#### North Eastern Regional Power Committee

# MINUTES OF THE 36<sup>th</sup> PROTECTION COORDINATION SUB-COMMITTEE MEETING OF NERPC

**Date**: 06/08/2015 (Thursday)

**Time** : 14:00 hrs

Venue: "Hotel Nandan", Guwahati.

The List of Participants in the 36th PCC Meeting is attached at Annexure - I

Shri P.K. Mishra, Member Secretary, NERPC requested Shri B. Lyngkhoi, Director/SE(O) to continue & take up the Agenda items.

#### A. CONFIRMATION OF MINUTES

### CONFIRMATION OF MINUTES OF 35<sup>th</sup> MEETING OF PROTECTION SUB-COMMITTEE OF NERPC.

The minutes of 34<sup>th</sup> meeting of Protection Sub-committee held on 14<sup>th</sup> July, 2015 at Guwahati were circulated vide letter No. NERPC/SE (O)/PCC/2015/4520-4555 dated 24<sup>th</sup> July, 2015.

The Sub-Committee confirmed the minutes of 34th PCCM of NERPC as no observations or comments were received from the constituents

#### ITEMS FOR DISCUSSION

# A.1 <u>Implementation of 3-Phase Auto Reclosure scheme of Radially fed 132kV</u> <u>Lines associated with Ranganadi HEP:</u>

At present, the power flows to Nirjuli, Gohpur and Ziro radially fed 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 35th PCC meeting, EE, SLDC, Ar. Pradesh requested NEEPCO to intimate

their plan atleast one week in advance so that necessary action can be taken by

them.

The sub-committee once again requested NEEPCO to take up the matter with M/S

Alstom immediately to finalize the implementation program and intimate Ar.

Pradesh in advance for necessary Shut Down. Further, NERPC will monitor the

status of action taken by NEEPCO on weekly basis to expedite the implementation

of long pending Auto Reclose Scheme before the next PCC meeting.

Deliberation of the sub-Committee

Sr. Manager, NEEPCO informed that M/s Alstom has given the tentative dates of

25<sup>th</sup> & 26<sup>th</sup> August, 2015 to visit the site and requested DOP, Arunachal Pradesh to

give the consent since the dates have intimated to them well in advance.

EE, SLDC, Arunachal Pradesh agreed to the proposal and requested NEEPCO to

confirm the dates in advance for necessary action.

The sub-committee noted as above.

Action: NEEPCO & Ar. Pradesh

A.2 Implementation of 3-phase Auto Reclosure Scheme in all lines 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 132 kV 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

After detailed deliberation in the 35th PCC meeting, it was agreed that joint

inspection comprising of POWERGRID, NEEPCO and AEGCL will be carried out on

03.08.15 and to complete the implementation of above scheme in 132 kV Khandong

Umrangso – Halflong line.

2

#### Deliberation of the sub-Committee

After detailed deliberation, it was once again agreed that joint inspection comprising of POWERGRID, NEEPCO and AEGCL will be carried soon to complete the implementation of above scheme in 132 kV Khandong – Umrangso – Halflong line.

The sub-committee noted as above.

Action: POWERGRID, NEEPCO & Asaam

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

As per SI. 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 the 35<sup>th</sup> PCCM and the updated status during the 36<sup>th</sup> PCCM is as given below:

Constituent  DoP, Ar. Pradesh  AEGCL  MSPCL  MePTCL  No.	per format of Task Force of submitted (only checklist submitted)	As per format of NERPC  Not submitted  Not submitted	Remarks  By 31.08.2015  By 31.08.2015
Ar. Pradesh  AEGCL  MSPCL  MePTCL  P&E Dept.	(only checklist		
MSPCL  MePTCL  P&E Dept.	. 3	Not submitted	By 31.08.2015
MePTCL No			
P&E Dept.	Submitted	Submitted	Details of Protection as per Task Force Format not submitted
P&E Dept.	MePTCL Not submitted Submitted		By 31.08.2015
Mizoram	ot submitted	Submitted	By 31.08.2015
DoP,	Kohima,Wokha, eluri, Kiphire,	Yes (Kohima,Wokha, Meluri,Kiphire, Dimapur, Mokokchung)	

POWERGRID	Not received	Not received	By 31.08.2015	
NEEPCO	Yes (AGBPP, RHEP, Kopili & Khandong)	Yes (RHEP, Khandong & Kopili)	AGTPP not submitted, Doyang not received	
NTPC	Submitted	Not submitted	By 31.08.2015	
NHPC	Not submitted	Not submitted	By 31.08.2015	
ОТРС	Submitted	Submitted		

After detailed deliberation, the Sub-committee had decided that those who have not submitted the data as per format of Task Force in Annexure A.2 (II) & also, as per the format of NERPC in Annexure A.2 (i) for 3rd Party Protection Audit are requested to furnish these data by 31.08.15 positively.

The Sub-committee noted as above.

Action: All remaining utilities as above.

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

The Sub-committee requested all the constituents to intimate the status of progress to NERPC regularly so that the same could be intimated to CERC.

#### **Deliberation in the Meeting:**

The Status as intimated during 36<sup>th</sup> PCC meeting is attached at **Annexure - A.4**.

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.

Action: All 7 NER States.

## A.5 <u>Furnishing Protection Details of Transmission Lines, Transformers,</u> Reactors and Bus Bars:

During 34th PCC meeting, SE(O) informed that as NERPC had written to all concerned constituents as per directive of the Sub-committee and the reply is awaited.

The status as intimated by NERLDC during the 35<sup>th</sup> PCCM and the updated status during the 36<sup>th</sup> PCCM is as given below:

	Status of submission of data related to Protection Systems as per CEA regulations						
Sl No	Name of Constituent	Transmission Line	Transformers	Reactor	Bus-Bar & LBB	Bus Coupler	Remarks
1	DoP, Arunachal Pradesh	Not submitted	Not submitted	Not Applicable	Not submitted	Not submitted	By 31.08.15
2	AEGCL	Submitted	Submitted	Submitted	Not submitted	Submitted	Except Bus Bar – By 31.08.15
3	MSPCL	Submitted	Submitted	Not Applicable	Submitted	Submitted	
4	MePTCL	Submitted	Submitted	Submitted	Submitted	Submitted	
5	P&E Deptt, Mizoram	Submitted	Submitted	Not Applicable	Submitted	Submitted	
6	DoP, Nagaland	Submitted	Submitted	Not Applicable	Submitted	Submitted	
7	TSECL	Submitted	Submitted	Not Applicable	Submitted	Submitted	
8	POWERGRID	Submitted	Submitted	Submitted	Submitted	Submitted	
9	NEEPCO	Submitted	Submitted	Submitted	Submitted	Submitted	Details of Khupi & Doyang – By 31.08.15
10	NTPC	Not submitted	Not submitted	Not Applicable	Not submitted	Not submitted	By 31.08.15
11	NHPC	Submitted	Submitted	Not Applicable	Submitted	Submitted	
12	OTPC	Submitted	Submitted	Submitted	Submitted	Submitted	

#### **Deliberation in the Meeting:**

After detailed deliberation, the Sub-committee had decided that those who have not submitted the data related to Protection System as per CEA regulations are requested to furnish these data by **31.08.15 positively**. All constituents agreed.

The Sub-committee noted as above.

Action: All remaining utilities as above.

#### A.6 Grid Disturbances during May, 2015:

The following numbers of Grid Disturbances (GD) occurred during the period w.e.f 1st July to 31st July, 2015:

	Control Area	Grid Disturbance in nos.			
SI No		1 <sup>st</sup> July, 2015 to 31 <sup>st</sup> July, 2015	1 <sup>st</sup> January, 2015 to 31 <sup>st</sup> July, 2015		
1	Palatana	0	5		
2	AGBPP	0	1		
3	AGTPP	1	5		
4	Ranganadi	0	4		
5	Kopili	0	1		
6	Khandong	0	1		
7	Doyang	1	3		
8	Loktak	1	5		
9	Arunachal Pradesh	9	43		
10	Assam	5	43		
11	Manipur	3	40		
12	Meghalaya	1	25		
13	Mizoram	1	8		
14	Nagaland	5	19		
15	Tripura	1	4		

		Grid Disturbance in nos.			
SI No	Category of GD	1 <sup>st</sup> July, 2015 to 31 <sup>st</sup> July, 2015	1 <sup>st</sup> January, 2015 to 31 <sup>st</sup> July, 2015		
1	GD 1	20	140		
2	GD 2	0	3		
3	GD 3	0	0		
4	GD 4	0	0		
5	GD 5	0	1		
	Total	20	144		

#### **Deliberation in the Meeting:**

This is for information to the members. Remedial actions to be taken by the concerned power utilities of NER to avoid such disturbances in future.

#### A.7 Root Cause analysis of Grid Disturbacnes:

#### i. <u>Disturbances in Meghalaya System</u>

a. At 1332 Hrs on 26.07.15, 132 kV Khliehriat (PG) - Khliehriat (MePTCL) I & II lines (Line 1: Khliehriat (PG) - Not furnished & Khliehriat (MePTCL)- Not furnished and Line 2: Khliehriat (PG) - Not furnished & Khliehriat (MePTCL)- Not furnished) tripped. Due to tripping of these elements, there was loss of load in Khliehriat (including Lumshnong) area of Meghalaya and generation loss in Leshka HEP.

Load loss: 68 MW in Meghalaya

**Generation Loss:** 122 MW in Meghalaya (Leshka)

Category as per CEA Standards: GD-I

Analysis of events:

Due to tripping of these elements, power supply to Khliehriat & Lumshong area of Meghalaya was interrupted. It is suspected that there may be uncleared fault in Meghalaya system or delayed fault clearance. There was also tripping of Leshka

machines.

DR output at both ends of above elements required for proper analysis of the events.

**Deliberation in the Meeting:** 

MePTCL representative informed that meeting regarding earthing problem will be held soon by competent authority to look into the matter and the outcome will be intimated to the forum. Further, he stated that recommendations given by

POWERGRID will be looked into so that tripping can be addressed.

The Sub-committee requested NERPC to highlight the issue in the next TCC/RPC meetings so that competent authority should be aware of the

situation.

Action: NERPC, Meghalaya

ii. <u>Disturbance in Manipur system:</u>

a. At 1447 Hrs on 02.07.15, due to tripping of 132 kV Loktak- Ningthoukhong line (Loktak - Earth fault & Ningthoukhong - Not furnished) & 132 kV Ningthoukhong - Imphal (PG) line (Ningthoukhong - Not furnished & Imphal

(PG) - Earth fault), power supply to Ningthoukong area of Manipur interrupted.

Load loss: 25 MW in Manipur.

Category as per CEA Standards: GD-I

**Analysis of events:** 

It is suspected that there may be persistence fault in MSPCL system. DR output at

both ends of above elements required for proper analysis of the events.

7

#### **Deliberation in the Meeting:**

Manipur representative informed that the above tripping had occurred during R&M works and once the R&M is completed, the problem will be resolved. Further, they informed that DR was sent to NERLDC as soon as they requested.

DGM (SOII), NERLDC informed that NERLDC had not received any DR output from MSPCL.

Members suggested constituents to send information related to protection issues to NERLDC with a copy to NERPC for information so that the same can be sent to NERLDC if required.

The Sub-committee noted as above.

#### iii. Disturbance in Arunachal Pradesh and Gohpur area of Assam

a. At 1840 Hrs on 02.07.15, 132 kV Ranganadi- Lekhi (Ranganadi- No tripping & Lekhi- Over current) line tripped. Due to tripping of this element, Lekhi & Nirjuli area of Arunachal Pradesh and Gohpur area of Assam separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 95 MW in Arunachal Pradesh & Assam

b. At 1204 Hrs on 08.07.15, 132 kV Ranganadi- Lekhi (Ranganadi- No tripping & Lekhi- Over current) line tripped. Due to tripping of this element, Lekhi & Nirjuli area of Arunachal Pradesh and Gohpur area of Assam separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 90 MW in Arunachal Pradesh & Assam

c. At 0900 Hrs on 14.07.15, 132 kV Lekhi - Nirjuli (Lekhi - Not furnished & Nirjuli - Not furnished) line tripped. Due to tripping of this element, Nirjuli area of Arunachal Pradesh and Gohpur area of Assam separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 42 MW in Arunachal Pradesh & Assam

d. At 0523 Hrs on 15.07.15, 132 kV Ranganadi- Lekhi (Ranganadi- Not furnished & Lekhi- No tripping) line tripped. Due to tripping of this element, Lekhi & Nirjuli area of Arunachal Pradesh and Gohpur area of Assam separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 32 MW in Arunachal Pradesh & Assam

e. At 1935 Hrs on 24.07.15, 132 kV Ranganadi- Lekhi (Ranganadi- Earth Fault &

Lekhi- Not furnished) line tripped. Due to tripping of this element, Lekhi &

Nirjuli area of Arunachal Pradesh and Gohpur area of Assam separated from rest

of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 60 MW in Arunachal Pradesh & Assam

Category as per CEA Standards: GD-I

Analysis of Events:

Relay settings of 132 kV Lekhi – Nirjuli line at both ends are to be checked. It is also

to be checked whether these tripping are due to vegetation problem.

DR output at both ends of above elements required for proper analysis of the events.

Deliberation in the Meeting:

DGM (AM), NERTS suggested that relay has to be checked and Distance Protection

Relay has to be installed and if not, the present relay can be set as directional to

reduce the frequent tripping.

The Sub-committee requested AEGCL & DOP, Arunachal Pradesh to look into the

matter as suggested by POWERGRID and if required, POWERGRID will assist the

above settings.

The Sub-committee noted as above.

iv. Repeated tripping in Nagaland system

a. At 0815 Hrs on 04.07.15, 132 kV Dimapur(PG)- Kohima (Dimapur(PG)- Over

current & Kohima- No tripping) line tripped. Due to tripping of this element,

Capital area of Nagaland separated from rest of NER Grid and subsequently

collapsed due to no source in this area.

Load loss: 28 MW in Nagaland

b. At 2325 Hrs on 26.07.15, 132 kV Dimapur(PG)- Kohima (Dimapur(PG)- DP, ZI,

Y-B-E & Kohima- Not furnished) line tripped. Due to tripping of this element,

Capital area of Nagaland separated from rest of NER Grid and subsequently

collapsed due to no source in this area.

Load loss: 27 MW in Nagaland

9

c. At 2348 Hrs on 26.07.15, 132 kV Dimapur(PG)- Kohima (Dimapur(PG)- DP, ZI, Y-B-E & Kohima- Not furnished) line tripped. Due to tripping of this element, Capital area of Nagaland separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 4 MW in Nagaland

d. At 0042 Hrs on 27.07.15, 132 kV Dimapur(PG)- Kohima (Dimapur(PG)- DP, ZI, Y-B-E & Kohima- Not furnished) line tripped. Due to tripping of this element, Capital area of Nagaland separated from rest of NER Grid and subsequently collapsed due to no source in this area.

Load loss: 22 MW in Nagaland

Category as per CEA Standards: GD-I

#### Analysis of Events:

Relay settings of 132 kV Dimapur(PG)- Kohima line at both ends are to be checked. DR output at both ends of above elements required for proper analysis of the events.

#### Deliberation in the Meeting:

Since no representative from Nagaland was present, the status could not be updated.

This issue will be discussed during next PCC meeting.

The Sub-committee noted as above.

#### v. Blackout of Dimapur (PG) substation

At 1338 Hrs on 07.07.15, 220 kV Misa(PG)- Dimapur(PG) I (Misa- DP,Z1,Y-E & Dimapur (PG)- Not furnished) line tripped. 220 kV Misa (PG)- Dimapur (PG) II was under planned shutdown. 132 kV Dimapur (PG) - Dimapur (Nagaland) I & II (Dimapur(PG)- Loss of Voltage & Dimapur(Nagaland)- Not furnished), 132 kV Dimapur (PG) - Kohima (Dimapur (PG) - Loss of Voltage & Kohima- Not furnished), 132 kV Dimapur(PG) - Doyang I & II (Dimapur (PG) - Loss of Voltage & Doyang- Not furnished), 132 kV Dimapur(PG)- Bokazan (Dimapur(PG)- Loss of Voltage & Bokajan- Not furnished) 132 kV Dimapur(PG)- Imphal (PG) (Dimapur(PG)- Not furnished & Imphal (PG)- Not furnished) lines also tripped. 132 kV Doyang - Mokokchung(Nagaland) (Doyang -

Not Furnished & Mokokchung (Nagaland)- Not furnished) line also tripped.

Doyang Unit 1 also tripped.

Load loss: 87 MW in Nagaland

Generation Loss: 17 MW in Doyang

Category as per CEA Standards: GD-I

#### **Analysis of Events:**

Due to tripping of all the outgoing feeders of Dimapur (PG) substation, there was a complete blackout of Dimapur (PG) substation. As informed by NERTS, there was Insulator puncture at 220 kV Dimapur (PG). Due to tripping of 132 kV Dimapur(PG)- Dimapur(Nagaland) I & II, 132 kV Dimapur (PG)- Kohima & 132 kV Doyang- Mokokchung(Nagaland) lines, Nagaland system separated from rest of NER Grid and subsequently collapsed. Relay flag details and DR output at both ends of above elements required for proper analysis of the events.

#### **Deliberation in the Meeting:**

DGM (AM), NERTS informed that the problem is due to bus insulator punctured and the same has been rectified now.

The Sub-committee noted as above.

#### vi. Tripping of Loktak Generation

At 0202 Hrs on 22.07.15, 132 kV Loktak- Jiribam (PG) (Loktak- DP, ZI, R-Y-E & Jiribam- DP, ZI, R-Y-E), 132 kV Loktak- Imphal (PG) (Loktak- Overcurrent & Imphal- No tripping), 132 kV Loktak- Ningthoukhong (Loktak- Hand tripped & Ningthoukhong- Not furnished) & 132kV Loktak- Rengpang (Loktak- Not furnished & Rengpang- Not furnished) lines tripped. Loktak Unit 1,2 & 3 also tripped sue to loss of evacuation path.

Load loss: 2 MW in Manipur

Generation Loss: 100 MW in Loktak Category as per CEA Standards: GD-I

#### **Analysis of Events:**

Due to tripping of all the outgoing feeders from Loktak, all the running units of Loktak tripped due to loss of evacuation path. DR output at both ends of above elements required for proper analysis of the events.

#### **Deliberation in the Meeting:**

Manipur representative informed that the tripping has occurred due to lightning only.

The Sub-committee noted as above.

#### vii. Disturbance in AGTPP, Palatana and Tripura power system

At 1233 Hrs on 24.07.15, 132 kV AGTPP - Agartala I line (AGTPP - DP, ZIII, Y-B-E & Agartala - No tripping) & 132 kV AGTPP - Agartala II line (AGTPP- DP, ZIII, Y-B-E & Agartala - No tripping), 132 kV Agartala- Rokhia I (Agartala- Not furnished & Rokhia- Not Furnished), 132 kV Agartala- Rokhia II (Agartala- Not furnished & Rokhia- Not furnished), 132 kV Palatana - Surajmani Nagar (Palatana- No tripping & Surajmani Nagar- DP, ZIII, Y-B-E), 132 KV Jirania - Barmura (Jirania- Not furnished & Baramura- Not Furnished) & 132 KV Kamalpur - Dhalabil (Kamalpur- Not furnished & Dhalabil- Not Furnished) lines tripped. All the running units of Rokhia tripped.

Generation loss: 121 MW [AGTPP = 63 MW, Tripura= 58 MW]

Category as per CEA Standards: GD-I

#### Analysis of events:

As informed by AGTPP, tripping of 132 kV AGTPP - Agartala I & II lines occurred on DP, Z-III, 69.6 km at AGTPP end, which indicates uncleared fault in TSECL system. As informed by TSECL verbally, there was disc puncture in 132 kV Agartala- Rokhia II line. All the running units of Rokhia also tripped along with AGTPP Unit III. AGTPP Unit I & IV was desynchronized. Relay flag details and DR output at both ends of these elements are required for proper analysis of the events.

#### **Deliberation in the Meeting:**

DGM (AM), NERTS informed that Distance Protection is not in place and hence the tripping has occurred.

AEGCL representative informed that during the protection audit constituted by NERPC, it was found that many relays are lying unutilized and hence requested TSECL to look into the matter and try to install the same for improvement of their system.

GM (AM), POWERGRID suggested TSECL to engage a consultant to check and test the unutilized relays and install the relays at some important sub-stations at the earliest.

The Sub-committee has also noted that concerned engineers who have undergone training for Numerical Relay under the aegis of POWERGRID have not attend the meeting and requested NERPC to write to their management that those engineers should attend the meeting regularly.

The Sub-committee noted as above.

Action: TSECL & NERPC.

The Sub-committee also decided that all the grid incidences of previous months will be discussed in the next PCC meeting after getting all data from the constituents and analyze by NERLDC for fruitful deliberation and remedial suggestions.

## A.8 <u>Implementation of activities decided in joint meeting among NERLDC,</u> NERPC & constituents of NER on 29.12.14

A meeting was held at NERLDC between NERPC, NERLDC and constituents of NER as per directive of Hon'ble CERC in response to Petition No. 113/MP/2014 on 29.12.14.

The constituents of NER agreed upon the following:

- **a.** Testing of all existing relays and schemes within 2 months by all constituents to assess the healthiness of existing protective relays
- **b.** Review of relay settings based on history of tripping and non-availability of Distance Protection Relays would be done.
- **c.** Attempts would be made to avoid any tripping on account of vegetation growth, which is frequent in NER
- **d.** Single Phase / Three phase Auto Reclose Scheme of transmission lines of voltage level 132 kV and above under List of Important Grid Elements of NER are to be adopted, wherever available. The status of implementation will be monitored in monthly OCC/PCC meetings.

It is requested to power utilities of NER to intimate the latest status of the above activities.

Many of tripping of transmission & distribution lines occurred due to vegetation problem. Tripping of transmission & distribution lines can be reduced if bush/jungle cutting done regularly. It was observed that number of tripping of transmission & distribution lines increases during the period of monsoon.

#### **Deliberation in the Meeting:**

It was requested to all the constituents to send monthly status report of the activities decided during joint meeting among NERLDC, NERPC & constituents of NER on 29.12.14. It was suggested that proper patrolling are to be done after tripping any elements and patrolling reports are to be submitted by the concerned utility to NERLDC & NERPC. It was requested to all transmission utilities of NER for furnishing monthly report on trimming of trees.

The Sub-committee once again requested all the constituents to carry out the above suggestions as decided earlier for safety of the grid.

Action: All Power Utilities.

#### **ADDITIONAL AGENDA OF POWERGRID:**

#### Date and Venue of next PCC

It is proposed to hold the 37th PCC meeting of NERPC in the first week of September, 2015. The exact venue will be intimated in due course.

\*\*\*\*\*

#### Annexure-I

## List of Participants in the 36th PCC Meetings held on 06/08/2015

SN	Name & Designation	Organization	Contact No.
1.	Sh. Nangkong Perme, EE, SLDC	Ar. Pradesh	09436288643
2.	Sh. M.K. Bordoloi, CGM, SLDC	Assam	09435203996
3.	Sh. J.K. Baishya, AGM	Assam	09435041494
4.	Sh. Karuna Sarma, Asst. Mgr	Assam	09435013532
5.	Sh. A. Bhattacharya, Dy. Mgr.	Assam	09435332928
6.	Sh. J.P. Choudhury, AGM	Assam	09954055295
7.	Sh. A.N. Dev Choudhury, AGM	Assam	09854120791
8.	Sh. Laishram Ritu, Manager	Manipur	09612882984
9.	Sh. Khoisnam Steela, Manager	Manipur	08730831103
10.	Sh. T. Gidon, EE, SLDC	Meghalaya	09774479956
11.	Sh. Javed M. Warjri, AEE ,SLDC	Meghalaya	09856012700
12.	Sh. S. Saha. AE (SP)	Meghalaya	09436112798
13.	Sh. A.G. Tham, AE (SP)	Meghalaya	09774664034
14.	Sh. Lalduhawma, EE (SLDC)	Mizoram	09436144113
	No Representative	Nagaland	
15.	Sh. U. Debbarma, DGM	Tripura	09436462842
16.	Sh. D. Pal, Sr. Manager	Tripura	09436500244
17.	Sh. T.S. Singh, GM	NERLDC	09436302717
18.	Sh. A. Mallick, DGM (SO-II)	NERLDC	09436302720
19.	Sh. S. Konar, Ch. Manager	NERLDC	
20.	Sh. B. Medhi, Manager	NERLDC	0943635376
21.	Sh. A. Patir, GM (AM)	PGCIL	09436302529
22.	Sh. P. Kanungo, DGM (AM)	PGCIL	09436302823
23.	Sh. Suranjan Sarkar, Sr. Manager	NEEPCO	08974009294
24.	Sh. Bhaskar Goswami, Sr. Manager	NEEPCO	09436163981
25.	Sh. Narendra Kr Gupta, Manager	OTPC	09774233426
26.	Sh. T. Karmakar, Asst. Manager (E)	OTPC	09435239314
	No Representative	NHPC	
	No Representative	NTPC	
27.	Sh. P.K. Mishra, MS	NERPC	09968380242
28.	Sh. B.Lyngkhoi, Director/S.E (O)	NERPC	09436163419
29.	Sh. S.M. Jha, E.E	NERPC	08731845175
30.	Sh. S. Mukherjee, AEE	NERPC	08794277306
31.	Sh. Shaishav Ranjan, A.E	NERPC	08794276168