

North Eastern Regional Power Committee

Agenda For

4th Operation Coordination Sub-Committee Meeting

Time of meeting : 02:00 PM.

Date of meeting : 9th January, 2012 (Monday)

Venue : "Hotel Grand Starline" Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 3rd MEETING OF PROTECTION SUB-COMMITTEE OF NERPC.

The minutes of 3rd meeting of Protection Sub-committee held on 7th May, 2010 at Shillong were circulated vide letter No. NERPC/OP/PCC/2011/589 - 600 dated 12th May, 2010.

No observations were received from any of the constituents, the minutes of 3rd PCC meeting maybe confirmed.

ITEMS FOR DISCUSSION

B. FOLLOW UP ACTION

C. 1 Submission of details of various Protection Scheme:

During the 3rd PCC meeting, Member Secretary had requested all constituents of NERPC to submit the protection details of their transmission system so that the protection scheme can be standardized for North-Eastern region. He mentioned that so many trippings of lines could be due to improper relay setting or co-ordination problem of relays owned by different agencies and standardization of protection system and relay settings will improve the situation. AEGCL, MeSEB, Mizoram,

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RHEP & AGBPP, Kathalguri of NEEPCO have already submitted their protection details to NERPC. The protection details in respect of NERTS, Ar. Pradesh, Manipur, Nagaland, TSECL, NEEPCO (except RHEP & AGBPP) are still awaited. MS requested them to submit the details as early possible as per the performa enclosed at **Annexure C.1**.

Constituents may inform the current status on this issue.

C. 2 Undesired trippings of 132 kV RC Nagar-Agartala line I&II and R.C.Nagar-Kumarghat

During the 3rd PCC meeting, the tripping details of 132 KV R.C.Nagar- Agartala line I & II and R.C.Nagar-Kumarghat were discussed in the meeting. It was observed that 132 KV R.C.Nagar- Agartala line I & II were frequently tripping in Zone-3 because of faults at 132 kV lines (TSECL lines) originating from 79 tilla, Agartala S/S. TSECL representative stated that there is no distance protection schemes on these lines. Member Secretary requested TSECL to install Numerical Distance protection Scheme on these lines as loss of generation at R.C. Nagar due to fault in TSECL lines affects other States also. TSECL had agreed for providing distance protection scheme on their lines.

Regarding the 132 KV R.C.Nagar- Kumarghat line, it was found that there is some relay co-ordination/setting problem. NEEPCO and PGCIL were requested to jointly check the relay co-ordination/setting and resolve the problem at the earliest.

POWERGRID/NEEPCO may intimate the current status

C. NEW ITEMS

C. 1 Non Operation of Protective Switchgear of DOP, Manipur

Undesirable tripping of 132kV Imphal (PG) – Imphal (S) Line and 132kV Dimapur – Imphal Line during fault in Manipur system due to non-operation of protective switchgear of Manipur system is being observed since long. Refer list of mal trippings during 2011 enclosed in **Annexure – C.1**.

The issue was discussed in details during 9th TCC & NERPC Meeting held on 11th & 12th August 2010. During the meeting, Manipur informed that most of old outdated equipments need replacement and this process would take some time.

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Necessary action is being taken. Refer MOM Item No. 8.10 of 9th TCC & NERPC Meeting.

Manipur may inform the current status

C. 2 Frequent Tripping Of 33kv System of DOP, AP at Nirjuli and Ziro

During 9th TCC & NERPC Meeting, the issue was discussed in details and Arunachal Pradesh informed that they have already initiated various measures to reduce no. of faults on 33 KV lines owned by Dept. of Power, Govt. of Arunachal Pradesh.

During 10th TCC & NERPC Meeting, POWERGRID again expressed concern for non-reduction of no. of faults in 33kV Feeders. Arunachal Pradesh again assured to take necessary action urgently to reduce no. of faults in their 33kV lines.

During 11th & 12th TCC and NERPC Meeting, POWERGRID again raised the issue of increase in trippings. But, the issue could not be discussed in absence of representatives from Arunachal Pradesh.

The present status of tripping of 33kV Feeder as on 26.12.2011

A. 132/33kV Ziro Sub Station (Tripping of 33kV Feeders)

Sl. No	33 KV feeder	Jan' 10 to Mar' 11		Apr' 11 to Dec' 11	
		Nos.	Tripping/month	Nos.	Tripping/month
1	Kurung- Kamey	525	21.67	171	19.00
2	Old Ziro	232	14.47	85	04.44
3	Kimin	511	34.07	343	38.11

B. 132/33kV Nirjuli Sub Station (Tripping of 33kV Feeders)

Sl. No	33 KV feeder	Jan' 10 to Mar' 11		Apr' 11 to Dec' 11	
		Nos.	Tripping/month	Nos.	Tripping/month
1	AP #1	64	4.27	55	6.11
2	AP #2	155	10.33	121	13.44
3	AP #3	44	2.93	35	3.88

Arunachal Pradesh to take necessary action on priority to reduce no. of faults in 33kV feeders owned by DoP, Govt. of Arunachal Pradesh to avoid further failure of transformers at Nirjuli and Ziro Sub Stations.

Arunachal may inform action plan for reduction in trippings.

C. 3 T- Connection of Lekhi Sub Station

132kV Ranganadi-Nirjuli Line is being tapped (i.e. operating with T – connection) to feed Lekhi Sub Station instead of LILO since Aug/Sept 2008. DoP, AP may expedite the action for LILO of Ranganadi – Nirjuli line at at Lekhi sub-station.

Arunachal may inform action plan for restoration of LILO

C. 4 Tripping of all Feeders Connected to Khliehriat (PG) Sub Station due to Fault in MeECL System

There are several instances of tripping of all feeders connected to 132kV Khliehriat (PG) Sub Station during fault in MeECL System. Refer **Annexure – C.4**. From such tripping it is evident that the protective switchgear of MeECL beyond Khliehriat (MeECL) Sub Station fails to clear fault which results reflection of fault at 132kV Khliehriat (PG) Sub Station. Hence, MeECL has to take immediate action to ensure proper functioning of their protective switchgear to avoid such multiple tripping at 132kV Khliehriat (PG) Sub Station which often causes Grid Disturbance.

MeECL to take up immediate action

C. 5 Commissioning of Line CVTs of 132kv Khliehriat (PG) - Khliehriat (MeECL) Line # II

The CVTs of Khliehriat (MeECL) Bay # II at Khliehriat (PG) Sub Station have been erected but not commissioned till date. Presently the voltage input for Distance relay as well as for Back up protection relay is being taken from Bus CVT installed in POWERGRID, Khliehriat Sub-station. Matter was informed to R.E (Me.ECL), Khliehriat for taking necessary action in this connection.

MeECL may inform the status/action plan for commissioning the CVTs

C. 6 Installation of BMK at Khliehriat (MeECL) Bay # II at Khliehriat (PG) Station

During commissioning of Khliehriat (MeECL) Bay # II at POWERGRID's Khliehriat Sub Station Me.ECL excavated pit for installation of BMK but till date the same has not been installed and the pit has become a safety hazard. Matter was referred to R.E (MeECL), Khliehriat for taking necessary action.

Me.ECL may inform the status/action plan for installation of BMK

C. 7 Non-Functioning of 48V Battery System (PLCC) at Kopili HEP

At present, all the PLCC Links of Kopili HEP is out of service due to non-functioning of 48V Battery System. Meanwhile, POWERGRID has already replaced all obsolete PLCC Link Type ETI by Type ETL of M/S ABB Make.

NEEPCO may inform the status of rectification

C. 8 Non-Functioning of 48V Battery Bank at Samaguri (AEGCL) Sub Station

The 48V Battery Bank at 220/132kV Samaguri Sub Station of AEGCL is defective and at present, the load is being fed directly by the charger. Meanwhile, POWERGRID has already replaced obsolete PLCC (ETI) and CB (MOCB) and Auto Reclose Scheme will be put in service.

AEGCL may inform the status of rectification of 48V Battery Bank

C. 9 Installation of 2nd Distance Protection Relay for 220KV and above System

POWERGRID has already installed 2nd Distance Protection Relay for all the lines at 220kV and above level as per the CEA regulation. The status of 2nd DPR installation in following lines may be indicated by concerned utility.

S. No.	Station	Line	Utility	Status
1	Kopili HEP	220 KV Misa #1	NEEPCO	
2	Kopili HEP	220 KV Misa #II	NEEPCO	
3	Kopili HEP	220 KV Misa #III	NEEPCO	
4	Kathalguri PH	220 KV Misa	NEEPCO	
5	Kathalguri PH	220 KV Mariani	NEEPCO	
6	Samaguri SS	220 KV Balipara	AEGCL	
7	BTPS SS	220 KV Salakati # I	AEGCL	
8	BTPS SS	220 KV Salakati # II	AEGCL	

It is also required to be ensured that directional earth fault relay is provided/activated in case in case numerical distance protection has been provided to take care of high resistance faults.

Above Utilities may intimate the current status.

C. 10 Earth Fault in 220V DC System

During the visit of our representative persisting earth fault was observed in 220V DC System of following stations. The 220 V DC supply circuits needs to be cheked and problem should be sorted out on priority basis to avoid mal-operation of switchgear.

1. 220/132kV Samaguri Sub Station (AEGCL)
2. 220/132kV Mariani Sub Station (AEGCL)
3. 220kV Kathalguri Sub Station (NEEPCO)

The sub-Committee may discuss.

C. 11 Major Grid disturbances during the last one year.

The major grid disturbance during the last one year is enclosed at **Annexure C.11**.

The sub-Committee may discuss.

C. 12 Any other item

C. 13 Date and Venue of next OCC

It is proposed to hold the 5th PCC meeting of NERPC on 10th April, 2012 (Friday). As per roaster, Assam will be the host for 5th PCC meeting. The exact venue will be intimated in due course.
