme in all lines</u> associated with Khandong and Kopili HEP:

For reliable operation of Power system it is required to implement 3-Phase Auto Reclosure Scheme in all the 132kV lines associated with Kopili and Khandong HEP of NEEPCO. The lists of such lines are:

- a) 132kV Khandong Umrangso Halflong
- b) 132kV Kopili Khandong #1

During 42nd PCC meeting, AEGCL informed the forum that ETL 441 panel is to be shifted from Khandong to Umrangso and Carrier-Intertripping/AR to be checked by POWERGRID at Haflong. NEEPCO informed that at Khandong end Auto-Reclosure is functioning in all circuits. After detailed deliberation, the forum requested Assam, POWERGRID & NEEPCO to fix the suitable date for joint inspection and the above works should be completed within 30th May 2016.

NEEPCO, NERTS & Assam may kindly intimate the status.

A.3 Implementation of the recommendations of the Protection Audit:

As per Sl. no 9.1.1 & 9.1.4 of Report on Enquiry Committee on Grid Disturbance in Northern Region on 30th July 2012 and in Northern, Eastern & North-Eastern Region on 31st July 2012, thorough Third Party protection audit needs to be carried out periodically along with independent audit of Fault Recording Instruments.

The status as intimated by NERLDC during 42nd PCC meeting is given below:

Status	of submission of data	related to Third Party I	Protection Audit
Name of Constituent	As per format of Task Force	As per format of NERPC	Remarks
DoP, Ar. Pradesh	Not submitted	Submitted	Data as per format of Task Force to be submitted by 30.05.2016
	Partly submitted	Partly Submitted	
AEGCL	(Details as per	(Details as per	
	Annexure-1)	Annexure-1)	
TSECL	Not submitted	Submitted	Data as per format of NERPC for Surajmaninagar &

		9 11 11 11 11 11	Rabindranagar and Data as per Task
			Force Format for
			all sub-stations by
			30.05.2016
NEEPCO	AGTPP Not submitted as per	Not Submitted as per format	Data for AGTPP as per Task Force format by
	format		30.05.2016

Constituents/NERLDC may kindly intimate the status.

A.4 Status of R&M Implementation of NER from PSDF:

The Sub-committee requested all constituents to complete the proactive actions like taking Board's approval, floating of NITs, selection of bidders etc., as directed by the Hon'ble CERC.

During the meeting held on 11.12.2015 at Delhi under the Chairmanship CEA, the forum expressed concerned about delay in disbursement of fund and execution of R&M works.

The status as given in 42nd PCC meeting is given below:

Nagaland: NIT & LOAs for complete project of Rs. 39.96 Crores - Completed.

Assam: NITs is under progress & LOAs by June-July, 2016 for entire amount of Rs. 356.50 Crores.

MePTCL: NIT for Rs. 37.52 Cr – completed & LOAs for Rs. 8.66 Cr -out of Rs. 69.19 Crores. The rest NITs & LOAs is expected by June-July, 2016

MePGCL: NIT for Rs. 2.51 Crores & LOAs – Rs. 2.51 Cr out of Rs. 32.43 Crores. Other NITs in progress and LOAs will be completed by June - July, 2016

Tripura: NIT for completed project of Rs. 31.05 Crores – completed, LOAs by June - July, 2016

Mizoram: NIT is under progress & LOAs likely by June, 2016 for entire amount of Rs. 26.84 Crores.

Ar. Pradesh & Manipur: Approval from MoP is awaited. However, they have informed that NITs have already been prepared by them and the same would be published once the approval from MoP is received.

The forum requested all the constituents to complete the work at the earliest. Further, the forum directed that the status of progress of work be intimated to NERPC Secretariat every month so that the same can be submitted to Hon'ble CERC & CEA.

Constituents may kindly intimate the status.

A.5 Root cause analysis of tripping in Southern Part of NER on 08.08.2015 and 24.09.2015 & Remedial Measures:

Remedial Measures suggested by sub group members at the meeting held at NERPC on 29.09.15

The islanding scheme of AGTPP with Tripura system is to be reviewed so as to ensure successful islanding in such cases of isolation in NER Grid.

During 38th PCC meeting, the Sub-Committee decided that in addition to the recommendations of the sub-group the following should be implemented ASAP:

1. Modification to SPS-1 at Palatana: Unit-I and II to be put in AND logic so that SPS-1 would operate.

During 40th PCC meeting, OTPC informed that the work has already been completed.

DGM (SO-II), NERLDC stated that on 15.12.2015, SPS 1 was triggered when only one module is in operation which is not correct. The SPS 1 should be triggered when both the modules are in service. He requested OTPC to check the scheme and do the necessary logic correction at the earliest.

In 41st PCC meeting, DGM(O&M), OTPC suggested that SPS-1 be disabled when one module is not running, meanwhile OTPC would review the scheme and revert back to the forum with suggestions for further modification(if possible). The forum agreed to the proposal. DGM, OTPC also proposed for modification to SPS-3 since now both units are running. It was decided to refer the matter to System Studies sub-group.

In 42nd PCC meeting, SE(O), NERPC informed that due to paucity of time, the System Studies sub-group meeting could not be held during the month and the same will be convened soon. It was discussed that review of Islanding Scheme No 2 are required in view of change in load pattern after commencement of power supply to Bangladesh. NERPC agreed to conduct meeting by end of May.

NERPC, NERTS, NERLDC & OTPC may kindly intimate the status.

Root Cause Analysis & Remedial Measures by sub group members at the meeting held at NERPC on 18.11.15 regarding Non-Tripping of Azara-Bongaigoan as raised by AEGCL:

Cause: As per information given by POWERGRID, the incidences above are due to high arcing faults.

Remedial Measures:

- a. Explore to increase the resistive reach of Z-2 and Z-3.
- b. DEF characteristics should be IDMT in place of definite time with 1100msec opening time at maximum fault level
- c. Further, Z-3 setting should be 1000msec and necessary co-ordination is required for associated lines.

d. NERPC Secretariat may extend help wherever necessary Administrative coordination is required for clearance of faults.

During 40th PCC meeting, POWERGRID requested AEGCL to implement Zone 3 setting as per the recommendation of task force. Also DEF delay setting should be 100 ms more than Zone 3 setting with IDMT characteristics. AEGCL proposed for review of Zone 3 setting as recommended by task force. However, POWERGRID opined that there is no scope for review as it is the matter for implementation.

AEGCL insisted for joint meeting for which POWERGRID sought agenda from AEGCL.

The Sub-committee requested NERPC to invite AEGCL during the monthly Sub-committee meeting to discuss about various grid incidences being held every month by NERPC along with above issues of Assam.

During 42nd PCC meeting S.E (O) NERPC requested AEGCL to kindly make it convenient to attend the next Sub-Committee (for GD/GI) meeting, so that the matter may be discussed. The sub-committee requested AEGCL to make Zone-3 protection settings as per Task Force recommendations.

NERPC/AEGCL may kindly intimate the status.

A.6 Grid Incidences and Grid Disturbances from January, 2016 to June, 2016:

The following numbers of Grid Disturbances (GD) & Grid Incidents (GI) occurred during the period w.e.f 1st January, 2016 to 30th June, 2016:-

S1 No	Control Area	Grid Incidents Jan'16 to	Grid Disturbance Jan'16 to	Grid Incidents During	Grid Disturbance During
		Jun'16	Jun'16	2016	2016
1	Palatana	10	1	10	1
2	AGBPP	12	2	12	2
3	AGTPP	18	1	18	1
4	Ranganadi	1	1	1	1
5	Kopili	0	1	0	1
6	Khandong	0	1	0	1
7	Doyang	0	3	0	3
8	Loktak	2	2	2	2
9	BgTPP	2	2	2	2
10	Arunachal	0	14	0	14

	Pradesh				
11	Assam	0	28	0	28
12	Manipur	0	36	0	36
13	Meghalaya	0	41	0	41
14	Mizoram	0	15	0	15
15	Nagaland	0	24	0	24
16	Tripura	0	2	0	2

S1.	Category	Grid Disturbance in nos							
No.	of GD/GI	Jan'16 to Jun'16	During 2016						
1	GI-I	26	26						
2	GI-II	28	28						
3	GD I	197	197						
4	GD II	4	4						
5	GD III	0	0						
6	GD IV	0	0						
7	GD V	1	1						
8	Total GI	54	54						
9	Total GD	202	202						

This is for information to the members. Remedial Measure are to taken by the concerned power utilities of NER

A.7 Root cause analysis of Major Grid Disturbance on 16th April 2016:

A major disturbance of category GD-V occurred in NER Grid on 16.04.16 at 1203 Hrs. Concerned persons of all constituents of NER are requested to participate in the meeting alongwith available data for fruitful discussion of the following disturbance.

NER Grid was in synchronism with ER Grid through 220 kV Birpara - Salakati I & II, 400kV Bongaigaon - New Siliguri I, II, III & IV lines and was connected with NR Grid through +/- 800 kV HVDC Biswanath Chariali - Agra Pole-I.

At around 12:00:35.739 Hrs, 400 kV Bongaigaon - BgTPP line I tripped from Bongaigaon end on DP, B-phase, Zone II.

At 12:01:03.001 Hrs, 400 kV Bongaigaon - Balipara line IV tripped on DP, B-phase, Zone II and fault cleared from Balipara end in 325 msec (as per DR data).

Around 12:03:07.272 Hrs, 400 kV Bongaigaon - New Siliguri line III tripped on Zone IV at Bongaigaon. 400 kV Bongaigaon - BgTPP line II tripped from both ends at 12:03:30.091 Hrs and 400 kV Bongaigaon - Azara line tripped at 12:03:30.464 Hrs on DP, B-phase, Zone II at Azara end.

After that, 400/220kV 315 MVA ICT at Bongaigaon tripped on Back Up Over Current Protection on HV Side at around 12:03:36.784 Hrs. 400 kV Bongaigaon - New Siliguri line I tripped at 12:03:36.827 Hrs, 400 kV Bongaigaon - New Siliguri line II tripped at 12:03:37.964 Hrs from Bongaigaon end on over voltage. 400 kV Bongaigaon- New Siliguri line IV also tripped.

Due to these trippings, NER grid desynchronized from rest of India grid and at 12:03:40.960 Hrs. AGTPP along with part of Tripura system separated from isolated NER Grid (from PMU). Sarusajai bus blacked out at 12:03:43.360 Hrs and at 12:03:45 Hrs, +/- HVDC BNC - Agra Pole I blocked. Subsequently major part NER grid collapsed due to load generation mismatch. 220 kV Salakati S/S remained connected with Birpara and Gelephu S/S. AGBPP, LTPS and NTPS stations survived with generation of 150 MW, 90 MW and 60 MW respectively with upper Assam load due to successful operation of islanding scheme at around 12:05 Hrs (information taken from SLDC). The island was synchronized with main grid at Misa at 1406 Hrs. Tripura system initially survived along with AGTPP generation with demand of around 60 MW. Subsequently this island collapsed at due to load generation mismatch.

Details of Restoration attached at Annexure-1

Load Loss: 973 MW

Generation Loss: 1125 MW

Category as per CEA Standards: GD-V

Root Cause Analysis: Remedial Measures:

All utilities of NER are requested to furnish the details for fruitful discussion as mentioned below:

- a. Disturbance Recorders (In COMTRADE format), Relay Flags, Pickup distance of DP relays, Event Loggers, and SOE from all 400 kV and 220 kV Substations for all feeders
- b. Details of Operation of SPS during the disturbance on 16th April 2016
- c. Details of Operation of UFR during the disturbance on 16th April 2016 along with feeder-wise quantum of load relief.
- d. Detailed bus schemes indicating feeders connected in Main I and Main II at 400 kV Bongaigaon, 400 kV BgTPP (NTPC), 400 kV Balipara, 400 kV Silchar, 400 kV Azara, prior to the disturbance
- e. Observations from your end regarding the disturbance.
- f. Reason for pick-up of Backup O/C relays at HV side of ICT at Bongaigaon, even though fault was on HV side
- g. Relay flags for all Units and Lines tripping along with time of tripping and restoration.

- h. Loktak, AGBPP, AGTPP and Palatana may provide the bus frequency data at the time of disturbance (from 1200 Hrs to 1300 Hrs, on 16-04-2016).
- i. Time of formation of AGBPP island along with details of tripping of lines.
- j. Review of Relay Setting
- k. Operation of HVDC Frequency controller during the disturbance.
- 1. Time synchronisation of DR & EL
- m. Issues with timely submission of data
- n. Dynamic response of Machines.
- o. Second infeed point of NER.

As per discussion in the Sub-Group meeting preceding 42nd PCC meeting, the preliminary investigation revealed the following:

- 1) Line differential protection for 400 kV BgTPP (NTPC)-Bongaigaon (PG) I & II lines was not commissioned (as on 16.04.2016) by NTPC & POWERGRID at their ends.
- 2) DEF operated (at Bongaigaon end) with time delay 440 ms to clear the fault.
- 3) However before DEF could trip the line, all circuits of 400 kV Binaguri-Bongaigaon tripped on Zone-2 from 400 kV New-Siliguri end with time delay 350ms.

After detailed deliberation the forum felt that line differential protection for 400 kV BTPS-Bongaigaon should have been commissioned and time delay for zone-2 at Binaguri should have been around 600ms as is the standard for long lines followed by a short line.

The non-clearance of fault by relays at Bongaigaon end on 400 kV Bongaigaon – BgTPP (NTPC) I line, and lower settings of Zone-2 as compared to that recommended by CEA's V. Ramakrishna Task Force seems to be the primary cause of the disturbance.

Members also suggested that a special Enquiry Committee be formed for detailed and thorough investigation for the GD. SE(O), NERPC suggested that a committee be formed with DGM(SO-II), NERLDC as the Chairman and members from NERLDC, NLDC, NERTS, NTPC, AEGCL, MePTCL, NEEPCO and NERPC. Enquiry Committees for analysis of Grid Disturbance on 30th & 31st Jul12 were constituted by members of independent bodies. It is proposed to constitute Enquiry Committees for analysis of Grid Disturbance on 16th Apr16 with independent members. The forum unanimously agreed and set the deadline of 30.05.2016 for submission of report by the committee.

After detailed deliberation the forum felt that there are many pre and post disturbance events those need to be analyzed for correction, if any, of various scheme viz. Relay Setting, SPS Operation, Islanding Scheme, UFR Load Shedding Scheme functioning etc. Accordingly, SE (O), NERPC suggested that a committee be formed with DGM (SO-II), NERLDC as the Chairman and members from NERLDC, NERTS, NTPC AEGCL and NERPC to analyze the disturbance jointly conclude the same and submit report containing findings and recommendation thereof for corrective measures within 30.05.2016. The forum unanimously agreed to the suggestion.

NERLDC/NERPC may please intimate the status.

A.8 Review of remedial actions pertaining to Grid Disturbances w.e.f. 01.01.2016 to 31.03.2016:

Name of	Disturbance	Remedial action suggested	Status
Control Area			
Assam	Misa (PG) - Mariani(AS) (Misa (PG) - Not Furnished and Mariani(AS) - Auto Reclose Lockout) line, 220 kV Samaguri - Mariani(AS) (Samaguri (AS) - DP, ZI, R-E and Mariani(AS) - DP, ZI, R-E) line and 220 kV AGBPP - Mariani(PG) (AGBPP)	requested AEGCL to kindly attend the next Sub-Group meeting for review of zone-2 and zone-3 settings and other issues pertaining to co-ordination of relay settings.	
Manipur	Imphal(PG)-Imphal(MSPCL) I&II on 04.01.16,05.01.16,12.01.16,14. 01.16,21.01.16,24.01.16, 09.02.16,07.03.16,14.03.16, 19.03.16 & 26.03.16 Multiple tripping of 132 kV Loktak)-Ningthoukong(MSPCL)	DGM(AM), NERTS informed that for Imphal(PG)-Imphal(Man) line, settings for DP, EF/OC have been reduced to isolate from severe faults in Manipur system. He also suggested that R&M works need to be expedited. After detailed deliberation the Sub-Committee suggested the following: 1) Yurembam & Ningthoukong S/S R&M works to be checked and status reported by Expert Committee (NERLDC/NERTS/NERPC). 2) Expert Committee to draw up action plan for completion of balance activities. 3) After submission of report,	

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		NERTS will decide timeline for restoration of settings to normalcy. The forum requested NERPC to write a letter to MD, MSPCL for this issue.	
Arunachal Pradesh	Tripping of 132kV Ranganadi- Lekhi on 19.01.16 & 21.01.16	The EF relay at Lekhi should be made DEF (directional) towards Nirjuli/Itanagar. The Sub-Group also suggested that EF relay setting to be high set with low time delay (if possible) for speedy fault isolation.	
Nagaland	Tripping of 132 kV Dimapur(PG)-Dimapur(NG) I&II on 11.01.16, 21.02.16. Multiple tripping of 132kV Dimapur(PG)-Kohima(NG) on 12.01.16, 22.01.16, 21.02.16 & 31.03.16. Tripping of 132 kV Doyang(NEEPCO)-Mokokchung(NG) on 08.02.16, 18.02.16, 21.02.16.	The 42 nd PCC forum decided no proper analysis can be done unless details (relay flags, DR etc.) are submitted by DoP Nagaland. However forum suggested that vegetation clearance activities be taken up in earnest by DoP Nagaland to reduce the number of trippings. As no representative from DoP, Nagaland attended in the meeting, the issues could not be discussed in detail. The members expressed concern over non-representation of DoP, Nagaland to the sub-committee. The forum requested NERPC to write a letter to Chief Engineer, DoP, Nagaland for this issue.	
Mizoram	At 1420 Hrs 09.01.16, 132 kV Aizwal - Kolasib (Aizwal (PG) - Earth Fault and Kolasib - No Tripping) line and 132 kV Badarpur - Kolasib (Badarpur (PG)- DP, ZIII, R-E and Kolasib - No Tripping) line tripped. Tripping of 132kV Aizawl- Zuangtui on 24.02.16, 14.03.16,28.03.16. At 1621 Hrs 31.03.16, 132 kV Aizwal - Kumarghat (Aizwal (PG) - Not Furnished and Kumarghat- DP, ZII, Y-E), 132 kV Aizwal - Kolasib (Aizwal (PG) - DP, ZI, B-E and Kolasib - Not Furnished) and 132 kV Aizwal - Jiribam (Aizwal (PG) - DP, ZII,	The 42 nd PCC forum decided no proper analysis can be done unless details (no tripping, relay flags, DR etc.) are submitted by DoP Mizoram. However forum suggested that vegetation clearance activities be taken up in earnest by DoP Mizoram to reduce the number of trippings. As no representative from P&E Dept., Mizoram attended in the meeting, the trippings pertaining to Mizoram system could not be discussed in detail. The members expressed concern over non-representation of P&E Dept., Mizoram to the sub-committee. The forum requested NERPC to write a letter to Engineer in Chief,	

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		P&E Dept., Mizoram for this	
	Furnished) line tripped.	issue.	
	Multiple tripping of 132 kV	In the Sub-Group meeting	
	Khliehriat(PG)-Khliehriat(ME)	preceding 42 nd PCCM, after	
	I&II on 27.02.16,28.02.16,	analysis of all tripping, it was	
	19.03.16, 28.03.16, 31.03.16.	emphasized that R&M works	
	At 1830 Hrs 29.01.16,	, , ,	
	132 kV Agia (AEGCL) –	importance. SE, MePTCL	
	Medipathar (MePTCL) (Agia		
	(AEGCL) – Not Furnished and		
	Medipathar (MePTCL) -Not	be completed within one week.	
	Furnished) line tripped.	2) Within one month numerical	
	At 0804 Hrs 04.03.16, 132 kV	relay will be installed in all	
	Lumshong- Panchgram	feeders emanating from Khliehriat	
	(Lumshong – Earth Fault and	S/Stn.	
	Panchgram- Earth Fault) line	3) Earthing of Towers of all	
	tripped.	transmission lines of MePTCL will	
	At 2150 Hrs 30.03.16, 132 kV	be checked.	
	Nangalbibra (MePTCL) –		
Meghalaya	Medipathar (MePTCL)	DGM(AM), NERTS clarified that	
	(Nangalbibra(MePTCL)- DP,ZII,	POWERGRID would review relay	
	R-Y-B and Medipathar	settings at Khliehriat(PG) once	
	(MePTCL) –No Tripping) line	line 1&2 are completed.	
	tripped.		
		He also informed that	
		POWERGRID is in the process of	
		installing Line LAs for 132kV	
		Aizawl-Kumarghat, 132kV	
		Badarpur-Kolasib, 132kV	
		Khliehriat-Khandong and 132 kV	
		Khandong- Haflong. S.E.(O),	
		NERPC proposed that for all the	
		state lines (Meghalaya in	
		particular) for lightning prone	
		zones; line LAs may be installed	
		with funding from PSDF. All	
		members agreed.	
	Tripping of 400171 Dangered	The 40nd DCC falt manage magating	
	Tripping of 400kV Ranganadi-	The 42 nd PCC felt proper reactive	
	BNC I (Overvoltage) on 12.01.16 & 13.01.16.	power compensation is required	
	\times 13.01.10.	at BNC-HVDC S/Sn. And it is	
		needed to expedite commissioning	
		of 1 no. Bus Reactor at 400 kV	
DMC	A+ 1924 Ura 05 01 16 120 1-37	Rangandi.	
BNC	At 1834 Hrs 25.01.16, 132 kV	Forum suggested that vegetation	
	Biswanath Charali - Pavoi I	clearance activities be taken up in	
	(Biswanath Charali (PG) – No	earnest by AEGCL & DoP Ar.	
	Tripping and Pavoi (AEGCL) –	Pradesh to reduce the number of	
	Not Furnished) line, 132 kV	trippings.	
	Biswanath Charali (PC)		
	(Biswanath Charali (PG) – Over		

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DoP Ar. Pradesh, AEGCL, MSPCL, MeECL, DoP Mizoram, DoP Nagaland, TSECL, NERLDC may please inform the status.

(PG)

A.9 Disturbance in Bongaigaon Thermal Power Plant

(Biswanath Charali

line tripped.

Directional Earth Fault and Pavoi (AEGCL) – Earth Fault)

At 1242 Hrs 02.03.16, 400 kV BgTPP- Bongaigaon I & II (BgTPP- Bus Bar Differential Protection and Bongaigaon- Direct Trip) lines tripped. BgTPP Unit I also tripped due to operation of Busbar differential protection. Due to tripping of these elements Bongaigaon Thermal Power Plant blackout.

The 42nd PCC forum requested NTPC to ensure that there is proper sharing of load and outgoing feeders between Main-I and Main-II buses (DMT bus scheme at 400 kV BgTPP). From this incident, it appears that both the feeders of 400 kV BgTPP (NTPC) – Bongaigaon I & II were on same bus, which got tripped due to operation of Bus-bar differential protection on one bus. NTPC was asked to check what was the bus-bar configuration at the time of disturbance.

NTPC representative agreed to revert back to the forum with details of fault (due to which bus bar differential operated).

NTPC may please intimate the details.

A.9 Tripping of generating units at AGBPP-NEEPCO:

- a. At 1153 Hrs on 06.01.2016, Units # 2, 5, 9 of AGBPP tripped due to tripping of Gas Compressor-IV (Generation Loss = 73 MW)
- b. At 0434 Hrs on 11.01.2016, Units # 5 of AGBPP tripped due to tripping of Gas Compressor-II (Generation Loss = 45 MW)
- c. At 0508 Hrs on 12.01.2016, Units # 2&4 of AGBPP tripped due to tripping of Gas Compressor-II (Generation Loss = 89 MW)
- d. At 0635 Hrs on 13.01.2016, Units # 2,3,4&8 of AGBPP tripped due to tripping of Gas Compressor-II (Generation Loss = 144 MW)

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- e. At 0544 Hrs on 08.02.2016, Unit # 4 of AGBPP tripped due to tripping of Gas Compressor-II (Generation Loss = 31 MW)
- f. At 1052 Hrs on 11.02.2016, GTG I & STG I of AGBPP tripped due to Tripping of Gas Booster Compressor (Generation Loss = 250 MW)
- g. At 0155 Hrs on 26.02.2016, Units # 1,2,3,7&8 of AGBPP tripped due to Tripping of Gas Compressor II (Generation Loss = 111 MW)
- h. At 0050 Hrs on 06.03.2016, Units # 7&8 of AGBPP tripped due to tripping of Gas Compressor II (Generation Loss = 33 MW)

During 42nd PCCM, NEEPCO informed that reasons of GC tripping(s) would be furnished by them at the earliest.

NEEPCO may please intimate the details.

A.9 Tripping of generating units at AGTCCPP-NEEPCO:

- a. At 0654 Hrs on 10.01.2016, Units # 3 of AGTPP tripped due to Differential pressure high in inlet air filter (Generation Loss = 14 MW)
- b. At 0324 Hrs on 11.01.2016, Units # 2 of AGTPP tripped due to Differential pressure high in inlet air filter (Generation Loss = 13 MW)
- c. At 1520 Hrs on 05.02.2016, Unit # 3 of AGTPP tripped due to control system problem (Generation Loss = 15 MW)
- d. At 1914 Hrs on 05.02.2016, STG II of AGTPP tripped due to high core temperature (Generation Loss = 20 MW)
- e. At 1128 Hrs on 15.02.2016, STG I of AGTPP tripped due to tripping of operator console (Generation Loss = 22 MW)
- f. At 1901 Hrs on 03.03.2016, STG II of AGTPP tripped due to operation of Rotor earth fault protection (Generation Loss = 23 MW)
- g. At 2340 Hrs on 03.03.2016, Unit # 1 and STG-I of AGTPP tripped due to low control oil pressure (Generation Loss = 34 MW)
- h. At 1042 Hrs on 04.03.2016, Unit # 1 of AGTPP tripped due to boiler problem (Generation Loss = 20 MW)
- i. At 2127 Hrs on 27.03.2016, Unit # 3 of AGTPP tripped (Generation Loss = 15 MW)
- j. At 1031 Hrs on 28.03.2016, Unit # 3 of AGTPP tripped due to problem in Control System (Generation Loss = 4 MW)

During 42nd PCCM, NEEPCO informed that cause and rectification(s) done, if any, would be furnished by them at the earliest. The reason for these disturbances

could be un-cleared fault in Tripura system. However, due to absence of any representative from TSECL, the matter could not be discussed in detail. The sub-committee expressed concern over non-participation of TSECL in PCC meetings inspite of repeated requests.

The forum requested NERPC to write a letter to CMD, TSECL for this issue.

NEEPCO/NERPC may please intimate the status.

A.9 Tripping of generating units at Loktak HEP-NHPC:

- a. At 1720 Hrs on 17.01.2016, Units # 3 of Loktak tripped due to high Air temperature (Generation Loss = 35 MW)
- b. At 1715 Hrs on 08.03.2016, Unit # 1 of Loktak tripped due to GBOC pump failure (Generation Loss = 35 MW)

The 42nd PCC forum viewed very seriously the absence of representative of NHPC and requested NHPC to kindly submit details of above trippings and remedial actions undertaken in this regard.

NHPC may please intimate the status.

A.11 Completion of activities within specified time as per directives of CERC vide order in Petition No. 113/MP/2014

As per order in Petition No. 113/MP/2014 of Hon'ble CERC, CERC directed to power utilities and organizations of NER to complete the activities within specified time/submit monthly reports as per provisions of IEGC & Grid Standards of CEA etc.

List of actions/activities/reports to be completed within specified time as per directives of CERC vide order in Petition No. 113/MP/2014 attached at - **Annexure II**.

During 42nd PCC meeting, All the utilities were once again requested to submit compliance status latest by 20.05.2016.

Members may please deliberate

A.12 Standardization of Disturbance Recorder Channels:

Disturbance Recorders on Transmission elements are necessary for post disturbance analysis, and identification & rectification of any protection operation. As per CBIP's manual on Protection of Generators, GT, Transformers and Networks, it is recommended to have minimum 8(eight) analog signals and 16(sixteen) binary signals per bay or circuit. Also, it should have a minimum of 5 sec of total recording time, minimum pre-fault recording time of 100 msec and minimum post-fault recording time of 1000 msec.

POWERGRID had standardized Disturbance Recorder Channels for lines, transformers & reactors.

The Sub-committee requested NERPC/NERLDC to circulate the above standardization to all constituents of NER for giving comments and suggestion by 24.07.15. NERLDC had sent this document to all constituents of NER for giving comments and suggestion by **24.07.15**.

Till date no comments has been received from any constituents. It is requested all constituents of NER to standardize Disturbance Recorder Channels at the earliest.

During 42nd PCC meeting, the forum requested NTPC to provide their standardized DR Channels for generator so that it may be standardized for all generating units of NER. NTPC representative readily agreed. S.E.(O) once again requested all the constituents to kindly furnish their comments so that the process may be completed.

Concerned utilities may please intimate the status.

A.13 <u>Frequent voltage dips/tripping on 132 kV line to Umrangshu Plant of</u> Calcom Cement:

During the months of Feb-April'2016 frequent voltage dips/tripping (Annx. II) were recorded leading to production losses of client. Such voltage dips/tripping were not recorded until January, 2016.

In 42nd PCC meeting, it was suggested that the exact reasons for voltage dip can be ascertained only after physical inspection at site. It was decided that joint team of NERTS/AEGCL would visit the plant at a suitable date and submit report to the forum for further action.

Members may like to discuss.

A.14 Submission of Grid Disturbance Report on monthly basis:

As per communication from NPC *vide*. 5/GDR/NPC/CEA/2016 dtd. 25.01.2016 henceforward GD report in given proforma(Annx. III) is required to be submitted on a monthly basis. All the constituents are requested to provide necessary data likewise in a timely manner.

This is for information & necessary action please.

A.15 Protection System in Tripura and its ramifications in NER grid:

During 40th PCC meeting, SE(O), NERPC stated that the main concern is the protection within Tripura system. As it is learnt that no primary protection system is in place in many of their important lines and any delayed tripping on their system may affect the power supply to Bangladesh. Further, he stated that the issue was brought to the notice of Tripura in many occasions but no positive response was made from Tripura side. After detailed deliberation, the Subcommittee requested NERPC to write letter to highest authority of Tripura with a copy to MoP in this regard.

In 41st PCC meeting, SE(O), NERPC informed the forum that intimation has already been given to Govt. of Tripura, however response in this regard is awaited. The forum viewed seriously the non participation of TSECL representative in PCC meetings of NERPC and requested that this matter to be raised in the next TCC/RPC meeting.

In 121st OCC meeting in agenda item No. D.23 NEEPCO had raised the matter of frequent tripping of AGTCCPP units "Instances of tripping AGTCCPP units in many occasions exists due to nu-cleared downstream disturbance in Tripura system". This has resulted to heavy stress to the machines in addition to reduce the maintenance interval time. Tripura is requested to analyze the fault and rectify the same at the earliest." and in item No. D.15 NERLDC had raised the matter of disturbance in power supply to Bangladesh.

As per deliberation of the Sub-Group (preceding 42nd PCC meeting) for analysis of Grid Disturbances the following were suggested for improvement of the protection system in Tripura:-

Proper protection systems are required urgently for 132 kV Surjamaninagar, 132 kV Udaipur and 132 kV 79 Tilla (Agartala).

In response to TSECL representative's request for CTU help in relay settings at the above stations, NERTS suggested that the following may please be provided:

<A> Feeder details- Name of feeder, kV level, Circuit configuration [D/C or S/C], MVA level(Short Circuit level), % impedance, line length, type of conductor, shortest and longest line length at next station at same voltage level.

- ICT Details- % impedance, tap position.
- <C> Existing connected relay details and relay settings.
- <D> C.T. and P.T. ratio for all feeders.

The 42nd PCC forum approved the above. Regarding generation interruption at Palatana GBPP it was suggested that to prevent ICT tripping in case of fault in Tripura system, settings of 132 kV Palatana-S M Nagar and 132 kV Palatana-Udaipur lines are to be changed by OTPC in co-ordination with settings at 132 kV S M Nagar and 132 kV Udaipur S/Sn. Members readily agreed to the suggestion.

DGM(AM), NERTS suggested that Protection Audit of Tripura Power System needs to be done and sent to MoP. The forum unanimously agreed and requested to NERPC to kindly initiate action in this regard.

During deliberation it is discussed that Tripura has to ensure physical existence and proper functioning of Main & Back Up Protective Relays for all the elements connected to 79, Tilla and Surjamani Grid Sub Station buses to avoid undesirable tripping of Main Grid Lines including Bangladesh Line during fault in Tripura System. Further, DGM (AM) suggested forming a group of protection experts from AEGCL, POWERGRID and OPTC to visit Sujamani and 79 Tilla Grid Sub Station for activation and implementation of correction setting to available healthy relays. Further, the same group will carry out Protection Audit of Tripura Power System and submit the recommendation for corrective measures to TSECL, for implementation in stipulated time frame, and NERPC, for monitoring on regular basis in OCC & PCC Meeting. However, in case of any delay in implementation matter will be referred to CERC / MoP. The forum unanimously agreed and requested to NERPC to kindly initiate action in this regard.

NERPC/TSECL may please deliberate.

A.15 <u>Multiple trippings in 400 kV Bongaigaon- Balipara corridor during 400 kV Bus-I shutdown at Balipara on 29.04.16:</u>

During 400 kV Bus-I shutdown at Balipara on 29.04.16 the following trippings took place putting the grid in very vulnerable condition on two occasions. Only 400 kV Bongaigaon – Balipara Ckt-II remained in service. Restoration of these lines also took considerable time.

- 400 kV Bongaigaon Balipara- III was under outage due to O/V
- 400 kV Bongaigaon Balipara- I tripped at 09:23 Hrs and restored at 11:29 Hrs
- 400 kV Bongaigaon Balipara- IV tripped at 09:41 Hrs and restored at 09:51 Hrs
- 400 kV Bongaigaon Balipara- I tripped at 11:40 Hrs and could not be charged
- 400 kV Bongaigaon Balipara- III taken in service at 1146 Hrs
- 400 kV Bongaigaon Balipara- IV tripped at 11:40 Hrs and restored at 12:04 Hrs

Similar situation may happen at any time during major shutdown when system remains in depleted condition. In view of above it is requested to all concerned for taking extra care during critical shutdown and also ensures that Senior Executives remain in control room for managing contingent situations.

During the meeting of sub-group(preceding 42nd PCC meeting) consisting of representatives from NERTS, NERLDC, NERPC, MePTCL & NEEPCO on 03.05.2015, DGM(AM), NERTS indicated that multiple tripping of 400 kV Bongaigaon – Balipara lines occurred due to fault in DC system at 400 kV Balipara end, which led to mal-operation of protective system. However, exact location of DC fault could not be verified indicating the system could be prone to more such disturbances. The PCC sub-committee members requested NERTS to act on it to get the fault rectified, and take appropriate care to prevent such disturbances in future, which endanger security of whole of NER Grid.

NERTS may please intimate the status.

A.16 <u>Analysis & Discussion on Events, Grid Incidences, Grid Disturbances</u> which occurred in NER Grid w.e.f January'16 to June'16:

A. Disturbances in Arunachal Pradesh System:

Total **21 Nos** Disturbances have occurred in Arunachal Pradesh system during the month of January'16 to June'16. (S1 No. 4 to 24 of Disturbance Report of NER Grid attached in Annexure-I)

3 Nos disturbances occurred due to tripping of 400 kV Ranagandi-Biswanath Chariali I line, while 400 kV Ranagandi-Biswanath Chariali II line was opened on Over Voltage (Sl No. 4, 5 & 6 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Ziro, Lekhi & Capital area of Arunachal Pradesh and Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.

Root Cause Analysis: For Sl. No. 4 & 5:

The element tripped on operation of Over Voltage Relay at Ranganadi. Further investigations shall be done after getting DR outputs from Ranganadi and Biswanath Chariali.

For Sl. No. 6:

R-Ph CT of Sub Bank-3 of Main Bank Z-1 at BNC failed. Due to un-wanted operation of Distance Protection Relay (DPR) (PD-571) in Zone-1 at Ranganadi, 400 kV Ranganadi - BNC - I line tripped and un wanted operation of Distance Protection in Zone-4 at Balipara resulted in tripping of 400 kV Balipara - BNC III & IV lines. (REL relay setting for Zone-4 for 400 kV Balipara - BNC lines was set instantaneous. For REL relay, Zone-4 is extra and is not required. However, for MICOM relays Zone-4 is reverse zone). Events occurred due to mal-operation of Numerical relays. It has been corrected by NERTS. The PD-571 relay setting details has been given by POWERGRID to NEEPCO. NEEPCO is to check.

Remedial Measure to be taken:

For Sl. No. 4 & 5:

Ranganadi is to check overvoltage relay settings further overvoltage relay operation at Ranganadi to be checked by injecting voltage. Reactor at Ranganadi end to be expedited.

For Sl. No. 6:

The Zone-4 for the Distance Protection of 400 kV Balipara-BNC - III & IV lines at Balipara have been corrected (disabled). At Biswanath-Chariali end, Tie-breaker was not in service. For operational reliability, Main and Tie both should always be in service. Ranganadi Zone-1 should not have operated. Ranganadi to check and review the setting of the Distance Protection Relay Reason for CT blast occurred to be checked by POWERGRID and intimated to sub-committeee / RPC as the event happened in a newly commissioned substation.

Khupi Area:

9 Nos disturbances occurred due to tripping of 132 kV Balipara- Khupi line, (Sl No. 7 to 15 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Khupi area of Arunachal Pradesh was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Most of the cases are due to soil erosion resulting in bamboo touching the line and resulting in earth fault.

Remedial Measure to be taken:

Vegetation clearance is to be done by NEEPCO.

Capital Area:

5 Nos disturbances occurred due to tripping of 132 kV Ranganadi- Lekhi line, (Sl No. 16 & 20 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Lekhi & Capital areas of Arunachal Pradesh & Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.

Root Cause Analysis:

The O/C and E/F relays are found to operate indiscriminately for down stream faults. Due to vegetation problem in downstream of Lekhi, 132 kV Ranganadi - Lekhi line tripped.

Remedial Measure to be taken:

Vegetation clearance is to be done. Directionality function associated with Earth Fault Relay is to be enabled at Lekhi. Regular patrolling to be done. Lekhi end relay settings to be co-ordinated with downstream relays.

Nirjuli Area:

3 Nos disturbances occurred due to tripping of 132 kV Lekhi- Nirjuli line, (Sl No. 21 & 23 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Nirjuli area of Arunachal Pradesh & part of Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Fault could be in the line section due to vegetation problem. NERTS may check.

Remedial Measure to be taken:

PG to maintain healthiness of the line. Lekhi end relay settings to be coordinated with downstream relays.

Deomali Area:

1 No disturbance occurred due to tripping of 220 kV AGBPP- Deomali line, **(SI No. 24 of Disturbance Report of NER Grid attached in Annexure-I).** Due to tripping of this element, Deomali area of Arunachal Pradesh was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem, the line tripped. Arunachal to give further details regarding this tripping.

Remedial Measure to be taken:

Vegetation clearance is to be done by DoP AP.

B. Disturbances in Assam System:

Total **25** Nos Disturbances have occurred in Assam system during the month of January'16 to June'16. (Sl. No. 25 to 50 of Disturbance Report of NER Grid attached in Annexure-I).

Dullavcherra Area:

- 2 Nos disturbances occurred due to tripping of 132 kV Silchar Dullavcherra line and 132 kV Dullavcherra- Dharmanagar line, (Sl No. 25 & 26 of Disturbance Report of NER Grid attached in Annexure-I).
- **12 Nos** disturbances occurred due to tripping of 132 kV Silchar Dullavcherra line while 132 kV Dullavcherra- Dharmanagar line was kept

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open for system requirement, (Sl No. 27 to 38 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Dullavcherra area of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

One of the reasons of tripping of these lines is vegetation. It is also suspected that tripping might me due to improper relay co-ordination or its absence thereof at Durlavcherra. Sometimes due to jumper failure and lightning in the line, 132 kV Silchar - Dullavcherra line tripped.

Remedial Measure to be taken:

AEGCL to check Dullavcherra relay setting & timing, and matching with Silchar end. Also it is to be checked whether relays are in service or not at Dullavcherra end AEGCL to check relay settings at Dullavcherra and coordinate with downstream end relays. Vegetation problem in the downstream system is be checked by AEGCL & TSECL. Proper maintenance and frequent patrolling are to be done by AEGCL & TSECL. Conditional as well as period maintenance of line accessories to be done by POWERGRID & AEGCL and patrolling also to be done. Tower footing as well as substation earth resistance is to be checked by POWERGRID & AEGCL.

Halflong Area & Umrangshu Area:

4 Nos disturbances occurred due to tripping of 132 kV Haflong (PG)-Haflong(S) line (S1 No. 39 to 42 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Haflong area of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

1 Nos disturbance occurred due to tripping of 132 kV Khandong – Umrangshu line and 132 kV Haflong- Jiribam (PG) line (S1 No. 43 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Haflong and Umrangshu areas of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

For Sl No. 39 to 42

Phase to phase fault at downstream of Haflong (PG) cleared at Haflong(PG). Only phase-phase fault will likely cause overcurrent, if no earth fault relay operated.

For S1 No. 43

Improper relay setting co-ordination at Khandong end.

Remedial Measure to be taken:

For Sl No. 39 to 42

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Relay co-ordination at downstream level Haflong-AS end to be done by AEGCL in consultation with POWERGRID.

For S1 No. 43

NEEPCO to send adopted relays settings at Khandong end to sub-committee, and to be co-ordinate with settings of Umrangshoo and Haflong. Time grading needs to be checked.

Gohpur Area:

2 Nos disturbances occurred due to tripping of 132 kV Gohpur- Nirjuli line (S1 No. 44 & 45 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Gohpur area of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

POWERGRID had informed that there was problem of incoming power at Gohpur.

Remedial Measure to be taken:

AEGCL to inform about CT ratio at Gohpur end, and check overcurrent relay at Gohpur end. AEGCL is to furnish detailed report on this incident. If it is issue of overcurrent, then POWERGRID needs to check relay settings at Gohpur / Nirjuli in coordination with AEGCL.

South Assam Area:

1 No disturbance occurred due to tripping of 132 kV Silchar- Panchgram line, 132 kV Silchar - Dullavcherra line, 132 kV Srikona - Panchgram line & 132 kV Silchar - Srikona I & II lines (Sl No. 46 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Part of South Assam area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

It was understood from relay flags that 132 kV Silchar - Panchgram line, 132 kV Silchar - Dullavcherra line tripped due to vegetation problem. Likely downstream fault at Dullavcherra end. But 2 unwanted operations at Panchgram end of E/F relay in 132kV Srikona-Panchgram and 132kV Silchar-Panchgram lines.

Remedial Measure to be taken:

AEGCL to check relays at Panchgram end. Directionality of the Earth Fault Relays at Panchgram for 132 kV Silchar – Panchgram line is to be checked. Protection at Srikona for 132 kV Panchgram – Srikona line is to be verified. Vegetation clearance is to be done by AEGCL.

Pavoi and Depota Area:

3 No disturbance occurred due to tripping of 132 kV Biswanath Charali (PG) -Pavoi I & II lines (S1 No. 47 to 49 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Pavoi area of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

There was jumper failure in 132 kV BNC – Pavoi I line. 132 kV BNC – Pavoi II line tripped on overloading subsequently. 132 kV BNC - Pavoi I & II lines are highly loaded during peak hours. Some more incidents of jumper failure have occurred in these lines.

Remedial Measure to be taken:

Alternate connectivity between Balipara (PG) and Pavoi is to be explored. Meanwhile, POWERGRID has carried out jumper tightening in all locations of the 132 kV BNC-Pavoi I & II lines. If such tripping still repeated, POWERGRID have to do Jumper Strengthening for this section.

Dhaligaon Area:

1 No disturbance occurred due to tripping of 132 kV BTPS- Dhaligaon I & II lines (S1 No. 50 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Dhaligaon area of Assam was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Likely fault in line. A/R to be installed at both end. AEGCL to give relay indications at BTPS end.

Remedial Measure to be taken:

Since the lines are mostly overloaded, upgradation to HTLS to be expedited. The matter may be referred to OCC forum of NERPC.

C. Disturbances in Manipur System:

Total **40 Nos.** Disturbances have occurred in Manipur system during the month of January'16 to June'16. (Sl No. 51 to 90 of Disturbance Report of NER Grid attached in Annexure-I).

Capital & Karong Areas:

25 Nos disturbances occurred due to tripping of 132 kV Imphal (PG)-Imphal (S) I & II lines, (Sl No. 51 to 75 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Capital & Karong area of Manipur were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.

Root Cause Analysis:

Fault was in Manipur system and cleared at Imphal (PG). Tripping of incoming feeders occurred due to non-clearance of fault within Manipur system.

Remedial Measure to be taken:

Relay coordination has to be done by MSPCL in consultation with POWERGRID. PG/Manipur to do relay co-ordination in downstream level. But existing problem in Breaker at Imphal end of Karong – Imphal line. MSPCL to rectify. **MSPCL should not change relay settings without intimation to forum, after it has been co-ordinated with POWERGRID**. Directional feature of each protection at Imphal (Manipur) is to be checked. Vegetation clearance is to be done by MSPCL.

Ningthoukhong Area:

- 1 No. disturbance occurred due to tripping of 132 kV Loktak-Ningthoukhong line & 132 kV Loktak-Imphal lines, (Sl No. 76 of Disturbance Report of NER Grid attached in Annexure-I).
- **8 Nos.** disturbances occurred due to tripping of 132 kV Loktak-Ningthoukhong line while 132 kV Imphal (PG) Ningthoukhong line kept open for system constraint, (Sl No. 77 to 84 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Ningthoukhong area of Manipur was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Likely fault in line section, since relay indication at Loktak end is Zone-1. But, Ningthoukong end E/F relay should not have operated since it is radial line. Due to vegetation problem, 132 kV Loktak - Ningthoukhong line tripped. For further analysis, SLDC, MSPCL shall furnish relay indication pertaining to their end.

Remedial Measure to be taken:

Vegetation clearance and tower footing resistance are to be checked by MSPCL. POWERGRID is requested to visit Ningthoukong and check relay co-ordination after renovation has been done by MSPCL. MSPCL to check and Ningthoukong S/s upgradation to be expedited

Rengpang Area:

6 Nos. disturbances occurred due to tripping of 132 kV Loktak – Rengpang line, (S1 No. 85 to 90 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Rengpang area of Manipur was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem in the line, 132 kV Loktak - Rengpang line tripped.

Remedial Measure to be taken:

Vegetation clearance is to be done by MSPCL.

D. Disturbances in Meghalaya System:

Total **53 Nos.** Disturbances have occurred in Meghalaya system during the month of January'16 to June'16. (Sl No. 91 to 143 of Disturbance Report of NER Grid attached in Annexure-I).

Khliehriat Area:

48 Nos disturbances occurred due to tripping of 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines, (SI No. 91 to 138 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Khliehriat area of Meghalaya were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Root Cause Analysis:

132 kV Khliehriat (PG) - Khliehriat (ME) I & II lines tripped due to non-clearance of fault at downstream of Khliehriat (ME) system. Fault generated in downstream of Khliehriat (ME) system due to vegetation or lightning.

Remedial Measure to be taken:

Earthing work related to Khliehriat (ME) substations is to be completed as the earliest. Tower footing resistance is also to be checked and in case of more than 10 ohms, proper earthing has to be done by MePTCL. Relay settings of Meghalaya substations are to be checked by MePTCL in coordination with POWERGRID after the completion of earthing works.

Action taken by MePTCL:

Earthing work at Khliehriat under jurisdiction of MePTCL vizz. 132 kV switchyard, is completed (Resistance is about 0.7 ohms). But, distribution side work is not completed. MePTCL is going for procurement of new relays. MePTCL to install Numerical relays on Leshka feeder on test basis, by 14th July (S/D at Leshka is not possible till Dam is full. Date to be finalized by SLDC). Distribution side viz. 33 kV switchyard work to be taken up urgently. NERPC to write to Director, MePDCL.

Byrnihat Area:

2 No. disturbances occurred due to tripping of 132 kV EPIP II - Byr1nihat I & II lines, (SI No. 139 & 140 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Meghalaya system except Khliehriat area, Lumnsnong area and Mendipathar area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Root Cause Analysis:

The 12th June tripping was due to conductor snapping in B-phase at Gantry point. Indicates hardware failure. The tripping reasons for 16th June is to intimated by MePTCL.

Remedial Measure to be taken:

S/Sn hardware at gantry & bays to be strengthened.

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The Sub-Group viewed seriously the non-restoration of reactor at Byrnihat and referred the matter to OCC.

Mendipathar & Nangalbibra Area:

2 Nos. disturbances occurred due to tripping of 132 kV Agia- Mendipathar or 132 kV Mendipathar- Nangalbibra lines, (Sl No. 141 & 142 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Mendipathar & Nangalbibra areas of Meghalaya was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem, the lines were tripped. Relay flags and DR outputs to be submitted by Agia (AEGCL), Nangalbibra (MePTCL) & Medipathar (MePTCL) for analysis. Relay flags at Agia to be given by Assam and at Mendipathar to be given by MePTCL

Remedial Measure to be taken:

Vegetation clearance is to be done by MePTCL.

Lumshnong Area:

1 No. disturbances occurred due to tripping of 132 kV Panchgram - Lumshnong line, while 132 kV Lumshnong - Khliehriat line kept open for system requirement. (Sl No. 143 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Lumshnong area of Meghalaya was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem in the line, 132 kV Lumshnong - Panchgram line tripped.

Remedial Measure to be taken:

Vegetation clearance is to be done by MePTCL & AEGCL. Clearance may be taken up by MePTCL and AEGCL.

E. Disturbances in Mizoram System:

Total 18 Nos. Disturbances have occurred in Mizoram system during the month of January'16 to June'16. (Sl No. 144 to 161 of Disturbance Report of NER Grid attached in Annexure-I).

3 Nos disturbances occurred due to tripping of 132 kV Aizwal - Jiribam line, 132 kV Aizwal - Kolasib line and 132 kV Aizwal - Kumarghat lines, (S1 No. 144 to 146 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Mizoram system was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Agenda for 43rd PCC Meeting to be held on 13.07.2016

Root Cause Analysis:

POWERGRID informed that the lines tripped due to multiple strokes of lighting. On 31st March 2016 multiple lightning stroke resulting in simulatanous tripping of all 3 lines at both ends.

On 27th June flashover in B-phase Substation bus insulator, but insulator did not fail. Issue still under investigation by NERTS.

Remedial Measure to be taken:

Tower footing as well as substation earth resistance is to be checked by POWERGRID & P&ED, Mizoram. In case of lightning prone area, line arrester has to be installed. PID scanning at Aizawl S/Sn to be done by NERTS

Kolasib Area:

1 Nos disturbance occurred due to tripping of 132 kV Kolasib - Badarpur line & 132 kV Kolasib - Aizwal lines, (Sl No. 147 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Kolasib area of Mizoram were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Root Cause Analysis:

Could be Kolasib downstream fault. NERTS/ Mizoram to further check

Remedial Measure to be taken:

Vegetation clearance has to done by P&E Deptt, Mizoram and POWERGRID. Relay settings of Kolasib as well as Mizoram downstream stations has to be investigated by P&E Dept, Mizoram and POWERGRID.

Zuangtui Area:

14 No. disturbances occurred due to tripping of 132 kV Aizawl - Zuangtui line, (Sl No. 148 & 161 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

The over current and earth fault relay settings for the outgoing feeders at Zuangtui were verified and their operating times were found to be on higher side. Since line passes mostly through town (vegetation is not issue), likely fault is in downstream due to vegetation and is getting cleared at Aizwal (PG).

Remedial Measure to be taken:

The over current and earth fault relay settings for the outgoing feeders at Zuangtui have been reviewed and communicated to P&ED, Mizoram for implementation. Status is to be informed by P&E Deptt, Mizoram. Vegetation clearance is to be done by P&ED, Mizoram. The co-ordinated relay settings for Zuangtui S/Sn calculated by NERTS was given to DoP Mizoram but it seems that it was not implemented. DoP Mizoram may please elaborate.

F. Disturbances in Nagaland System:

Total **32** Nos. Disturbances have occurred in Nagaland system during the month of January'16 to June'16. (Sl No. 162 to 193 of Disturbance Report of NER Grid attached in Annexure-I).

Mokokchung Area:

4 Nos disturbances occurred due to tripping of 132 kV Doyang - Mokokchung (NA) line, (Sl No. 162 to 165 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Mokokchung area of Nagaland was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem, 132 kV Doyang - Mokokchung (NA) line tripped.

Remedial Measure to be taken:

Vegetation clearance is to be done by DoP, Nagaland.

Dimapur Area:

2 No. disturbances occurred due to tripping of 132 kV Dimapur (PG) - Dimapur (NA) I & II lines, (Sl No. 166 & 167 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of these elements, Dimapur area of Nagaland was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

This is case of phase to phase fault and fault was cleared at Dimapur (PG). Phase - phase fault seems the only possibility in case of non-operation of earth fault. Can be phase-phase fault. DoP, Nagaland to confirm further

Remedial Measure to be taken:

Relay settings of downstream stations of Nagaland is to be checked by DoP, Nagaland in consultation with POWERGRID. POWERGRID is to elaborate on General trip relay indication.

Capital Area:

26 No. disturbances occurred due to tripping of 132 kV Dimapur (PG) - Kohima line, (Sl No. 168 to 193 of Disturbance Report of NER Grid attached in Annexure-I).

Due to tripping of this element, Capital area of Nagaland was separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Root Cause Analysis:

Due to vegetation problem, 132 kV Dimapur (PG) - Kohima line tripped.

Remedial Measure to be taken:

Vegetation clearance is to be done by DoP Nagaland. Relay settings of downstream elements is to be checked by DoP Nagaland in consultation with POWERGRID. Fault may be also in Kohima – Karong line which remains idle charged. Protections at Kohima end of the line to be kept properly.

G. Disturbances in Tripura System:

Total 2 Nos. Disturbances have occurred in Tripura system during the month of January'16 to June'16. (Sl No. 194 & 195 of Disturbance Report of NER Grid attached in Annexure-I).

2 Nos disturbances occurred due to tripping of multiple trippings of lines in Tripura system as mention in the disturbance report

Due to tripping of multiple elements, part of Tripura system, part of Bangladesh system (Comilla area) and AGTPP system were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.

Root Cause Analysis:

Due to non-clearance of downstream fault in the Tripura System,132 kV AGTPP - Agartala I & II line tripped at AGTPP end and 132 kV AGTPP - Kumarghat line tripped at Kumarghat end.

Remedial Measure to be taken:

Zone-III time delay of 132 kV AGTPP - Kumarghat line to be increased by POWERGRID so that 132 kV Kumarghat - AGTPP line does not trip along with 132 kV AGTPP - Agartala I & II lines, to keep integrated operation of AGTPP system. NEEPCO is to furnish DR of the event at the earliest for further analysis. Agartala relay setting is to be checked by TSECL in coordination with POWERGRID. POWERGRID, NEEPCO, AEGCL & OTPC are requested to conduct protection audit in substations of TSECL.

H. Power Station Blackout:

Loktak Power Plant:

1 No disturbances occurred due to tripping of 132 kV Loktak - Imphal(PG) line, 132 kV Loktak - Jiribam line & 132 Loktak - Ningthoukhong line, (S1 No. 197 of Disturbance Report of NER Grid attached in Annexure-I).

Due to evacuation problem, Loktak Power Station was blacked out.

Root Cause Analysis:

Due to non-operation of any protective relay at Loktak it could not be ascertained whether the fault was in 132 kV Jiribam - Loktak line or 132 kV Loktak - Ningthoukhong line. Fault was in Jbm-Loktak line. This further caused O/C in Imphal-loktak end. Loktak may furnish DRs for all the lines. DR from Loktak end shows overcurrent (I>1).

Remedial Measure to be taken:

Loktak is to furnish detailed report explaining non clearance of fault at Loktak end. Loktak & Imphal(PG) shall submit DR output pertaining to the event. Standardisation of DR to be taken up by Loktak-NHPC

A. AGTPP Power Plant:

1 No disturbances occurred due to tripping of 132 kV AGTPP - Agartala I & II lines & 132 kV AGTPP - Kumarghat line, (S1 No. 198 of Disturbance Report of NER Grid attached in Annexure-I).

Due to evacuation problem, all running units of AGTPP tripped.

Root Cause Analysis:

Due to non-clearance of downstream fault in the Tripura System at Agartala, 132 kV AGTPP - Agartala I & II line tripped at AGTPP and 132 kV AGTPP - Kumarghat line tripped at Kumarghat end. At AGTPP, Zone-III indicates fault was in Tripura system.

Remedial Measure to be taken:

Zone-III time delay of 132 kV AGTPP - Kumarghat line to be increased by POWERGRID so that 132 kV Kumarghat - AGTPP line does not trip along with 132 kV AGTPP - Agartala I & II lines, keep integrated operation of AGTPP. NEEPCO is to furnish DR of the event at the earliest for further analysis. Agartala relay setting is to be checked by TSECL in cordination with POWERGRID. POWERGRID, NEEPCO, AEGCL & OTPC are requested to conduct protection audit in substations of TSECL. Relay co-ordination b/w AGTPP and Tripura system to be done. K'ghat end time setting to be co-ordinated with AGTPP end

B. Doyang Power Plant:

1 No disturbance occurred due to tripping of 132 kV Dimapur - Doyang II line & 132 kV Doyang - Mokokchung line while 132 kV Dimapur - Doyang I line is under Shutdown . (Sl No. 199 of Disturbance Report of NER Grid attached in Annexure-I).

1 No disturbance occurred due to tripping of 132 kV Dimapur - Doyang II line while 132 kV Dimapur - Doyang I line is under Shutdown & 132 kV Doyang- Mokokchung line was not restored after tripping. **(S1 No. 200 of Disturbance Report of NER Grid attached in Annexure-I).**

Due to evacuation problem, Doyang Power Station was blacked out.

Root Cause Analysis: NEEPCO to check and inform with further details

Remedial Measure to be taken:

N.B. All DRs / Tripping details to be given to NERLDC / NERPC within 24 hours of the events.

A.17 Maintenance Procedure adopted by utilities:

It has been observed that number of Grid Disturbances in NER occurred due to failure of the equipment. As per Section 20 of the Grid Standards Regulation, 2010 of CEA, each entity shall prepare maintenance procedure for each equipment in line with manufactures recommendations and prudent utility practices.

It is requested to all utilities of NER to follow their maintenance schedule as per maintenance procedures. It is also requested to utilities who have no maintenance procedures, to prepare and finalize maintenance procedures at the earliest.

This is for information please.

Any other item:

Date and Venue of next PCC

It is proposed to hold the 44th PCC meeting of NERPC on second week of September, 2016. The exact venue will be intimated in due course.

ANNEXURE-I

			T:-4 - f C		N41-	-Eastern Regi	and Call	J T		NEXURE-I			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	122 kV Pokojon Gologhat	AEGCL		Bokajan	No tripping	Not Furnished	No	No			2/25/2016 10:55	No SPS	
	132 kV Bokajan - Golaghat	AEGCL		Golaghat	DP, ZI, R-E	Not Furnished	No	No		: GD-II	2/23/2010 10.33	100 51 5	0.035
	220 kV Misa - Mariani(AS)	POWERGRID	2/25/2016 10:22	Misa Mariani (AS)	Not Furnished Tripped	Not Furnished Lockout	No No	No No]		2/25/2016 10:35	No SPS	
	220 kV Samaguri - Mariani	AEGCL		Samaguri Mariani	DP, ZI, R-E DP, ZI, R-E	Not Furnished Not Furnished	No No	No No	Loss of Load: 0& Loss of		2/26/2016 13:50	No SPS	
	220 kV AGBPP - Mariani(PG)	POWERGRID		AGBPP	Direct Trip received	Not Furnished	No	No	Generation: 124		2/25/2016 18:13	No SPS	
	A CIDED II 2	MEEDGO	2/25/2017 10 20	Mariani (PG)	Over Voltage	Not Furnished	No	No			2/25/2016 10 27	N. CDC	
	AGBPP U 3 AGBPP U 4	NEEPCO	2/25/2016 10:20	AGBPP	Tripped on High	Not applicable	No No	No No			2/25/2016 10:37	No SPS	
		NEEPCO	2/25/2016 10:20	AGBPP	frequency in	Not applicable			4		2/25/2016 11:15	No SPS	1 1
	AGBPP U 8 FIR by the constituent	NEEPCO No	2/25/2016 10:20	AGBPP	frequency in	Not applicable	No	No			2/25/2016 12:03	No SPS	
1	Brief Description of the Incident	Upper Assam ar AGBPP - Maria 25.02.16,220 kV Due to the trippe	rea and AGBPP syst ni(PG) lines(220 K / Samaguri-Mariani ing these elements, 8 tripped on high fi	CV Misa -Maria i(AS), 220 Misa Upper Assam a	ni(PG) was unde n-Mariani(AS), 1	r planned SD from 32 kV Bokajan -	n 0650 hrs an Golaghat lines	d 132 kV Ma s tripped. 220	riani - Mokokc kV AGBPP-M	hung line wa ariani(PG) li	s under long outage ne tripped on O/V s). At 1020 Hisubsequently	rs on at 1022 hrs.
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent Gei	neration : 1029	MW , पूर्ववृत्ता	लोड/ Antecedent	Load : 1335	MW)					
	Restoration Details	Upper Assam ar Hrs on 25.02.16	ea was synchronize	ed to rest of the l	NER grid at Mar	iani(AS) at aroun	d 10:35 Hrs o	n 25.02.16 th	rough 220 kV 1	Misa - Mariar	ni(AS) line.AGBPP	unit-3 restor	ed at 10:37
	Root Cause		on problem in the lin OTI WTI of line rea		•	* *				ine tripped d	ue to mal operation	at Misa(PG)	during the
	Remedial Measures	Vegetation clear	ance to be done by	AEGCL.									

क्रम सं बिजली व्यवस्था तत्व /		0 4		1																		
ख्या/ विवरण / Name of tripping Sl. element/ Description No.	Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU										
400/220/33 kV , 315 MVA ICT at Bongaigaon	OWERGRID		Bongaigaon	R-Ph , Over Current	Not applicable	Yes	No			3/16/2016 18:43	No SPS											
220 kV Agia -Azara	AEGCL	3/16/2016 18:17	Agia	Over current	Not applicable	No	No	Loss of Load:	GD-II	3/16/2016 18:53	No SPS	0.112										
		2.10.2010 10.17	Azara	No tripping	Not applicable	No	No	259	0.5 11													
220 kV Boko -Azara	AEGCL		Boko	Over current	Not applicable	No	No			3/16/2016 19:05	No SPS											
TYP I di di A W	Azara No tripping Not applicable No No																					
FIR by the constituent Ye	~o																					
Brief Description of the Incident Operation of the Azim Azim Azim Azim Azim Azim Azim Azim	00/220 kV, 200 d 400 kV Balipened to reduce alkhola(WB)-Dening of the IC rrent protection or ICT – II ongaigaon. The zara – Boko lin	MVA ICT-I at Ma para – Biswanath C loading of 220 kv b/C and 220 kV Da T at Malbase(Bhun in B phase.At 18: at Binaguri tripped ICT which was ali	lbase was taker Chariali – III wer Purnea - New I khoila - Siliguri tan), flow on Bi 15 Hr Dalkhola at 18:17 hrs du ready loaded to ripping of these	n in shutdown at re open due to ov Purnea D/C which i were on one bu- inaguri ICTs increased bus coupler was use to the resulting around 250 MW elements, part of	16:27 hrs due to p ver-voltage, 400 K h was around 180 s while 220 kV D reased from aroun s again closed to r g over-load.Due to 7 further over-load of NER Grid (Dha	oroblem in R p XV Patna- Kisi MW per circ alkhola - Purn d 200 MW to educe loading to the tripping led and tripped ligaon, Agia a	phase LA,400 hanganj I & I uit. With the nea - D/C and about 300 M g of the Binag of these two ld at 18:09 hrs and Boko area	kV Binaguri – I lines were und opening of the Dalkhola - Ma W flow (per IC uri ICT - 2. But ICTs, the load but At 18:17 Hrs as of Assam and	Bongaigaon der breakdow bus coupler a lda - D/c wer T). The ICT-t Dalkhola buseing met by ton 16.03.16 d Nangalbibra	kept open for syste III, 400 kV Balip n).At 17:57 hrs, Da t Dalkhola, 220 kV e on the other bus. I tripped at 18:09 h s coupler tripped in these ICTs shifted t , 220 kV Azara – A a area of Meghalaya s area.	ara – Bongaig khola Bus co Dalkhola - Immediately rs due to Bac nmediately a o the 400/220 gia line and	gaon – III pupler was after k-up over fter 0 kV ICT at 220 kV										
NER Grid		न/ Antecedent Gen																				
Restoration Details Hr	rs on 16.03.16. 5.03.16	Power extended to	Agia through 2							ough 220 kV BTPS V Boko -Azara line												
	ue to fault in E										Due to fault in Eastern Region system											
	ICTs at Bongaigaon,NTPC to be commissioned at the earliest to avoid overloading of Bongaigaon ICT.																					
Remedial Measures IC	Ts at Bongaiga				,				•													
Remedial Measures IC	Ts at Bongaiga	16/04/2016 12:00:36.192	BgTPP Bongaigaon		Not Furnished Not Furnished	Yes No	No No			4/16/2016 15:01												
Remedial Measures IC 400 kV BgTPP - Bongaigaon I 400 kV Balinare	Ī	16/04/2016	BgTPP	DP, ZII, B-E DP, ZI, B-E DP, ZII, B-E	Not Furnished	Yes	No			4/16/2016 15:01 4/16/2016 14:00												

			List of G	rid Disturba	nces in North	rth-Eastern Regional Grid during January 2016								
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator		सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	अनुसार / Category as per	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	SPS	एमयू में हानि/ Loss in MU	
	Siliguri III	ENICL	12:03:06.878	New Siliguri		Not applicable	No	No	1		4/10/2010 10.40			
	400 kV BgTPP - Bongaigaon II	POWERGRID	16/04/2016 12:03:30.091	BgTPP Bongaigaon	Direct Trip	Not applicable Not applicable	Yes Yes	No No			4/16/2016 14:18			
	400 kV Bongaigaon - Azara	NETC & AEGCL	16/04/2016 12:03:30.464	Bongaigaon Azara	- 11	Not applicable Not applicable	No Yes	No No			4/16/2016 15:18			
	400/220 kV 315MVA ICT at Bangaigaon	POWERGRID	16/04/2016 12:03:36.784	Bangaigaon	Back up O/C on HV side	Not applicable	Yes	No	Loss of Load: 973 (84%) &			4/16/2016 12:31	SPS I & II	
3	400 kV Bongaigaon - New Siliguri I	POWERGRID	16/04/2016 12:03:36.827	Bongaigaon	received	Not Furnished	Yes	No	Loss of Generation:	GD-V	4/16/2016 12:51	operated successfully	3.82	
	-			New Siliguri		Not Furnished	No	No	1125 (93%)					
	400 kV Bongaigaon - New	POWERGRID	16/04/2016	Bongaigaon	II.	Not Furnished	Yes	No			4/18/2016 18:42			
	Siliguri II		12:03:37.964	New Siliguri		Not Furnished	No	No	1			ļ		
	400 kV Bongaigaon - New	ENICL	16/04/2016	Bongaigaon	* * *	Not Furnished	Yes	No	1		4/16/2016 12:30			
	Siliguri IV		12:03:55.727	New Siliguri		Not Furnished	No	No						
	+/- 800 kV Biswanath Charali-Agra I	POWERGRID	16/04/2016 12:03:45.000	Biswanath Charali	Votage,DC	Not applicable	No	Yes			4/17/2016 20:30		1	
			12.001.01000	Agra		Not applicable	No	No	1					
	220 kV BTPS - Salakati I	POWERGRID	4/16/2016 12:03	BTPS Salakati		Not Furnished Not Furnished	No No	No No			4/16/2016 13:35			
				BTPS	Not Furnished		No	No	1			1		
	220 kV BTPS - Salakati II	POWERGRID	4/16/2016 12:03	Salakati		Not Furnished	No	No			4/16/2016 12:50			

			List of G	rid Disturba	nces in North	-Eastern Regi	onal Grid o	luring Jan	uary 2016				
क्रम सं ख्या, Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	400 kV Balipara -	POWERGRID		Balipara	Not Furnished		No		Loss of Load:		4/16/2016 13:16	SPS I & II	
	Bongaigaon I		16/04/2016 12:03:00.000	Bongaigaon	Not Furnished		No No	No No	973 (84%) & Loss of	GD-V		operated	3.82
	400 kV Balipara - Bongaigaon II	POWERGRID		Balipara Bongaigaon	Not Furnished Not Furnished		No	No	Generation:		4/16/2016 13:33	sucessfully	
	FIR by the constituent	Yes(Assam,Meg	ghalaya,Tripura,AG	0	&POWERGRID)	<u> </u>			<u> </u>	•		
3	Brief Description of the Incident	+/- 800 kV HVI Hrs, 400kV Bor Bongaigaon-Net line tripped at 12 around 12:03:36 Bongaigaon end NER grid(from load generation 60 MW respecti	in synchronism with DC Biswanath Changaigaon-Balipara li w Siliguri III line tri 2:03:30.464 Hrs on 6.784 Hrs. 400kV B I on over voltage. D PMU). Sarusajai bu mismatch.220kV Sively with upper Assa at 1406 hrs. Tripu	riali-Agra pole- ne IV tripped on ipped on Zone-I B-phase zone II ongaigaon-New ue to these tripp s blacked out at alakati S/S rema sam load due to	At around 12:00 n B phase Zone I V at Bongaigaon at Azara end. Af Siliguri I line trivings, NER grid st. 12:03:43.360 H nined connected successful opera	D:35.739 Hrs, 400 I and fault cleare in 400 kV Bongai fter that, 400/220k ipped at 12:03:36 is separated from EF is and at 12:03:45 with Birpara and 0 tion of Islanding	kV Bongaigar d from Balipa gaon-NTPC E V 315MVA I 827 Hrs and R grid and at 1 5 Hrs +/- HVE Gelephu S/S scheme at aro	on-BgTPP lir ra end(fault of ine II tripped CT at Bonga 400kV Bong 2:03:40.960 OC BNC Agra AGBPP, LTF und 12:05 Hr	ne I tripped from cleared in 325m from both ends igaon tripped o aigaon-New Sil Hrs AGTPP alc a pole –I blocke S and NTPS st s(information t	n Bongaigaon sec from DR at 12:03:30.4 n Back Up O iguri II line t ong with part d.Subsequen ations surviva aken from SI	n end on B-phase Z data). Around 12:0 091 Hrs and 400 k ver Current Protect ripped at 12:03:37. of Tripura system s tly major part NER ed with generation DC). The island w	one II. At 12: 03:07.272 Hrs V Bongaigac ion on HV Si 964 Hrs from eparated fror grid collapse of 150MW, 9 as synchroniz	01:03.001 s, 400kV on-Azara de at in isolated ad due to 0MW and ded with
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent Ger	neration : 1206	MW , पूर्ववृत्ताः	लोड/ Antecedent	Load: 1153	MW)					
	Root Cause	quadrant and ou	alt occurred in 400 k at side the distance rootection for both the	elay operating c	haracteristics.	-			on end. On anal	ysis the fault	impedance was fou	nd to fall in f	ourth The line
	Remedial Measures	The Line Differ	ential Prtection for l	ooth the circuits	of 400 kV Bong	aigaon-BgTPP Li	ne have been	commissione	ed and put in to	service.			

	List of Grid Disturbances in North-Eastern Regional Grid during January 2016												
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	400 kV Ranganadi-Biswanath			Ranganadi	Over Voltage	Not applicable	No	No	Loss of Load:				
	Charali 1	POWERGRID	1/12/2016 2:13	Biswanath Charali	Direct Trip received	Not applicable	No	No	48	GD-I	1/12/2016 2:34	No SPS	0.063
	FIR by the constituent	No				-	_		-	-	-		
4	Brief Description of the Incident	Ziro area, Lekhi area & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 400 kV Ranganadi-Biswanath Charali I line(400 kV Ranganadi-Biswanath Charali II was under shutdown from 22:01 Hrs on 11.01.2016). At 02:13 Hrs on 12.01.2016,400 kV Ranganadi-Biswanath Charali I line tripped. Due to tripping of this element, Ziro area, Lekhi area & Capital area and Gohpur area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.											
	Antecedent Conditions of Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent G	eneration: 10	96 MW , पूर्ववृ	त्ता लोड/ Anteced	lent Load: 1	309 MW)					
	Restoration Details	Power extended to Ranganadi at 02:34 Hrs on 12.01.16 through 400 kV Ranganadi-Biswanath Charali 1 line.Power extended to Lekhi area & Capital area of Arunachal Pradesh at 02:43 Hrs on 12.01.16 through 132 kV Ranganadi-Lekhi line.Power extended to Ziro area of Arunachal Pradesh at 02:47 Hrs on 12.01.16 through 132 kV Ranganadi-Ziro line.											
		at 02.43 1118 011	12.01.16 through	132 kV Rangai	nadı-Lekhı line	.Power extended	to Ziro area o	f Arunachal I	Pradesh at 02:47	Hrs on 12.0	1.16 through 132	kV Ranganad	li-Ziro line.
	Root Cause					Power extended after getting DR					_	kV Ranganad	di-Ziro line.
	Root Cause Remedial Measures	Over voltage at	Ranganadi. Furth	er investigation	s shall be done		outputs. Rang	ganadi and BN			_	kV Ranganad	li-Ziro line.
		Over voltage at Measures after i	Ranganadi. Furth	er investigation oot cause of the Ranganadi	s shall be done event. Rangan	after getting DR	outputs. Rang	ganadi and BN			_	kV Ranganad	0.027
	Remedial Measures 400 kV Ranganadi-Biswanath	Over voltage at Measures after i	Ranganadi. Furth	er investigation oot cause of the Ranganadi Biswanath	s shall be done event. Rangan Over Voltage Direct Trip	after getting DR di to check overv Not applicable	outputs. Rang oltage relay so No	ganadi and BN ettings.	NC to give DR o	outputs for in	vestigation.		
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1	Over voltage at Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rartripped. Due to to this area.	Ranganadi. Furth dentification of re 1/13/2016 14:40 area & Capital anganadi-Biswanat	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area	event. Rangan Over Voltage Direct Trip received al Pradesh and of sunder shutdow a, Lekhi area &	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hi Capital area and	outputs. Rangoltage relay so No No No Sassam were cos on 11.01.20 Gohpur area	nanadi and BN ettings. No No No onnected with 016). At 02:13 were separate	Loss of Load: 36 rest of NER G	GD-I rid through 40	vestigation.	No SPS Biswanath C	0.027 harali I I line
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1 FIR by the constituent Brief Description of the	Over voltage at Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rartripped. Due to to this area.	Ranganadi. Furth dentification of re 1/13/2016 14:40 area & Capital anganadi-Biswanat	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area	event. Rangan Over Voltage Direct Trip received al Pradesh and of sunder shutdow a, Lekhi area &	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hi	outputs. Rangoltage relay so No No No Sassam were cos on 11.01.20 Gohpur area	nanadi and BN ettings. No No No onnected with 016). At 02:13 were separate	Loss of Load: 36 rest of NER G	GD-I rid through 40	vestigation. 1/13/2016 15:12 00 kV Ranganadi-Ranganadi-Biswa	No SPS Biswanath C	0.027 harali I I line
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1 FIR by the constituent Brief Description of the Incident	Over voltage at Measures after in Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rar tripped. Due to the in this area. (५वंव्ता उत्पाद Power extended at 15:21 Hrs on	Ranganadi. Furth dentification of ro 1/13/2016 14:40 area & Capital anganadi-Biswanat tripping of this elector Ranganadi at 12.01.16 through	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area Generation: 10 15:12 Hrs on 13 132 kV Rangan	over Voltage Direct Trip received al Pradesh and os under shutdov a, Lekhi area & 99 MW, पूर्वव् 3.01.16 through nadi-Lekhi line	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hr Capital area and त्ता लोड/ Anteced	No No No Sssam were cos on 11.01.20 Gohpur area lent Load : 1 di-Biswanath	no	Loss of Load: 36 rest of NER Gr Hrs on 12.01.2 d from rest of N	GD-I GD-I d through 49 2016,400 kV NER Grid and ed to Lekhi a	vestigation. 1/13/2016 15:12 00 kV Ranganadi-Ranganadi-Bisward subsequently colurea & Capital area 1.16 through 132	No SPS Biswanath C nath Charali I lapsed due to	0.027 harali I I line o no source
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1 FIR by the constituent Brief Description of the Incident Antecedent Conditions of Grid	Over voltage at Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rar tripped. Due to the in this area. (पूर्ववृत्ता उत्पाद Power extended at 15:21 Hrs on Over voltage at	Ranganadi. Furth dentification of ro 1/13/2016 14:40 area & Capital anganadi-Biswanat tripping of this elector Ranganadi at 12.01.16 through Ranganadi. Further	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area ceneration: 10 15:12 Hrs on 13 132 kV Rangan er investigations	over Voltage Direct Trip received al Pradesh and os under shutdov a, Lekhi area & 99 MW, पूर्वव 3.01.16 through nadi-Lekhi line s shall be done	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hr Capital area and Cal else Anteced 400 kV Rangana Power extended after getting DR of the control of the	No No No Sssam were cors on 11.01.20 Gohpur area lent Load : 1 di-Biswanath to Ziro area ooutputs. Rang	nnected with 016). At 02:13 were separate 474 MW) Charali 1 lin f Arunachal F anadi and BN	Loss of Load: 36 rest of NER Gr Hrs on 12.01.2 d from rest of N	GD-I GD-I d through 49 2016,400 kV NER Grid and ed to Lekhi a	vestigation. 1/13/2016 15:12 00 kV Ranganadi-Ranganadi-Bisward subsequently colurea & Capital area 1.16 through 132	No SPS Biswanath C nath Charali I lapsed due to	0.027 harali I I line o no source
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1 FIR by the constituent Brief Description of the Incident Antecedent Conditions of Grid Restoration Details	Over voltage at Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rar tripped. Due to the in this area. (पूर्ववृत्ता उत्पाद Power extended at 15:21 Hrs on Over voltage at	Ranganadi. Furth dentification of ro 1/13/2016 14:40 area & Capital anganadi-Biswanat tripping of this elector Ranganadi at 12.01.16 through Ranganadi. Further	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area ceneration: 10 15:12 Hrs on 13 132 kV Rangan er investigations	over Voltage Direct Trip received al Pradesh and os under shutdow a, Lekhi area & 99 MW, \(\frac{4}{4}\) 3.01.16 through hadi-Lekhi line s shall be done event. Rangan	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hr. Capital area and CCTI लोड/ Anteced 400 kV Rangana. Power extended after getting DR od it o check overv	No No No Sssam were cors on 11.01.20 Gohpur area lent Load : 1 di-Biswanath to Ziro area ooutputs. Rang	nnected with 016). At 02:13 were separate 474 MW) Charali 1 lin f Arunachal F anadi and BN	Loss of Load: 36 rest of NER Gr Hrs on 12.01.2 d from rest of N	GD-I GD-I d through 49 2016,400 kV NER Grid and ed to Lekhi a	vestigation. 1/13/2016 15:12 00 kV Ranganadi-Ranganadi-Bisward subsequently colurea & Capital area 1.16 through 132	No SPS Biswanath C nath Charali I lapsed due to	0.027 harali I I line o no source
5	Remedial Measures 400 kV Ranganadi-Biswanath Charali 1 FIR by the constituent Brief Description of the Incident Antecedent Conditions of Grid Restoration Details Root Cause	Over voltage at Measures after in POWERGRID No Ziro area, Lekhi line(400 kV Rar tripped. Due to the in this area. (पूर्ववृत्ता उत्पाद Power extended at 15:21 Hrs on Over voltage at	Ranganadi. Furth dentification of ro 1/13/2016 14:40 area & Capital anganadi-Biswanat tripping of this elector Ranganadi at 12.01.16 through Ranganadi. Further	er investigation oot cause of the Ranganadi Biswanath Charali rea of Arunacha h Charali II was ement, Ziro area ceneration: 10 15:12 Hrs on 13 132 kV Rangan er investigations	over Voltage Over Voltage Direct Trip received al Pradesh and of sunder shutdow a, Lekhi area & 99 MW, Yaq 3.01.16 through nadi-Lekhi line s shall be done event. Rangan DP, ZI, R-E	after getting DR di to check overv Not applicable Not applicable Gohpur Area of A wn from 22:01 Hr Capital area and Cal else Anteced 400 kV Rangana Power extended after getting DR of the control of the	No No No Sssam were cors on 11.01.20 Gohpur area lent Load : 1 di-Biswanath to Ziro area ooutputs. Rang	nnected with 016). At 02:13 were separate 474 MW) Charali 1 lin f Arunachal F anadi and BN	Loss of Load: 36 rest of NER Gr Hrs on 12.01.2 d from rest of N	GD-I GD-I d through 49 2016,400 kV NER Grid and ed to Lekhi a	vestigation. 1/13/2016 15:12 00 kV Ranganadi-Ranganadi-Bisward subsequently colurea & Capital area 1.16 through 132	No SPS Biswanath C nath Charali I lapsed due to	0.027 harali I I line o no source

List of Grid Disturbances in North-Eastern Regional Grid during January 2016													
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Charali III	POWERGRID	5/9/2016 18:17	Biswanath Charali	No tripping	Not applicable	No	No	Loss of Load: 79	GD-I	5/9/2016 19:19	No SPS	0.118
	400 kV Balipara-Biswanath Charali 1V	POWERGRID		Balipara	DP, ZIII, R-E	Not applicable	No	No			5/9/2016 18:36	No SPS	
				Biswanath Charali	No tripping	Not applicable	No	No					
	Ranganadi U 1	NEEPCO		Ranganadi	Over frequency	Not applicable	No	No	Loss of Generation: 104		5/9/2016 20:25	No SPS	0.166
	FIR by the constituent	No											
6	Brief Description of the Incident	Ziro area & Lekhi area of Arunachal Pradesh and part of Gohpur area of Assam were connected with rest of NER Grid through 400 kV Ranganadi-Biswanath Charali I line(Bus Coupler CB of Gohpur kept open for system requirement ,400 kV Ranganadi-Biswanath Charali II was under planned shutdown from 07:50 Hrs on 09.05.16 & 400 kV Balipara - Biswanath Charali I kept open on over voltage). At 18:17 Hrs on 09.05.2016, 400 kV Ranganadi-Biswanath Charali I line got tripped. Due to tripping of 400 kV Ranganadi-Biswanath Charali I line, Ziro area & Lekhi area of Arunachal Pradesh and part of Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.											
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पादन/ Antecedent Generation : 1752 MW , पूर्ववृत्ता लोड/ Antecedent Load : 2022 MW)											
	Root Cause	R-Ph CT of Sub Bank-3 of Main Bank Z-1 at BNC failed.Due to un-wanted operation of Distance Protection (PD-571) in Zone-1 at Ranganadi, 400 kV Ranganadi-BNC - II line tripped. and Un wanted operation of Distance Protection in Zone-4 at Balipara resulted in tripping of 400 kV Balipara-BNC - III & IV lines. (REL relay setting for Zone-4 for BLP - BNC lines was set instantaneous. For REL relay, Zone-4 is extra and is not required. However, for MICOM relays Zone-4 is reverse zone). Events were due to maloperation of Numerical relays and has been corrected by NERTS. The PD-571 relay setting details has been given by NERTS to NEEPCO. NEEPCO to check.											
	Remedial Measures	(1) The Zone-4 for the Distance Protection of 400 kV Balipara-BNC - III & IV at Balipara have been corrected (Disabled). (2) Ranganadi to review the setting of the DPR. (3) Reason for CT blast occurred to be checked by NERTS and intimated to sub-committeee / RPC as the event happened in a newly commissioned substation.											

			List of (Frid Disturb	ances in North	1-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Balipara - Khupi	NEEPCO	3/16/2016 12:09	Balipara	DP, ZI, R-Y-E	Not Furnished	No	No	Loss of Load:	GD-I	3/16/2016 12:36	No SPS	0.010
	132 KV Balipara - Kliupi	NEEFCO	3/10/2010 12.09	Khupi	No tripping	Not Furnished	No	No	18	GD-1	3/10/2010 12.30	NOSES	0.010
	FIR by the constituent	No											
	Brief Description of the Incident					R Grid through 13 NER Grid and su		-			132 kV Balipara- l	Khupi line tri	pped. Due
7	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 11	12 MW , पूर्ववृत्त्	ना लोड/ Antecede	nt Load : 171	.0 MW)					
	Restoration Details	Power extended	to Khupi area of	Arunachal Prac	desh at 12:36 Hrs	on 16.06.16 thro	ugh 132 kV B	alipara - Khu	ıpi line.				
	Root Cause	Due to vegetation	on problem in the	line,132 kV Ba	ılipara - Khupi lir	ne tripped.							
	Remedial Measures	Vegetation clear	rance to be done l	by NEEPCO.									
	132 kV Balipara - Khupi	NEEPCO	4/13/2016 10:24	Balipara	Back Up Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	4/13/2016 10:56	No SPS	0.016
	DID I di di d	NI.		Khupi	Not Furnished	Not applicable	No	No					
	FIR by the constituent	No Khuni araa of A	runaahal Deada-1	was sommast-1	with root of NED	Crid through 12	2 leV Deline	Vhuei lie -	A+ 10.24 II	n 12 04 16	132 kV Balipara-	Vhuni lina 4	inned Due
8	Brief Description of the Incident					NER Grid and su					134 ку бапрага-	Kilupi line tri	ippea. Due
O	Antecedent Conditions of NER Grid		_			ा लोड/ Antecede		_	o no source m c				
	Root Cause	Due to vegetation	on problem in the	line or downstr	eam Khupi (AP).	,132 kV Balipara	- Khupi line t	ripped.					
	Remedial Measures								to be checked b	y DoP,Aruna	chal Pradesh in c	onsultation w	vith
	1001117 11 11 11	NEEDGO		Balipara	Earth Fault, R-ph	Not applicable	No	No	Loss of Load:	GD I	5/0/001510.50	N. ana	0.050
	132 kV Balipara - Khupi	NEEPCO	5/2/2016 8:05	Khupi	No tripping	Not applicable	No	No	23	GD-I	5/2/2016 19:53	No SPS	0.273
9	FIR by the constituent	No	•										
2	Brief Description of the Incident					R Grid through 13 NER Grid and su					132 kV Balipara-	Khupi line tri	ipped. Due
	Antecedent Conditions of NER Grid					ना लोड/ Antecede							

Root Cause Root Cause Due to ground clearmer and provided by CR operator Paint Paint				List of C	Frid Disturb	ances in Nortl	1-Eastern Reg	ional Grid	during Jai	nuary 2016				
Remedial Measures Ground clearance and vegetation clearance to be done by REEPCO at the earliest	सं ख्या/ Sl.	विवरण / Name of tripping element/		घटना के समय सीआर ऑपरेटर दवारा प्रदान की / Date & Time of Event provided by	/ Name of	ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by	का ऑपरेशन / Operation of	भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24	भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	(मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation	सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid	द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by	संचालन के विवरण / Details of SPS	हानि/ Loss
FIR by the constituent NEEPCO S26/2016 17:003 Balipara Fault Not applicable No No No Loss of Load: 29 GD-1 5:26/2016 18:30 No SPS 0.077		Root Cause	Due to ground of	clearance problem	, 132 kV Balip	ara - Khupi line t	ripped . Vegetation	n clearance al	lready done b	y NEEPCO.				
12 kV Balipara - Khupi NEEPCO 266/2016 17:09 Khupi No tripping Not applicable No No No No No No No N		Remedial Measures	Ground clearan	ce and vegetation	clearance to be	done by NEEPO	CO at the earliest.		•					
Fig. by the constituent Sprief Description of the Incident Continuent Sprief Description of the Incident Sprief Descripti		132 kV Balipara - Khupi	NEEPCO	5/26/2016 17:03	1	Fault					GD-I	5/26/2016 18:39	No SPS	0.077
Brief Description of the Incident Company Collapsed due to no source in this area.					Khupi	No tripping	Not applicable	No	No					
Incident Not impring of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.		·		Arunachal Pradesh	was connected	with rest of NE	Grid through 13	2 kV Balinara	- Khuni line	At 17:03 Hrs (on 26.05.16	132 kV Balinara	Khuni line tı	rinned Due
NER Grid Root Cause Remedial Measures NEPCO NENCHION NO N	10											132 K V Bumpuru	rinapi inie u	ipped. Due
Remedial Measures Necessary actions to be taken to increase ground clearance by NEEPCO at the earlies 132 kV Balipara - Khupi NEEPCO \$30/2016 14:22 Balipara DP, ZI, R-Y-E, 4.032 Kms. Not Furnished No No No No No No No N		NER Grid	., .			., -	ना लोड/ Antecede	nt Load: 180	04 MW)					
132 kV Balipara - Khupi NEEPCO 5/30/2016 14:22 Balipara DP, ZI, R-Y-E, 40.32 kms. Not Furnished No No No Loss of Load: 20 GD-I 5/31/2016 10:55 No SPS 0.423		Root Cause	Fault in the line	or downstream d	ue to low grour	nd clearance.								
132 kV Balipara - Khupi NEEPCO 5/30/2016 14:22 Balipara 40.32 kms. Not Furnished No No No 20 GD-1 5/31/2016 10:55 No SPS 0.423		Remedial Measures	Necessary actio	ns to be taken to i	ncrease ground	clearance by NE	EPCO at the earli	est						
FIR by the constituent Fig. Fig.		132 kV Balipara - Khupi	NEEPCO	5/30/2016 14:22	1	40.32 Kms.					GD-I	5/31/2016 10:55	No SPS	0.423
Brief Description of the Incident Shupi area of Aruachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 14:22 Hrs on 30.05.16, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Antecedent Conditions of NER Grid Restoration Details Root Cause Fault in the line due to low ground clearance.		FID by the constituent	No		Kilupi	No urpping	Not Fullished	NO	NO					
Incident				runachal Dradach	was connected	with rest of NEL	Grid through 13	2 kV Balipara	Khuni lina	At 14:22 Hrs 6	n 30 05 16	132 kV Balinara	Khuni lina tr	inned Due
NER Grid Sestoration Details Restoration Details Root Cause Fault in the line due to low ground clearance. Remedial Measures Necessary actions to be taken to increase ground clearance by NEEPCO at the earliest	11											132 KV Banpara-	Knupi inic u	ipped. Duc
Root Cause Remedial Measures Necessary actions to be taken to increase ground clearance by NEEPCO at the earliest 132 kV Balipara - Khupi NEEPCO 6/11/2016 11:49 Balipara DP, ZI, R-Y- E, 40.48 Kms. Not Furnished No No SPS Decention: 0 SPS S			(Antecedent G	eneration : 1669	MW , Anteced	lent Load : 1519	MW)							
Remedial Measures Necessary actions to be taken to increase ground clearance by NEEPCO at the earliest 132 kV Balipara - Khupi NEEPCO 6/11/2016 11:49 Balipara DP, ZI, R-Y- E, 40.48 kms. Not Furnished No No Generation: 0 Not Furnished No No Generation: 0 OD-I 6/11/2016 16:12 No SPS 0.059		Restoration Details												
132 kV Balipara - Khupi NEEPCO 6/11/2016 11:49 Balipara DP, ZI, R-Y- E, 40.48 Kms. Not Furnished No No No Generation: 0 Generation: 0 Generation: 0 Generation: 0 Generation: 0 No SPS 0.059 FIR by the constituent No Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 11:49 Hrs on 11.06.16, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Antecedent Conditions of NER Grid No No No No Generation: 0 Genera		Root Cause	Fault in the line	due to low groun	d clearance.	<u> </u>	<u> </u>							
132 kV Balipara - Khupi NEEPCO 6/11/2016 11:49 Balipara E,40.48 Kms. Not Furnished No No Generation: 0 GD-I 6/11/2016 16:12 No SPS 0.059 FIR by the constituent No Brief Description of the Incident to tripping of this element, Khupi area was separated from rest of NER Grid through 132 kV Balipara- Khupi line. At 11:49 Hrs on 11.06.16 , 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Antecedent Conditions of NER Grid (Antecedent Generation: 1756 MW , Antecedent Load: 1478 MW)		Remedial Measures	Necessary actio	ns to be taken to i	ncrease ground	clearance by NE	EPCO at the earli	est						
FIR by the constituent No Brief Description of the Incident NER Grid Antecedent Conditions of NER Grid NER Grid NER Grid No Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 11:49 Hrs on 11.06.16, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. (Antecedent Conditions of NER Grid (Antecedent Generation: 1756 MW, Antecedent Load: 1478 MW)		132 kV Balipara - Khupi	NEEPCO	6/11/2016 11:49	•	E,40.48 Kms.				22& Loss of	_	6/11/2016 16:12	No SPS	0.059
Brief Description of the Incident Incident Incident Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 11:49 Hrs on 11.06.16, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Antecedent Conditions of NER Grid Antecedent Generation: 1756 MW, Antecedent Load: 1478 MW)			N		Khupi	No tripping	Not Furnished	No	No	Generation: 0	I			Ц
Incident to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. Antecedent Conditions of NER Grid (Antecedent Generation: 1756 MW, Antecedent Load: 1478 MW)				anna a h al Dua I a l		:4h4 -£ NIET	Caid than 12	2 I-V/ D-1:	. IZh	A + 11.40 II	11 06 16	122 LV Dalin	Vh: lin : (inned Du
Antecedent Conditions of NER Grid (Antecedent Generation: 1756 MW, Antecedent Load: 1478 MW)	12											152 KV Balipara-	Knupi iine ti	rippea. Due
									÷					

			List of C	Grid Disturb	ances in North	n-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures												-
	132 kV Balipara - Khupi	NEEPCO	6/20/2016 0:37	Balipara Khupi	DP, ZII, R-Y- E, 40.28 Kms. Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 22	GD-I	6/21/2016 17:07	No SPS	0.782
	FIR by the constituent	No											
13	Incident				with rest of NER rated from rest of						32 kV Balipara- F	Khupi line trij	pped. Due
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 2047	MW , Anteced	lent Load : 1779	MW)							
	Root Cause												
	Remedial Measures												•
	132 kV Balipara - Khupi	NEEPCO	6/29/2016 15:55	Balipara Khupi	DP, ZI, B-E, 16.02 Kms. Not Furnished	Not applicable Not applicable	No No	No No	Loss of Load: 21	GD-I	6/29/2016 16:36	No SPS	0.02
	FIR by the constituent	No			•	•	•	•		•			
14	Brief Description of the Incident	•			with rest of NER rated from rest of			-			132 kV Balipara-	Khupi line tr	ripped. Due
	Antecedent Conditions of NER Grid	11 0	eneration : MW				1	1					
	Root Cause												
	Remedial Measures												
	132 kV Balipara - Khupi	NEEPCO	6/29/2016 17:38	Balipara	DP, ZI, B-E, 16.02 Kms.	Not applicable	No	No	Loss of Load:	GD-I	6/29/2016 18:11	No SPS	0.009
				Khupi	Not Furnished	Not applicable	No	No	1,7				
	FIR by the constituent	No											
15	Brief Description of the										132 kV Balipara-	Khupi line tr	ripped. Due
	Incident	to tripping of the	is element, Khupi	ı area was sepai	rated from rest of	NEK Grid and su	osequently co	mapsed due t	o no source in t	ms area.			
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : MW	, Antecedent l	Load: MW)								
ı	T												
	Root Cause Remedial Measures												

			List of G	rid Disturba	nces in Nort	h-Eastern Reg	ional Grid	during Ja	nuary 2016					
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU	
	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	1/19/2016 22:27	Ranganadi Lekhi	No tripping Earth Fault	Not Furnished Not Furnished	No No	No No	Loss of Load: 48	GD-I	1/19/2016 22:51	No SPS	0.017	
	FIR by the constituent	No	!						<u>!</u>	<u> </u>	!		!	
16	Brief Description of the Incident	Gohpur kept op	a & Capital area of Arunachal Pradesh and Gohpur Area of Assam were connected with rest of NER Grid through 132 kV Ranganadi-Lekhi line (Bus Coupler CB of ept open for system requirement). At 22:27 Hrs on 19.01.2016,132 kV Ranganadi - Lekhi line tripped. Due to tripping of this element, Lekhi area, Capital area & rea were separated from rest of NER Grid and subsequently collapsed due to no source in this area.											
	Antecedent Conditions of NER Grid	., .			., .									
	Restoration Details								s on 19.01.16 tl	nrough 132 k	V Ranganadi - Lel	chi line.		
	Root Cause	Due to vegetation	on problem in the	downstream of	Lekhi, 132 kV	' Ranganadi - Lek	thi line tripped	l.						
	Remedial Measures	Vegetation clear	rance to be done.	Directionality f	-	ated with Earth Fa			Lekhi.					
	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	1/21/2016 22:34	Ranganadi Lekhi	DP, ZI, R-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 41	GD-I	1/21/2016 23:13	No SPS	0.03	
	FIR by the constituent	No				-								
17	Brief Description of the Incident	Gohpur kept op	en for system req	uirement). At 2	2:34 Hrs on 21		Ranganadi - 1	Lekhi line tri	pped. Due to tri	pping of this	nganadi-Lekhi line element, Lekhi ar			
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 13	50 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	718 MW)						
	Restoration Details	Power extended	to Lekhi area &	Capital area of	Arunachal Prac	desh and Gohpur	Area of Assan	n at 23:13 Hr	s on 21.01.16 tl	nrough 132 k	V Ranganadi - Lel	chi line.		
	Root Cause	Due to vegetation	on problem in the	downstream of	Lekhi, 132 kV	' Ranganadi - Lek	thi line tripped	i.						
	Remedial Measures	Vegetation clear	rance to be done	by POWERGR	ID & DoP AP.									
	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	5/5/2016 10:27	Ranganadi	DC supply problem	Not applicable	No	No	Loss of Load:	GD-I	5/5/2016 10:34	No SPS	0.016	
			<u> </u>	Lekhi	No tripping	Not applicable	No	No	<u> </u>					
	FIR by the constituent	No												
18	Brief Description of the Incident	Gohpur kept op	en for system req	uirement). At 1	0:27 Hrs on 05		anganadi-Nirj	uli line trippe	ed. Due to trippi		nganadi-Lekhi line ement, Lekhi area			
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation :13	58 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	459 MW)						

			List of G	rid Disturba	nces in Nort	h-Eastern Reg	ional Grid	during Ja	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	NEEPCO to eal	aborate on DC su	ıpply problem f	or further analy	sis.							
	Remedial Measures	NEEPCO to che	eck Rangandi end	l relay details aı	nd inform to PC	GCIL for necessar	y corrective a	ction.					
	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	5/10/2016 6:46	Ranganadi Lekhi	Busbar Protection	Not applicable	No No	No No	Loss of Load: 58	GD-I	5/11/2016 11:50	No SPS	0.049
	FIR by the constituent	No		Lekiii	No tripping	Not applicable	NO	NO					
19	Brief Description of the Incident	Lekhi area & Ca CB of Gohpur k		em requiremen	t). At 06:46 Hrs	s on 10.05.16, 132	2 kV Rangana	di-Lekhi line	tripped. Due to		cV Ranganadi-Lek his element, Lekhi		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 13	316 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	536 MW)					
	Root Cause	Due to mal-ope	arion of Busbar p	rotection, 132 l	kV Ranganadi -	Lekhi line trippe	d.						
	Remedial Measures	NEEPCO to che	eck relay details a	and busbar conf	iguation at the	earliest.							
	132 kV Ranganadi - Lekhi	POWERGRID & DoP AP	5/12/2016 21:02	Ranganadi Lekhi	No tripping Y-B Ph Overcurrent	Not applicable Not applicable	No No	No No	Loss of Load: 73	GD-I	5/12/2016 21:19	No SPS	0.022
	FIR by the constituent	No		•				•		•			<u> </u>
20	Brief Description of the Incident	CB of Gohpur k		em requirement	t). At 21:02 Hrs	s on 12.05.16,132	kV Ranganad	li-Lekhi line	tripped. Due to		kV Ranganadi-Le his element, Lekhi		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 17	798 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load: 1	753 MW)					
	Root Cause	The O/C and E/	F relays are found	d to operate ind	liscriminately fo	or down stream fa	ults. Due to v	egetation pro	blem in downst	ream of Lekh	ni, 132 kV Rangan	adi - Lekhi li	ne tripped.
	Remedial Measures	Directional feat	ure of the O/C an	d E/F relays at	Lekhi are to be	restored at earlie	st by DoP,AP.	.Vegetation c	learance of dov	nstream of L	ekhi of Lekhi to b	e done by Do	P,AP.
	132 kV Lekhi - Nirjuli	DoP AP & POWERGRID	5/25/2016 17:30	Lekhi Nirjuli	Earth Fault, R,Y,B-Ph No tripping	Not applicable Not applicable	No No	No No	Loss of Load: 14	GD-I	5/25/2016 17:44	No SPS	0.006
	FIR by the constituent	No		. J.::					•			1	
21	Brief Description of the Incident	Nirjuli area of A open for system		t 17:30 Hrs on 2	25.05.16, 132 k	V Lekhi-Nirjuli l			-	-	uli line (Bus Coup & part of Gohpur		

			List of G	rid Disturba	nces in Nort	h-Eastern Reg	ional Grid	during Ja	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	output furnished within 24	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 19)34 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	603 MW)					
	Root Cause					ERTS may check.							
	Remedial Measures	Directional feat	ure of the O/C an	d E/F relays at	Lekhi are to be	restored.Vegetati	on clearance t	to be done by	DoP AP and P	OWERGRID).		
		DoP AP &		Lekhi	Earth Fault	Not applicable	No	No	Loss of Load:				
	132 kV Lekhi - Nirjuli	POWERGRID	6/5/2016 2:16	Nirjuli	Not Furnished	Not applicable	No	No	27	GD-I	6/5/2016 2:28	No SPS	0.013
	FIR by the constituent	No											
22	Brief Description of the Incident	open for system		02:16 Hr on 0	5.06.16, 132 k	V Lekhi - Nirjuli					ekhi line (Bus Cou a & part of Gohpu		
	Antecedent Conditions of NER Grid	(Antecedent Go	eneration : 1893	MW , Anteced	lent Load : 18	99 MW)							
	Root Cause												
	Remedial Measures												
	132/33 kV 50 MVA ICT-I at Nirjuli	POWERGRID	2/24/2016 16:50	Nirjuli	Restricted Earth Fault	Not applicable	No	No	Loss of Load: 11	GD-I	2/24/2016 22:13	No SPS	0.072
	FIR by the constituent	No											
23	Brief Description of the Incident										24.02.16, 132/33 source in this area		
	Antecedent Conditions of NER Grid	., •			-, -	त्ता लोड/ Antece							
						oration of 132/33							
		ŭ		he relay at Nirj	uli(PG), 132/33	kV 50 MVA IC	Γ-I at Nirjuli g	got tripped fo	r a fault in the 3	33 kv Feeder	- 4.		
	Remedial Measures	The problem ha	s been attended.										

क्रम सं	बिजली व्यवस्था तत्व /		List of Gi दिनांक और घटना के समय सीआर ऑपरेटर दवारा		सीआर ऑपरेटर द्वारा प्रदान	आटा राक्षांजर	24 घंटे के भीतर डी.आर. पेश	24 घंटे के भीतर	प्रभाव	श्रणा सीईए ग्रिड मानकों के	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या	एसपीएस संचालन के	
सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node		का ऑपरेशन / Operation of Auto Reclose	किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	नहीं) / EL output furnished within 24	उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	अन्यसम् /	समय या बहाली / Date and time of restoration provided by CR operator	विवरण /	एमयू में हानि/ Loss in MU

			List of C	Frid Disturba	ances in Nor	th-Eastern Re	gional Gri	d during J	anuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	समय या बहाली / Date and time of restoration	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	220 kV AGBPP - Deomali	DoP, AP	6/15/2016 11:58	AGBPP	DP, ZI, Y-E, 107.5 Kms.	Not Furnished	No	No	Loss of Load:	GD-I	6/15/2016 18:10	No SPS	0.021
	Deoman		11:56	Deomali	Not Furnished	Not Furnished	No	No	3				
	FIR by the constituent	No											
24	Brief Description of the Incident					NER Grid throug rated from rest of						BPP-Deomal	i line
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1925	MW , Anteced	lent Load : 154	45 MW)							
	Root Cause												
	Remedial Measures			_					_				

			List of	Grid Disturb	ances in Nort	h-Eastern Reg	gional Grid	during Jai	nuary 2016				
कम सं ड्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के श्रीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Silchar -	POWERGRID		Silchar	No tripping	Not applicable	No	No					
	Dullavcherra	& AEGCL		Dullavcherra	Earth Fault, B- ph	Not applicable	No	No	I CI l		3/21/2016 8:30	No SPS	
	132 kV Dullavcherra -	AEGCL &	3/21/2016 8:21	Dullavcherra	Loss of Voltage	Not applicable	No	No	Loss of Load: 14	GD-I			0.014
	Dharmanagar	TSECL		Dharmanagar	Loss of Voltage	Not applicable	No	No			3/21/2016 9:06	No SPS	
	FIR by the constituent	No	<u> </u>	<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u>!</u>		<u> </u>		
.5	Brief Description of the Incident	requirement). A		1.03.16 ,132 kV	Silchar- Dullavch						gar line kept open separated from re		rid and
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 109	94 MW , पूर्ववृत्त	ा लोड/ Antecedei	nt Load : 196	3 MW)					
	Restoration Details					1.03.16 through 1							
	Root Cause		2 kV Dharmanaga	ar - Dullavcherra	a line due to vege	tation problem.as	a result of no	n clearence o	of fault within th	at section .13	32 kV Silchar - Di	ıllavcherra li	ne got
						•				,			ne got
	Remedial Measures	tripped. Relay settings of	f Dullavcherra as	well as Dharma	anagar to be revie						e to be done by AI		
	Remedial Measures 132 kV Dullavcherra -	Relay settings of AEGCL &	f Dullavcherra as	well as Dharma							to be done by AI	EGCL & TSE	
	132 kV Dullavcherra - Dharmanagar	Relay settings of AEGCL & TSECL		Dullavcherra Dharmanagar	Over current No tripping	wed by AEGCL Not applicable Not applicable	& TSECL in c No No	onsultation v No No	vith PG.Vegetat	ion clearance			CL.
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar -	Relay settings of AEGCL & TSECL POWERGRID	f Dullavcherra as 4/16/2016 4:11	Dullavcherra Dharmanagar Silchar	Over current No tripping Over current	wed by AEGCL Not applicable Not applicable Not applicable	& TSECL in c No No No	onsultation w No No No	vith PG.Vegetat		4/16/2016 6:12	EGCL & TSE	
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra	Relay settings of AEGCL & TSECL POWERGRID & AEGCL		Dullavcherra Dharmanagar	Over current No tripping Over current	wed by AEGCL Not applicable Not applicable	& TSECL in c No No	onsultation v No No	vith PG.Vegetat	ion clearance	to be done by AI	No SPS	CL.
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar -	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No	4/16/2016 4:11	Dullavcherra Dharmanagar Silchar Dullavcherra	Over current No tripping Over current No tripping	wed by AEGCL on Not applicable Not applicable Not applicable Not applicable Not applicable	& TSECL in c No No No No	No No No No No No	vith PG.Vegetat Loss of Load: 5	ion clearance	4/16/2016 6:12 4/16/2016 4:40	No SPS	0.013
26	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are , 132 kV Dullav	4/16/2016 4:11 ea of Assam was	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132	Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla	wed by AEGCL on the AEGCL of th	& TSECL in c No No No No No On No No Dullavcherra-	onsultation w No No No No No	Loss of Load: 5	GD-I Silchar- Dul	4/16/2016 6:12	No SPS No SPS 04:11 Hrs or	0.013
26	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are , 132 kV Dullav and subsequent	4/16/2016 4:11 ea of Assam was cherra-Dharmana y collapsed due t	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 loo no source in the	Over current No tripping Over current No tripping Virial over current No tripping rest of NER Grid kV Silchar- Dulla nis area.	wed by AEGCL on the AEGCL of th	& TSECL in c No No No No No Outlieve to trip	No No No No No No No No of these	Loss of Load: 5	GD-I Silchar- Dul	4/16/2016 6:12 4/16/2016 4:40 avcherra line. At	No SPS No SPS 04:11 Hrs or	0.013
226	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, , 132 kV Dullav and subsequent!	a of Assam was cherra-Dharmana y collapsed due t न/ Antecedent (etation problem	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 lo o no source in th Generation: 133	Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area.	weed by AEGCL of Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp	& TSECL in c No No No No No No No Load: 1750	No No No No No Oharmanagar	Loss of Load: 5	GD-I Silchar- Dul	4/16/2016 6:12 4/16/2016 4:40 avcherra line. At	No SPS No SPS No SPS 04:11 Hrs or om rest of Ni	0.013 0.013 n 16.04.16 ER Grid
226	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequent! (पूर्ववृत्ता उत्पाद Fault due to veg Dullavcherra lin Over Current se	a of Assam was cherra-Dharmana y collapsed due t	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 133 kV E	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. S9 MW , पूर्ववृत्त	Not applicable Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp II लोड/ Anteceder armanagar line.N	& TSECL in c No No No No No Dullavcherra- bed. Due to trip at Load: 1750 on clearance of	No No No No No No Oharmanagai pping of these	Loss of Load: 5 r line & 132 kV e elements, Dul	GD-I Silchar- Dul lavcherra are	4/16/2016 6:12 4/16/2016 4:40 4/uscherra line. At a was separated fr	No SPS No SPS 04:11 Hrs or om rest of NI	0.013 0.013 n 16.04.16 ER Grid
226	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequent! (पूर्ववृत्ता उत्पाद	a of Assam was cherra-Dharmana y collapsed due t	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 133 kV E	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW, ५५वं दन्त Dullavcherra - Dh to be co-ordinate DP, ZII, Y-E	Not applicable Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp II लोड/ Anteceder armanagar line.N	& TSECL in c No No No No No Dullavcherra- bed. Due to trip at Load: 1750 on clearance of	No No No No No No Oharmanagai pping of these	Loss of Load: 5 r line & 132 kV e elements, Dul	GD-I Silchar- Dul lavcherra are	4/16/2016 6:12 4/16/2016 4:40 4/16/2016 4:40 davcherra line. At a was separated fr	No SPS No SPS 04:11 Hrs or om rest of NI	0.013 0.013 n 16.04.16 ER Grid
26	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Silchar -	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequent! (पूर्ववृत्ता उत्पाद Fault due to veg Dullavcherra lin Over Current se POWERGRID	a of Assam was cherra-Dharmana y collapsed due to Antecedent Cetation problem we.	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 132 kV E or Dullavcherra Silchar	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW, ५५वं दन्त Dullavcherra - Dh to be co-ordinate DP, ZII, Y-E	Not applicable Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp II Also Anteceder armanagar line.Not with that for Di	& TSECL in c No No No No No No No Louising the second of	No No No No No No No No On No No On No On	Loss of Load: 5 r line & 132 kV e elements, Dul	GD-I Silchar- Dul lavcherra are	4/16/2016 6:12 4/16/2016 4:40 lavcherra line. At a was separated from the separated from the separated in tripping of the bedone by TS	No SPS No SPS 04:11 Hrs or om rest of No SPS 64:12 kV Silce SECL.	0.013 0.013 n 16.04.16 ER Grid
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Silchar - Dullavcherra	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequent! (पूर्ववृत्ता उत्पाद Fault due to veg Dullavcherra lin Over Current se POWERGRID & AEGCL No Dullavcherra are requirement). Al	ea of Assam was cherra-Dharmana y collapsed due to Antecedent Cetation problem vie. 3/21/2016 3:35 ea of Assam was	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 133 was in 132 kV E or Dullavcherra Silchar Dullavcherra connected with 1.03.16, 132 kV	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW , पूर्ववृत्त Dullavcherra - Dh to be co-ordinate DP, ZII, Y-E Earth Fault rest of NER Grid Silchar- Dullavc	weed by AEGCL of Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp I old with that for Di Not Furnished Not Furnished I through 132 kV	& TSECL in c No No No No No No Dullavcherra- bed. Due to trip at Load: 1756 on clearance of harmanager fee No No Silchar- Dulla	onsultation w No No No No No No Oharmanagar pping of these O MW) of fault in this eder at Dulla No	Loss of Load: 5 r line & 132 kV e elements, Dul s section at Dull vcherra.Vegetat Loss of Load: 12 132 kV Dullavc	GD-I Silchar- Dul lavcherra are avcherra resu ion clearance GD-I	4/16/2016 6:12 4/16/2016 4:40 lavcherra line. At a was separated from the separated from the separated in tripping of the bedone by TS	No SPS No SPS 04:11 Hrs or om rest of No SPS 64:12 kV Silce SECL. No SPS open for systematics and selection of the selec	0.013 0.013 n 16.04.16 ER Grid nhar -
26	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequent! Fault due to veg Dullavcherra lin Over Current se POWERGRID & AEGCL No Dullavcherra are requirement). Ais subsequently coi	a of Assam was cherra-Dharmana y collapsed due to a collapsed due to no a collapsed due	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in the Generation: 135 was in 132 kV E or Dullavcherra Silchar Dullavcherra Connected with 1.03.16, 132 kV source in this a	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW , पूर्ववृत्त Dullavcherra - Dh to be co-ordinate DP, ZII, Y-E Earth Fault rest of NER Grid Silchar- Dullavcrea.	weed by AEGCL of Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp I old with that for Di Not Furnished Not Furnished I through 132 kV	& TSECL in c No No No No No Dullavcherra- ed. Due to trip at Load : 1750 on clearance c narmanager fee No No Silchar- Dulla Due to trippi	No No No No No No No No Oharmanagar pping of these of ault in this eder at Dullar No	Loss of Load: 5 r line & 132 kV e elements, Dul s section at Dull vcherra.Vegetat Loss of Load: 12 132 kV Dullavc	GD-I Silchar- Dul lavcherra are avcherra resu ion clearance GD-I	4/16/2016 6:12 4/16/2016 4:40 lavcherra line. At a was separated fra to be done by TS 3/21/2016 4:00 anagar line kept of	No SPS No SPS 04:11 Hrs or om rest of No SPS 64:12 kV Silce SECL. No SPS open for systematics and selection of the selec	0.013 0.013 n 16.04.16 ER Grid nhar -
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequently ('\(\frac{d}{q}\) ccil 3cVI\(\frac{d}{q}\) c	a of Assam was cherra-Dharmana y collapsed due to etation problem we. etting at Silchar fr 3/21/2016 3:35 Hrs on 21 llapsed due to no of Antecedent (Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 133 was in 132 kV E or Dullavcherra Silchar Dullavcherra connected with 1.03.16, 132 kV source in this ar Generation: 119	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW , पूर्ववृत्त Oullavcherra - Dh to be co-ordinate DP, ZII, Y-E Earth Fault rest of NER Grid Silchar- Dullavc rea.	Not applicable Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripp I ris / Anteceder armanagar line.N I with that for DI Not Furnished Not Furnished I through 132 kV therra line tripped	& TSECL in c No No No No No No Dullavcherra- bed. Due to trip at Load: 1756 narmanager fe No No Silchar- Dulla . Due to trippi at Load: 1786	onsultation w No No No No No No No Odd No No Odd No No No No Odd No N	Loss of Load: 5 r line & 132 kV e elements, Dull s section at Dull Loss of Load: 12 132 kV Dullavcement, Dullavch	GD-I Silchar- Dul lavcherra are avcherra resu ion clearance GD-I	4/16/2016 6:12 4/16/2016 4:40 lavcherra line. At a was separated fra to be done by TS 3/21/2016 4:00 anagar line kept of	No SPS No SPS 04:11 Hrs or om rest of No SPS 64:12 kV Silce SECL. No SPS open for systematics and security and security are security are security and security are security as a security as a security and security are security as a security as a security as a security are security as a security and security are security as a security as a security as a securit	0.013 0.013 n 16.04.16 ER Grid nhar -
	132 kV Dullavcherra - Dharmanagar 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	Relay settings of AEGCL & TSECL POWERGRID & AEGCL No Dullavcherra are, 132 kV Dullav and subsequently (पूर्ववृत्ता उत्पाद Fault due to veg Dullavcherra lin Over Current se POWERGRID & AEGCL No Dullavcherra are requirement). At subsequently coi (पूर्ववृत्ता उत्पाद Power extended	a of Assam was cherra-Dharmana y collapsed due to a classification problem with the classification and the classif	Dullavcherra Dharmanagar Silchar Dullavcherra connected with agar line & 132 l o no source in th Generation: 133 was in 132 kV to or Dullavcherra Silchar Dullavcherra Connected with 1.03.16, 132 kV source in this at Generation: 119 area of Assam a	Over current No tripping Over current No tripping Over current No tripping rest of NER Grid kV Silchar- Dulla nis area. 59 MW , पूर्ववृत्त Oullavcherra - Dh to be co-ordinate DP, ZII, Y-E Earth Fault rest of NER Grid Silchar- Dullavc rea.	weed by AEGCL of Not applicable Not applicable Not applicable Not applicable I through 132 kV avcherra line tripped armanagar line.N of with that for Di Not Furnished Not Furnished I through 132 kV therra line tripped	& TSECL in c No No No No No No Dullavcherra- bed. Due to trip at Load: 1756 narmanager fe No No Silchar- Dulla . Due to trippi at Load: 1786	onsultation w No No No No No No No Odd No No Odd No No No No Odd No N	Loss of Load: 5 r line & 132 kV e elements, Dull s section at Dull Loss of Load: 12 132 kV Dullavcement, Dullavch	GD-I Silchar- Dul lavcherra are avcherra resu ion clearance GD-I	4/16/2016 6:12 4/16/2016 4:40 lavcherra line. At a was separated fra to be done by TS 3/21/2016 4:00 anagar line kept of	No SPS No SPS 04:11 Hrs or om rest of No SPS 64:12 kV Silce SECL. No SPS open for systematics and security and security are security are security and security are security as a security as a security and security are security as a security as a security as a security are security as a security and security are security as a security as a security as a securit	0.013 0.013 n 16.04.16 ER Grid nhar -

			List of	Grid Disturb	ances in Nort	h-Eastern Reg	ional Grid	during Ja	nuary 2016			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपी संचाल विवर Detai SF Oper
	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	3/28/2016 9:45		DP, ZIII, R-Y-E	Not Furnished	No	No	Loss of Load:	GD-I	3/28/2016 10:20) No
				Dullavcherra	No tripping	Not Furnished	No	No				
28		requirement). At		28.03.16 , 132 k	V Silchar- Dulla						managar line kept f Assam was sepa	
	of NER Grid				•	ा लोड/ Anteceden						
						3.03.16 through 13	32 kV Silchar	- Dullavcher	ra line.			
			ailure in the line,									
			vell as period ma	•		e done by POWE				be done.		
	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	4/4/2016 19:57	Silchar Dullavcherra	DP, ZII, Y-E Not Furnished	Not Furnished	No No	No No	Loss of Load: 17	GD-I	4/4/2016 21:10	No
		No AEGCL	<u> </u>	Dunavenerra	110t Furnished	rvot Furmsned	TNO	INO	1/			
	Brief Description of the	Dullavcherra are requirement). At		04.04.16 ,132 kV	Silchar- Dullavo	-					managar line kept as separated from	-
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पादः	न/ Antecedent (Generation: 129)1 MW , पूर्ववृत्त	ा लोड/ Anteceden	ıt Load : 217.	3 MW)				
	Root Cause	Transient lighter	ning fault occured	d in the AEGCL	section of 132 k	V Silchar - Dulla	vcherra line(F	ault distance	shown at Silch	ar 25 Km.).		
$ldsymbol{ld}}}}}}}$	Remedial Measures		s well as substati	on earth resistan				•	quent lightning	, arrester has	to be kept in plac	e.
	Dullavcherra	& AEGCL	4/15/2016 2:23	Silchar Dullavcherra	DP, ZII, Y-E Not Furnished		No No	No No	Loss of Load: 18	GD-I	4/15/2016 2:40	No :
[]		No										
30	Brief Description of the	requirement). At		5.04.16 , 132 kV	Silchar- Dullavo						nanagar line kept o s separated from r	
	OI NEK Grid	·• -				ा लोड/ Anteceden	nt Load : 1670	0 MW)				
			on problem in the			ra line tripped.						
igsqcut	Remedial Measures	Vegetation clear	rance to be done l	by POWERGRII	D & AEGCL.							
	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	4/16/2016 19:38	Silchar	DP, ZII, R-Y-B	Not Furnished	No	No	Loss of Load: 16	GD-I	4/16/2016 20:16	5 No

			List of	Grid Disturb	ances in Nort	h-Eastern Reg	gional Grid	during Ja	nuary 2016			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसर्प संचाल विवर Deta SI Oper
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 100	67 MW , पूर्ववृत्त्	ग लोड/ Anteceder	nt Load : 157	3 MW)				
	Root Cause	Due to lightning	in the line,132 l	kV 132 kV Silch	ar - Dullavcherra	line tripped.						
	Remedial Measures					by POWERGRII	D & AEGCL					
	Remedial Measures	·	ance to be done									
i I	132 kV Dullavcherra -	AEGCL &		Dullavcherra	Over current	Not applicable	No	No	4		4/16/2016 6:12	No
	Dharmanagar	TSECL	4/16/2016 4:11	Dharmanagar	No tripping	Not applicable	No	No	Loss of Load:	GD-I	., ,	
	132 kV Silchar -	POWERGRID		Silchar	Over current	Not applicable	No	No	5		4/16/2016 4:40	No
	Dullavcherra	& AEGCL		Dullavcherra	No tripping	Not applicable	No	No				
	FIR by the constituent	No										
	Brief Description of the Incident	, 132 kV Dullav		agar line & 132 l	«V Silchar- Dulla						llavcherra line. At ea was separated f	
32	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 135	59 MW , पूर्ववृत्त्	ा लोड/ Anteceder	nt Load : 175	0 MW)				
	Root Cause	Fault due to veg Dullavcherra lin		was in 132 kV D	ullavcherra - Dh	armanagar line.N	on clearance of	of fault in thi	s section at Dul	lavcherra res	ulted in tripping o	of 132 k
	Remedial Measures	Over Current se	etting at Silchar f	or Dullavcherra	to be co-ordinate	ed with that for Dl	harmanager fe	eder at Dulla	nvcherra.Vegeta	tion clearanc	e to be done by T	SECL.
	132 kV Silchar -	POWERGRID	4/24/2016 18:16	Silchar	DP, ZII, Y-E	Not Furnished	No	No	Loss of Load:	GD-I	4/25/2016 16:06	No No
	Dullavcherra	& AEGCL	1,24,2010 10.10	Dullavcherra	No tripping	Not Furnished	No	No	10	OD-1	-1/23/2010 10.00	, 110
	FIR by the constituent	No										
	_					•					nanagar line kept	-
		requirement). At	t 18:16 Hrs on 24	4.04.16, 132 kV	Silchar- Dullave	herra line tripped.	Due to trippi	ng of this ele	ment, Dullavch	erra area was	separated from re	est of N
33	Antecedent Conditions of NER Grid	., .			., ,	ा लोड/ Anteceder	nt Load : 171	2 MW)				
	Root Cause	Due to vegetatio				rra line tripped.						
	Remedial Measures		ance to be done									
	घटना का विवरण /								(132 kV Dullav	cherra-Dhari	nanagar line kept	open f
	Description of Incident					लोड/ Anteceder	ī		I and aCT 1			T
	132 kV Silchar -	POWERGRID	4/4/2016 2:40	Silchar		Not Furnished	No	No	Loss of Load:	GD-I	4/4/2016 3:29	No
ı I	Dullavcherra	& AEGCL		Dullavcherra	Not Furnished	Not Furnished	No	No	3		I	1

			List of	Grid Disturb	ances in Nort	n-Lastern Reg	ional Grid	during Ja	nuary 2016			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपी संचाल विवर Detai SP Oper:
	Antecedent Conditions of NER Grid				•	ा लोड/ Anteceder						
	Root Cause					V Silchar - Dulla						
	Remedial Measures		s well as substati							, arrester has	to be kept in place	e.
	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	4/5/2016 11:57	Silchar Dullavcherra	DP, ZI, Y-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 7	GD-I	4/8/2016 17:38	No S
	FIR by the constituent	No										
35	Brief Description of the Incident										managar line kept is separated from r	
33	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent C	Generation: 127	71 MW , पूर्ववृत्त	ा लोड/ Anteceder	nt Load : 191	2 MW)				
	Root Cause	Due to jumper f			on) 122 kV Silok							
	Remedial Measures	Due to jumper i	ailure in the line(at AEGCL porti	011),132 KV SHCI	ar - Dullavcherra	line tripped.					
						ar - Dullavcherra e done by POWE		EGCL and pet	rolling also to l	be done.		
	132 kV Silchar - Dullavcherra			intanence of line Silchar	DP, ZII, Y-B-E	Not Furnished	RGRID & AE	No	rolling also to l Loss of Load: 4	be done. GD-I	4/17/2016 9:33	No S
	132 kV Silchar - Dullavcherra	Conditional as v POWERGRID & AEGCL	well as period mai	intanence of line	accessories to b	e done by POWE	RGRID & AE	1	Loss of Load:		4/17/2016 9:33	No S
34	132 kV Silchar -	Conditional as v POWERGRID & AEGCL No Dullavcherra are requirement). A	4/17/2016 9:19 ea of Assam was	Silchar Dullavcherra connected with 17,04.16, 132 kV	DP, ZII, Y-B-E No tripping rest of NER Grid Silchar- Dullavo	Not Furnished Not Furnished through 132 kV	RGRID & AE No No Silchar- Dulla	No No avcherra line(Loss of Load: 4	GD-I	4/17/2016 9:33 nanagar line kept o	pen for
34	132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the	Conditional as v POWERGRID & AEGCL No Dullavcherra are requirement). A subsequently co (पूर्ववृत्ता उत्पाद	ea of Assam was t 09:19 Hrs on 17 llapsed due to no	Silchar Dullavcherra connected with 17.04.16, 132 kV source in this and Generation: 130	DP, ZII, Y-B-E No tripping rest of NER Grid Silchar- Dullavorea.	Not Furnished Not Furnished through 132 kV	No No No Silchar- Dulla	No No avcherra line(ing of this ele	Loss of Load: 4	GD-I	nanagar line kept o	pen for
34	132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	Conditional as v POWERGRID & AEGCL No Dullavcherra are requirement). A subsequently co (पूर्ववृत्ता उत्पाद Due to lightning	ea of Assam was t 09:19 Hrs on 17 llapsed due to no	Silchar Dullavcherra connected with 17.04.16, 132 kV source in this ar Generation: 136 V 132 kV Silchar	DP, ZII, Y-B-E No tripping rest of NER Grid Silchar- Dullavorea. D4 MW, पूर्ववृत्त	Not Furnished Not Furnished through 132 kV	No No No Silchar- Dulla Due to tripp	No No avcherra line(ing of this ele	Loss of Load: 4	GD-I	nanagar line kept o	pen for
34	132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	Conditional as v POWERGRID & AEGCL No Dullavcherra are requirement). A subsequently co (पूर्ववृत्ता उत्पाद Due to lightning	ea of Assam was t 09:19 Hrs on 17 llapsed due to no	Silchar Dullavcherra connected with 17.04.16, 132 kV source in this ar Generation: 136 V 132 kV Silchar	DP, ZII, Y-B-E No tripping rest of NER Grid Silchar- Dullavorea. D4 MW, पूर्ववृत्त	Not Furnished Not Furnished through 132 kV	No No No Silchar- Dulla Due to tripp	No No avcherra line(ing of this ele	Loss of Load: 4	GD-I	nanagar line kept o	pen fo
34	132 kV Silchar - Dullavcherra FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	Conditional as v POWERGRID & AEGCL No Dullavcherra are requirement). A subsequently co (पूर्ववृत्ता उत्पाद Due to lightning	ea of Assam was t 09:19 Hrs on 17 llapsed due to no	Silchar Dullavcherra connected with 17.04.16, 132 kV source in this ar Generation: 136 V 132 kV Silchar	DP, ZII, Y-B-E No tripping rest of NER Grid Silchar- Dullavorea. 14 MW, पूर्ववृत्त	Not Furnished Not Furnished through 132 kV	No No No Silchar- Dulla Due to tripp	No No avcherra line(ing of this ele	Loss of Load: 4	GD-I	nanagar line kept o	pen fo

			List of	Grid Disturb	ances in Nort	h-Eastern Reg	gional Grid	during Ja	nuary 2016			
क्रम सं ख्या/ SI. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपी संचाल विवर Detai SP Oper
35		requirement). At		2.04.16, 132 kV	Silchar- Dullavel						managar line kept separated from re	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 160	64 MW , पूर्ववृत्त	ा लोड/ Anteceder	nt Load : 133	2 MW)				
	Root Cause	Due to vegetatio	n problem in the	line,132 kV Sile	char - Dullavche	та line tripped.						
	Remedial Measures	Vegetation clear	ance to be done	by POWERGRI	D & AEGCL.							
	132 kV Silchar - Dullavcherra	POWERGRID & AEGCL	5/17/2016 12:37	Silchar	DP, ZII, Y- E,56.59 Kms.	Not applicable	No	No	Loss of Load:	GD-I	5/17/2016 12:53	No S
-	FIR by the constituent	No		Dullavcherra	No tripping	Not applicable	No	No			<u> </u>	
	Brief Description of the Incident	line kept open fo Dharmanagar ar	or system require ea of Tripura we	ment). At 12:37 re separated from	Hrs on 17.05.16 n rest of NER Gr	id and subsequen	- Dullavcherr tly collapsed	a line tripped due to no sou	. Due to trippin		ra line(132 kV P.1 nent,Dullavcherra	
	Antecedent Conditions of NER Grid	., .			., .	ा लोड/ Antecedei						
						e beyond the juris						
			L to check for th			hat, further analy	sis can be don				_	
	132 kV Silchar -	POWERGRID	5/12/2016 16:02	Silchar		Not applicable	No	No	Loss of Load:	GD-I	5/12/2016 16:38	No S
I L	Dullavcherra	& AEGCL	0,12,2010 10102	Dullavcherra	No tripping	Not applicable	No	No	9	02.1	<i>5,</i> 12, 2010 10.00	110
	FIR by the constituent	No										
37	Rriof Decernition of the	requirement). At		2.05.16, 132 k	V Silchar- Dullav	•					nanagar line kept o as separated from	-
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 175	57 MW , पूर्ववृत्त	ा लोड/ Antecedei	nt Load : 169	3 MW)				
	Root Cause	Due to vegetatio POWERGRID's	•	-		a line,132 kV Silo	char - Dullavc	herra line trip	pped.(Fault Dist	ance shown	at Silchar = 64 Kn	n, whic
	Remedial Measures	Problem in the d	lownstream syste	m of be cheched	l by AEGCL & T	SECL.Proper ma	intenace and	frequent petro	olling to be don	e by AEGCL	& TSECL.	
	132 kV Silchar -	POWERGRID	5/12/2016 16:51	Silchar	DP, ZII, B-E	Not applicable	No	No	Loss of Load:	GD-I	5/12/2016 18:17	No S
	Dullavcherra	& AEGCL	5/12/2010 10:51	Dullavcherra	No tripping	Not applicable	No	No	9	GD-1	3/12/2010 16:17	NO.
	FIR by the constituent	No										
	Brief Description of the Incident					through 132 kV erra line tripped.					nanagar line kept o	

			List of	Grid Disturk	ances in North	1-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Haflong(PG) - Haflong	AEGCL	4/5/2016 19:43	Haflong(PG) Haflong	Over current Not Furnished	Not applicable Not applicable	No No	No No	Loss of Load:	GD-I	4/5/2016 19:50	No SPS	0.001
	Ü	No		Hallong	Not Furnished	Not applicable	NO	NO	2				
	FIR by the constituent												
39	Brief Description of the Incident	-			of NER Grid throu area was separate	•	-	•			32kV Haflong (As this area.	S)-Haflong(P	G) line
	Antecedent Conditions of NER Grid	., •			95 MW , पूर्ववृत्त								
	Root Cause	Downstream of	haflong or in line	phase to phase	fault cleared at H	Iaflong(PG). Only	phase-phase	fault will like	ely cause overci	arrent, if no e	earth fault relay op	erated.	
	Remedial Measures	AEGCL shall lo	ok in to this matt	er immediately	•								
	132 kV Haflong(PG) - Haflong	AEGCL	4/12/2016 5:11	Haflong(PG) Haflong	Over current Not Furnished	Not applicable Not applicable	No No	No No	Loss of Load: 2	GD-I	4/12/2016 5:35	No SPS	0.001
	FIR by the constituent	No	-		-	-			-	-	_		
40	Brief Description of the Incident	-			of NER Grid throu area was separate	•	-	•			32kV Haflong (As	S)-Haflong(P	G) line
40	Antecedent Conditions of NER Grid	**	11 0		00 MW , पूर्ववृत्त			•	onapsed due to	no source in	tins area.		
	Root Cause	In downstream of	of Haflong or in l	ine phase to ph	ase fault cleared a	t Haflong(PG). O	nly phase-pha	se fault will l	likely cause ove	rcurrent, if n	o earth fault relay	operated.	
	Remedial Measures	AEGCL shall lo	ok in to this matt	er immediately									
	132 kV Haflong(PG) - Haflong	AEGCL	5/1/2016 19:32	Haflong(PG) Haflong	Over current Not Furnished	Not applicable Not applicable	No No	No No	Loss of Load:	GD-I	5/1/2016 19:50	No SPS	0.001
	FIR by the constituent	No	•				•		•	•	•		
41	Brief Description of the Incident	-			of NER Grid through area was separate	•	-	•			32kV Haflong (Asthis area.	S)-Haflong(P	G) line
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 15	19 MW , पूर्ववृ <i>त्</i> त	ा लोड/ Anteceden	t Load : 1525	5 MW)					
	Root Cause	,	wnstream Phase-										
	Remedial Measures	Relay co-ordina	tion at downstrea	m level to be d	one by AEGCL in	consultation with	POWERGRI	D.					
	132 kV Haflong(PG) - Haflong	AEGCL	6/15/2016 13:31	Haflong(PG)	Earth Fault, R- ph Not Furnished	Not applicable	No No	No No	Loss of Load:	GD-I	6/15/2016 13:48	No SPS	0.001
	FIR by the constituent	No							I				

			List of	Grid Disturb	oances in North	1-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
42	_				of NER Grid through area was separate	•	•	•			•	S)-Haflong(P	G) line
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1498	MW , Anteced	lent Load : 1617	MW)							
	Root Cause												
	Remedial Measures		1				T	Ī		Ī			
	132 kV Khandong - Umrangso	POWERGRID & AEGCL		Khandong	Master Trip Relay Opearted	Lockout	No	No			6/28/2016 14:08	No SPS	
	Cilitangso												
				Umrangso	Not Furnished	Not Furnished	No	No	Loss of Load:				
	132 kV Haflong(PG) -		6/28/2016 13:45	0		Not Furnished Not Furnished	No No		Loss of Load: 2	GD-I	6/28/2016 14:14	No SDS	0.001
	132 kV Haflong(PG) - Jiribam		6/28/2016 13:45	Ŭ	Not Furnished DP, ZI, B-E,			No		GD-I	6/28/2016 14:14	No SPS	0.001
43	Jiribam		6/28/2016 13:45	Haflong(PG)	Not Furnished DP, ZI, B-E, 76.6 Kms. DP, ZI, B-E,	Not Furnished	No	No No		GD-I	6/28/2016 14:14	No SPS	0.001
43	Jiribam	POWERGRID No Umrangso & Ha 132 kV Khando	aflong area of As:	Haflong(PG) Jiribam sam were connerne & 132 kV H	Not Furnished DP, ZI, B-E, 76.6 Kms. DP, ZI, B-E, 21.6 Kms. ected with rest of N aflong-Jiribam lin	Not Furnished Not Furnished NER Grid through	No No	No No No	2 agsho line & 13:	2 kV Haflong	g-Jiribam line .At	13:45 Hrs on	28.06.16,
43	FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	POWERGRID No Umrangso & Ha 132 kV Khando Grid and subseq	uflong area of Ass	Haflong(PG) Jiribam sam were conne ne & 132 kV H due to no source	Not Furnished DP, ZI, B-E, 76.6 Kms. DP, ZI, B-E, 21.6 Kms. ected with rest of Naflong-Jiribam linge in this area.	Not Furnished Not Furnished NER Grid through	No No	No No No	2 agsho line & 13:	2 kV Haflong	g-Jiribam line .At	13:45 Hrs on	28.06.16,
43	FIR by the constituent Brief Description of the Incident Antecedent Conditions	POWERGRID No Umrangso & Ha 132 kV Khando Grid and subseq	uflong area of Ass ng-Umrangsho li uently collapsed	Haflong(PG) Jiribam sam were conne ne & 132 kV H due to no source	Not Furnished DP, ZI, B-E, 76.6 Kms. DP, ZI, B-E, 21.6 Kms. ected with rest of Naflong-Jiribam linge in this area.	Not Furnished Not Furnished NER Grid through	No No	No No No	2 agsho line & 13:	2 kV Haflong	g-Jiribam line .At	13:45 Hrs on	28.06.16,

I fad trip trip trip trip trip trip trip trip	by the constituent of Description of the Incident eccedent Conditions of NER Grid	19.01.2016 ,132 this area.(Load l (पूर्ववृ त्ता उत्पाद Power extended Un-known misc	प्रदान की / Date & Time of Event provided by CR operator 1/19/2016 11:35 Assam was conn kV Gohpur - Nii oss in MU:0.002	rjuli line tripped) Generation: 10 of Assam at 11:	d. Due to tripping 63 MW , पूर्ववृत्त 46 Hrs on 19.01.1	ugh 132 kV Gohp of this element, G T लोड/ Anteceden 6 through 132 kV	ohpur area wa	as separated fi	उत्पादन की हानि) / Effect (Loss of Load & Generation in MW) Loss of Load: 15		सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator 1/19/2016 11:46	SPS Operation No SPS ment). At 11	
FIR by Brief I Anteco Rest Rem 132 k FIR by Brief I	by the constituent of Description of the Incident eccedent Conditions of NER Grid estoration Details	No Gohpur Area of 19.01.2016 ,132 this area.(Load l (पूर्ववृ त्ता उत्पाद Power extended Un-known misc	Assam was conn kV Gohpur - Nir oss in MU:0.002 न/ Antecedent G to Gohpur Area	Nirjuli nected with rest rjuli line tripped) Generation: 10 of Assam at 11:	DP, ZI, R-Y-E of NER Grid throd . Due to tripping 63 MW , पूर्ववृत्त	Not Furnished ugh 132 kV Gohp of this element, G T लोड/ Anteceden 6 through 132 kV	No ur - Nirjuli lin ohpur area wa t Load : 1472	No ne (Bus Couples separated file	15 ler CB of Gohpt	ır kept open	for system require	ment). At 11	:35 Hrs on
FIR by Brief I Anteco Rest Rem 132 k FIR by Brief I	by the constituent of Description of the Incident eccedent Conditions of NER Grid estoration Details	No Gohpur Area of 19.01.2016 ,132 this area.(Load l (पूर्ववृ त्ता उत्पाद Power extended Un-known misc	Assam was conn kV Gohpur - Nir oss in MU:0.002 न/ Antecedent G to Gohpur Area	nected with rest rjuli line tripped) Generation: 10 of Assam at 11:	of NER Grid throi 1. Due to tripping 63 MW , पूर्ववृत्त 46 Hrs on 19.01.1	ugh 132 kV Gohp of this element, G T लोड/ Anteceden 6 through 132 kV	ur - Nirjuli lin ohpur area wa t Load : 1472	ne (Bus Couples separated for the couples of the co	ler CB of Gohp		•		
Brief I Antecco Rest Rem 132 k' FIR by Brief I	of Description of the Incident secedent Conditions of NER Grid sestoration Details	Gohpur Area of 19.01.2016 ,132 this area.(Load l (पूर्ववृ त्ता उत्पाद Power extended Un-known misc	kV Gohpur - Nii oss in MU:0.002 न/ Antecedent G to Gohpur Area	rjuli line tripped) Generation: 10 of Assam at 11:	d. Due to tripping 63 MW , पूर्ववृत्त 46 Hrs on 19.01.1	of this element, G T ਜੀਤ/ Anteceden 6 through 132 kV	ohpur area wa	as separated fi	•		•		
Anteco Rest Rem 132 kV FIR by	Incident Exceedent Conditions of NER Grid Exestoration Details	19.01.2016 ,132 this area.(Load l (पूर्ववृ त्ता उत्पाद Power extended Un-known misc	kV Gohpur - Nii oss in MU:0.002 न/ Antecedent G to Gohpur Area	rjuli line tripped) Generation: 10 of Assam at 11:	d. Due to tripping 63 MW , पूर्ववृत्त 46 Hrs on 19.01.1	of this element, G T ਜੀਤ/ Anteceden 6 through 132 kV	ohpur area wa	as separated fi	•		•		
Rem 132 kV FIR by Brief I	of NER Grid estoration Details	Power extended Un-known misc	to Gohpur Area	of Assam at 11:	:46 Hrs on 19.01.1	6 through 132 kV							
Rem 132 kV FIR by Brief I		Un-known misc					Gohnur - Nir						
Rem 132 kV FIR by Brief I	Root Cause		reants had cut a b	oig treee and fee	1 4 1 1 1 4		Gonpui Ivii	rjuli line.					
132 k ^v FIR by Brief I		police station.			el on the line betw	een Loc 106-107	at village Durp	pang, causing	damage to the	towers and co	onductors. FIR wa	s filed in the	nearest
FIR by Brief I	emedial Measures	Vegetation clear	ance on up-hill s	ide to be done.									
Brief I	kV Gohpur - Nirjuli	POWERGRID	5/10/2016 12:30	Gohpur Nirjuli	Over current No tripping	Not applicable Not applicable	No No	No No	Loss of Load: 26	GD-I	5/10/2016 12:55	No SPS	0.004
	by the constituent	No											
5	ef Description of the Incident	shutdown from (09:00 Hrs on 10.0	05.16). At 12:30		, 132 kV Gohpur-	_		3		ganadi - Lekhi was chi area & Capital		- •
	ecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation : 13	78 MW , पूर्ववृ <i>त्</i> त	ा लोड/ Anteceden	t Load : 1570	MW)					
	Root Cause	As reported from	n Nirjuli sub stati	ion the incomin	g power at Gohpu	r failed. No probl	em in line, as i	recorded by (CPCC, NERTS.				
Rem	emedial Measures				EGCL to furnish of eck relay settings					oblem in line	e, NERTS can take	up for rectif	ication. If
13	132 kV Silchar -	POWERGRID		Silchar	DP, ZII, B-E	Not applicable	No	No			5/12/2016 18:17	No SPS	
!	Dullavcherra	& AEGCL	5/12/2016 16:51	Dullavcherra	No tripping	Not applicable	No	No			5/12/2010 16:17	MOSES	
	132 kV Silchar -	POWERGRID	3/12/2010 10:31	Silchar	No tripping	Not applicable	No	No			5/12/2016 18:50	No SPS	
		& AEGCL		Panchgram		Not applicable	No	No			5, 12, 2010 10.50	110 01 0	
	Panchgram	_		0.1	No tripping	Not applicable	No	No	Loss of Load:	GD-I	5/12/2016 17:38	No SPS	0.004
	132 kV Srikona -	AEGCL		Srikona	11 0								
132 kV	υ	AEGCL		Panchgram	Earth Fault	Not applicable	No	No	24		I		
132 FA	132 kV Srikona - Panchgram		5/12/2016 16:58	Panchgram	11 0		No No No	No No No	24		5/12/2016 17:36	No SPS	

			List of	Grid Disturl	bances in Nortl	1-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 KV SHCHai - SHKOHa II	TOWERORID		Srikona	No tripping	Not applicable	No	No			3/12/2010 17.38	NUSES	
46	FIR by the constituent	No			-			•	-				
	Brief Description of the Incident	Silchar-Panchgra 16:51 Hrs on 12	am line (132 kV .05.16, 132 kV \$	Panchgram-Lui Silchar-Panchgi	a) was connected v msshnong line,132 ram line tripped an ping of these eleme	kV Pailapool-Jir d at 16:58 Hrs on	ibam line and 12.05.16, 132	132 kV Dull 2 kV Silchar	avcherra-Dharn - Dullavcherra l	nanagar line l ine,132 kV S	kept open for syste Srikona - Panchgra	em requireme ım line & 132	ent).At 2 kV
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 17	737 MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1694	MW)					
	Root Cause	Likely due to ve	getation problem	in 132 kV Srik	kona - Panchgram,	132 kV Silchar -	Panchgram &	132 kV Srik	ona - Panchgrai	n lines trippe	ed at Panchgram.		
	Remedial Measures	Directionality of be done by AEG		Relays at Panch	ngram for the abov	e two feeders to b	e checked.Pro	otection at Sri	kona for Panch	gram - Sriko	na to be verified.V	egetation cle	arence to
	132 kV Biswanath Charali- Pavoi I	POWERGRID		Biswanath Charali	No tripping	Not Furnished	No	No			1/25/2016 19:56	No SPS	
	r avoi i												
	r avoi i			Pavoi	Not Furnished	Not Furnished	No	No					
	132 kV Biswanath Charali- Pavoi II	POWERGRID	1/25/2016 18:34	Biswanath Charali	Over current	Not applicable	No	No	Loss of Load:	GD-I	1/25/2016 19:27	No SPS	0.155
	132 kV Biswanath Charali- Pavoi II	POWERGRID	1/25/2016 18:34	Biswanath Charali Pavoi		Not applicable Not applicable			Loss of Load: 183	GD-I	1/25/2016 19:27	No SPS	0.155
	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT I at Balipara		1/25/2016 18:34	Biswanath Charali	Over current	Not applicable	No	No	4	GD-I	1/25/2016 19:27 1/25/2016 19:30		0.155
	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT	POWERGRID NEEPCO AEGCL	1/25/2016 18:34	Biswanath Charali Pavoi	Over current Not Furnished	Not applicable Not applicable	No No	No No	4	GD-I		No SPS	0.155
47	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT I at Balipara 220/132 kV,50 MVA ICT	POWERGRID NEEPCO	1/25/2016 18:34	Biswanath Charali Pavoi Balipara	Over current Not Furnished Over current	Not applicable Not applicable Not applicable	No No No	No No No	4	GD-I	1/25/2016 19:30	No SPS	0.155
47	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT I at Balipara 220/132 kV,50 MVA ICT II at Balipara	POWERGRID NEEPCO AEGCL No Khupi area of A MVA ICT I&II : 25.01.2016,132	runachal Pradesh at Balipara (132 l kV Biswanath C	Biswanath Charali Pavoi Balipara Balipara and Depota & kV Rangia-Sipa	Over current Not Furnished Over current	Not applicable Not applicable Not applicable Not applicable sam were connect Rangia-Rowta lin 32 kV,50 MVA I	No No No No ed with rest o e & 132 kV S CT I&II at Ba	No No No No F NER Grid the amaguri-Deplipara tripped	183 hrough 132 kV ota line kept op	Biswanath (1/25/2016 19:30 1/25/2016 21:15 Charali-Pavoi I&II n requirement) . A	No SPS No SPS lines,220/13: t 18:34 Hrs o	2 kV,50
47	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT I at Balipara 220/132 kV,50 MVA ICT II at Balipara FIR by the constituent Brief Description of the	POWERGRID NEEPCO AEGCL No Khupi area of A MVA ICT I&II a 25.01.2016,132 Depota area wer	runachal Pradesh at Balipara (132 l kV Biswanath C e separated from	Biswanath Charali Pavoi Balipara Balipara and Depota & kV Rangia-Sipa Charali-Pavoi I& rest of NER Gr	Over current Not Furnished Over current Over current Pavoi areas of Asajhar line, 132 kV &II lines and 220/1	Not applicable Not applicable Not applicable Not applicable sam were connect Rangia-Rowta lin 32 kV,50 MVA I	No No No No ed with rest o e & 132 kV S CT I&II at Ba to no source in	No No No No f NER Grid ti amaguri-Dep lipara tripped n this area.	183 hrough 132 kV ota line kept op	Biswanath (1/25/2016 19:30 1/25/2016 21:15 Charali-Pavoi I&II n requirement) . A	No SPS No SPS lines,220/13: t 18:34 Hrs o	2 kV,50
47	132 kV Biswanath Charali- Pavoi II 220/132 kV, 50 MVA ICT I at Balipara 220/132 kV,50 MVA ICT II at Balipara FIR by the constituent Brief Description of the Incident Antecedent Conditions	POWERGRID NEEPCO AEGCL No Khupi area of A MVA ICT I&II a 25.01.2016,132 Depota area wer (पूर्ववृत्ता उत्पाद	runachal Pradesh at Balipara (132 l kV Biswanath C e separated from	Biswanath Charali Pavoi Balipara Balipara and Depota & kV Rangia-Sipa Charali-Pavoi I& rest of NER Gr	Over current Not Furnished Over current Over current Pavoi areas of Asajhar line, 132 kV kill lines and 220/1 rid and subsequent	Not applicable Not applicable Not applicable Not applicable sam were connect Rangia-Rowta lin 32 kV,50 MVA I tly collapsed due	No No No No No ed with rest o e & 132 kV S CT I&II at Ba to no source in t Load: 2162	No No No No No No f NER Grid the amaguri-Deplipara tripped in this area.	hrough 132 kV ota line kept op . Due to trippin	Biswanath (en for systen g of these ele	1/25/2016 19:30 1/25/2016 21:15 Charali-Pavoi I&II a requirement) . A	No SPS No SPS lines,220/13 t 18:34 Hrs o a,Pavoi Area	2 kV,50 on and

			List of (Grid Disturl	oances in Nortl	1-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures	The relay config	guration problem	has already bee	n attended.								
	132 kV Biswanath Charali- Pavoi I	POWERGRID		Biswanath Charali	No tripping	Not Furnished	No	No			1/26/2016 12:36	No SPS	
	1 avoi 1		1/25/2016 20:30	Pavoi	Earth Fault	Not Furnished	No	No	Loss of Load:	GD-I			0.062
	132 kV Biswanath Charali- Pavoi II	POWERGRID	1,20,2010 20100	Biswanath Charali	Directional Earth Fault	Not Furnished	No	No	80	GD 1	1/25/2016 21:16	No SPS	0.002
				Pavoi	Earth Fault	Not Furnished	No	No					
	FIR by the constituent	No											
48	Brief Description of the Incident Antecedent Conditions	line kept open for tripped. Due to t	or system require tripping of these	ment and 132 k elements, Pavo	with rest of NER V Depota-Balipar i area was separate 538 MW , पूर्ववृत्त	a line was not resed from rest of NE	tored after trip ER Grid and so	oping). At 20: ubsequently o	30 Hrs on 25.0	1.2016, 132	kV Biswanath Ch	arali-Pavoi I	&II lines
	of NER Grid Restoration Details	Davies autonded	to Davisi area of	A ssam at 21.14	6 Hrs on 25.01.16	through 122 lsV E							
	Root Cause		to ravoi alea oi	Assain at 21.10) THS OH 25.01.10				lino				
			failed in Circuit- per failure have o		ne Circuit -2 trippe then.					D/C BNC-Pa	voi line is very con	nmon and so	me more
	Remedial Measures	incidents of jum		occurred since	then.					D/C BNC-Pa	voi line is very cor	nmon and so	me more
	132 kV Biswanath Charali-	incidents of jum	per failure have o	occurred since	then.	d on overload , so				D/C BNC-Pa	oi line is very cor 5/12/2016 22:09	nmon and so	me more
		incidents of jum Alternative con	per failure have o	is to be explor Biswanath	then.	ed on overload , so	ubsequently.	Over loading		D/C BNC-Pa			me more
	132 kV Biswanath Charali-	incidents of jum Alternative con	per failure have o	is to be explor Biswanath Charali Pavoi Biswanath Charali	Earth Fault Earth Fault Over current	Not applicable Not applicable Not applicable	No No No	No No No		O/C BNC-Pa [*] GD-I			me more 0.116
	132 kV Biswanath Charali- Pavoi I 132 kV Biswanath Charali-	incidents of jum Alternative con POWERGRID	per failure have onectivity to Pavoi	is to be explor Biswanath Charali Pavoi Biswanath Charali Pavoi	ed. Earth Fault Earth Fault Over current Hand Tripped	Not applicable Not applicable Not applicable Not applicable Not applicable	No No No No No	No No No No	of the 132 kV l		5/12/2016 22:09	No SPS	
	132 kV Biswanath Charali- Pavoi I 132 kV Biswanath Charali-	incidents of jum Alternative con POWERGRID	per failure have onectivity to Pavoi	is to be explor Biswanath Charali Pavoi Biswanath Charali Pavoi Depota	ed. Earth Fault Earth Fault Over current Hand Tripped Earth Fault	Not applicable	No No No No No No No	No No No No No No No	of the 132 kV l		5/12/2016 22:09	No SPS	
49	132 kV Biswanath Charali- Pavoi I 132 kV Biswanath Charali- Pavoi II	Alternative conn POWERGRID POWERGRID	per failure have onectivity to Pavoi	is to be explor Biswanath Charali Pavoi Biswanath Charali Pavoi	ed. Earth Fault Earth Fault Over current Hand Tripped	Not applicable Not applicable Not applicable Not applicable Not applicable	No No No No No	No No No No	of the 132 kV l		5/12/2016 22:09 5/13/2016 16:43	No SPS	
49	132 kV Biswanath Charali- Pavoi I 132 kV Biswanath Charali- Pavoi II 132 kV Depota - Sonabil	AEGCL No Pavoi area of Asopen for system	per failure have onectivity to Pavoi 5/12/2016 20:01 ssam was connect requirement). At	is to be explor Biswanath Charali Pavoi Biswanath Charali Pavoi Depota Sonabil ted with rest of 20:01 Hrs on	ed. Earth Fault Earth Fault Over current Hand Tripped Earth Fault	Not applicable 132 kV Biswanaiswanath Charali	No No No No No No No No Ano Ano Ano Ano Ano Ano Ano Ano Ano An	No N	Loss of Load: 124 s & 132 kV Dep Depota - Sona	GD-I oota - Sonabii	5/12/2016 22:09 5/13/2016 16:43 5/12/2016 20:57 line (Bus Coupler	No SPS No SPS No SPS	0.116 our kept
49	132 kV Biswanath Charali- Pavoi I 132 kV Biswanath Charali- Pavoi II 132 kV Depota - Sonabil FIR by the constituent Brief Description of the	POWERGRID AEGCL No Pavoi area of Asopen for system Pavoi area of As (पूर्ववृत्ता उत्पाद	ssam was connect requirement). At ssam was separate	is to be explor Biswanath Charali Pavoi Biswanath Charali Pavoi Depota Sonabil ted with rest of 20:01 Hrs on ed from rest of	Earth Fault Earth Fault Over current Hand Tripped Earth Fault Earth Fault NER Grid through	Not applicable a 132 kV Biswanatiswanath Charalisequently collaps	No No No No No No Ano Ano No Ano Ano Ano Ano Ano Ano Ano Ano Ano An	No N	Loss of Load: 124 s & 132 kV Depota - Sona area.	GD-I oota - Sonabii bil line trippe	5/12/2016 22:09 5/13/2016 16:43 5/12/2016 20:57 line (Bus Coupler d. Due to tripping	No SPS No SPS No SPS	0.116 our kept

			List of	Grid Disturk	oances in North	n-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	output furnished within 24	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures		•		nd Pavoi to be expl Jumper Strengthen			ID has carrie	d out jumper tig	ghtening in a	ll locations of the	132 kV D/C	BNC-Pavoi
	132 kV BTPS - Dhaligaon	AEGCL	•	BTPS	186 A-B operated, No other indication	Lockout	No	No			6/26/2016 13:04	No SPS	
	1		6/26/2016 12:46	Dhaligaon	DP, ZI, Y-B-E, 8 Kms.	Not Furnished	No	No	Loss of Load:	GD-I			0.038
	132 kV BTPS - Dhaligaon	AEGCL	0/20/2010 12.40	BTPS	186 A-B operated, No other indication	Lockout	No	No	101	GD-1	6/26/2016 19:44	No SPS	0.036
50	п			Dhaligaon	DP, ZI, Y-B-E, 8 Kms.	Not Furnished	No	No					
	FIR by the constituent	No											
	Brief Description of the Incident	open for system	requirement). At	1246 Hr on 26	st of NER Grid the .06.16,132 kV Dh source in this area	aligaon-BTPS I &	•		_	_	_		-
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1870	MW , Anteced	lent Load: 1595	MW)							
	Root Cause												
	Remedial Measures												

			List of G	rid Disturb	ances in North	ı-Eastern Regi	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not Furnished	No	No			1/4/2016 14:18	No SPS	
	Imphal (MA) I		1/4/2016 4:37	Imphal	Not Furnished	Not Furnished	No	No	Loss of Load:	GD-I			0.04
	132 kV Imphal (PG) -	POWERGRID/ MSPCL		Imphal (PG)	Earth Fault	Not Furnished	No	No	40		1/5/2016 14:45	No SPS	
	Imphal (MA) II FIR by the constituent	No MSPCL		Imphal	Not Furnished	Not Furnished	No	No					
	FIR by the constituent		forong Area of M	faninur was cor	mactad with ract	of NED Grid thro	ugh 122 kV I	mphal Impha	1 I & II lines (1	22 kV Kakak	ing-Kongba line	₽- 122 LV K	rong
51	Brief Description of the Incident	Kohima line kep	ot open for system	n requirement).	At 04:37 Hrs on		/ Imphal-Impl				these elements, C		
	Antecedent Conditions of NER Grid					ता लोड/ Antecede							
	Restoration Details					18 Hrs on 04.01.							
	Root Cause	Fault was in Ma	nipur system and	l cleared at Imp	hal(PG). Tripping	g of incoming fee	ders occurred	due to non cl	earance of faul	t within Mani	pur system. Earth	quake of ma	gnitude 6.7
	Remedial Measures	Relay coordinati	ion has to be don	e by MSPCL in	consultation wit	h PG.							
	132 kV Imphal (PG) - Imphal (MA) I	POWERGRID		Imphal (PG) Imphal	Earth Fault Tripping due to Y-Phase Circuit II LA blast	Not Furnished Not Furnished	No No	No No	Loss of Load:		1/5/2016 15:40	No SPS	
	132 kV Imphal (PG) - Imphal (MA) II	POWERGRID/ MSPCL	1/5/2016 14:54	Imphal (PG) Imphal	Earth Fault Tripping due to Y-Phase Circuit II LA blast	Not Furnished Not Furnished	No No	No No	53	GD-I	1/6/2016 7:58	No SPS	0.038
52	FIR by the constituent	No											
	Brief Description of the Incident	Kohima line kep	ot open for system	n requirement).	At 14:54 Hrs on		/ Imphal-Impl	hal I & II line	s tripped. Due		ing-Kongba line & these elements, C		
	Antecedent Conditions of NER Grid					ता लोड/ Antecede							
	Restoration Details					40 Hrs on 05.01.	16 through 13	2 kV Imphal	(PG) - Imphal ((MA) I line.			
	Root Cause				Phase Circuit II								
	Remedial Measures	as per clause no		l Standards),20	10.MSPCL shall						nce procedure for lace of traditional		ents in line
	132 kV Imphal (PG) - Imphal (MA) I	POWERGRID	1/12/2016 8:53	Imphal (PG)	Earth Fault Earth Fault	Not applicable Not applicable	No No	No No	Loss of Load: 65	GD-I	1/12/2016 9:48	No SPS	0.048
	132 kV Imphal (PG) - Imphal (MA) II	POWERGRID/ MSPCL		Imphal (PG) Imphal	Earth Fault Earth Fault	Not applicable Not applicable	No No	No No	0.5		1/12/2016 9:49	No SPS	
	FIR by the constituent	No				The second second					ı.		

			List of G	rid Disturb	ances in North	-Eastern Reg	ional Grid	during Jar	nuary 20
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट लोड औ उत्पादन हानि) / E (Loss Load Generat in MV
53	Brief Description of the Incident	Kohima line kep	ot open for system	n requirement).	At 08:53 Hrs on	of NER Grid thro 12.01.2016,132 apsed due to no s	kV Imphal-In	nphal I & II li	
	Antecedent Conditions of NER Grid	,, ,			., •	ता लोड/ Antecede			
	Restoration Details					48 Hrs on 12.01.1			
	Root Cause	Fault was in Ma	nipur system and	cleared at Imp	hal(PG) tripping	incoming feeders	due to non cl	earance of fa	ult within l
	Remedial Measures	Relay coordinati done by MSPCL		e by Manipur i	n consultation wit	th PG. Directiona	l feature of ea	th fault prote	ction at Im
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not Furnished	Yes	No	
	Imphal (MA) I		1/14/2016 7:39	Imphal	Not Furnished	Not Furnished	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/	1/14/2010 7.37	Imphal (PG)	Earth Fault	Not Furnished	Yes	No	54
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not Furnished	No	No	
	FIR by the constituent	No							
54	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 07:39 Hrs on	of NER Grid thro 14.01.2016,132 apsed due to no s	kV Imphal-In	nphal I & II li	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 14	01 MW , पूर्ववृत्त	ता लोड/ Antecede	nt Load : 192	24 MW)	
	Restoration Details	Power extended	to Capital area &	Karong area o	of Manipur at 07:	56 Hrs on 14.01.1	6 through 132	2 kV Imphal	(PG) - Imp
	Root Cause	Fault was in Ma	nipur system and	cleared at Imp	hal(PG) tripping	incoming feeders	due to non cl	earance of fa	ult within l
	Remedial Measures	Relay coordinati	on has to be don	e by Manipur ii		th PG.Vegetation	clearance to b	e done by M	SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not Furnished	No	No	1
	Imphal (MA) I		1/21/2016 7:46	Imphal	Not Furnished	Not Furnished	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/	1,21,2010 7.10	Imphal (PG)	Earth Fault	Not Furnished	No	No	64
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not Furnished	No	No	
	FIR by the constituent	No							
55	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 07:46 Hrs on	of NER Grid thro 21.01.2016,132 k apsed due to no s	v Imphal-Im	phal I & II liı	nes tripped
	Antecedent Conditions of NER Grid	,, ,			., •	ता लोड/ Antecede			
	Restoration Details	Power extended	to Capital area &	Karong area o	of Manipur at 07:	51 Hrs on 21.01.1	6 through 132	2 kV Imphal	(PG) - Imp
	Root Cause	Fault was in Ma	nipur system and	cleared at Imp	hal(PG). Tripping	g of incoming fee	ders occurred	due to non c	learance of

Relay coordination has to be done by Manipur in consultation with PG.Vegetation clearance to be done by MSPCL.

Remedial Measures

			List of G	rid Disturba	ances in North	ı-Eastern Regi	ional Grid		1 uary 20 2
			दिनांक और				24 घंटे के	24 घंटे के	प्रभाव
			घटना के		सीआर		भीतर	भीतर	(मेगावाट
क्रम			समय सीआर		ऑपरेटर द्वारा	ऑटो रीक्लोजर	डी.आर. पेश	ई.एल. पेश	लोड औ
सं	बिजली व्यवस्था तत्व /	मालिक /	ऑपरेटर द्वारा	नोड के नाम	प्रदान की रिले	का ऑपरेशन /	किया (हां /	किया (हां /	उत्पादन
ख्या/	विवरण / Name of tripping	Owner	प्रदान की /	/ Name of	संकेत / Relay	Operation of	नहीं) / DR	नहीं) / EL	हानि) / Ef
Sl.	element/ Description	Owner	Date & Time	Node	indications	Auto Reclose	output	output	(Loss o
No.			of Event		provided by	Auto Reciose	furnished	furnished	Load d
			provided by		CR operator		within 24	within 24	Generat
			CR operator				hours (Y/N)	hours	in MV
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not Furnished	No	No	
	Imphal (MA) I		1/21/2016 15:11	Imphal	Earth Fault	Not Furnished	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/		Imphal (PG)	Earth Fault	Not Furnished	No	No	61
	Imphal (MA) II	MSPCL		Imphal	Earth Fault	Not Furnished	No	No	
	FIR by the constituent	No							
	Brief Description of the					of NER Grid thro			
56	Incident					21.01.2016,132 k			
	1 1 C 10 0	area were separa	ted from rest of	NER Grid and s	subsequently coll	apsed due to no se	ource in this a	irea.(Load ios	ss in MU:0
	Antecedent Conditions of NER Grid				., -	ता लोड/ Antecede			
	Restoration Details					29 Hrs on 21.01.1			
	Root Cause					g of incoming fee			
	Remedial Measures	Relay coordinati done by MSPCL		e by Manipur ir	n consultation wi	th PG.Directional	feature of eat	h fault protec	ction at Imp
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not Furnished	No	No	
	Imphal (MA) I		1/24/2016 19:05	Imphal	Not Furnished	Not Furnished	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/	1/24/2010 17:03	Imphal (PG)	Earth Fault	Not Furnished	No	No	68
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not Furnished	No	No	
	FIR by the constituent	No							
	Brief Description of the					of NER Grid thro			
57	Incident					24.01.2016,132 k			
						apsed due to no se			ss in MU:0
	Antecedent Conditions of NER Grid					ता लोड/ Antecede			
	Restoration Details					30 Hrs on 24.01.1			
	Root Cause					g of incoming fee			
	Remedial Measures	Relay coordinati	on has to be don			th PG.Vegetation	ī	1	SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	No	No	_
	Imphal (MA) I		2/9/2016 4:10	Imphal	No tripping	Not applicable	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/		Imphal (PG)	Earth Fault	Not applicable	No	No	41
	Imphal (MA) II	MSPCL		Imphal	No tripping	Not applicable	No	No	
	FIR by the constituent	No							
58	Brief Description of the		U			of NER Grid thro 109.02.2016, 132	U		
50	Incident					apsed due to no se			
	Anton Jone Conditions of								
	Antecedent Conditions of	(पर्वव त्त उत्पाद	ਜ/ Antecedent C	Seneration: 13	08 MW . पर्वव न	न लोड/ Antecede	nt Load : 13	26 MW)	

			List of G	rid Disturba	ances in North	-Eastern Regi	ional Grid	during Jan	uary 201
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट लोड औ उत्पादन हानि) / Ei (Loss (Load a Generat in MV
	132 kV Imphal (PG) - Imphal (MA) I	POWERGRID		Imphal (PG) Imphal	Earth Fault Not Furnished	Not applicable Not applicable	No No	No No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/	3/7/2016 15:23	Imphal (PG)	Earth Fault	Not applicable	No	No	28
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not applicable	No	No	1
	FIR by the constituent	No							
59	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 15:23 Hrs on	of NER Grid thro 07.03.16,132 kV apsed due to no so	Imphal-Impha	al I & II lines	
	Antecedent Conditions of NER Grid	", "			., •	ता लोड/ Antecede			
	Restoration Details	Power extended	to Capital area &	k Karong area o	of Manipur at 15:4	45 Hrs on 07.03.1	6 through 132	2 kV Imphal (PG) - Imp
	Root Cause	Ü	1		1 , 1), 132 kV Imphal	, ,	, ,	1.1
	Remedial Measures	Relay coordinati	on has to be don		r	h PG. Vegetation			SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	No	No	
	Imphal (MA) I	DOMED COM	3/14/2016 11:58	Imphal	No tripping	Not applicable	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/		Imphal (PG)	Earth Fault	Not applicable	No	No	24
	Imphal (MA) II FIR by the constituent	MSPCL No		Imphal	No tripping	Not applicable	No	No	
60	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 11:58 Hrs on	of NER Grid thro 14.03.16, 132 kV apsed due to no so	Imphal-Imph	al I & II lines	
	Antecedent Conditions of NER Grid				·* -	ता लोड/ Antecede			
	Restoration Details					09 Hrs on 14.03.1			
	Root Cause), 132 kV Imphal			
	Remedial Measures	Relay coordinati	on has to be don		r	h PG. Vegetation			SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	No	No	
	Imphal (MA) I		3/19/2016 15:45	Imphal	Earth Fault	Not applicable	No	No	Loss of L
	132 kV Imphal (PG) -	POWERGRID/		Imphal (PG)	Earth Fault	Not applicable	No	No	33
	Imphal (MA) II	MSPCL		Imphal	Earth Fault	Not applicable	No	No	
	FIR by the constituent	No							
61	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 15:45 Hrs on	of NER Grid thro 19.03.16 ,132 kV apsed due to no se	Imphal-Imph	al I & II lines	

L			List of G	rid Disturba	ances in North	ı-Eastern Regi	<u>ional Grid</u>	during Jan	uary 20
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभा (मेगावा लोड : उत्पादन हानि) / l (Loss Load Genera in M
	Antecedent Conditions of NER Grid	-				ना लोड/ Antecede			
. [Restoration Details	Power extended	to Capital area &	k Karong area o	of Manipur at 05:5	58 Hrs on 26.03.1	6 through 132	2 kV Imphal (PG) - Im
	Root Cause	Fault was in Ma	nipur system and	cleared at Impl	hal(PG) tripping	incoming feeders	due to non cle	earance of fau	ılt within
	Remedial Measures	Relay coordinat	on has to be don			h PG.Vegetation	clearance to b	e done by M	SPCL.
]	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)		Not applicable	No	No	
	Imphal (MA) I		3/26/2016 12:00	Imphal		Not applicable	No	No	Loss of
	132 kV Imphal (PG) -	POWERGRID/	2.20,2010 12.00	Imphal (PG)		Not applicable	No	No	25
	Imphal (MA) II	MSPCL No		Imphal	Not Furnished	Not applicable	No	No	
63	FIR by the constituent Brief Description of the	Capital area & I	-	-		of NER Grid thro 26.03.16,132 kV	•		
03	Incident Antecedent Conditions of	area were separa	ited from rest of	NER Grid and s	subsequently coll	apsed due to no se	ource in this a	rea.	птррец.
	NER Grid	·			•	ना लोड/ Antecede			
	Restoration Details		1		1	11 Hrs on 26.03.1		1	
	Root Cause					incoming feeders			
	Remedial Measures	Relay coordinat	on has to be don			h PG.Vegetation	T .		SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)		Not applicable	No No	No No	Loss of
	Imphal (MA) I 132 kV Imphal (PG) -	POWERGRID/	4/4/2016 13:59	Imphal (PG)	Not Furnished Earth Fault	Not applicable Not applicable	No	No	14
	Imphal (MA) II	MSPCL		Imphal (PG)	Not Furnished	Not applicable Not applicable	No	No	14
	FIR by the constituent			шрпаг	· · · · · · · · · · · · · · · · · · ·	TIOL APPLICABLE	110		
		No				**		NO	
64	Brief Description of the Incident	kept open for sy	stem requiremen	t). At 13:59 Hrs	t of NER Grid th	rough 132 kV Im kV Imphal-Imph a.		& II lines (13	
64	Brief Description of the	Capital area of kept open for sy NER Grid and s	stem requirement ubsequently colla	t). At 13:59 Hrs	at of NER Grid the son 04.04.16,132 source in this are	kV Imphal-Imph	al I & II lines	& II lines (13 tripped. Due	
64	Brief Description of the Incident Antecedent Conditions of	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma	stem requiremen ubsequently colla 터/Antecedent C nipur system and	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Impl	st of NER Grid th s on 04.04.16,132 source in this are source in this are solo MW, पूर्ववृत्त	kV Imphal-Imph ea. ना लोड/ Antecede incoming feeders	nt Load: 196	& II lines (13 tripped. Due 51MW)	to trippi
64	Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma	stem requiremen ubsequently colla 터/Antecedent C nipur system and	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Imple by Manipur ir	st of NER Grid th s on 04.04.16,132 source in this are 260 MW, पूर्ववृत्त्व hal(PG) tripping in consultation with	kV Imphal-Imph a. ता लोड/ Antecede incoming feeders h PG. Directiona	nt Load: 196	& II lines (13 tripped. Due 51MW)	to trippi
64	Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) -	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma Relay coordinat	stem requiremen ubsequently colla 터/Antecedent C nipur system and	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Imple e by Manipur ir Imphal (PG)	st of NER Grid the son 04.04.16,132 source in this are consultation with Earth Fault	kV Imphal-Imph a. ता लोड/ Antecede incoming feeders h PG. Directiona Not applicable	nt Load : 196 due to non cle feature of ea	& II lines (13 tripped. Due 51MW) earance of fauth fault protection.	to trippi
64	Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma Relay coordinat	stem requiremen ubsequently colla ল/ Antecedent C nipur system and on has to be don	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Imple by Manipur ir Imphal (PG) Imphal	st of NER Grid the son 04.04.16,132 source in this are consultation with Earth Fault Not Furnished	kV Imphal-Imph a. ता लोड/ Antecede incoming feeders h PG. Directiona Not applicable Not applicable	nt Load : 196 due to non cle feature of ea No No	& II lines (13 tripped. Due 51MW) earance of fauth fault protection No	alt within the ction at I
64	Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) -	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma Relay coordinat POWERGRID	stem requiremen ubsequently colla 터/Antecedent C nipur system and	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Imple by Manipur ir Imphal (PG) Imphal Imphal (PG)	st of NER Grid the son 04.04.16,132 source in this are 260 MW, पूर्ववृत्त्व hal(PG) tripping in consultation with Earth Fault Not Furnished Earth Fault	kV Imphal-Imphaa. ता लोड/ Antecede incoming feeders h PG. Directiona Not applicable Not applicable Not applicable	nt Load : 196 due to non cle feature of ea No No No	& II lines (13 tripped. Due 51MW) earance of fauth fault protein No No No	to trippi
	Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I	Capital area of kept open for sy NER Grid and s (पूर्ववृत्ता उत्पाद Fault was in Ma Relay coordinat	stem requiremen ubsequently colla ল/ Antecedent C nipur system and on has to be don	t). At 13:59 Hrs apsed due to no Generation: 12 cleared at Imple by Manipur ir Imphal (PG) Imphal	st of NER Grid the son 04.04.16,132 source in this are consultation with Earth Fault Not Furnished	kV Imphal-Imph a. ता लोड/ Antecede incoming feeders h PG. Directiona Not applicable Not applicable	nt Load : 196 due to non cle feature of ea No No	& II lines (13 tripped. Due 51MW) earance of fauth fault protection No	alt within ction at I

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				rid Disturb	ances in North	n-Eastern Reg			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभात (मेगावा लोड 3 उत्पादन हानि) / I (Loss Load Genera in M
	FIR by the constituent	No							
67	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 10:59 Hrs on	of NER Grid thro 09.04.16, 132 kV apsed due to no s	' Imphal-Impl	nal I & II line	
	Antecedent Conditions of NER Grid	., •			., .	ता लोड/ Antecede			
	Root Cause					g of incoming fee			
	Remedial Measures	Relay coordinati	on has to be don			th PG.Vegetation			SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	No No	No	Loss of
	Imphal (MA) I 132 kV Imphal (PG) -	POWERGRID/	4/10/2016 11:30	Imphal Imphal (PG)	Not Furnished Earth Fault	Not applicable Not applicable	No No	No No	Loss of
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not applicable	No	No	1 ~
	FIR by the constituent	No		<u>.</u>					
68	Brief Description of the Incident	Kohima line kep	ot open for systen	n requirement).	At 11:30 Hrs on	of NER Grid thro 10.04.16, 132 kV apsed due to no s	' Imphal-Impl	nal I & II line	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 15	533 MW , पूर्ववृत्व	ता लोड/ Antecede	nt Load : 21	44 MW)	
	Restoration Details	Power extended							
	Root Cause					g of incoming fee			
	Remedial Measures	Relay coordinati	on has to be don	, ,	1	th PG.Vegetation	r	•	SPCL.
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	No	No	<u> </u>
	Imphal (MA) I 132 kV Imphal (PG) -	POWERGRID/	4/10/2016 12:04	Imphal Imphal (PG)	Not Furnished Earth Fault	Not applicable Not applicable	No No	No No	Loss of
	Imphal (MA) II	MSPCL		Imphal (PG)	Not Furnished	Not applicable	No No	No	- 4
	FIR by the constituent	No		Impilar	1.5t I urmsned	тог аррисамс	110	110	1
69	Brief Description of the Incident	Capital area & K Kohima line kep	ot open for systen	n requirement).	At 12:04 Hrs on	of NER Grid thro 10.04.16, 132 kV apsed due to no s	Imphal-Impl	nal I & II line	
	Antecedent Conditions of NER Grid	., .			., .	ता लोड/ Antecede			
	Root Cause					g of incoming fee			
	Remedial Measures	Relay coordinati	on has to be don			th PG.Vegetation		1	
	132 kV Imphal (PG) - Imphal (MA) I	POWERGRID	4/10/2016 12:31	Imphal (PG) Imphal		Not applicable Not applicable	No No	No No	Loss of
	FIR by the constituent	No							

			List of G	rid Disturba	ances in North	ı-Eastern Regi	ional Grid (during Jar	nuary 201
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	TITITIZE /	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट लोड औ उत्पादन हानि) / El (Loss o Load o Generat in MV
	Imphal (MA) I	TOWERORID	5/15/2016 21:28	Imphal	No tripping	Not applicable	No	No	Loss of L
	1 \ /	POWERGRID/	3/13/2010 21:20	Imphal (PG)	Earth Fault	Not applicable	No	No	46
	Imphal (MA) II	MSPCL		Imphal	No tripping	Not applicable	No	No	
	FIR by the constituent	No					-		·

			T.				101		
क्रम सं ख्या/	बिजली व्यवस्था तत्व / विवरण / Name of tripping	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की /	नोड के नाम / Name of	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay	n-Eastern Regi ऑटो रीक्लोजर का ऑपरेशन / Operation of	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL	प्रभाव (मेगावाव लोड ३ उत्पादन हानि) / E
Sl. No.	element/ Description		Date & Time of Event provided by CR operator	Node	indications provided by CR operator	Auto Reclose	output furnished within 24 hours (Y/N)	output furnished within 24 hours	(Loss Load Genera in MV
72	Brief Description of the Incident	Kohima line kep	ot open for system	n requirement).	At 21:28 Hrs on	of NER Grid thro 15.05.16, 132 kV apsed due to no so	Imphal-Imph	al I & II lines	
	Antecedent Conditions of NER Grid	., -			., -	ता लोड/ Antecede			
	Root Cause					s not cleared at I			roblem in t
	Remedial Measures	The CB for 132	kV Karong Line			ed attended by MS			
	132 kV Imphal (PG) -	POWERGRID		Imphal (PG)	Earth Fault	Not applicable	Yes	No	
	Imphal (MA) I		5/31/2016 10:55	Imphal	Not Furnished	Not applicable	No	No	Loss of L
				Imphal (PG)	Earth Fault	Not applicable	Yes	No	44
	132 kV Imphal (PG) -	POWERGRID/							
	Imphal (MA) II	MSPCL		Imphal	Not Furnished	Not applicable	No	No	<u> </u>
	1 '	MSPCL No		Imphal	Not Furnished	Not applicable	No	No	<u> </u>
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident	MSPCL No Capital area & F Kohima line kep	ot open for systen	Imphal anipur were con requirement).	Not Furnished nnected with rest At 10:55 Hrs on		No ough 132 kV I	No mphal-Impha aal I & II lines	
73	Imphal (MA) II FIR by the constituent Brief Description of the	MSPCL No Capital area & I Kohima line kej area were separa	ot open for systen	Imphal anipur were conn requirement). NER Grid and s	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll	of NER Grid thro 31.05.16 ,132 kV apsed due to no so	No ough 132 kV I	No mphal-Impha aal I & II lines	
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of	MSPCL No Capital area & F Kohima line kep area were separa (Antecedent Ge Fault was in 132	ot open for system ated from rest of seneration: 1634	Imphal anipur were con n requirement). NER Grid and s MW, Anteced e) - Karong line	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load: 1360 and the same wa	of NER Grid thro 31.05.16,132 kV apsed due to no so MW)	No ough 132 kV I Imphal-Imph ource in this a	No mphal-Impha aal I & II lines rea. because of pr	s tripped. I
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures	MSPCL No Capital area & F Kohima line kep area were separa (Antecedent Ge Fault was in 132	ot open for system ated from rest of seneration: 1634	Imphal anipur were con n requirement). NER Grid and s MW, Anteced e) - Karong line	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load: 1360 and the same wa e) is to be attended	of NER Grid thro 31.05.16 ,132 kV apsed due to no so	No ough 132 kV I Imphal-Imph ource in this a	No mphal-Impha aal I & II lines rea. because of pr	s tripped. I
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	MSPCL No Capital area & F Kohima line kep area were separa (Antecedent Ge Fault was in 132 The CB for 132	ot open for system ated from rest of seneration: 1634	Imphal anipur were con n requirement). NER Grid and s MW, Anteced e) - Karong line	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load: 1360 and the same wa	of NER Grid thro 31.05.16,132 kV apsed due to no so MW)	No ough 132 kV I Imphal-Imph ource in this a	No mphal-Impha aal I & II lines rea. because of pr	s tripped. I
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I	MSPCL No Capital area & F Kohima line kep area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID	eneration: 1634 2 kV Imphal(State kV Karong Line	Imphal anipur were con n requirement). NER Grid and s MW, Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load : 1360 and the same wa e) is to be attended Earth Fault Not Furnished	of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at India attended by MS Not applicable Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No	No mphal-Impha al I & II lines rea. because of prarliest. No No	roblem in t
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) -	MSPCL No Capital area & H Kohima line kej area were separa (Antecedent Ge) Fault was in 132 The CB for 132 POWERGRID POWERGRID/	ot open for system ated from rest of seneration: 1634	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal (PG)	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load : 1360 and the same wa e) is to be attended Earth Fault Not Furnished Earth Fault	of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at India d attended by MS Not applicable Not applicable Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No No	No mphal-Impha al I & II lines rea. because of prarliest. No	s tripped. I
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID/ MSPCL	eneration: 1634 2 kV Imphal(State kV Karong Line	Imphal anipur were con n requirement). NER Grid and s MW, Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load : 1360 and the same wa e) is to be attended Earth Fault Not Furnished Earth Fault	of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at India attended by MS Not applicable Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No	No mphal-Impha al I & II lines rea. because of prarliest. No No	roblem in t
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) -	MSPCL No Capital area & H Kohima line kej area were separa (Antecedent Ge) Fault was in 132 The CB for 132 POWERGRID POWERGRID/	eneration: 1634 2 kV Imphal(State kV Karong Line	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal (PG)	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load : 1360 and the same wa e) is to be attended Earth Fault Not Furnished Earth Fault	of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at India d attended by MS Not applicable Not applicable Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No No	No mphal-Impha al I & II lines rea. because of pr arliest. No No	roblem in t
73	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Go Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Karong area of Mot open for system	Imphal anipur were corn requirement). NER Grid and s MW, Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal (PG) Imphal anipur were corn requirement).	Not Furnished Innected with rest At 10:55 Hrs on subsequently coll Ident Load: 1360 Ident	of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at India d attended by MS Not applicable Not applicable Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ex No No No No No No Imphal-Imph ough 132 kV I Imphal-Imph	No mphal-Impha lal I & II lines rea. because of pr arliest. No No No No no Indian I & II lines	roblem in t Loss of L 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Karong area of Mot open for system	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal Imphal Anipur were corn requirement). NER Grid and s	Not Furnished Innected with rest At 10:55 Hrs on Subsequently coll Itent Load: 1360 Itent Load: 136	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at Index attended by MS Not applicable Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ex No No No No No No Imphal-Imph ough 132 kV I Imphal-Imph	No mphal-Impha lal I & II lines rea. because of pr arliest. No No No No no Indian I & II lines	roblem in to Loss of L 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Carong area of Mot open for system ated from rest of a stated fro	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal Imphal Anipur were corn requirement). NER Grid and s	Not Furnished Innected with rest At 10:55 Hrs on Subsequently coll Itent Load: 1360 Itent Load: 136	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at Index attended by MS Not applicable Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ex No No No No No No Imphal-Imph ough 132 kV I Imphal-Imph	No mphal-Impha lal I & II lines rea. because of pr arliest. No No No No no Indian I & II lines	roblem in to Loss of L 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Carong area of Mot open for system ated from rest of a stated fro	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal Imphal Anipur were corn requirement). NER Grid and s	Not Furnished Innected with rest At 10:55 Hrs on Subsequently coll Itent Load: 1360 Itent Load: 136	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at Index attended by MS Not applicable Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ex No No No No No No Imphal-Imph ough 132 kV I Imphal-Imph	No mphal-Impha lal I & II lines rea. because of pr arliest. No No No No no Indian I & II lines	roblem in Loss of I 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Carong area of Mot open for system ated from rest of a stated fro	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal Imphal Anipur were corn requirement). NER Grid and s	Not Furnished Innected with rest At 10:55 Hrs on Subsequently coll Itent Load: 1360 Itent Load: 136	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at Index attended by MS Not applicable Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ex No No No No No No Imphal-Imph ough 132 kV I Imphal-Imph	No mphal-Impha lal I & II lines rea. because of pr arliest. No No No No no Indian I & II lines	roblem in Loss of I 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa	ent open for system ated from rest of eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Karong area of Mot open for system ated from rest of eneration: MW	Imphal anipur were corn requirement). NER Grid and s MW, Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal (PG) Imphal anipur were corn requirement). NER Grid and s r', Antecedent I	Not Furnished nnected with rest At 10:55 Hrs on subsequently coll lent Load: 1360 and the same wa e) is to be attended Earth Fault Not Furnished Earth Fault Not Furnished At 10:44 Hrs on subsequently coll Load: MW)	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at Index attended by MS Not applicable Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV apsed due to no so	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No No No No No ough 132 kV I Imphal-Imph ource in this a	No mphal-Impha al I & II lines rea. because of prarliest. No No No No No al I & II lines	roblem in Loss of I 47
	Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) - Imphal (MA) I 132 kV Imphal (PG) - Imphal (MA) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Imphal (PG) -	MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge Fault was in 132 The CB for 132 POWERGRID POWERGRID MSPCL No Capital area & F Kohima line kej area were separa (Antecedent Ge	eneration: 1634 2 kV Imphal(State kV Karong Line 6/28/2016 10:44 Carong area of Mot open for system ated from rest of a stated fro	Imphal anipur were corn requirement). NER Grid and s MW , Anteced e) - Karong line at Imphal (State Imphal (PG) Imphal Imphal (PG) Imphal anipur were corn requirement). NER Grid and s I , Antecedent I Imphal (PG)	Not Furnished Innected with rest At 10:55 Hrs on Subsequently coll Ident Load: 1360 In and the same wa In	Not applicable of NER Grid thro 31.05.16,132 kV apsed due to no so MW) as not cleared at In ad attended by MS Not applicable Not applicable Not applicable of NER Grid thro 28.06.16, 132 kV apsed due to no so Not applicable	No ough 132 kV I Imphal-Imph ource in this a mphal (State) SPCL at the ea No No No No No No No No No N	No mphal-Impha al I & II lines rea. because of pr arliest. No No No No No In lines rea. No	Loss of I 47

			List of G	rid Disturban	ces in North-	Eastern Regio	nal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के श्रीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Loktak - Imphal (PG)	POWERGRID		Loktak	DP, ZII, R-E DP, ZI, R-E	Not Furnished Not Furnished	No	No			2/1/2016 16:11	No SPS	
	132 kV Loktak -	MSPCL	2/1/2016 14:43	Imphal (PG) Loktak	No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load: 10	GD-I	2/1/2016 15:25	No SPS	0.007
	Ningthoukhong FIR by the constituent	No.		Ningthoukhong	Not Furnished	Not Furnished	No	No			2/1/2010 13:23	110313	
76	Brief Description of the Incident	Ningthoukhong Kongba line kep	ot open for system	constraint). At 1	4:43 Hrs on 01.		ktak-Ningtho	ukhong line t	ripped. Due to t		ingthoukhong line is element, Ningtl		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent G	eneration : 1017	MW , पूर्ववृत्ता	लोड/ Antecedent	Load : 1534	MW)					
	Restoration Details	Power extended	to Ningthoukhor	ng area of Manipu	r at 15:25 Hrs or	n 01.02.16 throug	132 kV Lok	tak - Ningtho	ukhong line.				
	Root Cause Remedial Measures	Ningthoukhong	line tripped due t	o ma-operation o	f protective relay	. Detailed analysi	s to be done b	y MSPCL.	PG) & 132 kV	Loktak - Nin	gthoukhong lines	132 kV Lok	tak -
	132 kV Loktak -			Loktak	DP, ZI, Y-E	tion clearance to b Not Furnished	No No	No No	Loss of Load:	CD I	2/10/2016 11 27	N. one	0.000
	Ningthoukhong	MSPCL	3/19/2016 11:15	Ningthoukhong	Earth Fault	Not Furnished	No	No	26	GD-I	3/19/2016 11:27	No SPS	0.008
	FIR by the constituent	No	43.6 1				*** * * * **						
77	Brief Description of the Incident	Ningthoukhong	line kept open fo	r system constrair	nt). At 11:15 Hrs		kV Loktak-l				gba line & 132 kV ng of this element		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent G	eneration : 1130) MW , पूर्ववृ त्ता	लोड/ Antecedent	Load : 1846	MW)					
	Restoration Details					19.03.16 throug	132 kV Lok	tak - Ningtho	ukhong line.				
	Root Cause Remedial Measures		on problem in the rance to be done b	line,132 kV Lokt	ak - Ningthoukh	ong line tripped.							
	132 kV Loktak -			Loktak	Earth Fault	Not applicable	No	No	Loss of Load:				
	Ningthoukhong	MSPCL	3/31/2016 17:25	Ningthoukhong		Not applicable	No	No	35	GD-I	3/31/2016 17:57	No SPS	0.02
	FIR by the constituent Brief Description of the					irid through 132 l	V I alsola Ni		line (122 h3/ h	skahina Von	-L- II 8, 122 LX		
78	Incident					on 31.03.16, 132 lue to no source is	kV Loktak-N				ng of this element.		
78	Antecedent Conditions of NER Grid	was separated f	rom rest of NER	Grid and subsequ	ently collapsed of		kV Loktak-N this area.	lingthoukhon					
78	Antecedent Conditions of NER Grid Restoration Details	was separated f (पूर्ववृत्ता उत्पाद Power extended	ল/ Antecedent G to Ningthoukhor	Grid and subseque Generation: 1213 ag area of Manipu	ently collapsed o S MW , पूर्ववृत्ता ir at 17:57 Hrs oi	elis Antecedent a 31.03.16 throug	kV Loktak-N this area. Load: 1927	MW)	g line tripped. I				
78	Antecedent Conditions of NER Grid Restoration Details Root Cause	was separated f (पूर्ववृत्ता उत्पाद Power extended Due to vegetation	ল/ Antecedent G to Ningthoukhor on problem in the	Grid and subsequence of the second subsequen	ently collapsed o B MW , पूर्ववृत्ता ur at 17:57 Hrs or um of Ningthouk	due to no source in लोड/ Antecedent n 31.03.16 throug hong,132 kV Lok	kV Loktak-N this area. Load: 1927 132 kV Lok tak - Ningtho	MW) tak - Ningthoukhong line t	g line tripped. I sukhong line. ripped.	Due to trippin	g of this element,	Ningthoukh	
78	Antecedent Conditions of NER Grid Restoration Details	was separated f (पूर्ववृत्ता उत्पाद Power extended Due to vegetatio Vegetation clear	ন/ Antecedent G to Ningthoukhor on problem in the rance to be done b	Grid and subsequence of the second subsequen	antly collapsed o B MW , पूर्ववृत्ता ar at 17:57 Hrs or am of Ningthouk v settings of Ning	due to no source in लोड/ Antecedent n 31.03.16 throughong,132 kV Lok thoukhong and d	kV Loktak-N this area. Load: 1927 132 kV Lok tak - Ningtho ownstream su	MW) tak - Ningthoukhong line t bstations of N	g line tripped. I sukhong line. ripped.	Oue to tripping	g of this element.	Ningthoukh	ong area
78	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong	was separated f (पूर्ववृत्ता उत्पाद Power extended Due to vegetatio Vegetation clear MSPCL	ল/ Antecedent G to Ningthoukhor on problem in the	Grid and subseques Generation: 1213 ag area of Manipu line or downstrea by MSPCL. Relay	ently collapsed o B MW , पूर्ववृत्ता ur at 17:57 Hrs or um of Ningthouk	due to no source in लोड/ Antecedent n 31.03.16 throughong,132 kV Lok thoukhong and d	kV Loktak-N this area. Load: 1927 132 kV Lok tak - Ningtho	MW) tak - Ningthoukhong line t	g line tripped. I nukhong line. ripped. Manipur to be cl	Due to trippin	g of this element,	Ningthoukh	
78	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak -	was separated fr (पूर्ववृत्ता उत्पाद Power extended Due to vegetatio Vegetation clear MSPCL No Ningthoukhong Ningthoukhong	rom rest of NER Antecedent G to Ningthoukhor on problem in the rance to be done I 3/19/2016 11:35 area of Manipur line kept open fo	Grid and subseque eneration: 1213 ag area of Manipu line or downstrea by MSPCL. Relay Loktak Ningthoukhong was connected wir system constrain	and the second s	alue to no source in all Antecedent all 31.03.16 throug thoug, 132 kV Lok thoukhong and de Not Furnished Not Furnished orid through 132 l	kV Loktak-N a this area. Load : 1927 a 132 kV Lok tak - Ningtho ownstream su No No V Loktak-Ni t kV Loktak-Ni	MW) tak - Ningthoukhong line t bstations of N No No	g line tripped. I ukhong line. ripped. Manipur to be cl Loss of Load: 4 line (132 kV ki	necked by Ma GD-I	g of this element.	ion with No SPS	0.002
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 13 2 kV Loktak Ningshookbong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	was separated fi (पूर्ववृत्ता उत्पाद Power extended Due to vegetatio Vegetation clean MSPCL No Ningthoukhong Ningthoukhong was separated fi	### Antecedent G T/Antecedent G To Ningthoukhor on problem in the rance to be done be 3/19/2016 11:35 area of Manipur line kept open for orm rest of NER T/Antecedent G	Grid and subseque Generation: 1213 ag area of Manipu line or downstree by MSPCL. Relay Loktak Ningthoukhong. was connected wir a system constrain Grid and subseque Generation: 1135	8 MW , पूर्ववृत्ता 18 MW , पूर्ववृत्ता 18 ur at 17:57 Hrs or 18 ur at 17:57 Hrs or 18 ur at 17:57 Hrs or 18 ur at 17:57 Hrs 19 ur at 17:57 Hrs 10 ur at 17:57	due to no source in लोड/ Antecedent n 31.03.16 through nong, 132 kV Lok thoukhong and de Not Furnished Not Furnished on 19.03.16, 133 due to no source in लोड/ Antecedent	kV Loktak-N n this area. Load: 1927 n 132 kV Lok tak - Ningtho ownstream su No No V Loktak-Ni e kV Loktak-l n this area. Load: 1824	MW) tak - Ningtho ukhong line t bstations of N No No ngthoukhong Ningthoukhong MW)	g line tripped. I ukhong line. ripped. Manipur to be cl Loss of Load: 4 line (132 kV kr ng line tripped.	necked by M. GD-I akching-Kon Due to trippi	SPCL in consultate 3/19/2016 14:12 gba line & 132 kV	ion with No SPS	0.002
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 13 2 kV Loktak Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of	was separated f (पूर्वपृत्सा उत्पाद Power extended Due to vegetatio Vegetation clear MSPCL No Ningthoukhong Ningthoukhong was separated f (पूर्वपृत्सा उत्पाद Power extended	Antecedent G To Ningthoukhor on problem in the rance to be done be 3/19/2016 11:35 area of Manipur line kept open for or rest of NER To Antecedent G to Ningthoukhor to Ningthoukhor	Grid and subseque Generation: 121: ag area of Manipu line or downstres by MSPCL Relay Loktak Ningthoukhong was connected wir r system constrain Grid and subseque Generation: 113: ag area of Manipu	s MW , पूर्ववृत्सा ir at 17:57 Hrs or um of Ningthouk of settings of Ning DP, ZI, Y-E Earth Fault th rest of NER C at). At 11:35 Hrs iently collapsed of 5 MW , पूर्ववृत्सा ir at 12:19 Hrs or	tue to no source in लोड/ Antecedent n 31.03.16 throug hong, 132 kV Lok etc. 10 km, 132 kV Lok of Furnished Not Furnished Not Furnished or 19.03.16, 13: tue to no source in लोड/ Antecedent n 19.03.16 throug	kV Loktak-N n this area. Load: 1927 n 132 kV Lok tak - Ningtho ownstream su No No V Loktak-Ni e kV Loktak-l n this area. Load: 1824	MW) tak - Ningtho ukhong line t bstations of N No No ngthoukhong Ningthoukhong MW)	g line tripped. I ukhong line. ripped. Manipur to be cl Loss of Load: 4 line (132 kV kr ng line tripped.	necked by M. GD-I akching-Kon Due to trippi	SPCL in consultate 3/19/2016 14:12 gba line & 132 kV	ion with No SPS	0.002
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak-Ningshookhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures	was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic Vegetation clean MSPCL No Ningthoukhong Ningthoukhong was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic	Antecedent G To Ningthoukhor on problem in the rance to be done be 3/19/2016 11:35 area of Manipur line kept open for or rest of NER To Antecedent G to Ningthoukhor to Ningthoukhor	Grid and subseque Generation: 121: ag area of Manipu line or downstrea Loktak Ningthoukhong was connected wir r system constrain Grid and subseque Generation: 113: ag area of Manipu line, 132 kV Lok by MSPCL.	s MW, पूर्ववृत्ता ir at 17:57 Hrs or im of Ningthouk s settings of Ning DP, ZI, Y-E Earth Fault ith rest of NER C at). At 11:35 Hrs ently collapsed of S MW, पूर्ववृत्ता ir at 12:19 Hrs or tak - Ningthoukl	in the to no source is also / Antecedent in 31.03.16 through hong, 132 kV Lob flowing and de Not Furnished Not Furnished Not Furnished in through 132 lue to no source in also / Antecedent in 19.03.16 through in tripped.	kV Loktak-N this area. Load: 1927 a 132 kV Lok tak-Ningtho to No No V Loktak-Ni tkV Loktak-1 tkV Loktak-1 tkV Loktak-1 tkV Loktak-1	MW) tak - Ningthoukhon tak - Ningthoukhong line te bastations of N No No ngthoukhong Ningthoukhon MW) hal(PG)-Ning	g line tripped. I ukhong line. ripped. Manipur to be cl Loss of Load: 4 line (132 kV kr ug line tripped.	necked by M. GD-I akching-Kon Due to trippi	SPCL in consultate 3/19/2016 14:12 gba line & 132 kV	ion with No SPS	0.002
	Antecedent Conditions of NER Grid Restoration Details Restoration Details Rost Cause Remedial Measures 132 AV Lottal- Ningthoukbong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Rost Cause Remedial Measures 132 AV Lottals-	was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic Vegetation clean MSPCL No Ningthoukhong Ningthoukhong was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic	rom rest of NER Antecedent G to Ningthoukhor on problem in the arance to be done be 3/19/2016 11:35 area of Manipur line kept open fo rom rest of NER Antecedent G to Ningthoukhor on problem in the	eneration: 1213 g area of Manipe line or downstre. Just and Loktak Ningthoukhong was connected wir system constraint Grid and subseque ceneration: 1133 g area of Manipe line, 132 kV Lok by MSPCL Loktak	ently collapsed of 8 MW, ¶ र्ववृत्ता ir at 17:57 Hrs or mr of Ningthouk settings of Ning DP, ZI, Y-E Earth Fault th rest of NER C nt). At 11:35 Hrs or ently collapsed of S MW, ¶ र्ववृत्ता ir at 12:19 Hrs or tak - Ningthouk! DP, ZIII, B-E	due to no source is ਕੀਤ/ Antecedent ਤ 31.03.16 through hong, 132 kV Look thoukhong and de Not Furnished Not Furnished on 19.03.16, 103 ind through 132 k ue to no source ਕੀਤ/ Antecedent 19.03.16 through non place tripped.	kV Loktak-N this area. Load: 1927 132 kV Lok ak - Ningtho No No No V Loktak-Ni 2 kV Loktak-l this area. Load: 1824 132 kV Imp	MW) tak - Ningthoukhon tak - Ningthoukhong line te sukhong line to No No No No Mo Mo hal(PG)-Ningthoukhong No No No	g line tripped. I ukhong line. ripped. danipur to be el Loss of Load: 4 line (132 kV ki ng line tripped. gthoukhong line Loss of Load:	necked by M. GD-I akching-Kon Due to trippi	SPCL in consultate 3/19/2016 14:12 gba line & 132 kV	ion with No SPS	0.002
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong FIR by the constituent Brid Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong	was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic Vegetation clean MSPCL No Ningthoukhong Ningthoukhong was separated f (Y.áq.cril 3c4lq Power extended Due to vegetatic Vegetation clean	rom rest of NER A/Antecedent G to Ningthoukhor on problem in the arace to be done b 3/19/2016 11:35 area of Manipur line kept open fo from rest of NER A/Antecedent G to Ningthoukhor on problem in the arace to be done b	Grid and subseque Generation: 121: ag area of Manipu line or downstrea Loktak Ningthoukhong was connected wir r system constrain Grid and subseque Generation: 113: ag area of Manipu line, 132 kV Lok by MSPCL.	s MW, पूर्ववृत्ता ir at 17:57 Hrs or im of Ningthouk s settings of Ning DP, ZI, Y-E Earth Fault ith rest of NER C at). At 11:35 Hrs ently collapsed of S MW, पूर्ववृत्ता ir at 12:19 Hrs or tak - Ningthoukl	in the to no source is also / Antecedent in 31.03.16 through hong, 132 kV Lob flowing and de Not Furnished Not Furnished Not Furnished in through 132 lue to no source in also / Antecedent in 19.03.16 through in tripped.	kV Loktak-N this area. Load: 1927 a 132 kV Lok tak-Ningtho to No No V Loktak-Ni tkV Loktak-1 tkV Loktak-1 tkV Loktak-1 tkV Loktak-1	MW) tak - Ningthoukhon tak - Ningthoukhong line te bastations of N No No ngthoukhong Ningthoukhon MW) hal(PG)-Ning	g line tripped. I ukhong line. ripped. Manipur to be cl Loss of Load: 4 line (132 kV kr ug line tripped.	Due to trippin GD-I akching-Kon Due to trippin	SPCL in consultat 3/19/2016 14:12 gba line & 132 kV ng of this element	Ningthoukh ion with No SPS / Imphal(PG), Ningthoukh	0.002
	Antecedent Conditions of NER Grid Restoration Details Restoration Details Rost Cause Remedial Measures 132 AV Lottal- Ningthoukbong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Rost Cause Remedial Measures 132 AV Lottals-	was separated f (qdq.crt szertz Power extended Due to vegetation clean MSPCL No Ningshoukhong Ningshoukhong vas separated qdq.crt szertz Power extended Due to vegetation MSPCL No Ningshoukhong Ningshou	room rest of NER 7d Antecedent G 1ot Ningthoukhoro 1ot Ningthoukhor	Grid and subseque gara of Manippe line of downstream to 1212 ag area of Manippe line of downstream to 1242 to	when the collapsed of t	the to no source in the total source in the total source in the source in the total so	kV Loktak-Ne this area. Load: 1927 132 kV Lok ak-Ningtho No No V Loktak-Ni this area. Load: 1824 kV Lok No No No V Loktak-Ni No No No V Loktak-Ni this area.	MW) tak - Ningthoukhong line te bstations of N No No No MW) hal(PG)-Ningthoukhong No No No MW)	ukhong line. ripped. I ukhong line. ripped. danipur to be el Loss of Load: 4 line (132 kV ki ng line tripped. Loss of Load: 25 line (132 kV ki line (132 kV ki	Due to trippin GD-I akching-Kon Due to trippin GD-I mphal(PG)-N	SPCL in consultat 3/19/2016 14:12 gba line & 132 kV ng of this element	Ningthoukh ion with No SPS / Imphal(PG), Ningthoukh No SPS	0.002
79	Antecedent Conditions of NER Grid Restoration Details Restoration Details Rost Cause Remedial Measures 132 kV Loktuk - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Rost Cause Remedial Measures 132 kV Loktuk - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of the NER Grid Antecedent Conditions of NER Grid Antecedent Conditions of NER Grid	was separated fe qdq.cm.3-cute Power extended Due to vegetation clear MSPCI. No Mingthoukhong Ningthoukhong was separated fe qdq.cm.3-cute Power extended Due to vegetation Vegetation clear No Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Separated for in Qdq.cm.3-cute No Ningthoukhong Separated for in Qdq.cm.3-cute Qdq.cm.3-cu	marca of NER #/ Antecedent of to Ningthoukhor on problem in the nance to be done in 219/2016 11:35 area of Manipur line kept open for from rest of NER #/ Antecedent of to Ningthoukhor on problem in the nance to be done in 4/7/2016 10:13 area of Manipur to open for system set of the Manipur to open for system set of NER #/ Antecedent of to Ningthoukhor on to open for system set of NER #/ Antecedent of The Manipur to open for system set of NER off #/ Antecedent of The Manipur	Grid and subseque ceneration: 1213 garea of Manipe line or downstrea. Loktak Ningshoukhong was connected with young connected with young connected with young connected was connected with post post post post post post Manipe	in the state of th	地域 to no source in 新多/Antecedent 31.03.16 through nong.132 kV Los throughong and do Not Furnished Not Furnished	kV Loktak-N; this area. 132 kV Lokak-Ningtho kak - Ningtho kak - Ningth	MW) tak - Ningthoukhon tak - Ningthoukhong line to batations of No No No No No No No MW) hal(PG)-Ningthoukhong No	g line tripped. I ukhong line. ripped. Aanipur to be cl Loss of Load: 4 Loss of Load: gthoukhong line tripped. Loss of Load: 25 Line (132 kV ki tripped. Due t	Due to trippin GD-I akching-Kon Due to trippin GD-I mphal(PG)-N	gg of this element, SPCL in consultation 3/19/2016 14:12 gba line & 132 kV ag of this element 4/7/2016 10:54	Ningthoukh ion with No SPS / Imphal(PG), Ningthoukh No SPS	0.002
79	Antecedent Conditions of NER Grid Resortation Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Antecedent Conditions of Next Mingthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	was separated f q'aq cni 3-citic Power extended Due to vegetation No Ningthoukhong Ningthoukhong Ningthoukhong Vegetation clean Cq'aq cni 3-citic Due to vegetation MSPCL No Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong NSPCL No Ningthoukhong Norgba line keps Esparated from i (q'aq cni 3-citic Q'aq cni 3-citic No Ningthoukhong Norgba line keps Esparated from i (q'aq cni 3-citic Due to vegetation Due to vegetation	rail Antecedent G NER rail Antecedent G to Ningthoukhoro to Ningthoukhoro problem in den arace to be done le 3/19/2016 11:35 area of Manipur tine kept open for form rest of NER rail Antecedent G to Ningthoukhoro to problem in do- to open for systems area of Manipur to topen for systems to topen for systems to the first of the first open for systems to the first open for the first open for the first open for systems to the first open for	Grid and subseque garea of Manipe line of downstream of his page and of Manipe line of downstream of Loktak Ningthoukhong was connected with visit of the downstream of the line, 132 kV Lok by MSPCL. Loktak ning though of the line, 132 kV Lok by MSPCL. Loktak nine, 132 kV Lok by MSPCL and the line, 132 kV Lok by	when the collapse de M. W., und rest of NER CA. A. C. S. M. W., und rest of NER CA. M. W. und rest of NER CA. M. Und rest of NER C	he to no source in 引き/Antecedent 引き/Antecedent 引き/Antecedent かのたりに からたりに かららに かららに からららに かららら のらら のらら のらら のらら のらら のらら のら	kV Loktak-Nt it is area. Load: 1927 132 kV Loktak-Ningthown No	MW) tak - Ningthe ukhong line t bstations of N No No No Ingthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong No	g line tripped. I ukhong line. ripped. Mamipur to be cl Loss of Load: 4 line (132 kV k ng line tripped. Loss of Load: 25 line (132 kV k tripped. Due t	Due to trippin GD-I akching-Kon, Due to trippin GD-I mphal(PG)-N o tripping of	g of this element. SPCL in consultat 3/19/2016 14:12 gba line & 132 kV ang of this element 4/7/2016 10:54 Kingthoukhong lin this element, Nin	ion with No SPS / Imphal(PG), Ningthouk! No SPS ve & 132 kV lythoukhong a	0.002
79	Antecedent Conditions of NER Grid Restoration Details Restoration Details Rost Cause Restoration Details Rost Cause 132 kV Loktak - Ningshookbong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Rost Cause Remedial Measures 132 kV Loktak - Ningshookbong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Antecedent Conditions of NER Grid Rost Cause Remedial Measures	was separated f qdq ent sevine qdq ent sevine Negetation clear MSPCL No Ningthoukhong was separated f qdq ent sevine Negetation clear No Ningthoukhong was separated f Due to vegetation clear Negetation clear MSPCL No Ningthoukhong MSPCL No Ningthoukhong MSPCL No Ningthoukhong MSPCL No Due to vegetation clear qdq ent sevine qdq ent sevine qdq ent sevine qda ent sevine Qda ent sevetation No ent sevetation Qda ent sevetation No ent sevetation Qda ent sevetation No ent s	room rest of NER ## Antecedent G ## An	Grid and subseque centration: 1212 ga area of Manipa line or downstrea. Loktak Ningthoukhong was connected with young connected with young connected with grid and subseque centration: 1138 ga area of Manipa line, 133 VI Jok. Jok Ningthoukhong was connected with young was connected with Jok Ningthoukhong was connected with was connected with and subsequently was connected with was connected with was connected with was connected with and subsequently centration: 128 Was you you you you you you you you	when the collapsed of MW, \q\frac{q}{q}\frac{q}{q}\text{crit} at 17:57 Hrs ow un of 17:59 Hrs ow un of 17:59 Hrs ow un of Ning Hrs ow per Starth Fault DP, ZI, YE Earth Fault the set of NER G MW, \q\frac{q}{q}\frac{q}{q}\text{crit} DP, ZII, B-E No tripping the set of NER G MW, \q\frac{q}{q}\frac{q}{q}\text{crit} U(3):3 Hrs on O'; collapsed due to MW, \q\frac{q}{q}\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit} MW, \q\frac{q}{q}\text{crit}	the to no source in stars / Antecedent and no source in stars / Antecedent and no source in stars / Antecedent and no source in source in source in source in source in source in stars / Antecedent and no source in stars / Antecedent / An	kV Loktak-N: this area. Load: 1927 132 kV Lok tak- Ningtho wnstream su No No No No V Loktak-Ni this area. Load: 1824 kV Imp No No V Loktak-Ni this area. Load: 1824 kV Imp Load: 1824 kV Imp No Lokak-Ni this area. Load: 1987 Load:	MW) tak - Ningtheukhong tak - Ningtheukhong line te bstations of N No No No No MW) hal(PG)-Ning No No No No No No No No No N	g line tripped. I ukhong line. ripped. Aanipur to be el Loss of Load: 4 line (132 kV k: gthoukhong line 25 Loss of Load: 25 Line (132 kV L: tripped. Due t	Due to trippin GD-I Askching-Kon Due to trippin GD-I mphal(PG)-N o tripping of	g of this element. SPCL in consultat 3/19/2016 14:12 gbs line & 1/32 kV ng of this element 4/7/2016 10:54 SPCL in consultat SPCL in consultat	Ningthoukh No SPS V Imphal(PG), Ningthoukh No SPS e & 132 kV gthoukhong a	0.002
79	Antecedent Conditions of NER Grid Resortation Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Loktak-Ningthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Antecedent Conditions of Next Mingthoukhong FlR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	was separated f q'aq cni 3-citic Power extended Due to vegetation No Ningthoukhong Ningthoukhong Ningthoukhong Vegetation clean Cq'aq cni 3-citic Due to vegetation MSPCL No Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong NSPCL No Ningthoukhong Norgba line keps Esparated from i (q'aq cni 3-citic Q'aq cni 3-citic No Ningthoukhong Norgba line keps Esparated from i (q'aq cni 3-citic Due to vegetation Due to vegetation	rail Antecedent G NER rail Antecedent G to Ningthoukhoro to Ningthoukhoro problem in den arace to be done le 3/19/2016 11:35 area of Manipur tine kept open for form rest of NER rail Antecedent G to Ningthoukhoro to problem in do- to open for systems area of Manipur to topen for systems to topen for systems to the first of the first open for systems to the first open for the first open for the first open for systems to the first open for	Grid and subseque of the property of the prope	when the collapse de M. W., und rest of NER CA. A. C. S. M. W., und rest of NER CA. M. W. und rest of NER CA. M. Und rest of NER C	the to no source in start Antecedent and a start and a	kV Loktak-Nt it is area. Load: 1927 132 kV Loktak-Ningthown No	MW) tak - Ningthe ukhong line t bstations of N No No No Ingthoukhong Ningthoukhong Ningthoukhong Ningthoukhong Ningthoukhong No	g line tripped. I ukhong line. ripped. Mamipur to be cl Loss of Load: 4 line (132 kV k ng line tripped. Loss of Load: 25 line (132 kV k tripped. Due t	Due to trippin GD-I akching-Kon Due to trippin GD-I mphal(PG)-N o tripping of	g of this element. SPCL in consultat 3/19/2016 14:12 gba line & 132 kV ang of this element 4/7/2016 10:54 Kingthoukhong lin this element, Nin	ion with No SPS / Imphal(PG), Ningthouk! No SPS ve & 132 kV lythoukhong a	0.002

Sl. No.	element/ Description	Owner	Date & Time of Event provided by CR operator	Name of Node	/ Relay indications provided by CR operator	
81	Brief Description of the Incident	Ningthoukhong	line kept open fo	was connected wi or system constrair Grid and subsequ	nt). At 11:57 Hrs	О
	Antecedent Conditions of NER Grid	., •		Generation: 1650		
	Root Cause			of Ningthoukhong		fu
	Remedial Measures	Remedial measu	res after identific	cation of root caus		
	132 kV Loktak - Ningthoukhong	MSPCL	4/24/2016 3:04	Loktak Ningthoukhong	DP, ZI, R-E Not Furnished	N N
	FIR by the constituent	No				
82	Brief Description of the Incident	Ningthoukhong	line kept open fo	was connected wi or system constrair Grid and subsequ	nt). At 03:04 Hrs	s c
	Antecedent Conditions of					
	NER Grid	., •			MW , पूर्ववृत्ता	
		., •		Generation: 1316 line, 132 kV Lok	., .	
	NER Grid	Due to vegetation		line, 132 kV Lok	., .	
	NER Grid Root Cause	Due to vegetation	on problem in the	line, 132 kV Lok by MSPCL.	., .	
	NER Grid Root Cause Remedial Measures 132 kV Loktak -	Due to vegetation Vegetation clear	on problem in the	line, 132 kV Lok by MSPCL. Loktak	tak - Ningthoukh	
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Ningthoukhong	on problem in the rance to be done to 5/13/2016 16:55 area of Manipur line kept open fo	line, 132 kV Lok by MSPCL. Loktak	DP, ZI, B-E Earth Fault th rest of NER Gnt). At 16:55 Hrs	no N N
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong FIR by the constituent Brief Description of the	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Ningthoukhong was separated fr (पूर्ववृत्ता उत्पाद	son problem in the rance to be done to be do	line, 132 kV Lok by MSPCL. Loktak Ningthoukhong was connected with or system constraint Grid and subseque Generation: 1750	DP, ZI, B-E Earth Fault th rest of NER G nt). At 16:55 Hrs ently collapsed do MW, पूर्ववृत्ता	N Ori
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Was separated fr (पूर्ववृत्ता उत्पादः) Fault within line	son problem in the rance to be done to be area of Manipur line kept open for som rest of NER of the work of the since relay tripped to be since relay tripped to be since relay tripped to be done to be since relay tripped to be done	line, 132 kV Lok by MSPCL. Loktak Ningthoukhong was connected wi or system constrair Grid and subseque Generation: 1750 med from both end.	DP, ZI, B-E Earth Fault th rest of NER Got). At 16:55 Hrsently collapsed do MW, पूर्ववृत्ता	N Ori
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Was separated fr (पूर्ववृत्ता उत्पादः) Fault within line	son problem in the rance to be done to be area of Manipur line kept open for som rest of NER of the work of the since relay tripped to be since relay tripped to be since relay tripped to be done to be since relay tripped to be done	line, 132 kV Lok by MSPCL. Loktak Ningthoukhong was connected wi or system constrair Grid and subseque Generation: 1750 bed from both end. istance to be chec	DP, ZI, B-E Earth Fault th rest of NER G nt). At 16:55 Hrs ently collapsed de MW, पूर्ववृत्ता Likely due to lig ked by MSPCL.	no N N Ori
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Was separated fr (पूर्ववृत्ता उत्पादः) Fault within line	son problem in the rance to be done to be area of Manipur line kept open for som rest of NER of the work of the since relay tripped to be since relay tripped to be since relay tripped to be done to be since relay tripped to be done	line, 132 kV Lok by MSPCL. Loktak Ningthoukhong was connected wi or system constrain Grid and subseque Generation: 1750 bed from both end. istance to be check Loktak	DP, ZI, B-E Earth Fault th rest of NER Got). At 16:55 Hrsently collapsed do MW, पूर्ववृत्ता	N Ori
83	NER Grid Root Cause Remedial Measures 132 kV Loktak - Ningthoukhong FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Loktak -	Due to vegetation Vegetation clear MSPCL No Ningthoukhong Ningthoukhong was separated from the company of the	area of Manipur line kept open for om rest of NER of Antecedent Cost since relay tripp tower footing res	line, 132 kV Lok by MSPCL. Loktak Ningthoukhong was connected wi or system constrair Grid and subseque Generation: 1750 bed from both end. istance to be chec	DP, ZI, B-E Earth Fault th rest of NER G nt). At 16:55 Hrs ently collapsed de MW, पूर्ववृत्ता Likely due to lig ked by MSPCL. DP, ZII, B-E	N Ori

Ningthoukhong line kept open for system constraint). At 12:01 Hrs of

List of Grid Disturbances in North-E

सीआर ऑपरेटर

द्वारा प्रदान की रिले संकेत

दिनांक और

घटना के समय सीआर

ऑपरेटर द्वारा प्रदान की /

मालिक /

बिजली व्यवस्था तत्व /

Brief Description of the

Incident

ख्या/ विवरण / Name of tripping

			List of C	rid Disturb	ances in Nortl	h-Eastern Reg	ional Grid	during Jai	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Loktak - Rengpang	MSPCL	1/9/2016 10:58	Loktak	DP, ZI, Y-B-E		No	No	Loss of Load:	GD-I	1/9/2016 14:56	No SPS	0.008
				Rengpang	Not Furnished	Not Furnished	No	No	2				
	FIR by the constituent	No											
85	Brief Description of the Incident		2 kV Loktak-Ren) line is under long and subsequently		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 12	32 MW , पूर्ववृत्	ता लोड/ Antecede	ent Load : 14	45 MW)					
	Restoration Details	Power extended	to Rengpang are	a of Manipur at	14:56 Hrs on 09	0.01.16 through 1	32 kV Loktak	- Rengpang l	ine.				
	Root Cause	Tripping due to	Vegetation probl	em									
	Remedial Measures	Vegetation clear	rance to be done	by MSPCL.									
	132 kV Loktak - Rengpang	MSPCL	1/13/2016 12:03	Loktak Rengpang	DP, ZI, B-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 2	GD-I	1/14/2016 15:08	No SPS	0.054
	FIR by the constituent	No											
86	Brief Description of the Incident		32 kV Loktak-Ro) line is under longid and subsequent		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 11	17 MW , पूर्ववृत्	ता लोड/ Antecede	ent Load : 15	22 MW)					
	Restoration Details	Power extended	to Rengpang are	a of Manipur at	15:08 Hrs on 14	.01.16 through 1	32 kV Loktak	- Rengpang l	ine.		•		
	Root Cause	Tripping due to	Vegetation probl	em									
	Remedial Measures	Vegetation clear	rance to be done	by MSPCL.									
	132 kV Loktak - Rengpang	MSPCL	2/6/2016 14:21	Loktak Rengpang	DP, ZI, B-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 2	GD-I	2/7/2016 15:34	No SPS	0.051
	FIR by the constituent	No											
87	Brief Description of the Incident	on 06.02.16,132		gpang line tripp		_	O.		Oi C) line is under long and subsequently		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 12	16 MW , पूर्ववृत	ता लोड/ Antecede	ent Load : 150	03 MW)					

			List of G	Frid Disturb	ances in Nort	h-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Restoration Details		d to Rengpang are				32 kV Loktak	- Rengpang l	ine.				
	Root Cause	Due to vegetation	on problem in the	line,132 kV Lo	oktak - Rengpang	g line tripped.							
	Remedial Measures	Vegetation clea	rance to be done	by MSPCL.				_					
	132 kV Loktak - Rengpang	MSPCL	5/13/2016 17:08	Loktak		Not Furnished	No	No	Loss of Load:	GD-I	5/14/2016 16:57	No SPS	0.048
				Rengpang	No tripping	Not Furnished	No	No	2				
	FIR by the constituent	No											
88	Brief Description of the Incident		2 kV Loktak-Ren			_		_) line is under long and subsequently		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 17	759 MW , पूर्ववृत	ता लोड/ Antecedo	ent Load : 15	01 MW)					
	Root Cause		line due to veget										
	Remedial Measures	Vegetation to b	e cleared by MSP			_			_		_	1	
	132 kV Loktak - Rengpang	MSPCL	5/15/2016 15:24	Loktak Rengpang	DP, ZI, B-E No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load: 2	GD-I	Not Yet Restored	No SPS	
	FIR by the constituent	No											
89	Brief Description of the Incident		2 kV Loktak-Ren) line is under long and subsequently		
	Antecedent Conditions of NER Grid	., .	न/ Antecedent (323 MW , पूर्ववृत	ता लोड/ Antecedo	ent Load : 13	40 MW)					
	Root Cause		line due to veget										
	Remedial Measures	Vegetation to b	e cleared by MSP	CL at the earlie	est.								
	132 kV Loktak - Rengpang	MSPCL	6/2/2016 11:30	Loktak Rengpang	DP, ZI, B-E, 18.4 Kms. Earth Fault	Not Furnished Not Furnished	No No	No No	Loss of Load:	GD-I	6/2/2016 18:31	No SPS	0.014
	FIR by the constituent	No											
90	Brief Description of the Incident		2 kV Loktak-Ren			_		_) line is under long and subsequently		
	Antecedent Conditions of NER Grid	(Antecedent G	eneration : 1940	MW , Anteced	lent Load : 1686	6 MW)							
	Root Cause												
	Remedial Measures												

			List of	Grid Disturba	nces in North	Eastern Regi	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	2/27/2016	Khliehriat (PG) Khliehriat (ME)	DP, ZIII, Y-E No tripping	Not Furnished Not Furnished	Yes No	Yes No	Loss of Load:		2/27/2016 14:42	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	14:14	Khliehriat (ME) Khliehriat (ME)		Not Furnished Not Furnished Not Furnished	Yes No	Yes No	51& Loss of Generation: 0	GD-I	2/27/2016 14:43	No SPS	0.001
	FIR by the constituent	Yes		`	11 0	•	•	•			•		<u>. </u>
91	Brief Description of the Incident	NEHU-Umiam l	ine & 132 kV N	s connected with r EHU-Mawlai line elements, Khleihri	were kept open fo	or system requirer	nent). At 14:1	4 Hrs on 27.0	02.16 ,132 kV I	Khliehriat (Po	G)-Khliehriat (Me	PTCL) I & II	lines
	Antecedent Conditions of NER Grid	.,, .		Generation : 979 I	, .			W)					
	Restoration Details	Power extended	to NEHU area a	t 14:16 Hrs on 27.	02.16 through 132	kV NEHU-Umi	am line.						
	Root Cause			n,132 kV Khliehria									
	Remedial Measures	-	earthing has to b	aya substations to be done by MePTO	CL.Relay settings	•			-	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	2/28/2016	Khliehriat (PG) Khliehriat (ME)	DP, ZI, B-E No tripping	Not Furnished Not Furnished	Yes No	No No	Loss of Load: 31& Loss of	GD-I	2/28/2016 13:18	No SPS	0.003
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	12:54	Khliehriat (PG) Khliehriat (ME)	DP, ZI, B-E No tripping	Not Furnished Not Furnished	Yes No	No No	Generation: 0	GD-1	2/28/2016 13:19	No SPS	0.003
	FIR by the constituent	Yes											
92	Brief Description of the Incident	NEHU-Umiam l	line & 132 kV N	s connected with r EHU-Mawlai line elements, Khleihri	were kept open fo	or system requirer	nent). At 12:5	54 Hrs on 28	.02.16 ,132 kV	Khliehriat (I	PG)-Khliehriat (M	ePTCL) I &	II lines
	Antecedent Conditions of NER Grid	·* -		Generation : 1019	., .			MW)					
	Restoration Details	Power extended	to NEHU area a	t 12:58 Hrs on 28.	02.16 through 132	kV NEHU-Umi	am line.						
	Root Cause	Due to fault in N	Aeghalaya systen	n,132 kV Khliehria	at (PG) - Khliehria	nt (ME) I&II lines	tripped due t	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		
	Remedial Measures		earthing has to b	aya substations to be done by MePTC									
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		. ,	DP, ZI, R-Y-B DP, ZII, R-Y-B		Yes No	No No	Loss of Load:		2/28/2016 15:59	No SPS	

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Khliehriat (PG) -	MePTCL	2/28/2016	Khliehriat (PG)		Not Furnished	Yes	No	43		2/28/2016 15:53	No SPS	
	Khliehriat (ME) II		15:14	Khliehriat (ME)	DP, ZII, R-Y-B	Not Furnished	No	No		GD-I			0.017
	Leshka U 1	MePGCL		Leshka	Tripped due to tripping of Lock out Relay	Not applicable	No	No	Loss of Generation: 5		2/28/2016 17:30	No SPS	
	FIR by the constituent	Yes											
93	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	were kept open fo	r system requiren	nent). At 15:1	4 Hrs on 28	3.02.16 ,132 kV	Khliehriat (l	kV Panchgram-Lui PG)-Khliehriat (Mi ion mismatch.(Loa	ePTCL) I & I	I lines
	Antecedent Conditions of NER Grid	., .		Generation: 1019	., .			ИW)					
	Restoration Details			t 15:21 Hrs on 28.									
	Root Cause										fault in the MeEO	CL system.	
	Remedial Measures	All main protect	tions (Distance R	elays) at MeECL			e to be made f	unctional afte	er completing tl	ne Earthing o	of the switchyard.		
	132 kV Khliehriat (PG) -			Khliehriat (PG)	DP, ZIII, Y-E	Not Furnished	* 7	No					
	Khliehriat (ME) I	POWERGRID	2/28/2016	Khliehriat (ME)	No tripping	Not Furnished	Yes No	No	Loss of Load:	CD I	2/28/2016 17:14	No SPS	0.005
	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	POWERGRID MePTCL	2/28/2016 16:00		No tripping				Loss of Load: 23	GD-I	2/28/2016 17:14 2/28/2016 16:13	No SPS	0.005
	132 kV Khliehriat (PG) -	MePTCL Yes	16:00	Khliehriat (ME) Khliehriat (PG) Khliehriat (ME)	No tripping DP, ZIII, Y-E No tripping	Not Furnished Not Furnished Not Furnished	No Yes No	No No No	23		2/28/2016 16:13	No SPS	
94	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL Yes Khliehriat area on NEHU-Umiam	16:00 of Meghalaya wa line & 132 kV N	Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line	No tripping DP, ZIII, Y-E No tripping est of NER Grid the were kept open for the set of	Not Furnished Not Furnished Not Furnished nrough 132 kV K r system requiren	No Yes No hliehriat (PG) nent). At 16:0	No No No -Khliehriat (Mo) Hrs on 28	23 MePTCL) I & II 3.02.16 ,132 kV	lines. (132 l Khliehriat (l		No SPS mnsnong line ePTCL) I & I	, 132 kV I lines
94	132 kV Khliehriat (PG) - Khliehriat (ME) II FIR by the constituent Brief Description of the	MePTCL Yes Khliehriat area of NEHU-Umiam tripped. Due to the	16:00 of Meghalaya wa line & 132 kV N tripping of these	Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line	No tripping DP, ZIII, Y-E No tripping est of NER Grid the were kept open fo at area was separa	Not Furnished Not Furnished Not Furnished nrough 132 kV K r system requiren ted from rest of N	No Yes No hliehriat (PG) nent). At 16:0 NER Grid and	No No No No -Khliehriat (Mo) O Hrs on 28 subsequent c	23 MePTCL) I & II 3.02.16 ,132 kV	lines. (132 l Khliehriat (l	2/28/2016 16:13 cV Panchgram-Lur PG)-Khliehriat (M	No SPS mnsnong line ePTCL) I & I	, 132 kV I lines
94	132 kV Khliehriat (PG) - Khliehriat (ME) II FIR by the constituent Brief Description of the Incident Antecedent Conditions	MePTCL Yes Khliehriat area o NEHU-Umiam tripped. Due to o (पूर्ववृत्ता उत्पाद	of Meghalaya wa line & 132 kV N tripping of these	Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line elements, Khleihri	No tripping DP, ZIII, Y-E No tripping est of NER Grid the were kept open for at area was separa MW, पूर्ववृत्ता ले	Not Furnished Not Furnished Not Furnished nrough 132 kV K r system requiren ted from rest of N	No Yes No hliehriat (PG) nent). At 16:0 NER Grid and Load: 1203 M	No No No No -Khliehriat (Mo) O Hrs on 28 subsequent c	23 MePTCL) I & II 3.02.16 ,132 kV	lines. (132 l Khliehriat (l	2/28/2016 16:13 cV Panchgram-Lur PG)-Khliehriat (M	No SPS mnsnong line ePTCL) I & I	, 132 kV I lines
94	132 kV Khliehriat (PG) - Khliehriat (ME) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	MePTCL Yes Khliehriat area o NEHU-Umiam tripped. Due to o (पूर्ववृत्ता उत्पाद Power extended	of Meghalaya wa line & 132 kV N tripping of these ज/ Antecedent C to NEHU area a	Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line elements, Khleihri Generation: 1021	No tripping DP, ZIII, Y-E No tripping est of NER Grid the were kept open for at area was separa MW, पूर्ववृत्ता ल	Not Furnished Not Furnished Not Furnished Trough 132 kV Ki Tr system requiren ted from rest of N TS/ Antecedent I kV NEHU-Umiz	No Yes No hliehriat (PG) nent). At 16:0 NER Grid and Load: 1203 N mm line.	No No No No -Khliehriat (No O Hrs on 28 subsequent co MW)	23 MePTCL) I & II 3.02.16 ,132 kV ollapsed due to	lines. (132 k Khliehriat (1 no source in	2/28/2016 16:13 CV Panchgram-Lur PG)-Khliehriat (M this area.(Load load)	No SPS mnsnong line ePTCL) I & I	, 132 kV I lines
94	132 kV Khliehriat (PG) - Khliehriat (ME) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures	MePTCL Yes Khliehriat area of NEHU-Umiam tripped. Due to	of Meghalaya wa line & 132 kV N tripping of these Ito NEHU area a Meghalaya systen elated to Meghalar earthing has to b	Khliehriat (ME) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line elements, Khleihri Generation: 1021 t 16:05 Hrs on 28.0 n,132 kV Khliehria aya substations to	No tripping DP, ZIII, Y-E No tripping est of NER Grid th were kept open fo at area was separa MW, पूर्ववृत्ता ल 02.16 through 132 at (PG) - Khliehria be completed as so	Not Furnished Not Furnished Not Furnished The Furnished Not Furnished Not Furnished Not Furnished Not Furnished The Furnished Th	No Yes No hliehriat (PG) nent). At 16:0 NER Grid and Load: 1203 M mm line. tripped due to	No No No No -Khliehriat (Mo) O Hrs on 28 subsequent co MW) O non clearant on of S/S eart	MePTCL) I & II .02.16 ,132 kV ollapsed due to ce of fault at de	lines. (132 k Khliehriat (I no source in wnstream of ting resistance	2/28/2016 16:13 CV Panchgram-Lur PG)-Khliehriat (M this area.(Load load)	No SPS mnsnong line ePTCL) I & 1 ss in MU:0.00	, 132 kV I lines (25)
94	132 kV Khliehriat (PG) - Khliehriat (ME) II FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures	MePTCL Yes Khliehriat area of NEHU-Umiam tripped. Due to	of Meghalaya wa line & 132 kV N tripping of these Ito NEHU area a Meghalaya systen elated to Meghalar earthing has to b	Khliehriat (ME) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) s connected with r EHU-Mawlai line elements, Khleihri Generation: 1021 t 16:05 Hrs on 28.0 n,132 kV Khliehria aya substations to	No tripping DP, ZIII, Y-E No tripping est of NER Grid the were kept open for at area was separa MW, पूर्ववृत्ता ले 02.16 through 132 at (PG) - Khliehria be completed as security as the complete as t	Not Furnished Not Furnished Not Furnished Not Furnished Trough 132 kV Ki r system requiren ted from rest of N TS/ Antecedent I kV NEHU-Umia t (ME) I&II lines oon as possible. A of Meghalaya sub Not Furnished Not Furnished	No Yes No hliehriat (PG) nent). At 16:0 NER Grid and Load: 1203 M mm line. tripped due to	No No No No -Khliehriat (Mo) O Hrs on 28 subsequent co MW) O non clearant on of S/S eart	MePTCL) I & II .02.16 ,132 kV ollapsed due to ce of fault at de	lines. (132 k Khliehriat (I no source in wnstream of ting resistance	2/28/2016 16:13 kV Panchgram-Lur PG)-Khliehriat (Mthis area.(Load load Khliehriat (ME). ce to be checked as	No SPS mnsnong line ePTCL) I & 1 ss in MU:0.00	, 132 kV I lines (25)

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Khliehriat (ME) II	MEF ICL		Khliehriat(ME)	No tripping	Not Furnished	No	No			3/19/2010 12.10	NO 313	
	FIR by the constituent	Yes			-								
95	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	rest of NER Grid the were kept open for iat area was separa	r system requiren	nent). At 11:4	9 Hrs on 19.	03.16,132 kV K	Chliehriat (PC	G)-Khliehriat (Mel		
	Antecedent Conditions of NER Grid	", "			MW , पूर्ववृत्ता ल			1W)					
	Restoration Details				03.16 through 132								
	Root Cause				at (PG) - Khliehria								
	Remedial Measures		r earthing has to b		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	3/19/2016 12:29	` ′	DP, ZIII, R-Y-B		Yes	No			3/19/2016 12:50	No SPS	
	1111101111111 (1712) 1			Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of Load:	GD-I			0.005
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	3/19/2016 12:30		DP, ZIII, R-Y-B		Yes	No	13		3/19/2016 13:05	No SPS	
	` '	W		Khliehriat(ME)	No tripping	Not Furnished	No	No					
	FIR by the constituent	Yes											
96	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	rest of NER Grid the were kept open for iat area was separa	r system requiren	nent). At 12:3	0 Hrs on 19.0	3.16 ,132 kV K	Chliehriat (PC	G)-Khliehriat (Mel	_	
	Antecedent Conditions of NER Grid	", "			MW , पूर्ववृत्ता ल			1W)					
	Restoration Details				.03.16 through 132								
	Root Cause				at (PG) - Khliehria								
	Remedial Measures		r earthing has to b	be done by MePTO	be completed as so CL.Relay settings of	of Meghalaya sub							
	132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG)	DP, ZI, R-Y-E	Not Furnished	No	No			3/28/2016 3:10	No SPS	
	Khliehriat (ME) I	1 5 WERGRID	3/28/2016 2:24	Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of Load:	GD-I	3,20,2010 3.10	110 01 0	0.002
	132 kV Khliehriat (PG) -	MaDTCI	2. 23. 2310 2.24	Khliehriat (PG)	DP, ZI, R-Y-B	Not Furnished	No	No	18	52.	3/28/2016 3:11	No CDC	0.002

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Khliehriat (ME) II	WIEF I CL		Khliehriat(ME)	No tripping	Not Furnished	No	No			3/26/2010 3.11	110 313	
	FIR by the constituent	Yes		<u> </u>	•		•	•		•			-
97	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	rest of NER Grid the were kept open for that area was separa	r system requiren	nent). At 02:2	4 Hrs on 28.	03.16,132 kV K	Chliehriat (PC	G)-Khliehriat (Mel	_	
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 1149	MW , पूर्ववृत्ता ल	াঁs/ Antecedent I	Load : 1671 N	MW)					
	Restoration Details	Power extended	to NEHU at 02:3	33 Hrs on 28.03.10	6 and to NEIGRIH	MS through 132l	cV Umiam-Nl	EHU-NEIGR	IMS. 132kV Kl	nliehriat (PG))-Khliehriat line I	and II at 03:1	2hrs.
	Root Cause				at (PG) - Khliehria								
	Remedial Measures		earthing has to b		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	3/31/2016 0:40	Khliehriat (PG) Khliehriat(ME)	Not Furnished	Not Furnished	No No	No No	Loss of Load:	GD-I	3/31/2016 2:22	No SPS	0.006
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	2,01,2010 0110	Khliehriat (PG) Khliehriat(ME)	DP, ZI, Y-B-E Not Furnished	Not Furnished Not Furnished	No No	No No	12	0.5 1	3/31/2016 2:26	No SPS	0.000
	FIR by the constituent	Yes											
98	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	est of NER Grid the were kept open for eparated from rest	r system requiren	nent). At 00:4	0 Hrs on ,13	2 kV Khliehriat	(PG)-Khliel		_	
	Antecedent Conditions of NER Grid	., .			MW , पूर्ववृत्ता ल								
	Restoration Details				16 and to Khliehr								
	Root Cause				at (PG) - Khliehria								
	Remedial Measures	Earthing work related to Meghalaya substations to be completed as soon as possible. After completion of S/S earthing, tower footing resistance to be checked and in case of more than 10 ohms, proper earthing has to be done by MePTCL. Relay settings of Meghalaya substations are to be checked by MePTCL in coordination with POWERGRID after the completion of earthing works.											
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/14/2016 20:44	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL]	Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	40		4/14/2016 20:45	No SPS]

			List of	Grid Disturba	ances in North	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Leshka U 2	MePGCL	4/14/2016 20:16	Leshka	Tripped due to tripping of 132	Not applicable	No	No	Loss of Generation:	GD-I	4/14/2016 21:07	No SPS	0.017
	Leshka U 3	MePGCL		Leshka	kV Khl(PG)- Khl I&II lines	Not applicable	No	No	84		4/14/2016 21:26	No SPS	
	FIR by the constituent	Yes			•	•			•	•	•		
99	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	rest of NER Grid to were kept open for iat area was separa	or system requiren	nent). At 20:1	6 Hrs on 14.0	4.16 ,132 kV k	Chliehriat (PC	6)-Khliehriat (MeI	_	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent C	Generation: 1366	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 2041 N	ЛW)					
	Root Cause	Due to lighning seems because of		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME) l	&II lines tripp	ped due to no	n clearance of f	ault at downs	stream of Khliehri	at (ME).R-Y	-B fault
	Remedial Measures		earthing has to b		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B DP, ZI, R-Y-B	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/16/2016 8:26	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B DP, ZI, R-Y-B	Not Furnished Not Furnished	No No	No No	44		4/16/2016 8:34	No SPS	
	Leshka U 2	MePGCL	4/16/2016 7:51	Leshka	Tripped due to Tripping of 132	Not applicable	No	No	Loss of Generation:	GD-I	4/16/2016 9:00	No SPS	0.002
	Leshka U 3	MePGCL		Leshka	kV Khl(PG)- Khl I&II lines	Not applicable	No	No	84		4/16/2016 9:00	No SPS	
	FIR by the constituent	Yes				•	•	•			•		
100	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	rest of NER Grid to were kept open for tat area was separa	or system requiren	nent). At 07:5	1 Hrs on 16.	04.16 ,132 kV l	Khliehriat (Po	G)-Khliehriat (Me	_	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation : 1544	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1583 N	ЛW)					

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Due to lighning seems because of		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME) l	&II lines tripp	ped due to no	n clearance of f	ault at downs	stream of Khliehri	at (ME).R-Y	-B fault
	Remedial Measures		earthing has to b	nya substations to loe done by MePTC									
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	, ,	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/16/2016 10:17	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B DP, ZI, R-Y-B	Not Furnished Not Furnished	No No	No No	20		4/16/2016 10:22	No SPS	
	Leshka U 1	MePGCL	4/16/2016 9:59	Leshka	Tripped due to Tripping of 132	Not applicable	No	No	Loss of Generation:	GD-I	4/16/2016 10:33	No SPS	0.007
	Leshka U 2	MePGCL		Leshka	kV Khl(PG)- Khl I&II lines	Not applicable	No	No	70		4/16/2016 10:33	No SPS	
	FIR by the constituent	Yes											
101	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	s connected with re EHU-Mawlai line elements, Khleihri	were kept open fo	r system requiren	nent). At 09:5	9 Hrs on 16.0	4.16 ,132 kV K	Chliehriat (PC	6)-Khliehriat (MeF		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1550	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent I	Load : 1495 N	1W)					
	Root Cause	seems because of	of lightning.	ya system,132 kV				•					
	Remedial Measures	_	earthing has to b	aya substations to loe done by MePTC		-	-		•	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/17/2016 21:13	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	24		4/17/2016 21:17	No SPS	
	Leshka U 1	MePGCL	4/17/2016 20:55	Leshka	Tripped due to tripping of 132	Not applicable	No	No	Loss of	GD-I	4/17/2016 21:13	No SPS	0.003

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Leshka U 2	MePGCL		Leshka	kV Khl(PG)- Khl I&II lines	Not applicable	No	No	84		4/17/2016 21:13	No SPS	
400	FIR by the constituent	Yes					•	•					
102	Brief Description of the Incident	NEHU-Umiam l	line & 132 kV NI	EHU-Mawlai line	est of NER Grid tl were kept open fo at area was separa	r system requiren	nent). At 20:5	5 Hrs on 17.	04.16 ,132 kV I	Khliehriat (PC	G)-Khliehriat (Me		
	Antecedent Conditions of NER Grid				MW , पूर्ववृत्ता ल								
	Root Cause	Due to lighning seems because o		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME)	I&II lines tripp	ped due to no	n clearance of f	ault at downs	stream of Khliehria	at (ME).R-Y-	-B fault
	Remedial Measures	_	earthing has to b	•	be completed as so CL.Relay settings of	-	-		•	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZIII, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/18/2016 21:09	No SPS	
	132 kV Khliehriat (PG) -			Khliehriat (PG)		Not Furnished	No	No	47				
	Khliehriat (ME) II	MePTCL		Khliehriat(ME)	No tripping	Not Furnished	No	No			4/18/2016 21:14	No SPS	
	Leshka U 1	MePGCL	4/18/2016 18:40	Leshka	Trippe due to tripping of 132	Not applicable	No	No		GD-I	4/18/2016 19:04	No SPS	0.004
	Leshka U 2	MePGCL		Leshka	kV Khliehriat (PG) -	Not applicable	No	No	Loss of Generation: 105		4/18/2016 19:55	No SPS	
	Leshka U 3	MePGCL		Leshka	Khliehriat (ME) I & II lines	Not applicable	No	No	103		4/18/2016 20:16	No SPS	
103	FIR by the constituent	Yes											
103	Brief Description of the Incident	NEHU- NEIGR	IHMS line & 132	kV NEHU-Must	est of NER Grid tl em line were kept lleihriat area was s	open for system i	equirement).	At 18:40 Hrs	on 18.04.16, 13	32 kV Khlieh	riat (PG)-Khliehri	at (MePTCL	
	Antecedent Conditions of NER Grid	- (पूर्ववृत्ता उत्पादः	न/ Antecedent G	Generation: 1740	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 2122 M	ИW)	_		_		

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	uary 2016				
म सं या/ Sl. Vo.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Due to lighning seems because of		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME)	&∏ lines tripp	ped due to no	n clearance of f	ault at downs	stream of Khliehri	at (ME).R-Y	-B fault
	Remedial Measures		r earthing has to l		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZII, Y-B-E No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		4/19/2016 3:55	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZII, Y-B-E No tripping		No No	No No	59		4/19/2016 4:08	No SPS	
	Leshka U 1	MePGCL	4/19/2016 3:42	Leshka	Trippe due to tripping of 132	Not applicable	No	No		GD-I	4/19/2016 4:23	No SPS	0.003
	Leshka U 2	MePGCL		Leshka	kV Khliehriat (PG) -	Not applicable	No	No	Loss of Generation: 126		4/19/2016 4:33	No SPS	
)4	Leshka U 3	MePGCL		Leshka	Khliehriat (ME) I & II lines	Not applicable	No	No			4/19/2016 4:46	No SPS	
	FIR by the constituent	Yes	•		•		•	•	•		•		
	Brief Description of the Incident	NEHU-Umiam	line & 132 kV N	EHU-Mawlai line	est of NER Grid the kept open for systy was separated from	tem requirement)	. At 03:42 Hrs	s on 19.04.16	,132 kV Khliel	riat (PG)-Kl	nliehriat (MePTCI		
	Antecedent Conditions of NER Grid	., .			MW , पूर्ववृत्ता ल								
	Root Cause				at (PG) - Khliehria								
	Remedial Measures		r earthing has to l		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID			DP, ZIII, R-Y-B		No	No	Loss of Load:		4/19/2016 9:20	No SPS	
	132 kV Khliehriat (PG) -		-	Khliehriat(ME)	No tripping DP, ZII, R-Y-B	Not Furnished	No No	No No	20				
	152 KV Killenriai (PG) -	MaDTCI	I	Killienriai (PG)	DP, ZII, K-Y-B	not rumished	NO	NO	J		1/10/2016 0-13	No CDC	ı I

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Khliehriat (ME) II	WIEF I CL		Khliehriat(ME)	No tripping	Not Furnished	No	No			4/19/2010 9.43	NOSES	
	Leshka U 2	MePGCL	4/19/2016 8:47	Leshka	Trippe due to tripping of 132 kV Khliehriat (PG) - Khliehriat (ME) I & II lines	Not applicable	No	No	Loss of Generation: 42	GD-I	4/19/2016 8:59	No SPS	0.001
105	FIR by the constituent	Yes					•	•		•			
	Brief Description of the Incident	Umiam-Umiam	Stage-I line & 13	32 kV NEHU-Mav	rest of NER Grid the wlai line were keptaleihriat area was s	open for system	requirement).	At 08:47 Hr	s on 19.04.16, 1	32 kV Khlie	hriat (PG)-Khliehi	riat (MePTCI	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1269	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent I	Load : 1434 N	ЛW)					
	Root Cause	seems because of	of lightning.	•	Khliehriat (PG) -			•					
	Remedial Measures	_	r earthing has to b	•	be completed as so CL.Relay settings of	•	-		-	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khlishriat (PG)		Not Furnished	No	No No	Loss of Load:		4/21/2016 22:48	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	4/21/2016 22:01	Khliehriat (ME) Khliehriat (PG) Khliehriat(ME)	No tripping DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished Not Furnished	No No No	No No	31	GD-I	4/21/2016 23:30	No SPS	0.009
	Leshka U 1	MePGCL	., 21, 2010 22.01	Leshka	Over Frequency		No	No	1	021	4/21/2016 22:10	No SPS	0.007
	Leshka U 2	MePGCL	1	Leshka	Voltage control Over Current	Not applicable	No	No	Loss of Generation:		4/21/2016 22:29	No SPS	
	Leshka U 3	MePGCL	1	Leshka	Over Frequency	Not applicable	No	No	124		Shutdown taken	No SPS]]
	FIR by the constituent	Yes	-			• • • • • • • • • • • • • • • • • • • •	-	-	-	-	-		
106	Brief Description of the Incident	for system requi	irement). At 22:0	1 Hrs on 21.04.16	rest of NER Grid the ,132 kV Khliehrid due to load genera	nt (PG)-Khliehria							

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1734	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent I	Load : 1638 N	ЛW)					
	Root Cause	Due to lighning seems because of		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME) l	&II lines tripp	ped due to no	n clearance of f	ault at downs	stream of Khliehri	at (ME).R-Y	-B fault
	Remedial Measures	_	r earthing has to b	•	be completed as so CL.Relay settings of	-	-		•	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-E No tripping	Not Furnished Not Furnished	No No	No No			4/23/2016 10:26	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	1	Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-E No tripping		No No	No No			4/23/2016 10:36	No SPS	
	132 kV NEIGRIHMS - Khliehriat (ME)	MePTCL	1	NEIGRIHMS Khliehriat	Earth Fault	Not applicable Not applicable	No No	No No	Loss of Load:		4/23/2016 10:18	No SPS	
	132 kV Lumshnong - Khliehriat(ME)	MePTCL	4/23/2016 10:07	Lumshnong Khliehriat	Earth Fault	Not applicable Not applicable	No No	No No	32	GD-I	4/23/2016 10:32	No SPS	0.002
	132 kV Mustem-Khliehriat	MePTCL		Mustem Khliehriat	Earth Fault	Not applicable Not applicable	No No	No No	1		4/23/2016 10:31	No SPS	
	132 kV Mustem-NEHU	MePTCL		Mustem NEHU	Not Furnished	Not Furnished Not Furnished	No No	No No	1		4/23/2016 10:11	No SPS	
107	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		4/23/2016 11:21	No SPS	
	FIR by the constituent	Yes											
	Brief Description of the Incident	Byrnihat (132 k NEIGRIHMS -	V Panchgram-Lu Khliehriat (ME)	mnsnong line kept line, 132 kV Must	est of NER Grid the topen for system to em-Khliehriat line to load generation to	requirement). At a & 132 kV Muste	10:07 Hrs on 2	23.04.16 ,132	kV Khliehriat	(PG)-Khlieh	riat (MePTCL) I &	t II lines,132	kV
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 1291	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent I	Load : 1382 N	ЛW)					
	Root Cause	Due to fault in I	Meghalaya systen	n,132 kV Khliehria	at (PG) - Khliehria	t (ME) I&II lines	tripped due to	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		

I			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures		earthing has to b								te to be checked an with POWERGRI		
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)		Not Furnished	No	No			4/23/2016 15:33	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (ME) Khliehriat (PG) Khliehriat (ME)	No tripping DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished Not Furnished	No No No	No No No	Loss of Load:		4/23/2016 15:34	No SPS	0.005
	132 kV NEHU - NEIGRIHMS	MePTCL	4/23/2016 15:03	NEHU NEIGRIHMS	Earth Fault	Not applicable Not applicable	No No	No No	23	GD-I	4/23/2016 15:10	No SPS	0.003
	132 kV Mustem-NEHU	MePTCL		Mustem NEHU	Not Furnished Tripped	Not Furnished Not Furnished	No No	No No			4/23/2016 15:06	No SPS	
	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		4/23/2016 15:41	No SPS	
108	FIR by the constituent	Yes		•			B.						
	Brief Description of the Incident	Byrnihat (132 k	V Panchgram-Lu & 132 kV Muste	mnsnong line kept	open for system r	requirement). At	15:03 Hrs on 2	23.04.16 ,132	kV Khliehriat (PG)-Khliehr	x 160 MVA, 220/1 iat (MePTCL) I & rid and subsequen	II lines,132	kV NEHU
	Antecedent Conditions												
	of NER Grid	(पूववृत्ता उत्पाद	न/ Antecedent C	Seneration: 1319	MW , पूर्ववृत्ता ल	ਤਿ/ Antecedent I	Load : 1427 M	IW)					
	Root Cause		fault in Meghala		., .				n clearance of fa	ult at downs	tream of Khliehria	nt (ME).R-Y-	·B fault
		Due to lighning seems because o	fault in Meghala of lightning. elated to Meghala earthing has to b	ya system,132 kV nya substations to l	Khliehriat (PG) - I	Khliehriat (ME) l	&II lines tripp	oed due to not	hing, tower foo	ting resistance	tream of Khliehria se to be checked an with POWERGRI	nd in case of	more than
	Root Cause	Due to lighning seems because o Earthing work re 10 ohms, proper	fault in Meghala of lightning. elated to Meghala earthing has to b	ya system,132 kV ya substations to le done by MePTC Khliehriat (PG)	Khliehriat (PG) - See completed as so CL.Relay settings of DP, ZI, B-E	Khliehriat (ME) loon as possible. Af Meghalaya sub	&II lines tripp After completic stations are to	oed due to not on of S/S eart be checked b	hing, tower foo	ting resistance	ce to be checked an	nd in case of	more than
	Root Cause Remedial Measures 132 kV Khliehriat (PG) -	Due to lighning seems because of Earthing work re 10 ohms, proper of earthing work	fault in Meghala of lightning. elated to Meghala earthing has to b	va system,132 kV nya substations to l e done by MePTC	Khliehriat (PG) - See completed as so CL.Relay settings of DP, ZI, B-E	Khliehriat (ME) l oon as possible. A of Meghalaya sub	&II lines tripp	oed due to not on of S/S eart be checked b	hing, tower foo y MePTCL in c	ting resistance	te to be checked an	nd in case of D after the co	more than

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	luring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Generation:		4/23/2016 22:44	No SPS	
	FIR by the constituent	Yes				••	•			•			
109	Brief Description of the Incident	NEHU- NEIGR	IHMS line & 132	kV NEHU-Must	rest of NER Grid the em line kept open iat area was separa	for system requir	ement). At 22	2:05 Hrs on 23	3.04.16, 132 kV	Khliehriat (l	PG)-Khliehriat (M		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation : 1335	SMW , पूर्ववृत्ता ल	ोड/ Antecedent I	∠oad : 1497 N	MW)					
	Root Cause	Due to fault in N	Meghalaya system	n,132 kV Khliehri	at (PG) - Khliehria	at (ME) I&II lines	tripped due t	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		
	Remedial Measures	•	earthing has to b	•	be completed as so CL.Relay settings of	•			-	-			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	DP, ZI, B-E	Not Furnished	No	No	Loss of Load:		4/24/2016 9:17	No SPS	
	` ,			Khliehriat(ME)	No tripping	Not Furnished	No	No	22				
	132 kV Khliehriat (PG) -	MePTCL	4/24/2016 0:07	Khliehriat (PG)	DP, ZI, B-E	Not Furnished	No	No		GD-I	4/24/2016 9:22	No SPS	0.002
	Khliehriat (ME) II			Khliehriat(ME)	No tripping	Not Furnished	No	No					
	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		4/24/2016 1:04	No SPS	
	FIR by the constituent	Yes											
110	Brief Description of the Incident	NEHU- NEIGR	IHMS line & 132	kV NEHU-Must	rest of NER Grid tl em line kept open iat area was separa	for system requir	ement). At 00	0:07 Hrs on 24	1.04.16, 132 kV	Khliehriat (l	PG)-Khliehriat (M		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1700) MW , पूर्ववृत्ता ल	ोड/ Antecedent I	 Load : 1486 N	MW)					
	Root Cause	Due to fault in M	Meghalaya system	n,132 kV Khliehri	at (PG) - Khliehria	at (ME) I&II lines	tripped due t	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	iary 2016				
हम सं इया/ SI. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures		earthing has to b	aya substations to loe done by MePTC									
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)		Not Furnished	No	No	Loss of Load:		4/24/2016 17:32	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	4/24/2016 17:23	Khliehriat(ME) Khliehriat (PG) Khliehriat(ME)	No tripping DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished Not Furnished	No No No	No No No	59	GD-I	4/24/2016 17:33	No SPS	0.004
											1/21/2016 15 15	N. apa	
	Leshka U 1	MePGCL MePGCI		Leshka	Over Frequency		No No	No No	Loss of Generation:		4/24/2016 17:47 4/24/2016 17:48	No SPS	
11	Leshka U 1 Leshka U 2 FIR by the constituent	MePGCL Yes	of Meghalaya was	` /	Over Frequency	Not applicable	No	No	Generation:		4/24/2016 17:48	No SPS	, 132 kV
11	Leshka U 1 Leshka U 2	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to t	IHMS line & 132 tripping of these of	Leshka Leshka	Over Frequency est of NER Grid them line kept open at area was separa	Not applicable nrough 132 kV K for system requir ted from rest of N	No hliehriat (PG)- ement). At 17: VER Grid and	No -Khliehriat (M :23 Hrs on 24 subsequently	Generation: MePTCL) I & II 1.04.16, 132 kV	lines. (132 k Khliehriat (I	4/24/2016 17:48 V Panchgram-Lur PG)-Khliehriat (Mo	No SPS	
111	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	MePGCL Yes Khliehriat area o NEHU- NEIGR tripped. Due to o (पूर्ववृत्ता उत्पाद	IHMS line & 132 tripping of these of	Leshka Leshka s connected with re kV NEHU-Muste elements, Khleihri. Generation: 1292	Over Frequency est of NER Grid them line kept open at area was separa MW, पूर्ववृत्ता ल	Not applicable nrough 132 kV K for system requir ted from rest of N	No hliehriat (PG)- ement). At 17: NER Grid and Load: 1574 M	No -Khliehriat (N 23 Hrs on 24 subsequently IW)	Generation: MePTCL) I & II 1.04.16, 132 kV collapsed due t	lines. (132 k Khliehriat (I to load genera	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Mation mismatch.	No SPS	
111	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to	IHMS line & 132 tripping of these of these of these of these of the depth of the de	Leshka Leshka s connected with relative to the connected with	Over Frequency est of NER Grid them line kept open at area was separa MW, पूर्ववृत्ता लें at (PG) - Khliehria	Not applicable nrough 132 kV K for system require ted from rest of N 15/ Antecedent I at (ME) I&II lines oon as possible. A	No hliehriat (PG)- ement). At 17: NER Grid and Load: 1574 M tripped due to after completion	No -Khliehriat (N:23 Hrs on 24 subsequently IW) o non clearance on of S/S eart	MePTCL) I & II 1.04.16, 132 kV 2 collapsed due to ce of fault at do thing, tower foo	lines. (132 k Khliehriat (Foo load general workstream of ting resistance	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Meation mismatch. Khliehriat (ME). Ee to be checked an	No SPS mnsnong line ePTCL) I & 1	II lines more than
11	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to	IHMS line & 132 tripping of these of these of these of these of the depth of the de	Leshka Leshka S connected with re 2 kV NEHU-Muste elements, Khleihria Generation: 1292 1,132 kV Khliehria aya substations to loe done by MePTC Khliehriat (PG)	est of NER Grid them line kept open at area was separa MW, पूर्ववृत्ता लें at (PG) - Khliehria be completed as so L.Relay settings of	Not applicable arough 132 kV K for system require ted from rest of N 15/ Antecedent I at (ME) I&II lines toon as possible. A of Meghalaya sub Not Furnished	No hliehriat (PG)- ement). At 17: NER Grid and coad: 1574 M tripped due to fter completic stations are to	No -Khliehriat (No. 23 Hrs on 24 subsequently IW) O non clearant on of S/S eart be checked by	MePTCL) I & II 1.04.16, 132 kV 2 collapsed due to ce of fault at do thing, tower foo	lines. (132 k Khliehriat (Foo load general workstream of ting resistance	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Meation mismatch. Khliehriat (ME). Ee to be checked an	No SPS mnsnong line ePTCL) I & 1	II lines more than
11	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to for (पूर्ववृत्ता उत्पाद Due to fault in Mearthing work re 10 ohms, proper of earthing work	IHMS line & 132 tripping of these of these of these of these of the depth of the de	Leshka Leshka Leshka s connected with re kV NEHU-Muste elements, Khleihria Generation: 1292 1,132 kV Khliehria aya substations to loe done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG)	est of NER Grid them line kept open at area was separa MW , पूर्ववृत्ता लें at (PG) - Khliehria be completed as sectRelay settings of DP, ZI, B-E No tripping DP, ZI, B-E	Not applicable arough 132 kV K for system requireted from rest of N Ts/ Antecedent I at (ME) I&II lines boon as possible. A of Meghalaya sub	No hliehriat (PG)- ement). At 17: NER Grid and Load: 1574 M tripped due to ffer completio stations are to	No -Khliehriat (M. 23 Hrs on 24 subsequently (IW) O non clearant on of S/S eart be checked be	Generation: MePTCL) I & II 4.04.16, 132 kV collapsed due t ce of fault at do thing, tower foo by MePTCL in collapsed Loss of Load:	lines. (132 k Khliehriat (Foo load general workstream of ting resistance	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Mation mismatch. Khliehriat (ME). De to be checked an with POWERGRI	No SPS mnsnong line ePTCL) I & a nd in case of D after the co	II lines more than
11	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) -	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to for the tripped of the tripped of fault in Mearthing work real to ohms, proper of earthing work POWERGRID	IHMS line & 132 tripping of these of these of these of these of these of the these	Leshka Leshka S connected with re 2 kV NEHU-Muste elements, Khleihria Generation: 1292 1,132 kV Khliehria aya substations to loe done by MePTC Khliehriat (PG) Khliehriat(ME)	est of NER Grid them line kept open at area was separa MW , पूर्ववृत्ता लें at (PG) - Khliehria be completed as sectRelay settings of DP, ZI, B-E No tripping DP, ZI, B-E No tripping Earth Fault	Not applicable arough 132 kV K for system required from rest of N The system required from rest of N	No hliehriat (PG)- ement). At 17: NER Grid and Load: 1574 M tripped due to after completic stations are to No No No	No -Khliehriat (No. 23 Hrs on 24 subsequently IW) o non clearant on of S/S eart be checked by No No No	Generation: MePTCL) I & II 4.04.16, 132 kV collapsed due t ce of fault at do thing, tower foo by MePTCL in c	lines. (132 k Khliehriat (I to load general wnstream of ting resistance coordination	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Meation mismatch. Khliehriat (ME). De to be checked at with POWERGRI 4/25/2016 2:51	No SPS mnsnong line ePTCL) I & a nd in case of D after the co	more than ompletion
111	Leshka U 1 Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU -	MePGCL Yes Khliehriat area of NEHU- NEIGR tripped. Due to	IHMS line & 132 tripping of these of these of these of these of the depth of the de	Leshka Leshka Leshka Seconnected with received with receiv	est of NER Grid them line kept open at area was separa MW , पूर्ववृत्ता लें at (PG) - Khliehria be completed as so CL. Relay settings of DP, ZI, B-E No tripping DP, ZI, B-E No tripping Earth Fault Not Furnished	Not applicable arough 132 kV K for system required from rest of N The system required from rest of N	No hliehriat (PG)- ement). At 17: NER Grid and Load: 1574 M tripped due to after completic stations are to No No No No No	No -Khliehriat (No. 23 Hrs on 24 subsequently IW) O non clearant on of S/S eart be checked by No No No No No	Generation: MePTCL) I & II 4.04.16, 132 kV collapsed due t ce of fault at do thing, tower foo by MePTCL in collapsed Loss of Load:	lines. (132 k Khliehriat (Foo load general workstream of ting resistance	4/24/2016 17:48 EV Panchgram-Lur PG)-Khliehriat (Meation mismatch. Khliehriat (ME). Lee to be checked at with POWERGRI 4/25/2016 2:51 4/25/2016 2:51	No SPS mnsnong line ePTCL) I & and in case of D after the co	II lines more than

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
112	Leshka U 2	MePGCL		Leshka	KV Kiii(FG)- Khl(ME) I&II lines	Not applicable	No	No	48		4/25/2016 3:43	No SPS	
	FIR by the constituent	Yes											
	Brief Description of the Incident	Byrnihat (132 k)	V Panchgram-Lui & 132 kV Muste	s connected with remnsnong line kept mrNEHU line trip	open for system i	requirement). At (02:31 Hrs on 2	25.04.16 ,132	kV Khliehriat	(PG)-Khliehi	riat (MePTCL) I &	II lines,132	kV NEHU
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation : 1509	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1576 N	MW)					
	Root Cause	D C 1											
	Root Cause	Due to fault in N	Meghalaya system	,132 kV Khliehria	at (PG) - Khliehria	nt (ME) I&II lines	tripped due to	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		
	Remedial Measures	Earthing work re	elated to Meghala r earthing has to b	n,132 kV Khliehria nya substations to l ne done by MePTC	be completed as so	oon as possible. A	After completion	on of S/S eart	hing, tower foo	ting resistan	ce to be checked a		
	Remedial Measures 132 kV Khliehriat (PG) -	Earthing work ro 10 ohms, proper	elated to Meghala r earthing has to b	tya substations to be done by MePTC Khliehriat (PG)	be completed as so CL.Relay settings of DP, ZI, Y-E	oon as possible. A f Meghalaya sub	After completions are to	on of S/S eard be checked be No	hing, tower foo	ting resistan	ce to be checked a		
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I	Earthing work re 10 ohms, proper of earthing work	elated to Meghala r earthing has to b	ya substations to be done by MePTC Khliehriat (PG) Khliehriat(ME)	be completed as so CL.Relay settings of DP, ZI, Y-E No tripping	oon as possible. A of Meghalaya sub Not Furnished Not Furnished	After completions are to No	on of S/S eard be checked be No	hing, tower foo	ting resistan	ce to be checked a with POWERGRI	D after the co	
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) -	Earthing work re 10 ohms, proper of earthing work	elated to Meghala r earthing has to b	ya substations to be done by MePTC Khliehriat (PG) Khliehriat(ME) Khliehriat (PG)	DP, ZI, Y-E No tripping DP, ZI, Y-E	oon as possible. A of Meghalaya sub Not Furnished Not Furnished Not Furnished	After completions are to No No No	on of S/S eard be checked to No No	hing, tower foo	ting resistan	ce to be checked a with POWERGRI	D after the co	
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	Earthing work re 10 ohms, proper of earthing work POWERGRID	elated to Meghala r earthing has to b	ya substations to the done by MePTC Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME)	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping	oon as possible. A of Meghalaya sub Not Furnished Not Furnished Not Furnished Not Furnished	No No No No No	on of S/S eard be checked to No No No No	hing, tower foo by MePTCL in o	ting resistan	te to be checked a with POWERGRI 4/27/2016 8:59	D after the co	
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU -	Earthing work re 10 ohms, proper of earthing work POWERGRID	elated to Meghala r earthing has to b	ya substations to be done by MePTC Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) NEHU	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault	oon as possible. A of Meghalaya sub Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable	No No No No No No No No No	on of S/S eard be checked to No No No No No	hing, tower foo by MePTCL in o	ting resistan	te to be checked a with POWERGRI 4/27/2016 8:59	D after the co	
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	Earthing work re 10 ohms, proper of earthing work POWERGRID MePTCL MePTCL	elated to Meghala r earthing has to b cs.	ya substations to be done by MePTC Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) NEHU NEIGRIHMS	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault Not Furnished	oon as possible. A of Meghalaya sub Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable Not applicable	No	No	hing, tower foo by MePTCL in o	ting resistand	4/27/2016 8:59 4/27/2016 8:32	No SPS No SPS No SPS	ompletion
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU -	Earthing work re 10 ohms, proper of earthing work POWERGRID MePTCL	elated to Meghala r earthing has to b cs.	kya substations to be done by MePTC Khliehriat (PG) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) NEHU NEIGRIHMS Mustem	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault Not Furnished Not Furnished	Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable Not applicable Not applicable	No No No No No No No No No	on of S/S eard be checked to No No No No No	hing, tower foo by MePTCL in o	ting resistand	4/27/2016 9:00	No SPS	ompletion
113	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS	Earthing work re 10 ohms, proper of earthing work POWERGRID MePTCL MePTCL	elated to Meghala r earthing has to b cs.	ya substations to be done by MePTC Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) NEHU NEIGRIHMS	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault Not Furnished	oon as possible. A of Meghalaya sub Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable Not applicable	No N	No	hing, tower foo by MePTCL in o	ting resistand	4/27/2016 8:59 4/27/2016 8:32	No SPS No SPS No SPS	ompletion
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS 132 kV Mustem-NEHU	Earthing work re 10 ohms, proper of earthing work POWERGRID MePTCL MePTCL MePTCL	elated to Meghala r earthing has to b cs.	khliehriat (PG) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) NEHU NEIGRIHMS Mustem NEHU	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault Not Furnished Not Furnished Earth Fault Voltage Control	Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable Not applicable Not applicable	No N	No N	Loss of Load: Loss of Generation:	ting resistand	4/27/2016 8:32 4/27/2016 8:31	No SPS No SPS No SPS No SPS No SPS	ompletion
	Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS 132 kV Mustem-NEHU Leshka U 2	Earthing work re 10 ohms, proper of earthing work POWERGRID MePTCL MePTCL MePTCL MePGCL Yes Khliehriat area of Byrnihat (132 k²)	elated to Meghalar earthing has to be seen t	khliehriat (PG) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) Khliehriat (ME) NEHU NEIGRIHMS Mustem NEHU	DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping DP, ZI, Y-E No tripping Earth Fault Not Furnished Not Furnished Earth Fault Voltage Control Overcurrent	Not Furnished Not Furnished Not Furnished Not Furnished Not Furnished Not applicable	No N	No N	Loss of Load: 21 Loss of Generation: 42 MePTCL) I & II kV Khliehriat	GD-I lines and 2 (PG)-Khliehi	4/27/2016 8:59 4/27/2016 8:59 4/27/2016 8:32 4/27/2016 8:31 4/27/2016 8:47 x 160 MVA, 220/1 iiat (MePTCL) I &	No SPS No SPS No SPS No SPS No SPS 132 kV ICT I	0.003 &II at

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Due to fault in N	Meghalaya system	,132 kV Khliehria	at (PG) - Khliehria	at (ME) I&II lines	tripped due to	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		
	Remedial Measures	_	earthing has to b	•	•				-	-	ce to be checked a with POWERGR		
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khlichriat (PG)	DP, ZI, Y-E	Not Furnished	No	No			4/27/2016 21:58	No SPS	
	132 kV Khliehriat (PG) -			Khliehriat(ME)	No tripping DP, ZI, Y-E	Not Furnished Not Furnished	No No	No No					
	Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	No tripping	Not Furnished Not Furnished	No	No	ł		4/27/2016 22:03	No SPS	
	132 kV NEHU - NEIGRIHMS	MePTCL		NEHU	Distance Backup protection	Not applicable	No	No	Loss of Load: 69		4/27/2016 21:13	No SPS	
				NEIGRIHMS		Not applicable	No	No	l				
	132 kV Mustem-NEHU	MePTCL	4/27/2016 21:06	Mustem NEHU		Not Furnished	No No	No No	ł		4/27/2016 21:12	No SPS	0.002
	132 kV Umiam St I –		4/2//2010 21.00	Umiam Stg I	General Trip Tripped	Not Furnished Not applicable	No	No	•	GD-I			0.002
	Umiam St II	MePTCL		Umiam Stg II	Over current	Not applicable	No	No	ł		4/27/2016 21:12	No SPS	
	Leshka U 2	MePGCL		Leshka	Voltage Control Overcurrent	Not applicable	No	No			4/27/2016 23:32	No SPS	
	Umiam Stg I U 3	MePGCL		Umiam Stg I	Generator Overcurrent	Not applicable	No	No	Loss of Generation:		4/27/2016 21:15	No SPS	
114	Umiam Stg I U 4	MePGCL		Umiam Stg I	Generator Overcurrent	Not applicable	No	No	98		4/27/2016 21:20	No SPS	
	Umiam Stg II U 1	MePGCL		Umiam Stg II	Isolated	Not applicable	No	No]		4/27/2016 21:12	No SPS	
	Umiam Stg III U 2	MePGCL		Umiam Stg III	Isolated	Not applicable	No	No			4/27/2016 21:12	No SPS	
	FIR by the constituent	Yes											
	Brief Description of the Incident	Byrnihat (132 k' Umiam St II line 132 kV Mustem	V Panchgram-Lui e. At 21:06 Hrs of NEHU line trip	mnsnong line kept n 27.04.16 ,132 k' ped. Due to trippi	t open for system i V Khliehriat (PG)-	requirement).Umi Khliehriat (MeP nts, Khleihriat are	ium Stage II F FCL) I & II lir a was separate	Power Station nes,132 kV N	was connected EHU - NEIGR	with rest of IHMS line, 1	x 160 MVA, 220/ NER Grid through 32 kV Umiam St I ly collapsed due to	n 132 kV Um I – Umiam S	iam St I – t II line &

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Seneration : 1396	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent l	Load : 1867 N	Л W)					
	Root Cause	Due to fault in N	Meghalaya systen	n,132 kV Khliehria	at (PG) - Khliehria	nt (ME) I&II lines	tripped due to	o non clearan	ce of fault at do	ownstream of	Khliehriat (ME).		
	Remedial Measures	_	r earthing has to b	•	be completed as so CL.Relay settings of	-	-		•	•			
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	, ,	Not Furnished	No	No			4/28/2016 0:27	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	-	Khliehriat(ME) Khliehriat (PG) Khliehriat(ME)	No tripping DP, ZI, R-B-E No tripping	Not Furnished Not Furnished Not Furnished	No No No	No No No	Loss of Load:		4/28/2016 0:28	No SPS	
	132 kV NEHU - NEIGRIHMS	MePTCL	4/28/2016 0:02	NEHU NEIGRIHMS	General Trip No tripping	Not applicable Not applicable	No No	No No	38		4/28/2016 0:06	No SPS	0.002
	132 kV Mustem-NEHU	MePTCL		Mustem NEHU	No tripping General Trip	Not Furnished Not Furnished	No No	No No			4/28/2016 0:08	No SPS	
115	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		4/28/2016 0:32	No SPS	
	FIR by the constituent	Yes	•			•	•		•		•		
	•	Byrnihat (132 k	V Panchgram-Lu & 132 kV Muste	mnsnong line kept	est of NER Grid the topen for system r pped. Due to tripp	requirement). At (00:02 Hrs on 2	28.04.16 ,132	kV Khliehriat	(PG)-Khlieh	riat (MePTCL) I &	z II lines,132	kV NEHU
	Antecedent Conditions of NER Grid				MW , पूर्ववृत्ता लोः								
	Root Cause		<u> </u>		at (PG) - Khliehria	` '	11				, ,		
	Remedial Measures		r earthing has to b		be completed as so CL.Relay settings of								
	132 kV Khliehriat (PG) - Khliehriat (MF) I	POWERGRID		Khliehriat (PG)	DP, ZI, Y-B-E	Not Furnished	No	No			4/28/2016 22:09	No SPS	

			List of	Grid Disturba	inces in North-	·Eastern Regio	onal Grid d	uring Janu	ıary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Kimemiat (ME) I			Khliehriat(ME)	No tripping	Not Furnished	No	No					
	132 kV Khliehriat (PG) -	MePTCL	1	Khliehriat (PG)	DP, ZI, Y-B-E	Not Furnished	No	No	Loss of Load:		4/28/2016 22:10	No SPS	
	Khliehriat (ME) II	Mei TCL		Khliehriat(ME)	No tripping	Not Furnished	No	No	12		4/28/2010 22.10	110 51 5	
	132 kV NEIGRIHMS -	MePTCL	4/28/2016 21:36	NEIGRIHMS	Over current	Not applicable	No	No	12	GD-I	4/28/2016 21:45	No SPS	0.001
	Khliehriat (ME)	WICE TEE	1/20/2010 21:30	Khliehriat	No tripping	Not applicable	No	No		GD 1	4/20/2010 21:43	110 51 5	0.001
	132 kV Mustem-NEHU	MePTCL		Mustem		Not Furnished	No	No			4/28/2016 21:40	No SPS	
	132 KV Musiciii IVEITO	WICE TEE		NEHU	General Trip	Not Furnished	No	No			4/20/2010 21:40	110 51 5	
	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		4/28/2016 22:25	No SPS	
116	FIR by the constituent	Yes			1	1							
		Khliehriat area	of Machalaria ma		and a C NICD Call 41	1 100 1 17 17							
	Brief Description of the Incident	Byrnihat (132 k Khliehriat (MeF	V Panchgram-Lu TCL) - NEIGRII	mnsnong line kept HMS & 132 kV M ad generation misn	t open for system i Iustem-NEHU line	requirement). At	21:36 Hrs on 2	28.04.16 ,132	kV Khliehriat	(PG)-Khliehi		II lines,132	
	•	Byrnihat (132 k Khliehriat (MeF subsequently co	V Panchgram-Lu TCL) - NEIGRIE llapsed due to loa	mnsnong line kept HMS & 132 kV M	t open for system i fustem-NEHU line natch.	requirement). At a	21:36 Hrs on 2 tripping of th	28.04.16 ,132 ese elements,	kV Khliehriat	(PG)-Khliehi	riat (MePTCL) I &	II lines,132	
	Incident Antecedent Conditions	Byrnihat (132 k Khliehriat (MeP subsequently co (पूर्ववृ त्ता उत्पाद	V Panchgram-Lu YTCL) - NEIGRIF Illansed due to loa 러/ Antecedent C	mnsnong line kept HMS & 132 kV M ad generation misn	t open for system t Mustem-NEHU line natch. MW , पूर्ववृत्ता ल	requirement). At a tripped. Due to	21:36 Hrs on 2 tripping of th	28.04.16 ,132 ese elements,	kV Khliehriat Khleihriat area	(PG)-Khliehi i was separate	riat (MePTCL) I & ed from rest of NE	II lines,132	
	Incident Antecedent Conditions of NER Grid	Byrnihat (132 k Khliehriat (MeP subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation misn Generation: 1228	t open for system i fustem-NEHU line natch. MW, पूर्ववृत्ता ल at (PG) - Khliehria be completed as so	requirement). At the tripped. Due to the tripped. The tripped at (ME) I&II lines to the tripped as possible. At the tripped as possible.	21:36 Hrs on 20 tripping of the Load: 1469 Mes tripped due to After completion	28.04.16 ,132 ese elements,	kV Khliehriat Khleihriat area ce of fault at de	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME).	EII lines,132 ER Grid and	kV more than
	Antecedent Conditions of NER Grid Root Cause	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M Earthing work r 10 ohms, proper	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation mism Generation: 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG)	t open for system i fustem-NEHU line natch. MW , पूर्ववृत्ता ल at (PG) - Khliehria be completed as so L.Relay settings o	requirement). At the tripped. Due to the tripped. Due to the tripped. The tripped is at (ME) I&II lines to the tripped is	21:36 Hrs on 20 tripping of the Load: 1469 Mes tripped due to After completi stations are to No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart b be checked b	kV Khliehriat Khleihriat area ce of fault at de	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME).	EII lines,132 ER Grid and	kV more than
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृ त्ता उत्पाद Due to fault in M Earthing work r 10 ohms, proper of earthing work	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation mism Generation: 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat(ME)	t open for system in fustem-NEHU line natch. MW , पूर्ववृत्ता लेक का (PG) - Khliehria be completed as so CL.Relay settings of DP, ZI, R-E No tripping	requirement). At the tripped. Due to the tripped. Due to the tripped. The tripped is at (ME) I&II lines to the tripped is	21:36 Hrs on 20 tripping of the Load: 1469 Mes tripped due to After completionstations are to No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart b be checked b	kV Khliehriat Khleihriat area ce of fault at de	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). The to be checked a with POWERGRI	ER Grid and The control of the cont	kV more than
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) -	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृ त्ता उत्पाद Due to fault in M Earthing work r 10 ohms, proper of earthing work	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation mism Generation: 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG)	t open for system in fustem-NEHU line natch. MW , पूर्ववृत्ता ल at (PG) - Khliehria be completed as sc L.Relay settings of DP, ZI, R-E No tripping DP, ZI, R-E	requirement). At the tripped. Due to the tripped. Due to the tripped. The tripped in tripped in the tripped in	21:36 Hrs on 20 tripping of the Load: 1469 Mes tripped due to After completions are to No No No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart b be checked b No No No	kV Khliehriat Khleihriat area ce of fault at de	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). The to be checked a with POWERGRI	ER Grid and The control of the cont	kV more than
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M Earthing work re 10 ohms, proper of earthing work	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation mism Generation: 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (PG)	t open for system in fustem-NEHU line natch. MW , पूर्ववृत्ता लेक का कि प्राप्त का स्वार (PG) - Khliehria be completed as so L.Relay settings of DP, ZI, R-E No tripping DP, ZI, R-E No tripping	requirement). At the tripped. Due to the tripped. Due to the tripped. Due to the tripped. The tripped is at (ME) I&II lines to the tripped is at (ME) I&II line	21:36 Hrs on 20 tripping of the Load : 1469 Mes tripped due to After completion stations are to No No No No No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart be checked b No No No No	kV Khliehriat Khleihriat area ce of fault at do	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). te to be checked a with POWERGRI 4/30/2016 23:13	at II lines,132 ER Grid and and in case of D after the co	kV more than
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEIGRIHMS -	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M Earthing work re 10 ohms, proper of earthing work	V Panchgram-Lu TCL) - NEIGRII llansed due to loa	mnsnong line kept HMS & 132 kV M ad generation mism Generation : 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) NEIGRIHMS	t open for system in fustem-NEHU line natch. MW , पूर्ववृत्ता लेक का कि प्राप्त का स्वार (PG) - Khliehria be completed as so CL.Relay settings of DP, ZI, R-E No tripping DP, ZI, R-E No tripping DP, ZI, R-Y-B	requirement). At the tripped. Due to the tripped. Due to the tripped. Due to the tripped. The tripped is at (ME) I&II lines to the tripped is at (ME) I&II line	21:36 Hrs on 20 tripping of the Load : 1469 Mes tripped due to After completion stations are to No No No No No No No No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart be checked b No No No No	kV Khliehriat Khleihriat area ce of fault at do thing, tower for by MePTCL in Loss of Load:	(PG)-Khliehn a was separate ownstream of	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). te to be checked a with POWERGRI 4/30/2016 23:13	at II lines,132 ER Grid and and in case of D after the co	kV more than
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M Earthing work r 10 ohms, proper of earthing work POWERGRID	V Panchgram-Lu PTCL) - NEIGRIF Illansed due to loz 터/Antecedent C Meghalaya system elated to Meghala r earthing has to b	mnsnong line kept HMS & 132 kV M ad generation mism Generation : 1228 n,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) NEIGRIHMS Khliehriat	t open for system in fustem-NEHU line natch. MW, पूर्ववृत्ता लेक at (PG) - Khliehria be completed as so CL.Relay settings of DP, ZI, R-E No tripping DP, ZI, R-E No tripping DP, ZI, R-Y-B DP, ZI, R-Y-B DP, ZI, R-Y-B	requirement). At the tripped. Due to the tripped. Due to the tripped. Due to the tripped. The tripped is at (ME) I&II lines to as possible. And the tripped is a substitution of Meghalaya substitution of the tripped is a substitution of tripped is a substitution of the tripped is a substitution of tripped is a su	21:36 Hrs on 20 tripping of the Load : 1469 Mes tripped due to After completion stations are to No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart be checked b No No No No No No	kV Khliehriat Khleihriat area ce of fault at do thing, tower for by MePTCL in Loss of Load:	(PG)-Khliehn n was separate ownstream of oting resistance coordination	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). te to be checked a with POWERGRI 4/30/2016 23:13	and in case of D after the converse No SPS	more than ompletion
	Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEIGRIHMS -	Byrnihat (132 k Khliehriat (MeF subsequently co (पूर्ववृत्ता उत्पाद Due to fault in M Earthing work r 10 ohms, proper of earthing work POWERGRID	V Panchgram-Lu PTCL) - NEIGRIF Illansed due to loz 터/Antecedent C Meghalaya system elated to Meghala r earthing has to b	mnsnong line kept HMS & 132 kV M ad generation mism Generation : 1228 1,132 kV Khliehria aya substations to be done by MePTC Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) NEIGRIHMS	t open for system in fustem-NEHU line natch. MW , पूर्ववृत्ता लेक का कि प्राप्त का स्वार (PG) - Khliehria be completed as so CL.Relay settings of DP, ZI, R-E No tripping DP, ZI, R-E No tripping DP, ZI, R-Y-B	requirement). At the tripped. Due to the tripped to the tripp	21:36 Hrs on 20 tripping of the Load : 1469 Mes tripped due to After completion stations are to No No No No No No No No	28.04.16 ,132 ese elements, AW) o non clearan on of S/S eart be checked b No No No No	kV Khliehriat Khleihriat area ce of fault at do thing, tower for by MePTCL in Loss of Load:	(PG)-Khliehn n was separate ownstream of oting resistance coordination	riat (MePTCL) I & ed from rest of NE Khliehriat (ME). te to be checked a with POWERGRI 4/30/2016 23:13	and in case of D after the converse No SPS	more than ompletion

			List of	Grid Disturba	ances in North	Eastern Regio	onal Grid d	luring Janı	uary 2016						
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU		
	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		5/1/2016 1:09	No SPS			
117	FIR by the constituent	Yes				I		•							
	Brief Description of the Incident	Byrnihat (132 k' Khliehriat (MeP	quently collapsed due to load generation mismatch												
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	liehriat (MePTCL) - NEIGRIHMS & 132 kV Mustem-Khliehriat line tripped. Due to tripping of these elements, Khleihriat area was separated from rest of NER Grid and osequently collapsed due to load generation mismatch विवृत्ता उत्पादन/ Antecedent Generation: 1000 MW, पूर्ववृत्ता लोड/ Antecedent Load: 1339 MW)												
	Root Cause	Due to fault in N	Meghalaya systen	n,132 kV Khliehri	at (PG) - Khliehria	at (ME) I&II lines	tripped due t	o non clearan	ice of fault at do	ownstream of	Khliehriat (ME).				
	Remedial Measures	_	earthing has to b	•	be completed as so CL.Relay settings of				-	-					
	132 kV Khliehriat (PG) -	POWERGRID	4/19/2016 4:00	Khliehriat (PG)	DP, ZI, R-Y-B	Not Furnished	No	No	Loss of Load:	GD-I	4/19/2016 4:35	No SPS	0.001		
	Khliehriat (ME) I			Khliehriat(ME)	No tripping	Not Furnished	No	No	9						
	FIR by the constituent	Yes													
	Brief Description of the Incident	NEHU-Umiam 1 03:40 Hrs on 19	line & 132 kV N 0.04.16). At 04:00	EHU-Mawlai line Hrs on 19.04.16,	rest of NER Grid to were kept open for 132 kV Khliehria o no source in this	r system requiren t (PG)-Khliehriat	nent and 132 l	kV Khliehria	t (PG)-Khliehria	at (MePTCL)	II line was not re	stored after t	ripping at		
118	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1380) MW , पूर्ववृ <i>त्</i> ता ल	ोड/ Antecedent I	Load : 1231 N	MW)							
	Root Cause	Due to lighning seems because of		ya system,132 kV	Khliehriat (PG) -	Khliehriat (ME)	&II lines tripp	ped due to no	on clearance of f	ault at downs	stream of Khliehri	at (ME).R-Y	-B fault		
	Remedial Measures	_	earthing has to b	•	be completed as so CL.Relay settings of				-	-					

			List of	Grid Disturba	nces in North	-Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Khliehriat (PG) -	POWERGRID	4/23/2016 17:07	Khliehriat (PG)	DP, ZI, R-B-E	Not Furnished	No	No	Loss of	GD-I	4/23/2016 18:21	No SPS	0.009
	Khliehriat (ME) I	1 0 W Eltoria	., 20, 2010 17.107	Khliehriat(ME)	No tripping	Not Furnished	No	No	Load: 9	021	., 20, 2010 10.21	110 51 5	0.005
	FIR by the constituent	Yes		11111111111111(1:12)	1.0 unpping	Trot I dillisiida	110	110					<u>. </u>
	Brief Description of the Incident	NEIGRIHMS li on 23.04.16). At	ne & 132 kV NE 17:07 Hrs on 23	s connected with r EHU-Mustem line 1.04.16, 132 kV Ki due to no source i	were kept open fo hliehriat (PG)-Kh	r system requiren	nent,132 kV K	Khliehriat (PC	6) - Khliehriat (1	ME) II line w	as not restored aft	er tripping at	16:19 Hrs
119	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1278	MW , पूर्ववृत्ता र	गोड/ Antecedent I	Load : 1569 N	MW)					
	Root Cause	Due to fault in l	Meghalaya syster	m,132 kV Khliehri	at (PG) - Khliehri	at (ME) I&II line	s tripped due t	to non clearar	nce of fault at do	ownstream of	Khliehriat (ME).		
	Remedial Measures	•	earthing has to b	aya substations to be done by MePTO		-	-		-				
	132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG)	DP, ZI, B-E	Not Furnished	No	No			4/24/2016 9:17	No SPS	
	Khliehriat (ME) I	1 0 WERGRIE	4/24/2016 13:28	Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of Load:	GD-I	1/2 1/2010 9.17	110 51 5	0.002
	132 kV Khliehriat (PG) -	MePTCL		Khliehriat (PG)	DP, ZI, B-E	Not Furnished	No	No	9		4/24/2016 9:22	No SPS	
	Khliehriat (ME) II FIR by the constituent	Yes		Khliehriat(ME)	No tripping	Not Furnished	No	No					
126	Brief Description of the Incident	Khliehriat area o Byrnihat (132 k)	V Panchgram-Lu GRIHMS & 132	s connected with r mnsnong line kep 2 kV Mustem-NEI	ot open for system	requirement). At	13:28 Hrs on	23.04.16 ,132	2 kV Khliehriat	(PG)-Khlieh	riat (MePTCL) I &	& II lines,132	kV
120	Antecedent Conditions of NER Grid			Generation: 1208	MW , पूर्ववृत्ता र	गोड/ Antecedent I	Load : 1355 N	MW)					
	Root Cause	Due to fault in N	∕leghalaya system	n,132 kV Khliehri	at (PG) - Khliehria	at (ME) I&II lines	tripped due to	o non clearan	ce of fault at do	wnstream of	Khliehriat (ME).		

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures	10 ohms, proper	earthing has to b		be completed as so CL.Relay settings of								
		of earthing work	CS.		1						1		
	132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG)			No	No	_		5/1/2016 22:15	No SPS	
	Khliehriat (ME) I			Khliehriat(ME)	No tripping	Not Furnished	No	No					
	132 kV Khliehriat (PG) -	MePTCL		Khliehriat (PG)		Not Furnished	No	No			5/1/2016 22:27	No SPS	
	Khliehriat (ME) II			Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of Load:				
	132 kV NEHU -	MePTCL		NEHU	General Trip	Not applicable	No	No	12		5/1/2016 21:51	No SPS	
	NEIGRIHMS		5/1/2016 21:42		î	Not applicable	No	No	1	GD-I		- 1.0 .0 - 2	0.002
	132 kV Mustem-NEHU	MePTCL		Mustem	Not Furnished	Not Furnished	No	No			5/1/2016 21:51	No SPS	
				NEHU	General Trip	Not Furnished	No	No				- 1.0 .0 - 2	
121	Leshka U 2	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of Generation: 42		5/1/2016 22:17	No SPS	
	FIR by the constituent	Yes											
		Byrnihat (132 k)	V Panchgram-Lui & 132 kV Muste	mnsnong line kept	est of NER Grid the topen for system r pped. Due to tripp	requirement). At 2	21:42 Hrs on (132, 105.16, 105.16	kV Khliehriat	(PG)-Khliehi	riat (MePTCL) I &	z II lines,132	kV NEHU
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent G	Seneration : 1164	MW , पूर्ववृत्ता ल	ਤਿ/ Antecedent I	Load : 1842 N	1W)					
	Root Cause				ected elements at								
	Remedial Measures	Station earthing	at Khliehriat (Me	eECL) sub station	to be rectified and	l all Main Protect	ive relays to b	e put into ser	vice.				
	132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG)	DP, ZI, Y-E	Not Furnished	No	No			5/1/2016 23:21	No SPS	
	Khliehriat (ME) I	TOWERORID		Khliehriat(ME)	No tripping	Not Furnished	No	No			3/1/2010 23.21	140 31 3	
	132 kV Khliehriat (PG) -	MePTCL		Khliehriat (PG)	Earth Fault	Not applicable	No	No			5/1/2016 23:21	No SPS	
	Khliehriat (ME) II	WIELTEL		Khliehriat(ME)	No tripping	Not applicable	No	No	Loss of Load:		5/1/2010 25.21	140 919	
	132 kV NEIGRIHMS -	MePTCL		NEIGRIHMS		Not Furnished	No	No	20		5/1/2016 23:15	No SPS	
	Khliehriat (ME)	WIELTEL	5/1/2016 22:48	Khliehriat	General Trip	Not Furnished	No	No]	GD-I	5/1/2010 25.15	140 919	0.0006
	132 kV Mustem-Khliehriat	MePTCL		Mustem	Not Furnished	Not Furnished	No	No]		5/1/2016 22:50	No SPS	
	132 K v Wiustein-Kintellilat	WICI ICL	j l	Khliehriat	Earth Fault	Not Furnished	No	No			5/1/2010 22.30	110 51 5	

I			List of	Grid Disturba	ances in North-	Eastern Regio	nal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
122	Leshka U 2	MePGCL		Leshka	Overcurrent	Not applicable	No	No	Loss of Generation: 42		5/1/2016 23:35	No SPS	
	FIR by the constituent	Yes	•		•				•	2	•		
	Brief Description of the Incident	Byrnihat (132 k ^v Khliehriat (MeP	V Panchgram-Lu: TCL) - NEIGRIF	mnsnong line kep	est of NER Grid tl t open for system i fustem-Khliehriat natch.	equirement). At 2	22:48 Hrs on 0	01.05.16 ,132	kV Khliehriat	(PG)-Khliehi	riat (MePTCL) I &	II lines,132	kV
	Antecedent Conditions of NER Grid				MW , पूर्ववृत्ता ल								
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	t (MeECL) su	ıb station					
	Remedial Measures	Station earthing	at Khliehriat (Mo	eECL) sub station	to be rectified and	all Main Protect	ive relays to b	e put into ser	vice.				
		δ	`	,			•						
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	`		DP, ZI, Y-B-E No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		5/2/2016 13:19	No SPS	
		POWERGRID		Khliehriat (PG)		Not Furnished	No		Loss of Load: 21	GD-I	5/2/2016 13:19 5/2/2016 13:22	No SPS	0.001
	Khliehriat (ME) I 132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG) Khliehriat (ME) Khliehriat (PG)	No tripping DP, ZI, Y-B-E	Not Furnished Not Furnished Not Furnished	No No No	No No		GD-I			0.001
	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II	POWERGRID MePTCL		Khliehriat (PG) Khliehriat(ME) Khliehriat (PG) Khliehriat(ME)	No tripping DP, ZI, Y-B-E No tripping	Not Furnished Not Furnished Not Furnished	No No No No	No No No	21 Loss of Generation:	GD-I	5/2/2016 13:22	No SPS	0.001
123	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II Leshka U 2	POWERGRID MePTCL MePGCL Yes Khliehriat area of Khliehriat-NEIC	5/2/2016 13:07 of Meghalaya was	Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) Leshka s connected with r 32 kV Khliehriat	No tripping DP, ZI, Y-B-E No tripping	Not Furnished Not Furnished Not Furnished Not applicable rrough 132 kV Ke kept open for sy	No No No No No No stem requirer	No No No No No -Khliehriat (Menent). At 13:(Loss of Generation: 42 MePTCL) I & II 07 Hrs on 02.05	lines. (132 k	5/2/2016 13:22 5/2/2016 13:18 EV Panchgram-Lui Khliehriat (PG)-K	No SPS No SPS mnsnong line hliehriat (Me	e, 132 kV
	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II Leshka U 2 FIR by the constituent Brief Description of the	POWERGRID MePTCL MePGCL Yes Khliehriat area of Khliehriat-NEIC II lines tripped.	5/2/2016 13:07 of Meghalaya was GRIHMS line & 1 Due to tripping o	Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) Leshka s connected with r 132 kV Khliehriat f these elements, l	No tripping DP, ZI, Y-B-E No tripping Over Frequency est of NER Grid tl -Mustem line wer	Not Furnished Not Furnished Not Furnished Not applicable arough 132 kV Ke kept open for systems as separated from the separated	No N	No No No No No At 13:0	Loss of Generation: 42 MePTCL) I & II 07 Hrs on 02.05	lines. (132 k	5/2/2016 13:22 5/2/2016 13:18 EV Panchgram-Lui Khliehriat (PG)-K	No SPS No SPS mnsnong line hliehriat (Me	e, 132 kV
	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions	POWERGRID MePTCL MePGCL Yes Khliehriat area c Khliehriat-NEIC II lines tripped.)	5/2/2016 13:07 of Meghalaya was GRIHMS line & I Due to tripping o	Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) Leshka s connected with r 32 kV Khliehriat f these elements, l	No tripping DP, ZI, Y-B-E No tripping Over Frequency est of NER Grid tl -Mustem line wer Khleihriat area was	Not Furnished Not Furnished Not Furnished Not applicable nrough 132 kV Ke kept open for systems separated from 1	No No No No No No No No Add: 1193 M	No No No No No No At 13:0	Loss of Generation: 42 MePTCL) I & II 07 Hrs on 02.05	lines. (132 k	5/2/2016 13:22 5/2/2016 13:18 EV Panchgram-Lui Khliehriat (PG)-K	No SPS No SPS mnsnong line hliehriat (Me	e, 132 kV
	Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II Leshka U 2 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	POWERGRID MePTCL MePGCL Yes Khliehriat area of Khliehriat-NEIC II lines tripped. । (पूर्ववृत्ता उत्पादः Non availability Station earthing	5/2/2016 13:07 of Meghalaya was GRIHMS line & I Due to tripping o ज/ Antecedent G of Main protecti at Khliehriat (Mo	Khliehriat (PG) Khliehriat (ME) Khliehriat (PG) Khliehriat (ME) Leshka s connected with r 132 kV Khliehriat f these elements, l Generation: 1277	No tripping DP, ZI, Y-B-E No tripping Over Frequency est of NER Grid tl -Mustem line wer Khleihriat area was MW, पूर्ववृत्ता ल	Not Furnished Not Furnished Not Furnished Not applicable nrough 132 kV Ke kept open for system of the separated from the separ	No No No No No No No No thliehriat (PG) stem requirer rest of NER G Load: 1193 M	No No No No No No At 13:0 Grid and subse AW)	Loss of Generation: 42 MePTCL) I & II 07 Hrs on 02.05 equently collaps	lines. (132 k .16 ,132 kV ed due to loa	5/2/2016 13:22 5/2/2016 13:18 EV Panchgram-Lui Khliehriat (PG)-K d generation misn	No SPS No SPS mnsnong line hliehriat (Menatch.	e, 132 kV PTCL) I &

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016					
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU	
	132 kV Khliehriat (PG) -	MePTCL	5/5/2016 10:00	Khliehriat (PG)		Not Furnished	No	No	31	GD-I	5/5/2016 10:13	No SPS	0.004	
	Khliehriat (ME) II		5/5/2010 10:00	Khliehriat(ME)	No tripping	Not Furnished	No	No		GD 1			0.001	
	Leshka U 1	MePGCL	ļ	Leshka	Tripped due to	Not applicable	No	No	Loss of		5/5/2016 12:30	No SPS		
	Leshka U 2 FIR by the constituent	MePGCL Yes		Leshka	evacuation	Not applicable	No	No	Generation:	<u> </u>	5/5/2016 10:42	No SPS	L	
124	Brief Description of the Incident Antecedent Conditions	Umiam Stg I-Un tripped. Due to t	PGCL Leshka evacuation Not applicable No No Generation: 5/5/2016 10:42 No SPS hriat area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines. (132 kV Panchgram-Lumnsnong line, 132 kV m Stg I-Umiam line & 132 kV NEHU-Mawlai line were kept open for system requirement). At 10:00 Hrs on 05.05.16,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines d. Due to tripping of these elements, Khleihriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch. क्ता उत्पादन/ Antecedent Generation: 1380 MW, पूर्ववृत्ता लोड/ Antecedent Load: 1430 MW)											
	of NER Grid	(% . 6				, 1111000000010101	3044 1 100 1							
	Restoration Details	NT 11111	63.6	C 11.4	. 1 1	122 1 37 37 11: 1 :	· OA ECI.)	1:						
	Root Cause				nected elements at									
	Remedial Measures			eecl) sub station be done for tower i	to be rectified and footing also.		ive relays to r	e put into sei	vice. After that	, tower footir	ig resistance to be	cnecked and	ii greater	
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	- H 0 1001 5 10 00	Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No			5/10/2016 18:35	No SPS		
	132 kV Khliehriat (PG) -	MePTCL	5/10/2016 18:20	Khliehriat (PG)	DP, ZI, R-Y-B	Not Furnished	No	No	1		5/10/2016 18:37	No SPS	1	
	Khliehriat (ME) II			Khliehriat(ME)	No tripping	Not Furnished	No	No						
	132 kV Mustem-NEHU	MePTCL		Mustem	No tripping	Not Furnished	No	No	Loss of Load: 42		5/10/2016 18:24	No SPS	0.005	
	132 kV NEHU - NEIGRIHMS	MePTCL	5/10/2016 18:20	NEHU NEHU	General Trip Distance Backup protection	Not Furnished Not Furnished	No No	No No	42	GD-I	5/10/2016 18:27	No SPS		
	T1.1 . TT 1	M. DCCI		NEIGRIHMS	No tripping	Not Furnished	No	No	T C	4	5/10/2016 10 42	N. CDC	\vdash	
105	Leshka U 1	MePGCL MePGCL	-	Leshka	Tripped due to	Not applicable	No	No	Loss of Generation:		5/10/2016 18:43	No SPS	0.079	
125	Leshka U 2 FIR by the constituent	Yes	<u> </u>	Leshka	evacuation	Not applicable	No	No	Generation:		5/10/2016 19:19	No SPS		
	Brief Description of the Incident	Khliehriat area (Byrnihat (132 k' 10.05.16, 132 k'	V Panchgram-Lu V Khliehriat (PG)	mnsnong line,132)-Khliehriat (MeP	est of NER Grid the kV Sarusajai-Um TCL) I & II lines, id and subsequent	tru I&II lines and 132 kV NEHU - I	132 kV Kahi NEIGRIHMS	lipara-Umtru & 132 kV M	I&II lines kept ustem-NEHU l	open for syst	em requirement).	At 18:20 Hrs	on	

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator		सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 1619	MW , पूर्ववृत्ता ल	ੀਤ/ Antecedent I	Load : 2162 N	MW)					
	Restoration Details												
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	t (MeECL) su	ıb station					
	Remedial Measures			eECL) sub station be done for tower t	to be rectified and footing also.	l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footii	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) -	POWERGRID		Khliehriat (PG)	DP, ZI, R-Y-B	Not applicable	No	No			5/11/2016 10:13	No SPS	
	Khliehriat (ME) I	POWERGRID		Khliehriat(ME)	No tripping	Not applicable	Yes	Yes			3/11/2010 10:13	NO 5F5	
	132 kV Khliehriat (PG) -	MePTCL]	Khliehriat (PG)	DP, ZI, R-Y-B	Not applicable	No	No]		5/11/2016 10:14	No SPS	
	Khliehriat (ME) II	WIEF ICL		Khliehriat(ME)	No tripping	Not applicable	No	No			3/11/2010 10.14	NO SES	
	132 kV Mustem-NEHU	MePTCL	5/11/2016 9:53	Mustem NEHU	No tripping Distance Backup protection	Not Furnished Not Furnished	No No	No No	Loss of Load: 65	GD-I	5/11/2016 13:50	No SPS	0.007
	132 kV NEHU -		1	NEHU	General Trip	Not Furnished	No	No					1
	NEIGRIHMS	MePTCL		NEIGRIHMS	No tripping	Not Furnished	No	No	1		5/11/2016 10:10	No SPS	
126	FIR by the constituent	Yes			11 0								<u> </u>
120		Byrnihat (132 k' ,132 kV Khliehr	V Khliehriat-Lun riat (PG)-Khliehr	nnsnong line,132 l iat (MePTCL) I &	est of NER Grid th «V Sarusajai-Umti II lines,132 kV N ently collapsed due	u I&II lines and 1 EHU - NEIGRIH	132 kV Kahili MS & 132 k	para-Umtru I	&II lines kept o	pen for syste	m requirement). A	at 09:53 Hrs	on 11.05.16
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 1441	MW , पूर्ववृत्ता ल	াঙ্গ/ Antecedent I	Load : 1591 N	MW)					
	Restoration Details												
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	ıt (MeECL) su	ıb station					
	Remedial Measures			eECL) sub station be done for tower t	to be rectified and footing also.	l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footii	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, Y-B-E No tripping	Not Furnished Not Furnished	No No	No No			5/11/2016 12:05		
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)		Not Furnished Not Furnished	No No	No No	Loss of Load:		5/11/2016 12:06		0.005

			List of	Grid Disturba	nces in North	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV NEIGRIHMS - Khliehriat (ME)	MePTCL	5/11/2016 11:48	NEIGRIHMS	Distance Backup protection	Not Furnished	No	No	61	GD-I	5/11/2016 11:55	No SPS	0.003
				Khliehriat	No tripping	Not Furnished	No	No					
	Umiam Stg III U 2	MePGCL		Umiam Stg III	Over Frequency	Not applicable	No	No	Loss of		5/11/2016 12:14	No SPS	0.018
	Umiam Stg IV U 1	MePGCL		Umiam Stg IV	Over Frequency	Not applicable	No	No	Generation:		5/11/2016 12:10	No SPS	0.018
127	FIR by the constituent	Yes	-							_	-		-
	Brief Description of the Incident	Byrnihat (132 k' line was under e	V Khliehriat-Lum mergency shutdo	nnsnong line,132 l	kV Sarusajai-Umtr rs on 11.05.16). A	ru I&II lines and 1 t 11:48 Hrs on 11	132 kV Kahili .05.16 ,132 k	para-Umtru I V Khliehriat (&II lines kept o (PG)-Khliehriat	pen for syste (MePTCL) l	x 160 MVA, 220/1 om requirement & I & II lines & 132 interest of the property of the second source in the second s	132 kV Must kV Khliehria	tem-NEHU
	Antecedent Conditions			· · · · · · · · · · · · · · · · · · ·						F		ins area.	
	of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1447						r	o to no source m	ins area.	
	of NER Grid Restoration Details				MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1646 N	Л W)			0 10 10 50 11 0		
	of NER Grid	Non availability	of Main protection	on for all the conn	MW , पूर्ववृत्ता ल	132 kV Khliehria	Load: 1646 N	AW)					
	of NER Grid Restoration Details Root Cause Remedial Measures	Non availability Station earthing	of Main protection at Khliehriat (Me	on for all the conneECL) sub station to done for tower to	MW, पूर्ववृत्ता ल nected elements at to be rectified and footing also.	132 kV Khliehria I all Main Protect	Load: 1646 M at (MeECL) su ive relays to b	MW) ab station be put into ser			ng resistance to be		if greater
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) -	Non availability Station earthing than 10 ohm, pro	of Main protection at Khliehriat (Meapper earthing to be	on for all the conneECL) sub station be done for tower to Khliehriat (PG)	MW, पूर्ववृत्ता ल nected elements at to be rectified and footing also. DP, ZI, R-Y-B	132 kV Khliehria I all Main Protect	Load: 1646 M at (MeECL) su ive relays to b	ab station the put into ser			ng resistance to be	checked and	if greater
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I	Non availability Station earthing than 10 ohm, pro	of Main protection at Khliehriat (Me	on for all the conneECL) sub station be done for tower to Khliehriat (PG) Khliehriat(ME)	MW, पूर्ववृत्ता ल nected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping	132 kV Khliehria all Main Protect Not applicable Not applicable	t (MeECL) surive relays to b	ab station the put into ser No No				checked and	if greater
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) -	Non availability Station earthing than 10 ohm, pro POWERGRID	of Main protection at Khliehriat (Meapper earthing to be	on for all the conneECL) sub station be done for tower to Khliehriat (PG) Khliehriat (ME) Khliehriat (PG)	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B	132 kV Khliehria all Main Protect Not applicable Not applicable Not applicable	nt (MeECL) survive relays to b	MW) ab station be put into ser No No No	vice. After that		ng resistance to be	checked and	if greater
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I	Non availability Station earthing than 10 ohm, pro POWERGRID	of Main protection at Khliehriat (Meoper earthing to b	on for all the conneECL) sub station be done for tower to Khliehriat (PG) Khliehriat(ME)	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping	132 kV Khliehria all Main Protect Not applicable Not applicable	t (MeECL) surive relays to b	ab station the put into ser No No	vice. After that.		ng resistance to be 5/12/2016 17:48	checked and	if greater
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) -	Non availability Station earthing than 10 ohm, pro POWERGRID MePTCL	of Main protection at Khliehriat (Meoper earthing to b	on for all the conneECL) sub station to done for tower in Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) NEHU	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping Distance Backup protection	132 kV Khliehria all Main Protect Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not Furnished	t (MeECL) surive relays to b No No No No No	MW) ab station be put into ser No No No No No	vice. After that	, tower footin	ng resistance to be 5/12/2016 17:48	checked and	
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS	Non availability Station earthing than 10 ohm, pro POWERGRID MePTCL MePTCL	of Main protection at Khliehriat (Meoper earthing to be 5/12/2016 14:56	on for all the conneECL) sub station to done for tower to Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME)	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping Distance Backup	132 kV Khliehria 1 all Main Protect Not applicable Not applicable Not applicable Not applicable	t (MeECL) surive relays to b	MW) ab station be put into ser No No No No	vice. After that.	, tower footin	ng resistance to be 5/12/2016 17:48 5/12/2016 17:49	checked and No SPS No SPS	
	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU -	Non availability Station earthing than 10 ohm, pro POWERGRID MePTCL MePTCL Yes	of Main protection at Khliehriat (Metoper earthing to be 5/12/2016 14:56 5/12/2016 14:53 5/12/2016 14:56	on for all the conneECL) sub station be done for tower for Khliehriat (PG) Khliehriat (PG) Khliehriat (PG) Khliehriat (ME) NEHU NEIGRIHMS	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping Distance Backup protection No tripping	132 kV Khliehria all Main Protect Not applicable Not applicable Not applicable Not applicable Not applicable Not applicable Not Furnished Not Furnished	t (MeECL) surive relays to b No No No No No No No	MW) ab station be put into ser No No No No No No	vice. After that. Loss of Load: 42	, tower footin	ng resistance to be 5/12/2016 17:48 5/12/2016 17:49 5/12/2016 15:02	checked and No SPS No SPS No SPS	0.003
128	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS	Non availability Station earthing than 10 ohm, pro POWERGRID MePTCL MePTCL Yes Khliehriat area of Byrnihat (132 k') line was under e	of Main protection at Khliehriat (Meaper earthing to be 5/12/2016 14:56 5/12/2016 14:56 5/12/2016 14:56 of Meghalaya was W Khliehriat-Lummergency shutdo	on for all the connected with remsnong line, 132 bown from 10:00 Historian	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping Distance Backup protection No tripping est of NER Grid to kV Sarusajai-Umters on 11.05.16). A	132 kV Khliehria 131 Main Protect Not applicable Not applicable Not applicable Not applicable Not Furnished Not Furnished hrough 132 kV Kru I&II lines and at 14:56 Hrs on 12	t (MeECL) survive relays to be No	MW) ab station be put into ser No No No No No No Vo No Vo Khliehriat (Mara-Umtru II V Khlie	vice. After that. Loss of Load: 42 MePTCL) I & II &II lines kept o	GD-I lines and 2 pen for syste (MePTCL) 1	ng resistance to be 5/12/2016 17:48 5/12/2016 17:49	checked and No SPS No SPS No SPS 132 kV ICT II132 kV Must kV NEHU -	0.003 &II at
128	of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Khliehriat (PG) - Khliehriat (ME) I 132 kV Khliehriat (PG) - Khliehriat (ME) II 132 kV NEHU - NEIGRIHMS FIR by the constituent Brief Description of the	Non availability Station earthing than 10 ohm, pro POWERGRID MePTCL MePTCL Yes Khliehriat area of Byrnihat (132 k) line was under et NEIGRIHMS to	of Main protection at Khliehriat (Meaper earthing to be 5/12/2016 14:56 5/12/2016 14:56 5/12/2016 14:56 of Meghalaya was W Khliehriat-Lummergency shutdoripped. Due to trip	on for all the connected with remsnong line, 132 bown from 10:00 Historian	MW, पूर्ववृत्ता ले ected elements at to be rectified and footing also. DP, ZI, R-Y-B No tripping DP, ZI, R-Y-B No tripping Distance Backup protection No tripping est of NER Grid to kV Sarusajai-Umtras on 11.05.16). A ments, Khleihriat	132 kV Khliehria all Main Protect Not applicable Not applicable Not applicable Not applicable Not Furnished Not Furnished Not Furnished Through 132 kV Kru L&II lines and at 14:56 Hrs on 12 area was separate	No N	No No No No No No No Vo No	vice. After that. Loss of Load: 42 MePTCL) I & II &II lines kept o	GD-I lines and 2 pen for syste (MePTCL) 1	ng resistance to be 5/12/2016 17:48 5/12/2016 17:49 5/12/2016 15:02 x 160 MVA, 220/1 m requirement & 1 & II lines & 132	checked and No SPS No SPS No SPS 132 kV ICT II132 kV Must kV NEHU -	0.003 &II at

			List of	Grid Disturba	nces in North	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	nt (MeECL) su	ıb station					
	Remedial Measures	_		eECL) sub station be done for tower t		l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footir	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-E No tripping	Not Furnished Not Furnished	No No	No No			5/15/2016 21:00	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-E No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load:		5/15/2016 21:01	No SPS	
	132 kV Mustem-Khliehriat	MePTCL	5/15/2016 20:38	Mustem Khliehriat	No tripping General Trip	Not Furnished Not Furnished	No No	No No	32	GD-I	5/15/2016 21:40	No SPS	0.003
	132 kV NEIGRIHMS - Khliehriat (ME)	MePTCL		NEIGRIHMS Khliehriat	Earth Fault No tripping	Not Furnished Not Furnished	No No	No No			5/15/2016 20:40	No SPS	
	Leshka U 1	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of	1	5/15/2016 21:01	No SPS	0.038
120	Leshka U 2	MePGCL		Leshka	o	Not applicable	No	No	Generation:		5/15/2016 21:01	No SPS	
129											x 160 MVA, 220/1		
	Incident	,132 kV Khliehr	riat (PG)-Khliehri		II lines132 kV M	ustem-Khliehriat	& 132 kV NI	EIGRIHMS -	Khliehriat (ME		d. Due to tripping		
	Antecedent Conditions of NER Grid		•	Generation: 1836	•	•							
	Restoration Details												
	Root Cause			on for all the conn									
	Remedial Measures			eECL) sub station be done for tower to		l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footir	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	DP, ZI, R-Y- E,16 Kms.	Not Furnished	No	No			5/16/2016 5:14	No SPS	
	132 kV Khliehriat (PG) -	MePTCL		Khliehriat (PG)	No tripping DP, ZI, R-Y-B- E,9.6 Kms.	Not Furnished Not Furnished	No No	No No			5/16/2016 5:14	No SPS	
	Khliehriat (ME) II	MICI TCL		Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of		5/10/2010 5.14	100313	0.002
	132 kV Mustem-NEHU	MePTCL	5/16/2016 3:50	Mustem	N Phase, Master trip relay operated	Not Furnished	No	No	Load: 22	GD-I	5/16/2016 3:55	No SPS	0.002

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	uring Janı	1ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
				NEHU	No tripping	Not Furnished	No	No					
	132 kV NEIGRIHMS -	MePTCL		NEIGRIHMS	Earth Fault	Not Furnished	No	No]		5/16/2016 3:55	No SPS	
	Khliehriat (ME)			Khliehriat	No tripping	Not Furnished	No	No					
130	Leshka U 1	MePGCL	ļ	Leshka	Tripped due to	Not applicable	No	No	Loss of		5/16/2016 5:56	No SPS	
	AGBPP U 3	NEEPCO		AGBPP	evacuation	Not applicable		3.7	Generation:		5/19/2016 18:08	M. ana	0.176
	Leshka U 2 FIR by the constituent	MePGCL Yes		Leshka	problem(Relay	Not applicable	No	No	84		5/16/2016 6:47	No SPS	
	Brief Description of the Incident Antecedent Conditions of NER Grid	Byrnihat (132 k ² 16.05.16 ,132 k ² elements, Khleil	V Panchgram-Lui V Khliehriat (PG) hriat area was sep	mnsnong line,132)-Khliehriat (MeP parated from rest o	est of NER Grid th kV Sarusajai-Um TCL) I & II lines, of NER Grid and so MW, पूर्ववृत्ता ल	tru I&II lines and 132 kV Mustem-Nubsequently colla	132 kV Kahil NEHU & 132 psed due to lo	lipara-Umtru kV NEIGRI ad generation	I&II lines kept HMS - Khliehri	open for syst	em requirement).	At 03:50 Hrs	on
	Restoration Details	., .			., -								
	Root Cause	Non availability	of Main protection	on for all the conr	nected elements at	132 kV Khliehria	nt (MeFCL) su	ıh station					
	Remedial Measures	Station earthing	at Khliehriat (Mo		to be rectified and footing also.				vice. After that	, tower footir	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	5/16/2016 15:28	Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y- E,11.43 Kms. No tripping	Not Furnished Not Furnished	Yes No	No No			5/16/2016 16:19	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y- E,15.95 Kms.	Not Furnished Not Furnished	Yes No	No No	Loss of Load: 8 & Loss of	GD-I	5/16/2016 16:18	No SPS	0.006
	Leshka U 2	MePGCL	5/16/2016 15:31	Leshka	Tripped due to evacuation problem(86A, 86B, 86FT operated)	Not applicable	No	No	Generation: 41	<i>συ</i> -1	5/16/2016 15:40	No SPS	0.006
131	FIR by the constituent	Yes			· r · · · · · · · /		1		•				
	Brief Description of the Incident	Khliehriat area of tripped at 15:28 At 15:31 Hrs on	Hrs on 16.05.16, 16.05.16 ,132 kV	132 kV Panchgra	rest of NER Grid the nm-Lumnsnong lin Khliehriat (MePT match.	e & 132kV Khlie	hriat-Mustem	line and 132	kV NEIGRIHM	IS-Khliehriat	line were under e	mergency sh	utdown).

			List of	Grid Disturba	nces in North	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1855	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1331 N	ЛW)					
	Restoration Details												
	Root Cause	Non availability of Main protection for all the connected elements at 132 kV Khliehriat (MeECL) sub station Station earthing at Khliehriat (MeECL) sub station to be rectified and all Main Protective relays to be put into service. After that, tower footing resistance to be checked and if greater than 10 ohm, proper earthing to be done for tower footing also.											
	D 11.174											checked and	if greater
	Remedial Measures	than 10 ohm, pr	oper earthing to b	e done for tower f	footing also.								
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	5/16/2016 17:37	Khliehriat (PG)	DP, ZI, B- E,36.97 Kms.	Not Furnished	Yes	No			5/16/2016 21:35	No SPS	
	Killiellilat (WL) II			Khliehriat(ME)	No tripping	Not Furnished	No	No					
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID	5/16/2016 17:38	Khliehriat (PG)	DP, ZI, B- E,23.48 Kms.	Not Furnished	Yes	No	Loss of Load:		5/16/2016 21:25	No SPS	0.003
	1111101111111 (1112) 1			Khliehriat(ME)	No tripping	Not Furnished	No	No	16				0.003
	132 kV Leshka -	MePTCL		Leshka	DP, ZI, B-E	Not Furnished	No	No		GD-I	5/16/2016 17:42	No SPS	
	Khleihriat (ME) I	WEI TEE		Khliehriat (ME)	No tripping	Not Furnished	No	No			3/10/2010 17:42	110 51 5	
	132 kV Leshka - Khleihriat (ME) II	MePTCL	5/16/2016 17:38	Leshka Khliehriat (ME)	DP, ZI, B-E No tripping	Not Furnished Not Furnished	No No	No No			5/16/2016 17:42	No SPS	
	Leshka U 1	MePGCL	1	Leshka	Tripped due to	Not applicable	No	No	Loss of	1	5/16/2016 17:48	No SPS	
	AGBPP U 3	NEEPCO	1	AGBPP	evacuation	Not applicable			Generation:		5/19/2016 0:00		0.014
132	Leshka U 2	MePGCL	1	Leshka	problem(86A,	Not applicable	No	No	84		5/16/2016 17:48	No SPS	1
	FIR by the constituent	Yes							-				
	Brief Description of the Incident	tripped at 17:37 At 17:38 Hrs on	Hrs on 16.05.16, 16.05.16 ,132 k	132 kV Panchgra V Khliehriat (PG)-	m-Lumnsnong lin	ie & 132kV Khlie CL) I line,132 kV	hriat-Mustem / Leshka - Kh	line and 132 leihriat (ME)	kV NEIGRIHM I&II lines tripp	IS-Khliehria	liehriat (PG)-Khlid t line were under e ripping of these ele	mergency sh	utdown).
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1863	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1574 N	MW)					
	Restoration Details												
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	t (MeECL) su	ıb station					
	Remedial Measures			eECL) sub station se done for tower t		l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footii	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	DP, ZI, B-E,21 Kms.	Not Furnished	No	No			5/16/2016 23:17	No SPS	
	(1.12) 1		5/16/2016 22:02	Khliehriat(ME)	No tripping	Not Furnished	No	No	j				j

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	3/10/2010 22.02	Khliehriat (PG)	DP, ZI, B-E,14 Kms.	Not Furnished	No	No	Loss of Load:		5/16/2016 23:20	No SPS	
	Tunionilat (NIE) II			Khliehriat(ME)	No tripping	Not Furnished	No	No	10				0.001
				NEHU	Not Furnished	Not Furnished	No	No	10	GD-I			
	132 kV NEHU - NEIGRIHMS	MePTCL	5/16/2016 22:02	NEIGRIHMS	Distance protection,186A &186B operated	Not Furnished	No	No		GD 1	5/16/2016 22:08	No SPS	
	Leshka U 1	MePGCL		Leshka	Tripped due to	Not applicable	No	No	Loss of		5/16/2016 23:09	No SPS	
100	AGBPP U 3	NEEPCO		AGBPP	evacuation	Not applicable			Generation:		5/19/2016 18:08		0.031
133	Leshka U 2	MePGCL		Leshka	problem(86A,	Not applicable	No	No	48		5/16/2016 23:09	No SPS	
	FIR by the constituent	Yes		Desima		r tot appricable	110	110			2710/2010 22:07	110 51 5	
	Brief Description of the Incident Antecedent Conditions	Byrnihat (132 k ¹ Kahilipara-Umtı Khliehriat (MeP subsequently co	V Khliehriat (PG ru I&II lines kept TCL) I&II lines a llapsed due to loa)-Khliehriat (MeP open for system r and 132 kV NEHU ad generation mism		ed at 17:37 Hrs or kV Khliehriat-M ine tripped. Due	n 16.05.16, 13 ustem line wa to tripping of	2 kV Panchg s under emer these element	ram-Lumnsnong gency shutdowr	g line,132 kV i). At 22:02 I	⁷ Sarusajai-Umtru Hrs on 16.05.16 ,1	I&II lines an 32 kV Khliel	d 132 kV nriat (PG)-
	of NER Grid	., .			MW , पूर्ववृत्ता ल								
	Root Cause	Non availability	of Main protecti	on for all the conn	ected elements at	132 kV Khliehria	at (MeECL) su	ıb station					
	Remedial Measures	_		eECL) sub station be done for tower f	to be rectified and footing also.	l all Main Protect	ive relays to b	e put into ser	vice. After that	tower footing	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	DP, ZI, R-B- E,11.6 Kms.	Not Furnished	No	No			5/17/2016 2:57	No SPS	
	iximemiat (IVIL) I		5/17/2016 2:32	Khliehriat(ME)	No tripping	Not Furnished	No	No	Loss of Load:	GD-I			0.012
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	5,17,2010 2.52	Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-B-E,7 Kms. No tripping	Not Furnished Not Furnished	No No	No No	28	<i>SD</i> 1	5/17/2016 2:59	No SPS	0.012
	Leshka U 1	MePGCL		Leshka	Tripped due to	Not applicable	No	No	Loss of		5/17/2016 3:25	No SPS	
	AGBPP U 3	NEEPCO	5/17/2016 2:32	AGBPP	evacuation	Not applicable	110	110	Generation:		1/0/1900 0:00	110 01 0	0.061
	Leshka U 2	MePGCL	5/11/2010 2.32	Leshka	problem(86A,	Not applicable	No	No	70		5/17/2016 3:25	No SPS	0.001
134	FIR by the constituent	Yes		Lesina	1 (,	1 tot applicable	110	110			5,11,2010 3.23	110 01 0	
134	ran by the constituent	1 09											

			List of	Grid Disturba	ances in North-	Eastern Regio	onal Grid d	luring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Brief Description of the Incident	Sarusajai-Umtru 02:32 Hrs on 17	I&II lines, 132 k .05.16 ,132 kV K	kV Kahilipara-Um	tru I&II lines ,132 nliehriat (MePTCL	kV Khliehriat-N	EIGRIHMS li	ine & 132 kV	Khliehriat-Mu	stem line we	kV Panchgram-Lu re kept open for sy was separated fron	stem require	ment). At
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation : 1519	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	Load : 1186 N	MW)					
	Root Cause	Non availability	of Main protecti	on for all the conn	nected elements at	132 kV Khliehria	ıt (MeECL) su	ıb station					
	Remedial Measures	_		eECL) sub station be done for tower	footing also.	l all Main Protect	ive relays to b	e put into ser	vice. After that	, tower footii	ng resistance to be	checked and	if greater
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG)	DP, ZI, Y-B- E,82.5 Kms.	Not Furnished	No	No			6/6/2016 12:04	No SPS	
	` '			Khliehriat(ME)	No tripping	Not Furnished	No	No					
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG)	DP, ZI, Y-B- E,103.3 Kms.	Not Furnished	No	No	Loss of Load:		6/6/2016 12:05	No SPS	0.003
	` '			Khliehriat(ME)	No tripping	Not Furnished	No	No	26				
	132 kV NEHU -	MePTCL	6/6/2016 11:36	NEHU	No tripping	Not Furnished	No	No	4	GD-I	6/6/2016 11:42	No SPS	
	NEIGRIHMS			NEIGRIHMS	Earth Fault	Not Furnished	No	No	4				
	132 kV NEIGRIHMS -	MePTCL		NEIGRIHMS	No tripping	Not Furnished	No	No	4		6/6/2016 11:42	No SPS	
	Khliehriat (ME)			Khliehriat	Earth Fault	Not Furnished	No	No					
135	Leshka U 2	MePGCL		Leshka	86C, 86FT, No other indication available	Not applicable	No	No	Loss of Generation: 35		6/6/2016 11:49	No SPS	0.008
	FIR by the constituent	Yes											
	Brief Description of the Incident	Byrnihat (132 k' requirement). A	V Khliehriat-Lun at 11:36 Hrs on 0	nnsnong line,132 l 6.06.16 ,132 kV K	kV Nangalbibra-N Khliehriat (PG)-Kh	ongstoin line,132 liehriat (MePTCI	kV Sarusajai L) I & II lines,	-Umtru I&II , 132 kV NEI	lines and 132 k GRIHMS - NEI	V Kahilipara HU line & 1	x 160 MVA, 220/. -Umtru I&II lines 32 kV NEIGRIHN generation mismat	kept open for IS - Khliehria	system
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration: 1627	MW , Anteceden	nt Load : 1584 MV	W)							
	Root Cause												
	Remedial Measures												
	120 kW Khliahriat (DC)			Khliehriat (PG)	No tripping	Not applicable	No	No]	I			

			List of	Grid Disturba	nces in North	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Khliehriat (ME) I	POWERGRID		Khliehriat(ME)	Master Trip Relay operated	Not applicable	No	No			6/9/2016 1:05	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL	6/9/2016 0:45	Khliehriat (PG) Khliehriat(ME)	No tripping Over Current,R- Ph	Not applicable Not applicable	No No	No No	Loss of Load: 12	GD-I	6/9/2016 1:10	No SPS	0.039
	132 kV Mustem-Khliehriat	MePTCL		Mustem Khliehriat	Tripped No tripping	Not applicable Not applicable	No No	No No	1		6/9/2016 1:50	No SPS	
	132 kV NEIGRIHMS - Khliehriat (ME)	MePTCL		NEIGRIHMS Khliehriat	Tripped No tripping	Not applicable Not applicable	No No	No No			6/9/2016 2:00	No SPS	
136	Leshka U 1	MePGCL		Leshka	Over Frequency	Not applicable	No	No	Loss of		6/9/2016 3:53	No SPS	
136	Leshka U 2	MePGCL	6/9/2016 0:45	Leshka	Over Frequency	Not applicable	No	No	Generation:		6/9/2016 2:01	No SPS	0.16
	Leshka U 3	MePGCL		Leshka	Over Frequency	Not applicable	No	No	126		6/9/2016 2:01	No SPS	
	FIR by the constituent	Yes											
	Brief Description of the Incident	Byrnihat (132 k ^v requirement). A	V Khliehriat-Lun at 00:45 Hrs on 0	nnsnong line,132 k 9.06.16 ,132 kV K	est of NER Grid th CV Nangalbibra-N Chliehriat (PG)-Kh at area was separa	ongstoin line,132 liehriat (MePTCI	kV Sarusajai L) I & II lines,	-Umtru I&II l 132 kV Mus	ines and 132 kt tem-Khliehriat	/ Kahilipara- & 132 kV N	-Umtru I&II lines EIGRIHMS - Kh	kept open for	system
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1969	MW , Anteceden	t Load : 1997 M	W)							
	Root Cause												
	Remedial Measures												
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	No tripping No Indication	Not Furnished Not Furnished	No No	No No	Loss of Load:	CD I	6/12/2016 12:32	No SPS	0.002
	132 kV Khliehriat (PG) -	M DEGI		Khliehriat (PG)	No tripping	Not Furnished	No	No	59	GD-I	6/10/2016 10 25	M. GDG	0.002
	Khliehriat (ME) II	MePTCL	6/12/2016 12:20		Earth Fault	Not Furnished	No	No	1		6/12/2016 12:35	No SPS	
	Leshka U 1	MePGCL]	Leshka		Not applicable	No	No	Loss of		6/12/2016 13:39	No SPS	
	Leshka U 2	MePGCL]	Leshka	86ABC, 86FT	Not applicable	No	No	Generation:		6/12/2016 12:42	No SPS	0.046
	Leshka U 3	MePGCL		Leshka		Not applicable	No	No	126		6/12/2016 13:09	No SPS	
137	FIR by the constituent	Yes			•	• • •		•	•	•	•	•	
	Brief Description of the Incident	Umiam-Umiam	Stg I line & 132	kV NEHU-Mawla	est of NER Grid the si line were kept of at area was separa	pen for system re	quirement). A	t 12:20 Hrs o	n 12.06.16 ,132	kV Khliehri	at (PG)-Khliehria		

			List of	Grid Disturba	nces in North-	Eastern Regi	onal Grid d	luring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1819	MW , Anteceden	t Load : 1577 MV	W)							
	Root Cause												
	Remedial Measures												
	132 kV Khliehriat (PG) - Khliehriat (ME) I	POWERGRID		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No			6/26/2016 17:15	No SPS	
	132 kV Khliehriat (PG) - Khliehriat (ME) II	MePTCL		Khliehriat (PG) Khliehriat(ME)	DP, ZI, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No			6/26/2016 17:23	No SPS	
	132 kV Umiam St I - Umiam St III I	MePTCL		Umiam St I	DP, Z-I, Y-E, 13.70 Kms.	Not Furnished	No	No			6/26/2016 16:59	No SPS	
	Cimani St III I			Umiam St III	Not Furnished	Not Furnished	No	No					
	132 kV Umiam St I - Umiam St III II	MePTCL	6/26/2016 16:52	Umiam St I	DP, Z-I, Y-E, 15.98 Kms.	Not Furnished	No	No	Loss of Load: 113	GD-I	6/27/2016 16:00	No SPS	0.011
	O 111 11 11 11 11 11 11 11 11 11 11 11 1			Umiam St III	Not Furnished	Not Furnished	No	No					
	132 kV Mustem-Khliehriat	MePTCL		Mustem Khliehriat	Not Furnished DP, Z-III, R-Y-B-E, 84.34 Kms.	Not Furnished Not Furnished	No No	No No			6/26/2016 17:06	No SPS	
	132 kV NEIGRIHMS -		1	NEIGRIHMS	Earth Fault	Not applicable	No	No	1				1
	Khliehriat	MePTCL		Khliehriat	Not Furnished	Not applicable	No	No	1		6/26/2016 17:10	No SPS	
	Umiam Stg I U 2	MePGCL		Umiam Stg I	Generator O/C, Under Voltage 86C.	Not applicable	No	No			6/26/2016 17:10	No SPS	
	Umiam Stg I U 3	MePGCL		Umiam Stg I	Generator O/C, Under Voltage 86C.	Not applicable	No	No			6/26/2016 17:06	No SPS	
138	Umiam Stg I U 4	MePGCL		Umiam Stg I	Generator O/C, Under Voltage 86C.	Not applicable	No	No	Loss of		6/26/2016 17:15	No SPS	
	Umiam Stg II U 1	MePGCL	6/26/2016 16:52	Umiam Stg II	MTR, OCR, 51T.	Not applicable	No	No	Generation: 145	GD-I	6/26/2016 17:09	No SPS	0.034
	Umiam Stg II U 2	MePGCL		Umiam Stg II	MTR, OCR, 51T.	Not applicable	No	No			6/26/2016 17:16	No SPS	

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	बहाली / Date and time of	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Leshka U 1	MePGCL		Leshka	86A, 86B, 86FT.	Not applicable	No	No			6/26/2016 18:44	No SPS	
	Leshka U 2	MePGCL		Leshka	86A, 86B, 86FT.	Not applicable	No	No			6/26/2016 17:31	No SPS	
	Leshka U 3	MePGCL		Leshka	86A, 86B, 86FT.	Not applicable	No	No			6/26/2016 18:28	No SPS	
	FIR by the constituent	Yes											
	Rrief Description of the	lines,132 kV Kl kV Nangalbibra Mustem, 132 kV	nliehriat (ME) - M -Nongstoin lines V NEIGRIHMS -	fustem, 132 kV N kept open for syst Khliehriat (ME) l	&II loads and Mer EIGRIHMS - Khli em requirement). ine and 132 kV Un r area was separato	iehriat (ME) line At 16:52 Hrs on 2 miam St I - Umia	and 132 kV U 26.06.16,132 k m St III I & II	miam St I - U V Khliehriat lines tripped	Jmiam St III I & (PG) - Khliehr . Due to trippin	Il lines (132) iat (ME) I & g of these ele	2 kV Khliehriat-L II lines,132 kV Kl ments, Meghalaya	umnsnong lin hliehriat (ME	ne & 132 (1) -
	Antecedent Conditions of NER Grid	(Antecedent Go	eneration : 1915	MW , Anteceden	t Load : 1763 MV	W)	_	_		_		_	_
	Root Cause												
	Remedial Measures												

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV EPIP II - Byrnihat I	MePTCL		EPIP II	Not Furnished	Not Furnished	No	No			6/12/2016 20:46	No SPS	
	,	WICH TEL		Byrnihat	DP, ZI, B-E	Not Furnished	No	No			0/12/2010 20.40	110 51 5	
	132 kV EPIP II - Byrnihat	MePTCL		EPIP II	Not Furnished	Not Furnished	No	No			6/12/2016 20:46	No SPS	
	II			Byrnihat		Not Furnished	No	No	Loss of Load:	GD-I			0.011
	132 kV NEIGRIHMS -	MePTCL		NEIGRIHMS		Not applicable	No	No	112		6/12/2016 14:24	No SPS	
	Khliehriat (ME)		-	Khliehriat	Earth Fault	Not applicable	No	No					
	132 kV Mustem-Khliehriat	MePTCL		Mustem Khliehriat	Not Furnished Over current	Not applicable Not applicable	No No	No No			6/12/2016 14:24	No SPS	
	Umiam Stg I U 2	MePGCL	6/12/2016 14:19	Umiam Stg I	Generation Over Current	Not applicable	No	No			6/12/2016 14:45	No SPS	
	Umiam Stg I U 3	MePGCL	1	Umiam Stg I	Generation Over Current	Not applicable	No	No	Loss of		6/12/2016 14:46	No SPS	
139	Umiam Stg II U 1	MePGCL		Umiam Stg II	MTR, OCR, 51T	Not applicable	No	No	Generation: 57		6/12/2016 14:45	No SPS	0.023
	Umiam Stg IV U 2	MePGCL		Umiam Stg IV	ELO, NELO, Negative phase sequence	Not applicable	No	No			6/12/2016 14:43	No SPS	
	FIR by the constituent	Yes			•		-	-	-	-	-	•	
	Brief Description of the Incident	Mustem-Khlieh kV Kahilipara-U kV EPIP II - By	riat line and 132 l Jmtru I&II lines k rnihat I&II lines t	kV EPIP II - Byrni kept open for syste cripped. Due to trip	ong area and Mend ihat I&II lines (132 cm requirement). A poping of these element the generation mismat	2 kV Khliehriat-L At 14:19 Hrs on 1 nents, Meghalaya	Lumnsnong lin 2.06.16 ,132	ne,132 kV Na kV NEIGRIF	ngalbibra-Nong IMS - Khliehria	gstoin line,13 at (ME) line,1	2 kV Sarusajai-Ur 132 kV Mustem-K	ntru I&II line hliehriat line	and 132 and 132
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1891	MW , Anteceden	t Load : 1478 MV	W)							
	Root Cause												
	Remedial Measures												
	132 kV Mustem-NEHU	MePTCL		Mustem	Master Trip Relay Operated	Not Furnished	No	No			6/16/2016 23:06	No SPS	
	122 1 1/ METODII 1/ C		4	NEHU	No tripping	Not Furnished	No	No					
	132 kV NEIGRIHMS - Khliehriat	MePTCL		NEIGRIHMS Whitehriet	No tripping	Not Furnished	No No	No No			6/16/2016 23:06	No SPS	
I	Killieliitat		J l	Khliehriat	Earth Fault	Not Furnished	NO	NO	J	I			

			List of	Grid Disturba	nces in North-	Eastern Regio	nal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV EPIP II - Byrnihat I	MePTCL		EPIP II	Backup Overcurrent Relay Operated	Not Furnished	No	No	Loss of Load: 118	GD-I	6/16/2016 23:08	No SPS	0.004
	132 kV EPIP II - Byrnihat	MePTCL	6/16/2016	Byrnihat EPIP II	Not Furnished Backup Overcurrent Relay Operated	Not Furnished Not Furnished	No No	No No			6/16/2016 23:08	No SPS	
	11		23:04	Byrnihat	Not Furnished	Not Furnished	No	No					
	Umiam Stg IV U 1	MePGCL		Umiam Stg IV	O/C, in excitation system, 86FT.	Not applicable	No	No			6/16/2016 23:34	No SPS	
140	Umiam Stg IV U 2	MePGCL		Umiam Stg IV	O/C, in excitation system, 86FT.	Not applicable	No	No	Loss of Generation: 84	GD-I	6/16/2016 23:28	No SPS	0.034
	Umiam Stg I U 2	MePGCL		Umiam Stg I	Generator O/C, 86ABC.	Not applicable	No	No	04		6/16/2016 23:30	No SPS	
	Umiam Stg I U 3	MePGCL		Umiam Stg I	Generator O/C, 86ABC.	Not applicable	No	No			6/16/2016 23:35	No SPS	
	Umiam Stg II U 1	MePGCL	6/16/2016 23:04	Umiam Stg II	MTR, OCR	Not applicable	No	No			6/16/2016 23:32	No SPS	
	FIR by the constituent	Yes											
	Brief Description of the Incident	132 kV EPIP II II lines kept ope	system except Khliehriat and Mendipathar area was connected with rest of NER Grid through 132 kV NEHU- Mustem, 132 kV NEIGRIHMS - Khliehriat (ME) line and P II - Byrnihat I & II lines (132 kV Khliehriat-Lumnsnong line,132 kV Nangalbibra-Nongstoin line, 132 kV Sarusajai-Umtru I & II lines and 132 kV Kahilipara-Umtru I & open for system requirement). At 23:04 Hrs on 16.06.16, 132 kV NEIGRIHMS - Khliehriat (ME) line, 132 kV Mustem-NEHU line and 132 kV EPIP II - Byrnihat I&II l. Due to tripping of these elements, Meghalaya system except Khliehriat and Mendipathar area was separated from rest of NER Grid and subsequently collapsed due to										
	Antecedent Conditions of NER Grid	(Antecedent G	eneration : 2120	MW , Anteceden	t Load : 1884 MV	W)							
	Root Cause												
	Remedial Measures												

			List of	Grid Disturba	ances in North-	Eastern Regio	nal Grid d		ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator		सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	output furnished within 24	लाड आर उत्पादन की हानि) / Effect (Loss of Load &	श्रणा सीईए ग्रिड मानकों के	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU

			List of G	Grid Disturba	ances in Nor	th-Eastern Re	gional Grid	d during Ja	anuary 2016						
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU		
				Agia	Not Furnished	Not Furnished	No	No	Loss of Load:	an 1					
	132 kV Agia - Medipathar	MePTCL	1/29/2016 18:30	Medipathar	Not	Not Furnished	No	No	15	GD-I	1/29/2016 18:40	No SPS	0.003		
	FIR by the constituent	No			,	1					1				
141		Medipathar line	Medipathar Furnished No												
	of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 17	/15 MW , पूर्ववृ	त्ता लोड/ Anteced	lent Load : 2	127 MW)							
	Restoration Details			1		aya at 18:40 Hrs o		U	V Agia - Medipa	athar line.					
						& Medipathar(Me	PTCL) for an	alysis.							
	Remedial Measures	Measures after i	dentification of r	oot cause of the		I			1		Ī				
	132 kV Nangalbibra - Mendipathar	MePTCL	3/30/2016 21:50	Nangalbibra Mendipathar	DP, ZII, R-Y-B	Not Furnished Not Furnished	No No	No No	Loss of Load: 57	GD-I	3/30/2016 22:18	No SPS	0.026		
	FIR by the constituent	Yes		Wendipathar	110 tripping	1 tot I urmsneu	110	110			<u> </u>				
142	Brief Description of the Incident	Nangalbibra & I for system requi	-	0 Hrs on 30.03	.16, 132 kV Ag	gia - Medipathar l	_	_			V Nangalbibra-No a & Mendipathar	-			
	Antecedent Conditions of NER Grid	.,,			. ", "	त्ता लोड/ Anteced									
	Restoration Details		to Nangalbibra & were progressive		areas of Megha	laya at 22:18 Hrs	on 30.03.16 t	hrough 132 k	xV Agia - Mend	ipathar line.	All outgoing feed	ers from the a	ffected		
	Root Cause	Due to lightning	g fault in in the lin	ne or 132 kV A	gia-Mendipatha	ar line,132 kV Na	ngalbibra - M	endipathar lir	ne tripped.R-Y-	B faults seem	ns to be because of	lightning.			

	1		List of G	rid Disturba	ances in Nor	th-Eastern Re	gional Grid	d during Ja	anuary 2016		ı		
क्रम सं ख्या/ Sl. No.	tripping element/	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node			24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	लाड आर उत्पादन की हानि) / Effect (Loss of Load & Generation	श्रणा सीईए ग्रिड मानकों के	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU

			List of (Grid Disturb	ances in Noi	rth-Eastern R	egional Gri	d during J	anuary 2016	i			
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Lumshnong -	MePTCL &		Lumshnong	Earth Fault	Not applicable	No	No	Loss of Load:				
	Panchgram	AEGCL	3/4/2016 8:04	Panchgram	Earth Fault, Y-ph	Not applicable	No	No	14	GD-I	3/5/2016 23:21	No SPS	0.003
	FIR by the constituent	No											
143	Brief Description of the Incident	requirement) . A		4.03.16 ,132 kV	Lumshnong -	_		-			g - Khliehriat line ea was separated		-
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 11	03 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	472 MW)					
						s on 04.03.16 thro		umshnong -	Khlileriat line.				
						nchgram line trip							
	Remedial Measures	Vegetation clear	ance and frequer	nt petrolling to b	be done by MeI	PTCL & AEGCL.							

			List of	Grid Disturb	ances in North	-Eastern Regi	ional Grid o	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Aizwal -	DOW/ED CD ID	3/31/2016 16:21	Aizawl	Not Furnished	Not Furnished	No	No			2/21/2016 16:50	No SPS	
	Kumarghat	POWERGRID	3/31/2016 16:21	Kumarghat	DP, ZII, Y-E	Not Furnished	No	No			3/31/2016 16:59	NO 5P5	
	132 kV Aizwal - Kolasib	POWERGRID	3/31/2016 16:24	Aizawl Kolasib	DP, ZI, B-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 40	GD-I	3/31/2016 18:33	No SPS	0.039
	132 kV Jiribam - Aizwal	POWERGRID	3/31/2016 16:26	Jiribam	Not Furnished	Not Furnished	No	No	70		3/31/2016 17:09	No SPS	
1 !				Aizawl	DP, ZII, B-E	Not Furnished	No	No					
144	FIR by the constituent	No	Aizawl DP, ZII, B-E Not Furnished No No										
	Brief Description of the Incident		Aizawl DP, ZII, B-E Not Furnished No										
	Antecedent Conditions of		llapsed due to no	source in this a	ırea.				t, Mizoram sysi	em was sepa	rated from rest of	NER GIIG an	id .
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	llapsed due to no न/ Antecedent (source in this a	_{urea.} 07 MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1751	MW)	t, Mizoram syst	em was sepa	rated from rest of	NEK Grid an	ld
	Antecedent Conditions of NER Grid Restoration Details	(पूर्ववृत्ता उत्पाद Power extended	allapsed due to no all Antecedent (to Aizwal(PG) a	source in this a Generation: 11 at 16:59 Hrs on 3	ırea.	ा लोड/ Anteceden	t Load : 1751	MW)	t, Mizoram syst	em was sepa	rated from rest of	NER Grid an	ld .
	Antecedent Conditions of NER Grid Restoration Details Root Cause	(पूर्ववृत्ता उत्पाद Power extended Due to lightning	ন/ Antecedent (to Aizwal(PG) a	Seneration: 11 at 16:59 Hrs on 3 near Aizwal	area. 07 MW , पूर्ववृ त्त 31.03.16 through I	ा लोड/ Anteceden 32 kV Aizwal - I	t Load : 1751 Kumarghat lin	e.					id .
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal -	(पूर्ववृ त्ता उत्पाद Power extended Due to lightning Tower footing a	ন/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati	source in this a Generation: 11 at 16:59 Hrs on 3 near Aizwal ion earth resistan Aizawl	nrea. 07 MW , पूर्ववृत्त 31.03.16 through I nce to be checked No tripping	। लोड/ Anteceden 32 kV Aizwal - I by POWERGRIE Not applicable	t Load : 1751 Kumarghat lin O & P&ED, M No	e. izoram. In ca			sster has to be kept	in place.	id .
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures	(पूर्ववृत्ता उत्पाद Power extended Due to lightning	ন/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati	Seneration: 11 at 16:59 Hrs on 2 near Aizwal ion earth resistan	nrea. 107 MW , पूर्ववृत्त 31.03.16 through leads to be checked No tripping DP, ZII, Y-E	उ kV Aizwal - I 32 kV Aizwal - I by POWERGRID Not applicable Not applicable	t Load : 1751 Kumarghat lin D & P&ED, M No Yes	e. izoram. In ca No Yes					d
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal -	(पूर्ववृ त्ता उत्पाद Power extended Due to lightning Tower footing a	न/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati 4/4/2016 7:14	source in this a Generation: 11 at 16:59 Hrs on 3 near Aizwal ion earth resistan Aizawl	nce to be checked No tripping DP, ZII, Y-E No tripping	32 kV Aizwal - I by POWERGRID Not applicable Not applicable Not applicable	t Load : 1751 Kumarghat lin O & P&ED, M No	e. izoram. In ca		ghtning, arre	sster has to be kept	in place.	
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat	(पूर्ववृत्ता उत्पाद Power extended Due to lightning Tower footing a POWERGRID	न/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati 4/4/2016 7:14	source in this a Generation: 11 at 16:59 Hrs on a near Aizwal ion earth resistan Aizawl Kumarghat Aizawl Zuangtui Jiribam	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E	32 kV Aizwal - I by POWERGRID Not applicable	t Load : 1751 Kumarghat lin D & P&ED, M No Yes No No No	e. izoram. In ca No Yes No No No	se of frequent li		ster has to be kept 4/4/2016 7:46	in place.	0.036
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui	(पूर्ववृत्ता उत्पाद Power extended Due to lightning Tower footing a POWERGRID	न/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati 4/4/2016 7:14	source in this a Generation: 11 at 16:59 Hrs on a near Aizwal ion earth resistan Aizawl Kumarghat Aizawl Zuangtui Jiribam Aizawl	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E No tripping	by POWERGRIE Not applicable	t Load : 1751 Kumarghat lin D & P&ED, M No Yes No No No No	e. izoram. In ca No Yes No No No	se of frequent li	ghtning, arre	4/4/2016 7:46 4/4/2016 7:55	in place. No SPS No SPS	
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui	(पूर्ववृत्ता उत्पाद Power extended Due to lightning Tower footing a POWERGRID	न/ Antecedent (to Aizwal(PG) a g, multiple stroke s well as substati 4/4/2016 7:14	source in this a Generation: 11 at 16:59 Hrs on a near Aizwal ion earth resistan Aizawl Kumarghat Aizawl Zuangtui Jiribam	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E	32 kV Aizwal - I by POWERGRID Not applicable	t Load : 1751 Kumarghat lin D & P&ED, M No Yes No No No	e. izoram. In ca No Yes No No No	se of frequent li	ghtning, arre	4/4/2016 7:46 4/4/2016 7:55	in place. No SPS No SPS	
145	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui	Power extended Due to lightning Tower footing a POWERGRID POWERGRID	The straight of the straight o	source in this a Generation: 11 at 16:59 Hrs on a mear Aizwal ion earth resistan Aizawl Kumarghat Aizawl Zuangtui Jiribam Aizawl Aizawl Aizawl	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E No tripping DP, ZI, Y-E No tripping	by POWERGRIE Not applicable	t Load : 1751 Kumarghat lin D & P&ED, M No Yes No No No No No	e. izoram. In ca No Yes No No No No No	se of frequent li	ghtning, arre	4/4/2016 7:46 4/4/2016 7:55 4/4/2016 7:40	in place. No SPS No SPS No SPS	
145	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui 132 kV Jiribam - Aizwal	Power extended Due to lightning Tower footing a POWERGRID POWERGRID POWERGRID POWERGRID No Mizoram system after tripping). A	### Antecedent (10 Aizwal(PG) are was connected at 07:14 Hrs on out of the Art of the Ar	source in this a Generation: 11 at 16:59 Hrs on 3 near Aizwal ion earth resistar Aizawl Kumarghat Aizawl Zuangtui Jiribam Aizawl Aizawl Kolasib with rest of NEI 04.04.16, 132	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E No tripping DP, ZI, Y-E No tripping	by POWERGRID Not applicable Not Furnished Not Furnished Vot Furnished	t Load : 1751 Kumarghat lin O & P&ED, M No Yes No No No No No No No No No N	e. izoram. In ca No Yes No No No No No No No No No N	se of frequent li Loss of Load: 57 bam - Aizwal l	ghtning, arre GD-I ine (132 kV	4/4/2016 7:46 4/4/2016 7:55 4/4/2016 7:50 4/4/2016 7:52 Aizwal - Kolasib I	in place. No SPS No SPS No SPS No SPS ine was not r	0.036
145	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui 132 kV Jiribam - Aizwal 132 kV Aizwal - Kolasib FIR by the constituent Brief Description of the	Power extended Due to lightning Tower footing a POWERGRID POWERGRID POWERGRID POWERGRID No Mizoram system after tripping). A separated from r	to Aizwal(PG) at multiple stroke swell as substati 4/4/2016 7:14 4/4/2016 7:14 4/4/2016 7:06 at was connected at 07:14 Hrs on test of NER Grid	source in this a Generation: 11 at 16:59 Hrs on a near Aizwal Aizawl Kumarghat Aizawl Zuangtui Jiribam Aizawl Aizawl Kolasib with rest of NEI 04.04.16, 132 and subsequent	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E No tripping PP, ZI, Y-E No tripping DP, ZI, R-E R Grid through 13 kV Aizwal - Kuma	by POWERGRIE Not applicable Not Furnished Not Furnished Very Aizwal - Ku Arghat line & 132 O no source in this	t Load : 1751 Kumarghat lin D & P&ED, M No Yes No No No No No No No No No N	e. izoram. In ca No Yes No No No No No No Ao Ao Atzwal line t	se of frequent li Loss of Load: 57 bam - Aizwal l	ghtning, arre GD-I ine (132 kV	4/4/2016 7:46 4/4/2016 7:55 4/4/2016 7:50 4/4/2016 7:52 Aizwal - Kolasib I	in place. No SPS No SPS No SPS No SPS ine was not r	0.036
145	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Aizwal - Kumarghat 132 kV Aizwal - Zuangtui 132 kV Jiribam - Aizwal 132 kV Aizwal - Kolasib FIR by the constituent Brief Description of the Incident Antecedent Conditions of	Power extended Due to lightning Tower footing a POWERGRID POWERGRID POWERGRID POWERGRID No Mizoram system after tripping). A separated from r (पूर्ववृत्ता उत्पाद	Illapsed due to no all Antecedent (1) to Aizwal(PG) at a multiple stroke is well as substation 4/4/2016 7:14 4/4/2016 7:14 4/4/2016 7:06 and was connected at 07:14 Hrs on the stroke of NER Grid all Antecedent (1) and the stroke of NER Grid all Antecede	source in this a Generation: 11 at 16:59 Hrs on a near Aizwal ion earth resistar Aizawl Kumarghat Aizawl Zuangtui Jiribam Aizawl Aizawl Kolasib with rest of NEI 04.04.16, 132 and subsequent Generation: 11	nce to be checked No tripping DP, ZII, Y-E No tripping Not Furnished DP, ZII, Y-E No tripping PP, ZI, Y-E No tripping DP, ZI, R-E R Grid through 13 kV Aizwal - Kum-	by POWERGRID Not applicable Not Furnished Not Furnished 2 kV Aizwal - Kuarghat line & 132 p no source in this also Anteceden	t Load : 1751 Kumarghat lin O & P&ED, M No Yes No No No No No No No No KV Jiribam - s area.	e. izoram. In ca No Yes No No No No No No Ai No	Loss of Load: 57 bam - Aizwal l	ightning, arre GD-I ine (132 kV Aripping of the	ster has to be kept 4/4/2016 7:46 4/4/2016 7:55 4/4/2016 7:52 Aizwal - Kolasib I ese elements, Mize	in place. No SPS No SPS No SPS No SPS ine was not roram system	0.036

			List of	Grid Disturb	oances in North	-Eastern Regi	onal Grid o	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Jiribam - Aizwal	POWERGRID		Jiribam	DP, ZII, B-E	Not applicable	No	No			6/27/2016 16:08	No SPS	
				Aizawl	Not Furnished	Not applicable	No	No					
	132 kV Aizwal - Kolasib	POWERGRID	6/27/2016 15:36	Aizawl Kolasib	Not Furnished DP, ZII, B-E	Not applicable Not applicable	No No	No No	Loss of Load: 58	GD-I	6/27/2016 16:18	No SPS	0.047
	132 kV Aizwal -	200000		Aizawl	Not Furnished	Not applicable	No	No	30			ana	1
	Kumarghat	POWERGRID		Kumarghat	DP, ZII, B-E	Not applicable	No	No	1		6/27/2016 17:50	No SPS	
1.46	FIR by the constituent	No											
146	Brief Description of the Incident	27.06.16, 132 kV	V Jiribam - Aizw	al line, 132 kV	R Grid through 132 Aizwal - Kolasib I tly collapsed due to	line and 132 kV A	izwal - Kuma						
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration: MW	, Antecedent l	Load: MW)								
	Root Cause												
	Remedial Measures												
	132 kV Aizwal - Kolasib	POWERGRID	1/9/2016 14:20	Aizawl Kolasib	Earth Fault No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load: 10& Loss of	GD-I	1/9/2016 14:57	No SPS	0.006
	132 kV Badarpur - Kolasib	POWERGRID	1/9/2010 14.20	Badarpur Kolasib	DP, ZIII, R-E No tripping	Not Furnished Not Furnished	No No	No No	Generation: 2		1/9/2016 14:50	No SPS	0.000
	FIR by the constituent	No											
147	Brief Description of the Incident	Badarpur line &		-Aizwal line trij	st of NER Grid thr pped. Due to trippi	•							
	Antecedent Conditions of NER Grid	., .			80 MW , पूर्ववृत्त								
	Restoration Details				4:50 Hrs on 09.01			Kolasib line.					
	Root Cause	Fault in 132 kV	Aizwal - Kolasib	line or downst	ream of kolasib du	ie to vegetation p	oblem.						
	Remedial Measures	Vegetation clear Mizoram and PC		by P&E Dept,	Mizoram and POV	VERGRID.Relay	settings of ko	lasib as well	as Mizoram dov	wnstream stat	tions has to be inv	estigated by l	P&E Dept,

			List of	Grid Disturb	ances in North	-Eastern Regi	onal Grid o	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Aizwal - Zuangtui	POWERGRID	2/24/2016 2:05	Aizawl	General Trip	Not Furnished	No	No	Loss of Load:	GD-I	2/24/2016 11:22	No SPS	0.191
	132 KV Alzwai - Zualigiui		2/24/2010 2.03	Zuangtui	Not Furnished	Not Furnished	No	No	19	GD-1	2/24/2010 11.22	110 51 5	0.191
	FIR by the constituent	No											
	Brief Description of the	•			est of NER Grid th	•	_						Due to
148	Incident	tripping of this e	element, Zuangtu	i area was sepa	rated from rest of N	NER Grid and sub	sequently col	lapsed due to	no source in th	is area.(Load	l loss in MU:0.191	.)	
	Antecedent Conditions of NER Grid				50 MW , पूर्ववृत्ता								
	Restoration Details				11:22 Hrs on 24.0								
	Root Cause				stream of Mizorar								
	Remedial Measures	Vegetation clear	ance to be done		ID and P&ED, Miz					ons of Mizora	ım to be checked l	by P&ED, M	izoram in
	132 kV Aizwal - Zuangtui	POWERGRID	3/14/2016 12:26	Aizawl Zuangtui	DP, ZII, R-Y-B No tripping	Not Furnished Not Furnished	No No	No No	Loss of Load: 30	GD-I	3/14/2016 13:59	No SPS	0.051
	FIR by the constituent	No											
	Brief Description of the				est of NER Grid th						Aizawl- Zuangtu	i line tripped.	Due to
1.40	Incident	tripping of this e	lement, Zuangtu	i area was sepa	rated from rest of N	NER Grid and sub	sequently col	lapsed due to	no source in th	is area.			
149	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 11	13 MW , पूर्ववृत्ता	लोड/ Anteceden	t Load : 1792	2 MW)					
	Restoration Details	Power extended	to Zuangtui area	of Mizoram at	13:59 Hrs on 14.0	3.16 through 132	kV Aizwal - Z	Zuangtui line					
	Root Cause	Due to lightning	in the line,132 k	V Aizwal - Zua	angtui line tripped.								
	Remedial Measures	Tower footing as	s well as substati		nce to be checked						ster has to be kep	in place.	
	132 kV Aizwal - Zuangtui	POWERGRID	3/28/2016 16:06	Aizawl Zuangtui		Not Furnished Not Furnished	No No	No No	Loss of Load: 46	GD-I	3/28/2016 16:34	No SPS	0.027
	FIR by the constituent	No											
	Brief Description of the	Zuangtui area of	Mizoram was co	onnected with r	est of NER Grid th	rough 132 kV Ai	zawl- Zuangtı	ui line. At 16:	:06 Hrs on 28.0	3.16, 132 kV	Aizawl- Zuangtu	i line tripped.	Due to
	Incident	tripping of this e	lement, Zuangtu	i area was sepa	rated from rest of N	NER Grid and sub	sequently col	lapsed due to	no source in th	is area.			
150	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 13	08 MW , पूर्ववृत्ता	लोड/ Anteceden	t Load : 2090) MW)					
	Restoration Details				16:34 Hrs on 28.0								
	Root Cause	Due to vegetatio	n problem in the	downstream M	lizoram system,132	2 kV Aizwal - Zua	angtui line trij	pped because	of non-clearan	ce of fault wi	thin Mizoram syst	em.	
	Remedial Measures	-	rance to be done here. The powerful to the contract of the con	•	ID and P&ED, Miz	zoram. Relay setti	ngs of Zuangt	tui and downs	stream substation	ons of Mizora	um to be checked l	py P&ED, M	izoram in

			List of	Grid Disturk	ances in North	ı-Eastern Regi	onal Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Aizwal - Zuangtui	POWERGRID	4/5/2016 20:27	Aizawl	DP, ZII, B-E	Not Furnished	No	No	Loss of Load:	GD-I	4/5/2016 20:43	No SPS	0.006
			4/3/2010 20:27	Zuangtui	Not Furnished	Not Furnished	No	No	34	GD 1	4/3/2010 20.43	110 51 5	0.000
	FIR by the constituent	No	: M:		est of NER Grid th		1.7	. 1 A / 20	27.1105.0	4.16. 122.137	. A 1 77	. 1	D
	Brief Description of the Incident				rated from rest of l						Aizawi- Zuangtu	i iine tripped.	Due to
151	Antecedent Conditions of NER Grid		_		99 MW , पूर्ववृ <i>त्</i> त			_	10 500100 111 11				
	Root Cause	Transient lighter	ning fault occure	d in downstrear	n Mizoram system	.As a result of no	n clearance of	fault within	Mizoram syster	n, 132 kV Ai	izwal - Zuangtui l	ine tripped.	
	Remedial Measures				nce to be checked ecked by P&ED, N				ase of frequent	ightning, arr	ester has to be kep	ot in place.Re	lay settings
	132 kV Aizwal - Zuangtui	POWERGRID	4/5/2016 21:24	Aizawl Zuangtui	, ,	Not Furnished Not Furnished	No No	No No	Loss of Load: 24	GD-I	4/5/2016 22:03	No SPS	0.019
	FIR by the constituent	No											
152	Brief Description of the Incident				est of NER Grid the rated from rest of l						Aizawl- Zuangtu	i line tripped.	Due to
132	Antecedent Conditions of NER Grid	·• -			36 MW , पूर्ववृत्त								
	Root Cause				n Mizoram system								
	Remedial Measures				nce to be checked ecked by P&ED, N	•			ase of frequent	ightning, arr	ester has to be kep	ot in place.Re	lay settings
	132 kV Aizwal - Zuangtui	POWERGRID	4/5/2016 22:26	Aizawl Zuangtui		Not Furnished Not Furnished	No No	No No	Loss of Load: 13	GD-I	4/5/2016 23:02	No SPS	0.015
	FIR by the constituent	No											
	Brief Description of the	-			est of NER Grid th	-	_				Aizawl- Zuangtu	i line tripped.	Due to
153	Incident	tripping of this e	element, Zuangtu	1 area was sepa	rated from rest of l	NER Grid and sub	sequently col	lapsed due to	no source in th	is area.			
	Antecedent Conditions of NER Grid	·* -			70 MW , पूर्ववृत्त		t Load : 1917	MW)					
	Root Cause	132 kV Aizwal	- Zuangtui trippe	ed to clear a fau	lt in 33 kV cable a	t state end.							
	Remedial Measures	Relay settings of	f downstream sul		oram to be checke			1				_	
	120 bW Airwal Zuanatui	DUMEDCDID	1/12/2016 21.51	Aizawl	DP, ZIII, B-E	Not Furnished	No	No	Loss of Load:	CD I	4/12/2016 22:17	No CDC	0.007

			List of	Grid Disturb	oances in North	-Eastern Regi	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 KV Alzwai - Zuangtui	POWEKOKID	4/12/2010 21.34	Zuangtui	No tripping	Not Furnished	No	No	16	OD-1	4/12/2010 22:17	NO 212	0.007
	FIR by the constituent	No	!		11 0	!			!		!		
	Brief Description of the											Due to	
154	Incident	tripping of this	element, Zuangtu	i area was sepa	rated from rest of I	NER Grid and sub	sequently col	lapsed due to	no source in th	is area.			
154	Antecedent Conditions of NER Grid	., .			77 MW , पूर्ववृ <i>त्</i> त								
	Root Cause	Due to vegetation	on problem in the	downstream M	Iizoram system,13	2 kV Aizwal - Zu	angtui line tri	pped because	of non-clearan	ce of fault wi	thin Mizoram sys	tem.	
	Remedial Measures	-	rance to be done h POWERGRID	•	ID and P&ED, Mi	•		tui and down		ons of Mizora	am to be checked	oy P&ED, Mi	zoram in
	132 kV Aizwal - Zuangtui	POWERGRID	4/16/2016 5:28	Aizawl Zuangtui	DP, ZII, R-Y-B Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 25	GD-I	4/16/2016 5:38	No SPS	0.005
	FIR by the constituent	No	L	<u>G</u>									
	Brief Description of the	Zuangtui area of	f Mizoram was c	onnected with r	est of NER Grid th	rough 132 kV Ai	zawl- Zuangt	ui line. At 05	:28 Hrs on 16.0	4.16, 132 kV	Aizawl- Zuangtu	i line tripped.	Due to
155	Incident				rated from rest of l								
155	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 13	871 MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1868	3 MW)					
	Root Cause	Due to lightning	g in the downstrea	am Mizoram sy	stem,132 kV Aizw	al - Zuangtui line	tripped becau	use of non-cle	earance of fault	within Mizor	ram system.		
	Remedial Measures				stations of Mizorar &ED, Mizoram. In					OWERGRID	.Tower footing as	well as subst	ation earth
	132 kV Aizwal - Zuangtui	POWERGRID	4/25/2016 12:21	Aizawl Zuangtui	DP, ZII, R-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 20	GD-I	4/25/2016 12:32	No SPS	0.008
	FIR by the constituent	No											
156	Brief Description of the Incident				est of NER Grid thrated from rest of l						Aizawl- Zuangtu	i line tripped.	Due to
	Antecedent Conditions of NER Grid	., .			20 MW , पूर्ववृत्त								
	Root Cause		•		lizoram system,13			• •					
	Remedial Measures	Vegetation clear	rance to be done	<u> </u>	ID and P&ED, Mi			•	1	ons of Mizora	am to be checked l	oy P&ED, Mi	zoram in
	132 kV Aizwal - Zuangtui	POWERGRID	5/1/2016 20:27	Aizawl Zuangtui		Not applicable Not applicable	No No	No No	Loss of Load: 48	GD-I	5/2/2016 0:14	No SPS	0.177
	FIR by the constituent	No											

			List of	Grid Disturb	ances in North	-Eastern Regi	onal Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Brief Description of the Incident				est of NER Grid thrated from rest of l						Aizawl- Zuangtu	i line tripped.	Due to
157	Antecedent Conditions of NER Grid		Ť	•	.61 MW , पूर्ववृत्त			•	no source in th	is area.			
	Root Cause				or the out going fee in downstream du					re found to b	e on higher side. S	Since line pas	sess mostly
	Remedial Measures	The over curren	t and earth fault r	elay settings fo	r the out going fee ance to be done by	ders at Zuangtui l	nave been revi			P&ED, Mizo	ram for implemen	tation. Status	to be
	132 kV Aizwal - Zuangtui	POWERGRID	5/2/2016 12:08	Aizawl Zuangtui		Not applicable Not applicable	No No	No No	Loss of Load: 16	GD-I	5/2/2016 14:04	No SPS	0.031
	FIR by the constituent	No		U	11 0						•		
	Brief Description of the Incident				est of NER Grid th rated from rest of l						Aizawl- Zuangtu	i line tripped.	Due to
158	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 13	313 MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1137	7 MW)					
	Root Cause				or the out going fee in downstream du					re found to b	e on higher side. S	Since line pas	sess mostly
	Remedial Measures				r the out going fee ance to be done by			ewed and co	mmunicated to	P&ED, Mizo	ram for implemen	tation. Status	to be
	132 kV Aizwal - Zuangtui	POWERGRID	5/10/2016 8:40	Aizawl Zuangtui	DP, ZII, B-E No tripping	Not applicable Not applicable	No No	No No	Loss of Load: 32	GD-I	5/10/2016 9:02	No SPS	0.017
	FIR by the constituent	No			and mapping	- var apparation							
	Brief Description of the Incident				est of NER Grid thrated from rest of I						Aizawl- Zuangtu	i line tripped.	Due to
159	Antecedent Conditions of NER Grid	् (पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 14	89 MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1579	OMW)					

			List of	Grid Disturb	ances in North	-Eastern Regi	onal Grid o	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause				or the out going fee in downstream du	_		_	-	re found to b	e on higher side. S	Since line pas	sess mostly
	Remedial Measures				r the out going feed ance to be done by	_						tation. Status	to be
	132 kV Aizwal - Zuangtui	POWERGRID	5/25/2016 19:46	Aizawl Zuangtui	R-Y Ph, Over Current No tripping	Not applicable Not applicable	Yes No	No No	Loss of Load: 37	GD-I	5/25/2016 20:54	No SPS	0.047
	FIR by the constituent	No				••							
160	Brief Description of the Incident				est of NER Grid th rated from rest of N						Aizawl- Zuangtu	i line tripped.	Due to
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 19	53 MW , पूर्ववृत्ता	लोड/ Anteceden	t Load : 1967	MW)					
	Root Cause				or the out going fee in downstream du	_		-	-	re found to b	e on higher side. S	Since line pas	sess mostly
	Remedial Measures				r the out going feed ance to be done by			ewed and cor	nmunicated to	P&ED, Mizo	ram for implemen	tation. Status	to be
	132 kV Aizwal - Zuangtui	POWERGRID	6/4/2016 18:32	Aizawl	DP, ZII, R-E, Distance not recorded	Not applicable	No	No	Loss of Load: 38	GD-I	6/4/2016 18:56	No SPS	0.019
	FID by the constituent	No		Zuangtui	Earth Fault	Not applicable	No	No	l		<u> </u>		
161	FIR by the constituent Brief Description of the		Mizoram was co	onnected with r	est of NER Grid th	rough 132 kV Air	zawl. Zuanoti	ıiline Δt 1Ω·	32 Hrs on 04 0	6 16 132 14	Aizawl- Zuangtu	i line trinned	Due to
101	Incident				rated from rest of N						7 112aw 1- Zualigiu	i iiic uippeu	. Duc 10
	Antecedent Conditions of NER Grid			*	lent Load : 2221 M			rest due to					
	Root Cause												
	Remedial Measures												

	1		List of	Grid Disturb	ances in North	-Eastern Regi	onal Grid o	during Jan	uary 2016	1	ı		
क्रम सं ख्या/ Sl. No.	tripping element/	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator		सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	आटा राक्लाजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	इ.एल. परा किया (हां / नहीं) / EL output furnished within 24	लाड आर उत्पादन की हानि) / Effect (Loss of Load &	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	समय या बहाली / Date and time of restoration provided by	एसपीएस संचालन के विवरण / Details of SPS Operation	in MU

			List of G	rid Disturba	nces in Nort	th-Eastern Re	gional Grid	l during Ja	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	122 LV D			Doyang	Over current	Not applicable	No	No	r cr i				
	132 kV Doyang - Mokokchung (NA)	DoP Nagaland	1/29/2016 18:28		Not Furnished	Not applicable	No	No	Loss of Load: 7	GD-I	1/29/2016 19:05	No SPS	0.002
	FIR by the constituent	No											
162	Brief Description of the	outage,132 kV N	Mokokchung (NA 016,132 kV Doya	A)-Mokokchung	g (PG) I & II lin	es were not resto	red after tripp	ing & 66 kV	- Tuengsang-Lik	imro line kep	ng(NA)-Marianai(ot open for system of NER Grid and s	requirement)	. At 18:28
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 16	86 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 2	171 MW)					
						on 29.01.16 thro							
						t Doyang. Phase -		eems the only	possibility if n	o earth fault i	relay operated.		
	Remedial Measures	Relay coordinate	ion to be done by			POWERGRID	& NEEPCO.						
	132 kV Doyang - Mokokchung (NA)	DoP Nagaland	2/8/2016 20:21	Doyang Mokokchung (NA)	DP, ZI, B-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 29	GD-I	2/8/2016 20:52	No SPS	0.02
	FIR by the constituent	No											
163	Brief Description of the	were under plan on 08.02.16, 132	ned shutdown,13	32 kV Mokokch okokchung (NA	ung (NA)-Mari) line tripped. I	ianai(AS) is unde	r long outage	& 66 kV Tue	ngsang-Likimr	o line kept op	ng (NA)-Mokokel en for system requ st of NER Grid and	irement). At	20:21 Hrs
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 18	35 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load: 2	274 MW)					
	Restoration Details	Power extended	to Mokokchung	area of Nagalar	nd at 20:52 Hrs	on 08.02.16 thro	ugh 132 kV D	oyang - Mok	okchung (NA)	line.			
	Root Cause	Due to vegetation	on problem in the	line, 132 kV D	oyang - Mokol	chung (NA) line	tripped.	·					·
	Remedial Measures	Vegetation clear	rance to be done	by DoP Nagalaı	nd.								
	122 LV Dovona		2/18/2016	Doyang	Over current	Not applicable	No	No	I one of I and.				

			List of G	i iu Distui ba	inces in 1 tol t								
हम सं ड्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Mokokchung (NA)	DoP Nagaland	2/18/2010 17:14	Mokokchung (NA)	Over current	Not applicable	No	No	Loss of Load: 24	GD-I	2/18/2016 17:30	No SPS	0.005
	FIR by the constituent	No			=		=			8			
	Brief Description of the		ned shutdown,13	2 kV Mokokch	ung (NA)-Mari	ianai(AS) is under	r long outage	& 66 kV Tue	ngsang-Likimro	o line kept op	ng (NA)-Mokokch en for system requ	irement). At	17:14 Hrs
64			no source in this				this element,	Mokokenung	g area was sepa	rated from re	st of NEK Grid an	u subsequent	iy
64		collapsed due to	no source in this	area.(Load los	s in MU:0.005)				g area was sepa	rated from re	st of NER Grid an	a subsequent	
64	Antecedent Conditions of NER Grid	collapsed due to (पूर्ववृ त्ता उत्पाद न	no source in this न/ Antecedent G	area.(Load los Generation: 13	s in MU:0.005) 19 MW , पूर्ववृ		lent Load : 1	851 MW)			st of NEK Grid an	a subsequent	
.64	Antecedent Conditions of NER Grid Restoration Details	collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream)	no source in this न/ Antecedent G to Mokokchung	area.(Load los Generation: 13 area of Nagalar or in 132 kV E	s in MU:0.005) 1 9 MW , पूर्ववृ nd at 17:30 Hrs	त्ता लोड/ Anteced on 18.02.16 thro	lent Load : 1	851 MW)	okchung (NA) l	line.	Doyang. Phase - p	•	
64	Antecedent Conditions of NER Grid Restoration Details Root Cause	collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream l only possibility i Relay coordinati	no source in this न/ Antecedent G to Mokokchung Nagaland system if no earth fault re	area.(Load los Generation: 13 area of Nagalar or in 132 kV Delay operated. Nagaland in co	s in MU:0.005) 19 MW , पूर्ववृ nd at 17:30 Hrs Doyang - Mokol	त्ता लोड/ Anteced on 18.02.16 thro	dent Load: 1sugh 132 kV D	851 MW) oyang - Moke se fault occur	okchung (NA) l	line. as cleared at		hase fault see	ems the
64	Antecedent Conditions of NER Grid Restoration Details Root Cause	collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream only possibility i Relay coordinati clearance to be d	no source in this Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by done by DoP Nag	Generation: 13 area of Nagalar or in 132 kV E elay operated. Nagaland in co çaland. Doyang	s in MU:0.005) 19 MW, पूर्वव् and at 17:30 Hrs Doyang - Mokol Directional	त्ता लोड/ Anteced on 18.02.16 thro	dent Load: 1sugh 132 kV D	851 MW) royang - Moke se fault occur eature of over	okchung (NA) l	line. as cleared at ion at Mokok	Doyang. Phase - p	hase fault see	ems the
64	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures	collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream only possibility i Relay coordinati clearance to be d	no source in this न/ Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by	area.(Load los Generation: 13 area of Nagalar or in 132 kV E elay operated. Nagaland in co	sin MU:0.005) 19 MW, पूर्ववृ and at 17:30 Hrs Doyang - Mokol Directional Earth Fault Not	त्ता लोड/ Anteced on 18.02.16 throi kchung (NA) line n PG & NEEPCO	dent Load: 1sugh 132 kV D, phase to phase	851 MW) royang - Moke se fault occur eature of over	okchung (NA) l red and fault w current protecti	line. as cleared at	Doyang. Phase - p	hase fault see	ems the
64	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Doyang - Mokokchung (NA) FIR by the constituent	collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream only possibility i Relay coordinati clearance to be d DoP Nagaland No	no source in this Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by done by DoP Nag 2/21/2016 0:38	s area.(Load los Generation : 13 area of Nagalar or in 132 kV E elay operated. Nagaland in co galand. Doyang Mokokchung (NA)	s in MU:0.005) 19 MW, पूर्वव् and at 17:30 Hrs Doyang - Mokol Directional Earth Fault Not Furnished	त्ता लोड/ Anteced on 18.02.16 throi kchung (NA) line n PG & NEEPCO Not applicable Not applicable	dent Load : 1sugh 132 kV D , phase to phase Directional fe	851 MW) oyang - Moke se fault occur eature of over No	okchung (NA) hered and fault we current protection Loss of Load:	line. as cleared at ion at Mokok GD-I	Doyang. Phase - p chung (NA) to be 2/21/2016 5:30	hase fault see checked.Veg No SPS	ems the etation 0.103
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Doyang - Mokokchung (NA) FIR by the constituent Brief Description of the Incident	Collapsed due to (पूर्ववृत्ता उत्पादः Power extended In Downstream I only possibility i Relay coordinati clearance to be d DoP Nagaland No Mokokchung are were under plant on 21.02.16, 132	no source in this Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by done by DoP Nag 2/21/2016 0:38 ea of Nagaland w ned shutdown,13:	area.(Load los Generation : 13 area of Nagalar or in 132 kV E elay operated. Nagaland in co galand. Doyang Mokokchung (NA) ras connected w 2 kV Mokokch okokchung (NA)	sin MU:0.005) 19 MW, पूर्वव् and at 17:30 Hrs Doyang - Mokol Directional Earth Fault Not Furnished Pith rest of NER ung (NA)-Mari) line tripped. I	त्ता लोड/ Anteced on 18.02.16 throw kehung (NA) line. PG & NEEPCO. Not applicable Not applicable C Grid through 13: anai(AS) is under the pure to tripping of	dent Load: 1 ugh 132 kV D , phase to phase Directional fee No No No 2 kV Doyang- r long outage of	851 MW) oyang - Moko se fault occur eature of over No No Mokokchung & 66 kV Tuer	okchung (NA) I red and fault w current protecti Loss of Load: 19 g (NA) . (132 k) ngsang-Likimro	line. as cleared at fon at Mokok GD-I V Mokokchu o line kept op	Doyang. Phase - p	hase fault see checked. Veg No SPS nung (PG) I & tirement). At	oms the ctation 0.103 Il lines 00:38 Hrs
164	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Doyang - Mokokchung (NA) FIR by the constituent Brief Description of the Incident	Power extended In Downstream I only possibility in Relay coordinatic clearance to be depended to the DoP Nagaland No Mokokchung are were under plant on 21.02.16,132 collapsed due to	no source in this Antecedent G to Mokokchung I Nagaland system if no earth fault re ion to be done by done by DoP Nag 2/21/2016 0:38 ea of Nagaland w ned shutdown,13.2 kV Doyang-Mo no source in this	area.(Load los Generation: 13 area of Nagalar or in 132 kV Delay operated. Nagaland in coral aland. Doyang Mokokchung (NA) vas connected w 2 kV Mokokchung (NA) area.(Load los	sin MU:0.005) 19 MW, पूर्वव् and at 17:30 Hrs Doyang - Mokol Onsultation with Directional Earth Fault Not Furnished Pith rest of NER ung (NA)-Mari Oline tripped. Its sin MU:0.103)	त्ता लोड/ Anteced on 18.02.16 throw kehung (NA) line. PG & NEEPCO. Not applicable Not applicable C Grid through 13: anai(AS) is under the pure to tripping of	ngh 132 kV D phase to phase Directional fee No No No 2 kV Doyang- r long outage of this element,	851 MW) oyang - Moke se fault occur eature of over No No No Mokokchung & 66 kV Tuer Mokokchung	okchung (NA) I red and fault w current protecti Loss of Load: 19 g (NA) . (132 k) ngsang-Likimro	line. as cleared at fon at Mokok GD-I V Mokokchu o line kept op	Doyang. Phase - p chung (NA) to be 2/21/2016 5:30 ng (NA)-Mokokch en for system requ	hase fault see checked. Veg No SPS nung (PG) I & tirement). At	oms the ctation 0.103 Il lines 00:38 Hrs
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Doyang - Mokokchung (NA) FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	Power extended In Downstream I only possibility i Relay coordinaticlearance to be d DoP Nagaland No Mokokchung are were under plant on 21.02.16, 132 collapsed due to	no source in this Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by done by DoP Nag 2/21/2016 0:38 ea of Nagaland w ned shutdown,13: 2 kV Doyang-Mo no source in this Antecedent G	area.(Load los Generation: 13 area of Nagalar or in 132 kV E elay operated. Nagaland in co galand. Doyang Mokokchung (NA) ras connected w 2 kV Mokokch okokchung (NA area.(Load los Generation: 11	sin MU:0.005) 19 MW, पूर्ववृ and at 17:30 Hrs Doyang - Mokol Directional Earth Fault Not Furnished Tith rest of NER ung (NA)-Mari) line tripped. Its in MU:0.103) 36 MW, पूर्ववृ	त्ता लोड/ Anteced on 18.02.16 throw schung (NA) line. PG & NEEPCO. Not applicable Not applicable R Grid through 13: anai(AS) is under the pure to tripping of	Ident Load: 1 ugh 132 kV D , phase to phase Directional fee No No No 2 kV Doyang- r long outage of this element, dent Load: 1	851 MW) oyang - Moke se fault occur eature of over No No Mokokchung & 66 kV Tuel Mokokchung	okchung (NA) I red and fault w current protecti Loss of Load: 19 g (NA) . (132 kV ngsang-Likimro area was separ	as cleared at on at Mokok GD-I V Mokokchuro line kept op ated from res	Doyang. Phase - p chung (NA) to be 2/21/2016 5:30 ng (NA)-Mokokch en for system requ	hase fault see checked. Veg No SPS nung (PG) I & tirement). At	oms the ctation 0.103 Il lines 00:38 Hrs
	Antecedent Conditions of NER Grid Restoration Details Root Cause Remedial Measures 132 kV Doyang - Mokokchung (NA) FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause	Power extended In Downstream I only possibility i Relay coordinaticlearance to be d DoP Nagaland No Mokokchung are were under plans on 21.02.16,132 collapsed due to (पूर्ववृत्ता उत्पादक Power extended Due to vegetatio	no source in this Antecedent G to Mokokchung Nagaland system if no earth fault re ion to be done by done by DoP Nag 2/21/2016 0:38 ea of Nagaland w ned shutdown,13 2 kV Doyang-Mo no source in this Antecedent G to Mokokchung on problem in the	area.(Load los Generation: 13 area of Nagalar or in 132 kV Delay operated. Nagaland in contained. Doyang Mokokchung (NA) ras connected we 2 kV Mokokchung (NA) area.(Load los) Generation: 11 area of Nagalar line or in dowr	sin MU:0.005) 19 MW, ५६व and at 17:30 Hrs Doyang - Mokol Directional Earth Fault Not Furnished Tith rest of NER ung (NA)-Mari) line tripped. E s in MU:0.103) 36 MW, ५६व and at 05:30 Hrs Instream of Mok	त्ता लोड/ Anteced on 18.02.16 throw kehung (NA) line. A PG & NEEPCO. Not applicable Not applicable a Grid through 13: Janai(AS) is under the pue to tripping of cता लोड/ Anteced	Ident Load: 1: ugh 132 kV D , phase to phase Directional fee No No No 2 kV Doyanger long outage of this element, Ident Load: 1: ugh 132 kV D 32 kV Doyanger	851 MW) oyang - Moke se fault occur eature of over No No Mokokchung & 66 kV Tuer Mokokchung 476 MW) oyang - Moke g - Mokokchu	Loss of Load: 19 (NA) . (132 k) ngsang-Likimro area was separ	line. as cleared at fon at Mokok GD-I V Mokokchu o line kept op ated from res	Doyang. Phase - p chung (NA) to be 2/21/2016 5:30 ng (NA)-Mokokch en for system requ	hase fault see checked. Veg No SPS nung (PG) I & tirement). At	oms the ctation 0.103 Il lines 00:38 Hrs

			List of G	rid Disturba	nces in Nort	th-Eastern Re	gional Grid	during Ja	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के श्रीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Dimapur (PG) -	DoP Nagaland		Dimapur (PG)	Over current	-	No	No			1/11/2016 10:38	No SPS	
	Dimapur (Nagaland) I	Dor Nagarand	1/11/2016 10:19	Dimapur	Over current	-	No	No	Loss of Load: 21	GD-I	1/11/2010 10.38	NO SES	0.008
	132 kV Dimapur (PG) -	POWERGRID		Dimapur (PG)		Not Furnished	No	No	21		1/11/2015 10 20	N. apa	
	Dimapur (Nagaland) II	& DoP Nagaland		Dimapur	Not Furnished	Not Furnished	No	No			1/11/2016 10:39	No SPS	
	FIR by the constituent	No											
166	Brief Description of the Incident	-	& II lines trippe			•					rs on 11.01.2016, htly collapsed due		•
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 11	56 MW , पूर्ववृ	त्ता लोड/ Antece	dent Load : 1	619 MW)					
	Restoration Details					1.01.16 through							
	Root Cause										o earth fault relay		
	Remedial Measures	Relay settings of	f downstream sta	tions of Nagala	nd to be checke	ed by DoP Nagala	and in consulta	tion with PO	WERGRID. C	PCC to elabo	rate on General tri	p relay indic	ation.
	132 kV Dimapur (PG) -	DoP Nagaland		Dimapur (PG)		Not applicable	No	No			2/21/2016 11:33	No SPS	
	Dimapur (Nagaland) I	Dor ragarana	2/21/2016	Dimapur	Not Furnished	Not Furnished	No	No	Loss of Load:	GD-I	2,21,201011160	110 515	0.009
	132 kV Dimapur (PG) -	POWERGRID & DoP	11:20	Dimapur (PG)	General Trip	Not Furnished	No	No	36	(D-1	2/21/2016 11:24	No ana	0.003
	Dimapur (Nagaland) II	Nagaland		Dimapur	Not Furnished	Not Furnished	No	No			2/21/2016 11:34	No SPS	
	FIR by the constituent	No											
167	Brief Description of the Incident		& II lines trippe								rs on 21.02.16 ,13 ntly collapsed due		

			List of G	rid Disturba	nces in Nort	th-Eastern Re	gional Grid	during Ja	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	लाड आर उत्पादन की हानि) / Effect (Loss of	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 11	92 MW , पूर्ववृ	त्ता लोड/ Antece	lent Load : 1	359 MW)					
	Restoration Details	Power extended	to Dimapur area	of Nagaland at	11:33 Hrs on 2	21.02.16 through	132 kV Dimaj	our (PG) - Di	mapur (Nagalaı	nd) I line.			
	Root Cause		Nagaland system is the only possib		. ,	1	nd) I&II lines	, phase to ph	ase fault occurr	ed and fault v	vas cleared at Din	napur(PG). Ph	nase -
	Remedial Measures	Dimapur shall fu	ırnish their down	stream relay se	ttings.								

			List of	Grid Disturbar	ices in North	-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	122 LV D: (DC)	POWERGRID		Dimapur (PG)	Earth Fault	Not Furnished	No	No	Loss of Load:				
	132 kV Dimapur (PG) - Kohima	& DoP Nagaland	1/12/2016 22:55		Not Furnished	Not Furnished	No	No	26& Loss of Generation:	GD-I	1/12/2016 23:05	No SPS	0.006
	FIR by the constituent	No			-								
168	Brief Description of the Incident	for system requi	rement). At 22:5	nnected with rest o 5 Hrs on 12.01.20 o load generation i	16,132 kV Din	•				-			
	Antecedent Conditions of NER Grid	., •		Generation: 1479	., .								
	Restoration Details			of Nagaland at 23:0	5 Hrs on 12.01	.16 through 132 l	cV Dimapur (PG) - Kohima	a line.				
	Root Cause		lem in Nagaland										
	Remedial Measures		ance and frequer	nt petrolling to be o						Dimapur (PC	i).		
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	1/12/2016 23:20	Dimapur (PG) Kohima	Earth Fault Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 21& Loss of Generation:	GD-I	1/12/2016 23:30	No SPS	0.006
	FIR by the constituent	No											
169	Brief Description of the Incident	for system requi	rement). At 23:2	nnected with rest o 0 Hr on 12.01.201 o load generation i	6,132 kV Dima	pur(PG)-Kohima	line tripped.						
	Antecedent Conditions of NER Grid	., ,		Generation: 1443	., -								
	Restoration Details			f Nagaland at 23:3	0 Hrs on 12.01	.16 through 132 l	cV Dimapur (PG) - Kohima	a line.				
	Root Cause		lem in Nagaland										
	Remedial Measures		ance and frequer	nt petrolling to be o						o be submitte	d by POWERGR	D for Dimap	ur(PG)
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	1/22/2016 12:43	Dimapur (PG) Kohima	General Trip Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 24 &Loss of Generation: 8	GD-I	1/22/2016 13:00	No SPS	0.017
	FIR by the constituent	No	-			-	-	•	-	-	-		

			List of	Grid Disturbar	ices in North	1-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
170	Brief Description of the Incident	for system requi	rement). At 12:4	nnected with rest of 3 Hrs on 22.01.20 ono source in this	16 ,132 kV Din	napur(PG)-Kohim							
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent C	Seneration : 1138	MW , पूर्ववृत्त	ा लोड/ Anteceder	t Load : 147	7 MW)					
	Restoration Details	Power extended	to Capital area o	f Nagaland at 13:0	0 Hrs on 22.01	.16 through 132 l	cV Dimapur (PG) - Kohima	a line.				
	Root Cause	Due to Vegetation	on problem in Na	galand system.									
	Remedial Measures	Diomapur(PG)		t petrolling to be o	lone DoP,Naga	land .For further	investigation	and analysis,	general trip to b	e elaborated	and DR outputs to	be submitted	d by PG for
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	2/21/2016 5:15	Dimapur (PG) Kohima	DP, ZI, Y-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 14	GD-I	2/21/2016 5:27	No SPS	0.004
	FIR by the constituent	No			•	•	•	•	•	•		•	
171	Brief Description of the Incident	for system requi	rement). At 05:1:	nected with rest of Hrs on 21.02.16 on source in this	, 132 kV Dima	pur(PG)-Kohima							
	Antecedent Conditions of NER Grid			eneration: 1195	., -								
	Restoration Details			f Nagaland at 05:2				PG) - Kohima	a line.				
	Root Cause		•	line, 132 kV Dim	napur (PG) - Ko	ohima line tripped							
	Remedial Measures		rance to be done l	y DoP Nagaland.									
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	2/21/2016 10:08	Dimapur (PG) Kohima	DP, ZI, B-E Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 22& Loss of Generation: 8	GD-I	2/21/2016 10:51	No SPS	0.24
	FIR by the constituent	No											
172	Brief Description of the Incident	for system requi	rement). At 10:0	nnected with rest of the street of the stree	5,132 kV Dima	apur(PG)-Kohima	line tripped.						

			List of	Grid Disturbar	ices in North	1-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent C	Generation: 1199	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 164	4 MW)					
	Restoration Details			f Nagaland at 10:5				PG) - Kohim	a line.				
	Root Cause			line, 132 kV Din	napur (PG) - Ko	ohima line tripped							
	Remedial Measures	Ü	rance to be done l	oy DoP Nagaland.				_					
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	2/21/2016 17:10	Dimapur (PG) Kohima	Not Furnished No tripping	Not Furnished Not applicable	No No	No No	Loss of Load: 20	GD-I	2/21/2016 17:36	No SPS	0.009
	FIR by the constituent	No			11 8				I				
173	Brief Description of the Incident	for system requi	rement). At 17:10	nnected with rest of 0 Hrs on 21.02.16 on source in this	,132 kV Dimap	•				_	_		
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 1438	MW , पूर्ववृत्त	ा लोड/ Anteceder	t Load : 1418	8 MW)					
	Restoration Details	Power extended	to Capital area o	f Nagaland at 17:3	36 Hrs on 21.02	.16 through 132 l	V Dimapur (PG) - Kohim	a line.				
	Root Cause	Dimapur(PG) ar	nd SLDC Nagalaı	nd have to submit	Relay Indicatio	n pertaining to th	eir end for fur	ther investiga	ation				
	Remedial Measures	Remedial measu	res after identific	cation of root caus									
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP Nagaland	3/31/2016 5:37	Dimapur (PG) Kohima	General Trip Not Furnished	Not Furnished Not Furnished	No No	No No	Loss of Load: 11	GD-I	3/31/2016 5:43	No SPS	0.002
	FIR by the constituent	No											
174	Brief Description of the Incident	for system requi	rement). At 05:3	nnected with rest of 7 Hrs on 31.03.16 on source in this	,132 kV Dimar								
	Antecedent Conditions of NER Grid	., .		Generation: 1253	., .								
				f Nagaland at 05:4				PG) - Kohim	a line.				
				elay Indication per									
<u></u>	Remedial Measures	Remedial measu	res after identific	cation of root caus	e.Dimapur(PG)	shall elaborate o	n General trip	indication.					

			List of (Grid Disturbar	ices in North	1-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Dimapur (PG) -	POWERGRID	2/21/2016 0:24	Dimapur (PG)	General Trip	Not Furnished	No	No	Loss of Load:	CD I	2/21/2016 0.59	N- CDC	0.009
	Kohima	& DoP Nagaland	3/31/2016 9:24	Kohima	Not Furnished	Not Furnished	No	No	14	GD-I	3/31/2016 9:58	No SPS	0.008
	FIR by the constituent	No						•	•	•	•	•	
175	Brief Description of the Incident Antecedent Conditions	for system requi and subsequentl	rement). At 09:55 y collapsed due to	nnected with rest o 8 Hrs on 31.03.16 o no source in this	,132 kV Dimap area.	our(PG)-Kohima	line tripped. D	Oue to tripping					
	of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1164	MW , पूर्ववृत्त	T लोड/ Anteceden	t Load : 1879	9 MW)					
	Restoration Details	Power extended	to Capital area o	f Nagaland at 09:5	8 Hrs on 31.03	3.16 through 132 l			a line.				
	Restoration Details Root Cause			f Nagaland at 09:5 elay Indication per			vV Dimapur (a line.				
		SLDC Nagaland	has to submit R		taining to their	end for further in	xV Dimapur (l vestigation	PG) - Kohima	a line.				
	Root Cause Remedial Measures	SLDC Nagaland	has to submit R	elay Indication per	taining to their e.Dimapur(PG)	end for further in	xV Dimapur (l vestigation	PG) - Kohima					
	Root Cause	SLDC Nagaland Remedial measu	has to submit R	elay Indication per cation of root cause	taining to their e.Dimapur(PG)	end for further in shall elaborate o	vestigation General trip	PG) - Kohima	Loss of Load:	GD-I	3/31/2016 5:10	No SPS	0.001
	Root Cause Remedial Measures 132 kV Dimapur (PG) -	SLDC Nagaland Remedial measu POWERGRID & DoP	has to submit Rures after identific	elay Indication per cation of root cause Dimapur (PG)	taining to their e.Dimapur(PG) DP, ZI, R-E Not	end for further in shall elaborate o Not Furnished	vestigation n General trip	PG) - Kohima indication. No	Loss of Load:	GD-I	3/31/2016 5:10	No SPS	0.001
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi	has to submit Rures after identification 3/31/2016 5:00 Nagaland was correment). At 05:00	elay Indication per cation of root cause Dimapur (PG)	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimap	end for further in shall elaborate of Not Furnished Not Furnished	vestigation n General trip No No No	PG) - Kohima indication. No No	Loss of Load: 5	Karong line &	& 66 kV Tuensang	-Likimro line	e kept open
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi and subsequentl (पूर्ववृत्ता उत्पाद	Nagaland was correment). At 05:00 y collapsed due to	elay Indication per cation of root cause Dimapur (PG) Kohima nnected with rest of 0 Hrs on 31.03.16 o no source in this Generation: 1253	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimagarea. MW, पूर्ववृत्त	nend for further in shall elaborate of Not Furnished Not Furnished Not Furnished rough 132 kV Din bur(PG)-Kohima	vestigation n General trip No No No napur(PG)-Ko line tripped. D	PG) - Kohima indication. No No No Ohima line (13 Due to tripping	Loss of Load: 5 32 kV Kohima- g of this elemen	Karong line &	& 66 kV Tuensang	-Likimro line	e kept open
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident Antecedent Conditions	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi and subsequentl (पूर्ववृत्ता उत्पाद	Nagaland was correment). At 05:00 y collapsed due to	elay Indication per cation of root cause Dimapur (PG) Kohima nnected with rest of the original of the cause 0 Hrs on 31.03.16	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimagarea. MW, पूर्ववृत्त	nend for further in shall elaborate of Not Furnished Not Furnished Not Furnished rough 132 kV Din bur(PG)-Kohima	vestigation n General trip No No No napur(PG)-Ko line tripped. D	PG) - Kohima indication. No No No Ohima line (13 Due to tripping	Loss of Load: 5 32 kV Kohima- g of this elemen	Karong line &	& 66 kV Tuensang	-Likimro line	e kept open
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi and subsequentl (पूर्ववृत्ता उत्पाद Power extended	Nagaland was correment). At 05:00 y collapsed due to Capital area o	elay Indication per cation of root cause Dimapur (PG) Kohima nnected with rest of 0 Hrs on 31.03.16 o no source in this Generation: 1253	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimagarea. MW, पूर्ववृत्त	nend for further in shall elaborate of Not Furnished Not Furnished Not Furnished Telephone 132 kV Din pur(PG)-Kohima	vestigation n General trip No No No napur(PG)-Ko line tripped. D	PG) - Kohima indication. No No No Ohima line (13 Due to tripping	Loss of Load: 5 32 kV Kohima- g of this elemen	Karong line &	& 66 kV Tuensang	-Likimro line	e kept open
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi and subsequentl (पूर्ववृत्ता उत्पाद Power extended Due to vegetatio Vegetation clean	Nagaland was correment). At 05:00 y collapsed due to Capital area on problem in the	elay Indication per cation of root cause Dimapur (PG) Kohima nnected with rest of the original ori	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimar area. MW, ५ ५ ६ ६ त	nend for further in shall elaborate of Not Furnished Not Furnished Not Furnished Tough 132 kV Din pur(PG)-Kohima	vestigation n General trip No No No napur(PG)-Ko line tripped. D	PG) - Kohima indication. No No No Ohima line (13 Due to tripping	Loss of Load: 5 32 kV Kohima- g of this elemen	Karong line &	& 66 kV Tuensang	-Likimro line	e kept open
176	Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Restoration Details Root Cause	SLDC Nagaland Remedial measu POWERGRID & DoP Nagaland No Capital area of N for system requi and subsequentl (पूर्ववृत्ता उत्पाद Power extended Due to vegetation	Nagaland was correment). At 05:00 y collapsed due to Capital area on problem in the	elay Indication per cation of root cause Dimapur (PG) Kohima nnected with rest of the original o	taining to their e.Dimapur(PG) DP, ZI, R-E Not Furnished f NER Grid thr ,132 kV Dimar area. MW, ५ ५ ६ ६ त	nend for further in shall elaborate of Not Furnished Not Furnished Not Furnished Telephone 132 kV Din pur(PG)-Kohima	vestigation n General trip No No No napur(PG)-Ko line tripped. D	PG) - Kohima indication. No No No Ohima line (13 Due to tripping	Loss of Load: 5 32 kV Kohima- g of this elemen	Karong line &	& 66 kV Tuensang	z-Likimro line om rest of N	e kept open

			List of	Grid Disturbar	nces in North	1-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
177	Brief Description of the Incident	for system requi	rement). At 13:3	nnected with rest of 1 Hrs on 13.04.16, of no source in this	132 kV Dimar	•				_	•		
Antecedent Conditions of NER Grid (पूर्ववृत्ता उत्पादन/ Antecedent Generation : 1289 MW , पूर्ववृत्ता लोड/ Antecedent Load : 1482 MW) Root Cause Due to vegetation problem in the line or in downstream of Kohima (NA), 132 kV Dimapur (PG) - Kohima line tripped.													
	Root Cause	Due to vegetation	n problem in the	line or in downstr	eam of Kohima	a (NA), 132 kV D	imapur (PG)	- Kohima line	e tripped.				
	Remedial Measures			by DoP Nagaland.: o be checked by D					LDC.Dimapur(PG) shall ela	borate on General	trip indication	n.Relay
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP	4/9/2016 10:50	Dimapur (PG) Kohima		Not Furnished Not Furnished	No No	No No	Loss of Load: 6	GD-I	4/9/2016 11:20	No SPS	0.003
	FIR by the constituent	No											
178	Brief Description of the Incident	for system requi	rement). At 10:5	nnected with rest of 0 Hrs on 09.04.16 of no source in this	,132 kV Dimar								
	Antecedent Conditions	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation: 1359	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 2023	3 MW)					
	Root Cause			line or in downstr									
	Remedial Measures			by DoP Nagaland. o be checked by D					LDC.Dimapur(PG) shall ela	borate on General	trip indication	n.Relay
	132 kV Dimapur (PG) -	POWERGRID & DoP	4/12/2016 10:27	Dimapur (PG)		Not applicable	No	No	Loss of Load:	GD-I	4/12/2016 10:37	No SPS	0.003
	Kohima	Nagaland		Kohima	Not	Not applicable	No	No	7				
	FIR by the constituent	No											
179	Brief Description of the Incident	for system requi	rement). At 10:2	nnected with rest o 7 Hrs on 12.04.16, o load generation i	132 kV Dimar								
	132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur (PG) - Kohima FIR by the constituent Brief Description of the Incident	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1713	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 158′	7 MW)					

			List of	Grid Disturbaı	nces in North	-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Due to vegetation	on problem in the	line or in downstr	eam of Kohima	(NA), 132 kV D	imapur (PG)	- Kohima line	tripped.	•	•	•	
	Remedial Measures	_	rance to be done land	by DoP Nagaland. OWERGRID.	SLDC Nagalan	d shall report dov	vnstream fault	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	y DoP
	132 kV Dimapur (PG) -	POWERGRID		Dimapur (PG)	General Trip	Not Furnished	No	No	Loss of Load:				
	Kohima	& DoP Nagaland	4/15/2016 0:35	Kohima	Not Furnished	Not Furnished	No	No	3	GD-I	4/15/2016 0:53	No SPS	0.001
	FIR by the constituent	No											
180	Brief Description of the Incident	for system requi	irement). At 00:3	nnected with rest of 5 Hrs on 15.04.16, to no source in this	132 kV Dimar	C		*		U		•	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation : 1518	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1678	8 MW)					
	Root Cause	Due to vegetation	on problem in the	line or in downstr	eam of Kohima	ı (NA), 132 kV D	imapur (PG)	- Kohima line	e tripped.				
	Remedial Measures			by DoP Nagaland. o be checked by D					LDC.Dimapur(PG) shall ela	borate on General	trip indication	n.Relay
	132 kV Dimapur (PG) -	POWERGRID		Dimapur (PG)	Earth Fault	Not applicable	No	No	Loss of Load:				
	Kohima	& DoP Nagaland	5/1/2016 0:58	Kohima	Not Furnished	Not applicable	No	No	24	GD-I	5/1/2016 1:49	No SPS	0.019
	FIR by the constituent	No											
181	Brief Description of the Incident	for system requi	irement). At 00:5	nnected with rest of 8 Hrs on 01.05.16 to no source in this	,132 kV Dimar	•				_	•		
	Antecedent Conditions of NER Grid	., -		Generation : 957 I									
	Root Cause		_	line or in downstr			_						
	Remedial Measures	~	rance to be done lasultation with PC	by DoP Nagaland. OWERGRID.	SLDC Nagalan	d shall report dov	vnstream fault	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	oy DoP
	132 kV Dimapur (PG) -	POWERGRID		Dimapur (PG)		Not applicable	No	No	Loss of Load:				
	Kohima	& DoP Nagaland	5/1/2016 21:55	Kohima	Not Furnished	Not applicable	No	No	13	GD-I	5/1/2016 22:53	No SPS	0.013

			List of (Grid Disturban	ces in North	n-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	FIR by the constituent	No			•	•	•	•	•	•		•	
182	Brief Description of the Incident	for system requi	rement). At 21:55	nnected with rest of 5 Hrs on 01.05.16 on o source in this	,132 kV Dimap	•				_		•	
	Antecedent Conditions of NER Grid	., .	उत्पादन/ Antecedent Generation : 1171 MW , पूर्ववृत्ता लोड/ Antecedent Load : 1783 MW) getation problem in the line or in downstream of Kohima (NA), 132 kV Dimapur (PG) - Kohima line tripped.										
	Root Cause	Due to vegetatio	to vegetation problem in the line or in downstream of Kohima (NA), 132 kV Dimapur (PG) - Kohima line tripped.										
	Remedial Measures		egetation problem in the line or in downstream of Kohima (NA), 132 kV Dimapur (PG) - Kohima line tripped. on clearance to be done by DoP Nagaland.SLDC Nagaland shall report downstream fault also to NERLDC.Relay settings of downstream stations to be checked by DoP in consultation with POWERGRID.										
	132 kV Dimapur (PG) -	POWERGRID & DoP	5/5/2016 11:35	Dimapur (PG)	Over current	Not applicable	No	No	Loss of Load:	GD-I	5/5/2016 11:44	No SPS	0.003
	Kohima	Nagaland		Kohima	No tripping	Not applicable	No	No	12				
	FIR by the constituent	Yes											
183	Brief Description of the Incident	for system requi	rement). At 11:35	inected with rest of 5 Hrs on 05.05.16, o no source in this	132 kV Dimap	•				_		•	
	Antecedent Conditions of NER Grid												
	Root Cause	Due to vegetatio	on problem in the	line or in downstre	eam of Kohima	a (NA), 132 kV D	imapur (PG)	- Kohima line	e tripped.				
	Remedial Measures	_	ance to be done be sultation with PC	oy DoP Nagaland.S OWERGRID.	SLDC Nagalan	d shall report dov	nstream fault	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	oy DoP
	132 kV Dimapur (PG) -	POWERGRID	E/11/001Z 1A.9E	Dimapur (PG)	Earth Fault	Not applicable	No	No	Loss of Load:	CD I	5/11/2016 14.50	Ma CDC	0.012

			List of (Grid Disturban	ces in North	-Eastern Regi	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Kohima	& DoP Nagaland	5/11/2016 14:35	Kohima	No tripping	Not applicable	No	No	25	GD-I	5/11/2016 14:59	No SPS	0.013
	FIR by the constituent	No					•	•		•			
184	Brief Description of the Incident	for system requi	rement). At 14:35	nected with rest of 5 Hrs on 11.05.16, o no source in this	132 kV Dimap								
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	eneration : 1429	MW , पूर्ववृत्त	। लोड/ Anteceden	t Load : 161'	7 MW)					
	Root Cause	Due to vegetatio	on problem in the	line or in downstro	eam of Kohima	ı (NA), 132 kV D	imapur (PG)	- Kohima line	e tripped.				
	Remedial Measures	•	ance to be done be sultation with PC	oy DoP Nagaland.S OWERGRID.	SLDC Nagalan	d shall report dow	nstream fault	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	y DoP
	132 kV Dimapur (PG) -	POWERGRID & DoP	5/12/2016 13:51	Dimapur (PG)	Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	5/12/2016 14:01	No SPS	0.004
	Kohima	Nagaland	5/12/2010 15:51	Kohima	Over current	Not applicable	No	No	18	GD-1	3/12/2010 14:01	NO SPS	0.004
	FIR by the constituent	Yes(Nagaland)					-		-				
	Brief Description of the Incident	for system requi	rement). At 13:5	nected with rest of Hrs on 12.05.16, no source in this	132 kV Dimap								
185	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पादः	न/ Antecedent G	eneration: 1555	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1701	1 MW)					

			List of	Grid Disturban	ces in North	n-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Root Cause	Due to vegetation	on problem in the	e line , 132 kV Dim	apur (PG) - Ko	ohima line tripped	l.						
	Remedial Measures		a clearance to be done by DoP Nagaland&POWERGRID. Directionality function of Earth fault/Over current relay at Kohima to be checked. Built in E/F and O/C feature cal relay at Dimapur-PG to be enabled along with triggering of DR at the earliest by POWERGRID, so that nature of fault can be known from DR. BRID Dimapur (PG) Earth Fault Not applicable No No Loss of Load:										
	132 kV Dimapur (PG) -	POWERGRID			Earth Fault	Not applicable	No	No	Loss of Load:				
	Kohima	& DoP Nagaland	5/12/2016 14:03	Kohima	Over current	Not applicable	No	No	12	GD-I	5/12/2016 14:24	No SPS	0.004
	FIR by the constituent	No		I									
	Brief Description of the Incident	for system requi	rement). At 14:0	nnected with rest of 3 Hrs on 12.05.16, of no source in this	132 kV Dimar								
186	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1557	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 1700	6 MW)					
	Root Cause	Due to vegetation	on problem in the	eline, 132 kV Dim	apur (PG) - Ko	ohima line tripped							
	Remedial Measures	C		by DoP Nagaland& G to be enabled al		•			•				C feature
	132 kV Dimapur (PG) -	POWERGRID & DoP	5/16/2016 13:52	Dimapur (PG)	Back Up Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	5/16/2016 19:18	No SPS	0.123
	Kohima	Nagaland	5/10/2010 15:52	Kohima	Earth Fault	Not applicable	No	No	21	GD-I	5/10/2010 19:18	no ara	0.123
	FIR by the constituent	No			-				-				

			List of (Grid Disturban	ices in North	ı-Eastern Reg	ional Grid	during Jai	nuary 2016				
हम सं इया/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
87		for system requi	irement). At 13:5	nnected with rest of 22 Hrs on 16.05.16 o no source in this	6, 132 kV Dima								
07	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1696	MW , पूर्ववृत्त	। लोड/ Anteceden	t Load : 1150	6 MW)					
	Root Cause	Due to vegetation	on problem in the	line , 132 kV Dim	napur (PG) - Ko	hima line tripped							
	Remedial Measures			by DoP Nagaland& G to be enabled al									C feature
	132 kV Dimapur (PG) -	POWERGRID & DoP	5/18/2016 13:29	Dimapur (PG)	Over Current,Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	5/18/2016 13:50	No SPS	0.006
	Kohima	Nagaland		Kohima	Y-Ph, Over Current	Not applicable	No	No	15				
	FIR by the constituent	No											
88		for system requi	irement). At 13:29	nnected with rest of 9 Hrs on 18.05.16, o no source in this	, 132 kV Dimap	C	1 \	,				_	1 1
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Generation: 1873	 MW , पूर्ववृत्त	। लोड/ Anteceden	t Load : 196	4 MW)					
	Root Cause	Due to vegetation	on problem in the	line , 132 kV Dim	napur (PG) - Ko	ohima line tripped							

			List of	Grid Disturban	ces in North	n-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर दवारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures	-		by DoP Nagaland& G to be enabled al		•			•				/C feature
	132 kV Dimapur (PG) - Kohima	POWERGRID & DoP	5/19/2016 18:20	Dimapur (PG)	Over Current,Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	5/19/2016 18:40	No SPS	0.015
	Konima	Nagaland		Kohima	No tripping	Not applicable	No	No	33				
	FIR by the constituent	No				•	•	•	•				
189	Brief Description of the Incident	for system requi	rement). At 18:2	nnected with rest o 0 Hrs on 19.05.16, o no source in this	132 kV Dimap								
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1842	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 196	7 MW)					
	Root Cause	Due to vegetation	on problem in the	line or in downstr	eam of Kohima	a (NA), 132 kV D	imapur (PG)	- Kohima line	e tripped.				
	Remedial Measures		rance to be done sultation with PC	by DoP Nagaland. OWERGRID.	SLDC Nagalan	d shall report dov	nstream fault/	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	oy DoP
	132 kV Dimapur (PG) -	POWERGRID & DoP	5/19/2016 18:45	Dimapur (PG)	Over Current,Earth Fault	Not applicable	No	No	Loss of Load:	GD-I	5/19/2016 19:25	No SPS	0.016
	Kohima	Nagaland		Kohima	No tripping	Not applicable	No	No	22				
	FIR by the constituent	No											

			List of (Grid Disturbar	ices in North	n-Eastern Reg	ional Grid	during Jar	nuary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
190	Brief Description of the Incident	for system requi	rement). At 18:4	nnected with rest of 5 Hrs on 19.05.16 on source in this	, 132 kV Dima	•				-	•		
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent G	Seneration: 1887	MW , पूर्ववृत्त	ा लोड/ Anteceden	t Load : 2064	4 MW)					
	Root Cause	Due to vegetation	getation problem in the line or in downstream of Kohima (NA), 132 kV Dimapur (PG) - Kohima line tripped.										
	Remedial Measures		rance to be done be sultation with PC	oy DoP Nagaland.: OWERGRID.	SLDC Nagalan	d shall report dov	nstream fault	also to NER	LDC.Relay sett	ings of down	stream stations to	be checked b	oy DoP
	132 kV Dimapur (PG) -	POWERGRID & DoP	6/11/2016 11:40	Dimapur (PG)	Over Current,Earth Fault	Not applicable	No	No	Loss of Load: 16& Loss of	GD-I	6/11/2016 11:55	No SPS	0.004
	Kohima	Nagaland	W.11,2010 11110	Kohima	Earth Fault	Not applicable	No	No	Generation: 16		0,11,201011160	1,000	0.00
	FIR by the constituent	Yes						•	•	•		•	•
191	Brief Description of the Incident	for system requi	rement). At 11:40	nnected with rest o O Hrs on 11.06.16, o load generation i	132 kV Dimap								
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1754	MW , Anteceden	t Load : 1479]	MW)							
	Root Cause												

			List of (Grid Disturbar	ices in North	-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	Remedial Measures												
	132 kV Dimapur (PG) -	POWERGRID & DoP	6/29/2016 18:40	Dimapur (PG)	Over current	Not applicable	No	No	Loss of Load:	GD-I	6/29/2016 18:53	No SPS	0.007
	Kohima	Nagaland	0/2//2010 10:10	Kohima	Not Furnished	Not applicable	No	No	22	GD 1	0/2//2010 10:33	110 51 5	0.007
	FIR by the constituent	No											
192	Brief Description of the Incident	for system requi	rement). At 18:40	nnected with rest of the one of the one one one one one one one one one on	132 kV Dimar								
	Antecedent Conditions of NER Grid	(Antecedent Go	eneration : MW	, Antecedent Loa	ad: MW)								
	Root Cause												
	Remedial Measures												
	132 kV Dimapur (PG) -	POWERGRID		Dimapur (PG)	Over current, Earth fault	Not applicable	No	No	Loss of Load:	GD I	c/7/201503	N. ana	0.002
	Kohima	& DoP Nagaland	6/5/2016 0:00	Kohima	Earth Fault (in 132 kV Kiphire line)	Not applicable	No	No	9& Loss of Generation: 8	GD-I	6/5/2016 0:14	No SPS	0.003
	FIR by the constituent	Yes						-					

			List of	Grid Disturban	ices in North	-Eastern Reg	ional Grid	during Jar	uary 2016				
क्रम सं ख्या/ SI. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
193	Brief Description of the Incident	for system requi	rement). At 00:0	nnected with rest o 00 Hr on 05.06.16, o load generation 1	132 kV Dimap	-	-			_			
	Antecedent Conditions of NER Grid	(Antecedent Ge	eneration : 1883	MW , Anteceden	t Load : 1972]	MW)							
	Root Cause												
	Remedial Measures												

			List of	Grid Disturbar	ices in North-	Eastern Regio	onal Grid d	uring Janı	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Surjamaninagar-	POWERGRID		Surjamaninagar	Not Furnished		No	No			4/4/2016 21:40	No SPS	
	Palatana I	TOWERGREE		Palatana	Not Furnished	Not Furnished	No	No			17 17 2010 21:10	110 51 5]
	132 kV Agartala - Bodhjungnagar	TSECL		Agartala		Not applicable Not applicable	No No	No No			4/4/2016 21:34	No SPS	
	132 kV Surjamaninagar-			Bodhjungnagar	Over current Earth Fault	•	No	No	ł				1
	Agarthala I	TSECL		Surjamaninagar		Not applicable Not Furnished	No	No			4/4/2016 21:57	No SPS	
	Ü			Agarthala		Not applicable	-						1
	132 kV Surjamaninagar- Agarthala II	TSECL		Surjamaninagar	Earth Fault		No No	No No			4/4/2016 21:57	No SPS	
				Agarthala Agartala	Not Furnished Not Furnished	Not applicable Not applicable	No	No No	Loss of Load:				1
	132 kV Agartala - Rokhia I	TSECL	4/4/2016 21:06	Rokhia		Not applicable	No	No	76	GD-I	4/4/2016 21:20	No SPS	0.081
	132 kV Agartala - Rokhia	TCECI		Agartala		Not applicable	No	No			4/4/2016 21.20	N. CDC	1 1
	II	TSECL		Rokhia	Over current	Not applicable	No	No			4/4/2016 21:20	No SPS	
	132 kV AGTPP - Agartala	POWERGRID		AGTPP	DP, ZIII, Y-B- E	Not Furnished	No	No			4/4/2016 21:55	No SPS	
194	1			Agartala	Not Furnished	Not Furnished	No	No					
	132 kV AGTPP - Agartala II	POWERGRID		AGTPP	DP, ZII, Y-B-E	Not Furnished	No	No			4/4/2016 21:30	No SPS	
	11			Agartala	Not Furnished	Not Furnished	No	No					
	FIR by the constituent	No											
	Brief Description of the Incident	Bodhjungnagar not restored afte kV Agartala - R	line,132 kV Surja r tripping). At 21 okhia I&II lines,	milla area of Bangl umaninagar-Agartha :06 Hrs on 04.04.10 132 kV AGTPP - A Grid and subseque	ala I & II lines,13 5,132 kV Surjam .gartala I & II line	2 kV Agartala - F aninagar-Palatana es tripped. Due to	Rokhia I&II ling I ling I line, 132 k' o tripping of the	nes, 132 kV A V Agartala - 1	AGTPP - Agarta Bodhjungnagar	ala I & II line line,132 kV \$	s (132 kV Udaipu Surjamaninagar-A	r-Monarchak garthala I &	II lines,132
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent G	Generation: 1310 M	MW , पूर्ववृ त्ता ल	ਤਿ/ Antecedent I	oad : 2219 N	MW)					
	Root Cause	Due to vegetation	on problem, fault	occured in Tripura	system.			<u></u>		-		<u></u>	
L	Remedial Measures	Detailed report t earliest by TSEC		y SLDC Tripura.Ve	getation clearance	e to be done by T	SECL.Electro	o mechanical	relays in Tripu	ra system to b	be replaced by Nu	merical relay	s at the
	132 kV Agartala -	TCECI		Agartala	Earth Fault	Not applicable	No	No			5/1/2016 20:25	No ope	
	Dhalabil (Khowai)	TSECL	10.57.00	Dhalabil	Earth Fault	Not applicable	No	No			5/1/2016 20:25	No SPS	

			List of	Grid Disturba	nces in North-	Eastern Regio	onal Grid d	uring Janu	ary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के श्रीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Ambasa -	TSECL	19.57.00	Ambassa		Not applicable	No	No			5/1/2016 20:21	No SPS	
	Teliamura			Teliamura	Earth Fault	Not applicable	No	No					1
	132 kV AGTPP - Agartala I	POWERGRID		AGTPP	E	Not applicable	No	No			5/1/2016 20:25	No SPS	
				Agartala	No tripping	Not applicable	No	No					
	132 kV AGTPP - Agartala II	POWERGRID		AGTPP	E	Not applicable	No	No	Loss of Load:		5/1/2016 20:25	No SPS	
				Agartala		Not applicable	No	No	230& Loss of	GD-II			0.046
	132 kV AGTPP - Kumarghat	POWERGRID	20:07:00	AGTPP	Heavy voltage jerk	Not applicable	No	No	Generation: 161		5/1/2016 20:47	No SPS	
		TOWERGRED		Kumarghat	DP, ZIII, R-Y- E	Not applicable	Yes	No			3/1/2010 20.47	110 51 5	
	AGTPP U 1	NEEPCO		AGTPP	Tripped due to	Not applicable	No	No			5/2/2016 20:14	No SPS]
	AGTPP U 2	NEEPCO		AGTPP	evacuation	Not applicable	No	No			5/2/2016 14:06	No SPS	
	AGTPP U 3	NEEPCO		AGTPP	problem	Not applicable	No	No			5/1/2016 21:30	No SPS	
	125 MVA, 400/132 kV ICT at Palatana	OTPC	20:13:50	Palatana	Neutral HV earth fault protection	Not applicable	Yes	No			5/1/2016 20:27	No SPS	
	132 kV Surjamaninagar-	POWERGRID	20:13:54	Surjamaninagar	Loss of Voltage	Not applicable	No	No			5/1/2016 21:36	No SPS	
	Palatana I	FOWERGRID	20.13.34	Palatana	Loss of voltage	Not applicable	Yes	No			3/1/2010 21.30	NO SES	
195	Palatana GTG I	ОТРС	20:13:56	Palatana	Tripped due to absence of Auxilliary supply	Not applicable	Yes	No			5/1/2016 22:19	SPS 1 operated	
	Palatana STG I	OTPC		Palatana	Tripped due to tripping of GTG I	Not applicable	Yes	No	1		5/1/2016 23:38	SPS 1 operated	1
	FIR by the constituent	Yes(OTPC,TSE	CL,AGTPP)										

	List of Grid Disturbances in North-Eastern Regional Grid during January 2016													
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	Owner Date & Time Name of Node indications Operation of output output Category and time of Details of										एमयू में हानि/ Loss in MU	
	Brief Description of the Incident	Teliamura line, shutdown from Teliamura line t along with AGT Palatana GTG I	132 kV AGTPP 13:55 Hrs on 01.0 ripped. Due to tri PP U I,II & II tri and STG I units.	angladesh system an Kumarghat line ar 05.16 & from 16:2 pping of these elem pped. At 20:13:50, Due to tripping of apsed due to load go	ad 125 MVA, 400 9 Hrs on 01.05.10 nents, the networl 125 MVA 400/13 these elements, P	0/132 kV ICT at F 6) respectively. A k got reduced. At 32 kV ICT at Pala Part of Tripura sys	Palatana (132 t 19:54 Hrs on 20:07 Hrs on tana tripped r	2 kV Udaipur n 01.05.16, 1 01.05.16, 13 resulted in los	- Palatana line 32 kV Agartala 2 kV AGTPP - ss of power sup	& 132 kV Su - Dhalabil (K Agartala I & ply to gas boo	rjamaninagar-Cor Thowai) line & 13 II lines, 132 kV A ost compressor and	milla II line w 2 kV Ambasa GTPP - Kum d subsequent	vas under a - narghat line tripping of	
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 1642	MW , पूर्ववृत्ता ल	ोड/ Antecedent I	oad : 1652 M	Л W)						
	Root Cause	Likely due to no Kumarghat end.	Likely due to non clearance of downstream fault in the Tripura System, 132 kV AGTPP - Agartala I&II line tripped at AGTPP end and 132 kV AGTPP - Kumarghat line tripped at Kumarghat end.											
	Remedial Measures	Agartala I&II lir	nes, to save gener	GTPP - Kumargha ation of AGTPP. N POWERGRID and	EEPCO to furnis	sh DR of the even	t at the earlies	st for further	analysis.Agarth					

			List of	Grid Distur	bances in North	-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के श्रीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	400 kV BgTPP - Bongaigaon I	POWERGRID		ВдТРР	Busbar differential protection Direct Trip	Not applicable	No	No			3/2/2016 14:00	No SPS	
			3/2/2016 12:42	Bongaigaon	received	Not applicable	Yes	No		GD-II			
	400 kV BgTPP - Bongaigaon II	POWERGRID	3,2,2010 12.12	BgTPP	Busbar differential protection	Not applicable	No	No	Loss of Generation:		3/2/2016 15:02	No SPS	1.935
				Bongaigaon	Direct Trip received	Not applicable	Yes	No	151				
196	BgTPP U 1	NTPC	3/2/2016 12:42	BgTPP	Tripped due to operation of Busbar differential protection	Not applicable	No	No			3/3/2016 1:23	No SPS	
	FIR by the constituent	No					U.						
	Brief Description of the Incident				ted with rest of NEI nation problem, Bg ⁷			gaon-BgTPP((NTPC) I & II I	ines. At 12:42	2 Hrs on 02.03.1	6 , 400 kV Bo	ongaigaon-
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 11	23 MW , पूर्ववृत्ता	लोड/ Antecedent	Load : 1370	MW)					
					3.16 through 400 kV								
		_	_		perated and both fee	eders were in sam	ie bus.						
	Remedial Measures	NTPC shall lool	in to this matter	as early as pos	sible.					<u> </u>			

			List of	Grid Distur	bances in North	-Eastern Reg	onal Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV Loktak - Imphal (PG)	POWERGRID		Loktak Imphal (PG)	Over current No tripping	Not applicable Not applicable	Yes No	No No			4/25/2016 15:56	No SPS	
			4/25/2016 15:37	Loktak	11 0	Not applicable	Yes	No	Loss of Load: 14				
	132 kV Loktak - Jiribam	POWERGRID		Jiribam (PG)	Back Up Earth Fault	Not applicable	No	No			4/25/2016 16:13	No SPS	
	132 kV Loktak -			Loktak	Hand Tripped	Not applicable	Yes	No		GD-I			0.005
	Ningthoukhong	MSPCL		Ningthoukhon g	Over current	Not applicable	No	No			4/25/2016 15:55	No SPS	
	Loktak U 1	NHPC		Loktak	Tripped due to	Not applicable	No	No	Loss of	1	4/25/2016 16:20	No SPS] /
	Loktak U 2	NHPC		Loktak		Not applicable	No	No	Generation:		4/25/2016 16:06	No SPS	i I
197	Loktak U 3	NHPC		Loktak	associated lines	Not applicable	No	No	103		4/25/2016 15:59	No SPS	
	FIR by the constituent	No											
	Brief Description of the Incident	Rengpang - Jirib	oam(MA) is unde	r long outage &	f NER Grid througl 2 132 kV Imphal - N tion problem, Lokta	Ningthoukhong lii	ne tripped at 1	0:30 Hrs on 2					
	Antecedent Conditions of NER Grid	(पूर्ववृ त्ता उत्पाद	न/ Antecedent (Generation : 10	96 MW , पूर्ववृ <i>त्</i> ता	लोड/ Antecedent	Load : 1370	MW)		_		_	
	Root Cause	Due to non oper	ation of any prot	ective relay at L	oktak it could not l	e ascertained wh	ether the fault	was in Jiriba	ım - Loktak line	or Loktak -	Ningthoukhong li	ne.	
	Remedial Measures	Loktak to furnis	h detailed report	explaining non	clearance of fault a	t Loktak end. Lol	tak&Imphal(PG) shall sub	mit DR output	pertaining to	the event.		

			List of	Grid Distur	bances in North	ı-Eastern Reg	ional Grid	during Jan	uary 2016				
क्रम सं ख्या/ Sl. No.	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
	132 kV AGTPP - Kumarghat	POWERGRID		AGTPP	No tripping	Not applicable	No Yes	No No			5/2/2016 15:50		
	132 kV AGTPP - Agartala I	POWERGRID		Kumarghat AGTPP Agartala	DP, ZIII, Y-B-E DP, ZIII, B-E No tripping	Not applicable Not applicable	No No	No No	Loss of Load:	GD-I	5/2/2016 16:25	SPS 6 operated	
	132 kV AGTPP - Agartala II	POWERGRID	5/2/2016 15:43	AGTPP Agartala	DP, ZIII, B-E No tripping	Not applicable Not applicable	No No	No No	Ů		5/2/2016 19:54		0.009
	AGTPP U 2	NEEPCO		AGTPP		Not applicable	No	No	Loss of Generation:		5/4/2016 18:49		
	AGTPP U 3	NEEPCO		AGTPP	Tripped due to	Not applicable	No	No			5/2/2016 17:23		
	AGTPP U 4	NEEPCO		AGTPP	evacuation	Not applicable	No	No			5/2/2016 16:45		
	AGTPP STG II	NEEPCO		AGTPP	problem	Not applicable	No	No		<u> </u>	5/2/2016 21:19	1	
	FIR by the constituent	No											
198		-											
	Antecedent Conditions of NER Grid	(पूर्ववृत्ता उत्पाद	न/ Antecedent (Generation: 12	77 MW , पूर्ववृत्ता	लोड/ Antecedent	Load : 1137	MW)					
	Loot Cours	Likely due to no tripped at Kuma		ownstream fault	in the Tripura Syst	em at Agarthala,	132 kV AGTP	P - Agartala	I&II line tripped	d at AGTPP e	end and 132 kV A	GTPP - Kum	arghat line
	Remedial Measures	Agartala I&II lir	nes, to save gener	ation of AGTP	ghat line to be incre P. NEEPCO to furn and OTPC are requ	ish DR of the eve	ent at the earli	est for further	analysis.Agart				

		List of	Grid Distur	bances in North	ı-Eastern Reg	ional Grid	during Jan	uary 2016				
बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description	मालिक / Owner	दिनांक और घटना के समय सीआर ऑपरेटर द्वारा प्रदान की / Date & Time of Event provided by CR operator	नोड के नाम / Name of Node	सीआर ऑपरेटर द्वारा प्रदान की रिले संकेत / Relay indications provided by CR operator	ऑटो रीक्लोजर का ऑपरेशन / Operation of Auto Reclose	24 घंटे के भीतर डी.आर. पेश किया (हां / नहीं) / DR output furnished within 24 hours (Y/N)	24 घंटे के भीतर ई.एल. पेश किया (हां / नहीं) / EL output furnished within 24 hours (Y/N)	प्रभाव (मेगावाट में लोड और उत्पादन की हानि) / Effect (Loss of Load & Generation in MW)	श्रेणी सीईए ग्रिड मानकों के अनुसार / Category as per CEA Grid Standards	सीआर ऑपरेटर द्वारा प्रदान की तिथि और समय या बहाली / Date and time of restoration provided by CR operator	एसपीएस संचालन के विवरण / Details of SPS Operation	एमयू में हानि/ Loss in MU
132 kV Doyang -	DoP Nagaland		Doyang	Directional Earth Fault	Not applicable	No	No			6/15/2016 19:17	No SPS	
Mokokchung(NA)	č		NA)	Not Furnished	Not applicable	No	No		an I			
		6/15/2016	Dimapur	Not Furnished	Not applicable	No	No	Loss of				
132 kV Dimapur - Doyang II	POWERGRID	18:20	Doyang	VT fuse fail, 3- Ph trip relay operated	Not applicable	No	No	Generation: 51	GD-I	6/15/2016 18:25	No SPS	
Doyang U 1	NEEPCO		Doyang	Overanced	Not applicable	No	No			6/15/2016 18:47	No SPS	
Doyang U 2	NEEPCO		Doyang	-	Not applicable	No	No			6/15/2016 18:44	No SPS	0.02
Doyang U 3	NEEPCO		Doyang	protection	Not applicable	No	No			6/15/2016 18:55	No SPS	
FIR by the constituent	Yes											
Brief Description of the Incident	Doyang Power Station was connected with rest of NER Grid through 132 kV Doyang- Dimapur II line & 132 kV Doyang-Mokokchung(NA) line (132 kV Doyang- Dimapur I line was under emergency shutdown from 20:32 Hrs on 14.06.16). At 18:20 Hrs on 15.06.16, 132 kV Doyang- Dimapur II line & 132 kV Doyang-Mokokchung(NA) line tripped. Due to evacuation problem, Doyang Power Station was blacked out.											
Antecedent Conditions of NER Grid	(Antecedent Ge	neration : 1972	MW , Anteced	ent Load : 2027 M	1W)							
Root Cause												
Remedial Measures												
			Dimapur	Not Furnished	Not applicable	No	No					
132 kV Dimapur - Doyang II	POWERGRID	6/15/2016	Doyang	3-Ph trip relay operated,No other indication	Not applicable	No	No	Loss of Generation:	GD-I	6/15/2016 18:58	No SPS	-
Doyang U 1	NEEPCO	19:50	Doyang	Over speed	Not applicable	No	No	30		6/15/2016 19:35	No SPS	
Doyang U 2	NEEPCO		Doyang		Not applicable	No	No			6/15/2016 19:26	No SPS	0.014
Doyang U 3	NEEPCO		Doyang	protection	Not applicable	No	No			6/15/2016 19:20	No SPS	
FIR by the constituent	Yes											
	Tarv / Name of tripping element/ Description 132 kV Doyang - Mokokchung(NA) 132 kV Dimapur - Doyang II Doyang U 1 Doyang U 2 Doyang U 3 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang II Doyang II Doyang II Doyang U 1 Doyang U 1 Doyang U 2 Doyang U 2 Doyang U 3	विवरण / Name of tripping element/Description	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description 132 kV Doyang - Mokokchung(NA) 132 kV Dimapur - Doyang U 1 NEEPCO Doyang U 2 NEEPCO Doyang U 3 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Needent Generation: 1972 Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Neepc	बिजली ट्यवस्था तत्व / विवरण / Name of tripping element/ Description 132 kV Doyang - Mokokchung(NA) 132 kV Dimapur - Doyang U 1 Doyang U 2 Doyang U 3 FIR by the constituent Brief Description of the Incident Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang II POWERGRID Doyang Power Station was connected with rest owas under emergency shutdown from 20:32 Hrs evacuation problem, Doyang Power Station was Antecedent Conditions of NER Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang II POWERGRID Doyang Power Station was connected with rest owas under emergency shutdown from 20:32 Hrs evacuation problem, Doyang Power Station was Antecedent Generation: 1972 MW, Anteced Chits/2016 18:56 Doyang Doyang	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description 132 kV Doyang - Mokokchung(NA) 132 kV Dimapur - Doyang U 1 NEEPCO Doyang U 3 NEEPCO Brief Description of the Incident Brief Description of the Suau Hongang Howard Conditions of Net Grid Antecedent Conditions of Net Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Doyang U 3 Neepco Broot Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Doyang U 2 Neepco Neepco Suau Doyang Power Station was connected with rest of NER Grid throug was under emergency shutdown from 20:32 Hrs on 14.06.16). At 13 evacuation problem, Doyang Power Station was blacked out. Antecedent Conditions of Nee Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Doyang U 2 Neepco Doyang U 3 Neepco Doyang U 1 Neepco Doyang Power Station was connected with rest of NER Grid throug was under emergency shutdown from 20:32 Hrs on 14.06.16). At 13 evacuation problem, Doyang Power Station was blacked out. Antecedent Conditions of Nee Grid Root Cause Remedial Measures 132 kV Dimapur - Doyang U 1 Neepco Doyang U 2 Neepco Doyang U 3 Neepco Doyang U 3 Neepco Doyang U 4 Neepco Doyang U 5 Neepco Doyang U 6/15/2016 Doyang U 1 Neepco Doyang U 1 Neepco Doyang U 1 Neepco Doyang U 2 Neepco Doyang U 2 Neepco Doyang Doy	बिजली व्यवस्था तत्व / विवरण / Name of tripping element/ Description Power Station was connected with rest of NER Grid through 132 kV Doyang U 2 NEEPCO Doyang U 3 NEEPCO Power Station was connected with rest of NER Grid through 132 kV Doyang Power Station was connected with rest of NER Grid through 132 kV Doyang II Power Generation Power Gener	बिजली स्ववस्था तत्व / विवरण / Name of tripping element/ Description 132 kV Doyang - Mokokchung(NA) DoP Nagaland POWERGRID Doyang U 1 Not applicable No Not a	विजली ब्यवस्था तत्व / विवास प्राप्ता कर्त विवास विवास प्राप्ता कर्त विवास विवास प्राप्ता कर्त विवास व	विकास क्षेत्र क्षेत	दिलांक और पटना के समय सीआर श्री क्षांतर सीतर श्री क्षांतर सीतर स्वाचा के समय सीआर श्री के नाम श्री क्षांतर सीतर स	श्री अप जिल्ला व्यवस्था तत्त् तं ते स्वयं सीआत अंत्रियं प्रवत्त्र के तिवार के तिवार प्रवत्त्र के तिवार के तिवार के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्रवत्त्व के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्रवत्त्र के तिवार प्र	श्री क्षेत्रचण (Name of tripping element/ Description of the poyang U 1 NEPCO Doyang U 2 NEPCO Doyang U 3 NEPCO Doyang U 3 NEPCO Doyang U 3 NEPCO Doyang U 3 NEPCO Doyang U 4 NEPCO Doyang U 5 Ref of the first of the

			List of	Grid Distur	bances in North	-Eastern Reg	ional Grid	during Jan	uary 2016				
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	Brief Description of the	Hrs on 14.06.16	Doyang Power Station was connected with rest of NER Grid through 132 kV Doyang- Dimapur II line (132 kV Doyang- Dimapur I line was under emergency shutdown from 20:32 Irs on 14.06.16 & 132 kV Doyang-Mokokchung(NA) line tripped at 18:20 Hrs on 15.06.16 and was not restored). At 18:56 Hr on 15.06.16, 132 kV Doyang- Dimapur II line ripped. Due to evacuation problem, Doyang Power Station was blacked out. Antecedent Generation: 2052 MW, Antecedent Load: 2302 MW)										
	Antecedent Conditions of NER Grid	(Antecedent Ge											
	Root Cause												
	Remedial Measures												