



भारत सरकार Government of India

विद्युत मंत्रालय Ministry of Power

उत्तर पूर्वी क्षेत्रीय विद्युत समिति

North Eastern Regional Power Committee

एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय  
NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya

Ph. No: 0364 - 2534039

Fax No: 0364 - 2534040

Website: www.nerpc.nic.in

No. NERPC/SE (O)/NETeST/2020/4847-4884

Dated: March 16, 2020

To,

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
4. Director (Generation), Me. PGCL, Lumjingshai, Short Round Road, Shillong – 793 001
5. Director (Distribution), Me. ECL, Lumjingshai, Short Round Road, Shillong – 793 001
6. Director(Transmission), Me. PTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
8. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. Chief Engineer (WE Zone),Department of Power ,Govt. of Arunachal Pradesh, Itanagar- 791111
12. Chief Engineer (EE Zone),Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Chief Engineer (TP&MZ),Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
14. Engineer-in-Chief (P&E), Department of Power, Govt. of Mizoram, Aizawl – 796 001
15. Chief Engineer (P), Department of Power, Govt. of Nagaland, Kohima – 797 001
16. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
17. Group General Manager, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
18. ED, NERTS, PGCIL, Dongtich-Lower Nongrah, Lapalang, Shillong -793 006
19. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
20. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
21. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad,Haryana-121003
22. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
23. GM, NERLDC, Dongtich, Lower Nongrah, Lapalang, Shillong -793 006
24. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer (NPC), NRPC Complex, Katwaria Sarai, SJSS Marg., New Delhi - 110016

**Sub: Minutes of 16<sup>th</sup> NETeST Meeting.**

**Sir/Madam,**

Please find enclosed herewith the minutes of 16<sup>th</sup> NETeST Meeting held at Guwahati on the **20<sup>th</sup> February, 2020** for your kind information and necessary action. The minute is also available on the website of NERPC, **www.nerpc.nic.in**.

Any comments/observations may kindly be communicated to NERPC Secretariat at the earliest.

**Encl: As above**

भवदीय / Yours faithfully,

बि. लिं गखोइ / B. Lyngkhoi

निदेशक / **Director/ SE**

Copy to:

1. CGM, AEGCL, Bijuli Bhavan, Guwahati - 781001
2. CGM, APGCL, Bijuli Bhavan, Guwahati - 781001
3. CGM, DISCOM, Bijuli Bhavan, Guwahati - 781001
4. Head of SLDC, Me.ECL, Lumjingshai, Short Round Road, Umjarain, Shillong – 793 022
5. Head of SLDC, Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
6. Head of SLDC, Department of Power, Dimapur, Nagaland
7. Head of SLDC, Electricity Department, Govt. of Manipur, Keishampat, Imphal – 795 001
8. Head of SLDC, Department of Power, Govt. of Mizoram, Aizawl – 796 001
9. Head of SLDC, TSECL, Agartala – 799 001
10. Chief Engineer(Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
11. Addl. GM (EED), NTPC Ltd., Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
12. DGM (C&M), OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019.



निदेशक / Director/ SE

**North Eastern Regional Power Committee**

**MINUTES OF THE 16<sup>th</sup> NER Telecommunication, SCADA & Telemetry**

**(NE-TeST) COORDINATION**

**SUB-COMMITTEE MEETING OF NERPC**

**Date** : 20/02/2020 (Thursday)  
**Time** : 14:30 hrs  
**Venue** : “Hotel Nandan”, Guwahati.

The List of Participants in the 16<sup>th</sup> NETeST Meeting is attached at ***Annexure-I***.

Shri A.K. Thakur, Member Secretary, NERPC welcomed all the participants to the 16<sup>th</sup> North Eastern Telecommunication, SCADA & Telemetry meeting. He congratulated NERLDC for completing the pilot V-Sat and it’s feasibility report. He informed that NERLDC has filed petitions against three states, so he requested members to put in all efforts to bring the power communication in NER to satisfactory level. He also observed that the representative from some states and OTPC are absent and it will be intimated to their management for stronger participation. He requested all members to prepare reply before coming for fruitful deliberations.

He then requested Shri B. Lyngkhoi, Director (O&P) to take up the agenda items for discussion.

**A. CONFIRMATION OF MINUTES**

**CONFIRMATION OF MINUTES OF THE 15<sup>th</sup> MEETING OF “NORTH EASTERN TELECOMMUNICATION, SCADA & TELEMETRY (NETeST)” SUB COMMITTEE OF NERPC.**

Director, NERPC informed that minutes of the 15<sup>th</sup> NETeST Meeting held on 21<sup>st</sup> October, 2019 at Guwahati were circulated by NERPC vide letter No. NERPC/SE(O)/TeST/2019/1622-1659 dated 7<sup>th</sup> November, 2019.

***The Sub-committee confirmed the minutes of the 15<sup>th</sup> NETeST Meeting as no comments/observations were received from the constituents.***

**A.1 Status of FO works under different projects:**

Name of the Project	Status as in 15 <sup>th</sup> NETeST
<p>MW Vacation &amp; OPGW Project</p>	<p>M/s TENDOT</p> <ul style="list-style-type: none"> <li>a. All Completed except 3links ( ROW issue Nirjuli-Ranga, Non-readiness of front terminal equipment by P&amp;E, Mizoram (Shimui w.r.t. Sihmuii-Melriat, Zemabawk2 w.r.t. Zemabawk2-Aizawl)-</li> <li>b. Overall testing March'20-Details given in attachment-<b>Annexure-A.01</b>.(S.N.2.B)</li> </ul> <p><b>NERTS informed that OPGW link Nirjuli-Ranganadi with LILO at Lekhi is still having ROW issue. Equipment for the above is also considered in NER FO expansion project.</b></p> <p><b>Action: DoP Ar. Pradesh/Administration</b></p> <p>Also, Sihmuii station (Part of Link Zemabawk-Aizawl LILO at Melriat --Sihmuii) is to be made ready by P&amp;E, Mizoram &amp; so commissioning getting delayed. Similarly, Zemabawk station is to be made ready (along with OPGW rerouting as Substation is shifted by P&amp;E Mizoram). DOCO will be done as per original scope completed by PGCI and integration will be done by PGCI after fronts end made ready by P&amp;E (Sihmuii, Zemabawk, FO Rerouting etc.) in future.</p>
	<p>TRIPURA</p> <ul style="list-style-type: none"> <li>• All OPGW completed except links which are under construction by State TSECL. 257km of 320km. (Actual 257km, 63km-no front)-Completed. Shut down for SMNagar-Palatana link is delayed (SD of power line crossing SM Nagar-Palatana &amp; 400KV</li> </ul>

NER FO  
Expansion/Additional  
requirement of OPGW

Silchar-Palatna) and so is delaying other Fiber linking with SLDC.

- 63.522 km (02 links viz. SM Nagar~Rokhia & SM Nagar~Monarchak, line is under construction) **front not** available due to construction of 2 lines by TSECL.
- Necessary Intimation has been given by POWERGRID to TSECL (Copy attached). Further there has been delay reportedly due to diversion work by Railway/TSECL-Tripura over Palatana-Udaipur. The matter will be taken up by POWERGRID with Railway authority.

**Meghalaya :**

1. 3nos. links out of 4nos.links completed. (Khl-Khl, Khl-Leshka, Khl -Lumshnong, with equipment at all stations including NEHU). POWERGRID & MEPTCL to do testing.

**Action: MePTCL & NERTS.**

**Manipur :**

1. 132kV Loktak (NHPC) ~ Rengpang: Team retreated after one trial (during Loktak -Imphal was done)/ Links around Loktak area will be tried at one go to avoid ROW/ miscreant/terrorist prone area.

**Manipur: Erection: 325/365km,**

Target completion: As per Annexure A.2 March-April 20.

Links for which ROW/administrative issue/Rerouting by State persists, same to be sorted by MSPCL- for such link-May 2020(or 3months wrt matter sorted).

ANNEX-A.01

**Nagaland:**

Dimapur-Dimapur, Wokha-Kohima & Connectivity to Mokokchung state completed. Refer **Annexure-A.01.**

	<p>DoP, State is to co-ordinate for early construction of TL of LILO part of Wokha –Kohima LILO at New Kohima (same is delaying the part of FO expansion project). DOP to connect to Doyang CS Wide band by PLCC from Sanis. DoP has been communicated through a letter.</p>
<p>Upgradation of ULDC FO node</p>	<p>Completed. Details given in <b>Annexure A.01-(S.N. 2c)</b>. 2 stations are pending which was delayed as front is not ready.</p>

**Critical Issues against project implementation:**

<b>Name of the Project</b>	<b>Critical Issue</b>
<p>Upgradation of ULDC FO node</p>	<p>Non-availability of fiber in Misa-Dimapur-Imphal (old OPGW) as line is under diversion &amp; continuous cuts are encountered &amp; Space in Kohima.</p> <p><b>Status: Discussed as above</b></p>
<p>MW Vacation</p>	<p>1. Non readiness of Sihmuui, Mizoram from P&amp;E Dept. is hindering completion of final works (RTU is not powered up, OPGW equipment is not powered up). As per last meeting, transformer was to be arranged by 2 months wef Oct19. This is also delaying MW vacation OPGW project</p> <p>2. Further originally, Aizawl-PG- to Ziambawk-2 (Zuangtuui) OPGW was completed (by Ten Dot) and even equipment (Fibcom/Tejas) were supplied under MW vacation /FO Expansion project.</p> <p>Later, P&amp;E, Mizoram has planned for shifting the Zimabawk-2 (Zuangtuui) substation itself to a different location. P&amp;E, Mizoram may immediately take up for necessary shifting of Equipment etc., to new location along with connecting new location/substation via OPGW. POWERGRID proposes that OPGW will be</p>

arranged (by POWERGRID) from spare of FO Expansion. However stringing of OPGW to connect Zuangtui (Zimabawk-2) and then to SLDC may be immediately taken up by P&E, Mizoram.

Note: Original plan as per MOM with P&E, DoP-Mizoram:

Aizawl\_PG (i)---(via 132kV line, to be done by PGCI)—Zuangtui/Zimabawk-2[ii]---(via 33kV Line OPGW/ADSS to be done by P&E)--SLDC-Mizoram[iii]

Link (i)---(ii) completed by PGCI but P&E, Mizoram is to ensure completion (ii)—(iii) of shifting Zuangtui SS & new work related to shifting(ii) along with OPGW

3. Connectivity of SLDC-AP via connecting Nirjuli-Lekhi-SLDC is still pending due to ROW issue in Nirjuli-Ranganadi Line.

SLDC AP can use the OPGW of Lekhi-to Chimpu and install a converter (Optical to Ethernet or Optical to serial) to bring data from Lekhi to Chimpu.

**Status: Discussed as above**

NERLDC mentioned that the Fibre-Optic projects under implementation by POWERGRID-NERTS needs to be completed at the earliest as per the deadlines to improve the real-time data availability of substations in the Northeastern region.

Complete detail of the communication project is attached in **Annexure A.01** and **Annexure A.01a**.

**The Sub-committee noted as above.**

**Action: State Utilities, NERTS, NERPC.**

**B. NEW ITEMS**

**B.1 Strengthening of PLCC System by NER States:**

As per discussion in previous meetings the following were supposed to be completed by Jan'19:

- a. 18th TCC/RPC consolidated network of OPGW.
- b. NERPSIP communication details.
- c. Assam, Manipur, Meghalaya communication map submitted by the respective utilities.

In 15th NETeST meeting GM-NERLDC stated that NERLDC team should be invited to the quarterly review meeting on NERPSIP projects conducted by MoP. The sub-committee noted as above.

NERPC will write a letter to ED, NERSIP-POWERGRID & NERPSIP-Nodal officer, AEGCL for a joint meeting between AGM (Communication), AEGCL and NER-SIP team for proper co-ordination.

**Deliberation in the meeting**

NERLDC informed the forum that the real-time data transfer from several substations in the NER is dependent on PLCC links and hence the maintenance of PLCC panels should be done at periodic intervals. It was also deliberated that certain T-connections if made by state-utilities for power transfer will lead to signal loss in PLCC communication; hence, it should be avoided. Forum agreed that due consideration on maintenance of PLCC panels should be given. NERLDC also suggested that each constituent should prepare the action plan for necessary BOQs for upgradation / renovation of PLCC and submit their proposal at NETeST forums. While preparing BOQs each constituent should ensure the feature of Speech and Data for PLCC links along with separate protection panels.

It was also deliberated that points “a” and “c” can be dropped. Point “b – NERPSIP communication details” needs to be elaborated by the states in detail.

***The Sub-Committee noted as above.***

***Action: NERPC.***

**B.2 Improvement of Data Availability of NER**

As per IEGC 4.6.2, all users shall ensure telemeter power system parameters to RLDC. The present level of data availability of NER grid is as tabled in the **Annexure-2**, which is less than 50% in the region.

SN	Utility	Status as informed in 15 <sup>th</sup> NETeST
1	Assam	<p>It was discussed that the SAS upgradation projects in Assam owned Stations has severely impacted the real-time data availability of the respective stations in the Assam-SLDC.</p> <p>Hence, the progress of SAS related works needs to be closely monitored by a team formed by NERPC.</p> <p>The NERPC will write a letter to MD-AEGCL to expedite the completion of SAS works.</p> <p>As per mail sent by AEGCL the target dates were updated. However, the target dates are not being followed on strict basis. NERLDC requested NERPC to pursue the matter with higher authorities of AEGCL.</p>
2	Tripura	<p>As informed by NERTS only 12 out of 25 stations of TSECL will be covered into NER FO expansion projects. Stations which will be covered under FO network are: Dhalabil, SM Nagar, BJ Nagar, Gumti, Amarpur, Udaipur, Rokhia, Baramura, Badharghat, Satchand, Sabroom and Agartala.</p> <p>NERLDC requested TSECL to submit an action plan for establishment of communication link in remaining 13 stations which are not covered in NER FO expansion project. NERLDC requested TSECL to provide necessary actions plans for improvement of data availability as there is no significant improvement in data availability and data availability is in range of 25 to 27% since last nine (09) months.</p>
3	Meghalaya	<p>NERLDC emphasized that all the telemetry data like MW, MVAR, kV, Hz, OLTC, Isolators, CBs and SOEs to be provided by field to SLDC as well as RLDC for effective grid operation.</p>

		MePTCL mentioned that it is concentrating on getting the analog and CB data at present. The Isolators data will also be subsequently considered as it requires procurement of DI cards for C264 RTUs which is under discussion with M/s GE T&D India Limited.
5	Manipur	Manipur has to do integration work of all RTUs reporting over FO network. Tipaimukh was reporting through GPRS, but now it is not reporting. The same need to be rectified at the earliest.
6	Nagaland	Out of 17 stations only 4 (Nagarjan, Kohima, Mokokchung, Power House) stations are reporting. Nagaland should submit action plan for remaining 13 stations for providing the data availability.
7	Mizoram	<p>NERTS mentioned that RTU at Kolasib will be delivered by Dec'19. It was also stated that the GPRS works in Zuangtui and Lungmual has been completed and necessary integration works will be completed within one (01) week and the data will be available at SLDC and RLDCs. ( Internet link static ip on public domain is to be provided by P&amp;E, Mizoram).</p> <p>A new 25 MVA ICT has been procured by DoP Mizoram and will be installed at Sihhmui station. Once it is charged data will report through FO link.</p>
8	Ar. Pradesh	<p>EE, DoP AP stated that the data of four substations (i.e. Along, Bhalukpong, Khupi and Lekhi) is available in CFE but it is facing some issues in the network switch. After integration of Dikshi over VAST, some new network architecture adopted (one router is incorporated) &amp; some re-work (Server IP &amp; RTU IP management) is to be done by GPRS vendor. Once the network switch issue is rectified by GE, then Along, Bhalukpong, Khupi and Lekhi data will get reported on GPRS.</p> <p>It was also mentioned that VSAT for eight (08) locations was proposed but only one (01) location in Chimpu station has been approved. GM, NERLDC suggested that Chimpu is a local station and reporting can be directly through LAN cables. The VSAT planned for Chimpu station shall be shifted to some</p>

	other remote location for data transfer. GM-NERLDC requested AP to submit an action plan for establishment of communication in its stations as several stations are not covered under FO Expansion projects.
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NERLDC request NERPC to advise TSECL, DoP-Mizoram, DoP-Arunachal Pradesh and DoP-Nagaland for improvement of the data availability of respective state-owned stations.

Periodic reminder letters regarding data-availability has been sent to all constituents but no response has been received yet. Due to non-responsiveness for a long-time, the matter of non-availability of data in case of Arunachal Pradesh and Tripura has been escalated to CERC in form of a petition for necessary support.

**Deliberation in the meeting**

NERLDC conveyed that the real-time data availability of state utilities is not improving satisfactorily and an online portal for 24x7 monitoring of the same has been developed and made available to all the constituents of NER. The demo of the online portal was shown to the forum and discussions took place on the basis of the data statistics displayed on it. The state-wise list of issues highlighted is mentioned below:

**i. Mizoram:** The data availability of stations under jurisdiction of Mizoram was projected as 15 %. The station-wise telemetry status was discussed and it was found that many stations near to Aizawl are also not reporting to the SLDC. NERPC mentioned that stations near to Aizawl i.e. Luangmual and Zuangtuiu may get easily integrated due to the respective geographical locations and will be followed-up by NERPC.

For energizing Sihmuui Sub-Station, 12.5 MVA ICT under purchase is expected to be installed by April 2020.

Shifting of 132kV Zuangtuiu (Zemabawk-II) is already completed and in operation. However, RTU installed in the previous Sub-Station needed to be shifted to a new Control Room. 132 kV Lungmual (Zemabawk-II) and SLDC is already connected by ADSS (by Mizoram). Terminal connection at 132 kV Lungmual (Zemabawk-II) Sub-Station and at SLDC is yet to be done.

RTU for Kolasib has not been delivered and to be installed by PGCIL. Unless RTU at 132kV Zuangtui (Zemabawk-II) Sub-Station is in place and connection done, GPRS scheme could not be taken up.

GPRS scheme is not working as some specific ports i.e. 1701 (UDP), 1194 (Both TCP and UDP) and 2404 are not opened by ISP provider, which is Mizoram NIC, the same needed to be taken up by SLDC Mizoram for necessary actions with Mizoram NIC.

**ii. Tripura:** The data availability of stations under jurisdiction of Tripura was projected as 21.37 %. NERLDC also mentioned that the RTU maintenance is not proper and it needs to be taken into consideration for routine Operation and Maintenance. The station-wise telemetry status was discussed and following was deliberated:

Dhalabil, Badarghat, Baramura, SM Nagar and BJ Nagar: NERTS has informed that links associated with above stations are completed. SLDC can configure voice and data up to SLDC Tripura. TSECL may intimate the status of configuration.

Gumti, Amarpur and Rokhia: Real-time data will be available to SLDC once the pending work associated with FO link 132 kV SM Nagar-Palatana is completed. As requested by NERTS, OTPC need to permit NERTS to carry work on end equipment installed at Palatana end.

Sabroom, Satchand: Stachand and Sabroom are connected to each other via islanded FO link. The real-time data of both stations may be reported on PLCC to the nearest wideband node at Udaipur, and further to SLDC Tripura.

Monarchak: To be addressed by TSECL. 132 kV SMNagar-Monarchak Line is under construction. NERTS has handed over the material to TSECL.

**iii. Meghalaya:** The data availability of stations under jurisdiction of Meghalaya was projected as 42.38 %. NERLDC mentioned that the telemetry of digital status in stations is very low and it was discussed and recorded as per the Minutes of Meeting dated 27-05-2019 with MePTCL also.

MePTCL representative conveyed that their MRT-team has moved proposal related to procurement of DI Cards and the same is pending with Planning and Design department for necessary approval. NERPC stated that it should be followed-up and completed at the earliest so as to facilitate the data availability of Circuit-Breakers and Isolators to respective SLDC and NERLDC.

**iv. Manipur:** The data availability of stations under jurisdiction of Manipur was projected as 40.48 %. NERTS informed the forum that many data interruptions in stations owned by Manipur are due to patch chord issues caused by rodents. In such cases, the visit of vendors cannot be arranged on free-of-cost basis for rectifications works all the times. These are minor house-keeping issues which are part of every substation maintenance activity. NERLDC mentioned that rodent-repellent coating and sprays are available which when applied on the cables prevents it from rodents for around 6-8 months after which it has to be re-applied.

NERPC also mentioned that these issues will be taken up in NERPC/TCC meetings also as it leads to data interruption which further has commercial implications due to non-observability of over-drawl/under-drawl by the SLDC and in turn gets converted to huge penalty in terms of DSM charges.

**v. Arunachal Pradesh:** The data availability of stations under jurisdiction of Arunachal Pradesh was projected as 8.78 %. NERLDC mentioned that the Fiber-Optic expansion projects being executed by POWERGRID-NERTS have no links for Arunachal Pradesh. Further, DoP-Arunachal Pradesh has made no action-plan for establishing the communication links for its stations. NERPC informed the forum that they will take the matter with the higher management of DoP, AP regarding action plan for bringing the real-time data to SLDC and NERLDC. DoP, AP has to intimate the status of VSAT project, which was to be implemented in state.

***The Sub-Committee noted as above.***

***Action: All state utilities.***

### **B.3 Status of URTDSM**

Angle error and rectification: Angle Error/Phase sequence error was solved in six (06) numbers of stations out of nine (09) stations in the month of September'19. NERTS is requested to solve the issue in remaining three (03) stations namely, 220 kV Dimapur (PG) S/s, 220 kV Mariani (AS) and Tinsukia. Further, the angle issue also persist in 400 kV Bongaigaon – Siliguri Line 1. All the angles are measured with respect to 400 kV Bongaigaon Bus.

NERTS has reverted to NERLDC with the correction scheme implemented as was intimated by NERLDC System study group earlier. Further once NERLDC reverts back

with proposed action plan (what to do at secondary ckt, after system study), action would be taken care by NERTS. NERLDC & NERTS may confirm.

Status of Loading of Power System Analysis package by IIT Mumbai:

Updated status may be informed to forum.

Long outage of PMUs: Following PMUs are not reporting at NERLDC.

Sl. No.	Location	Parameter Not reporting
1.	Mariani (AS)	220 kV Bus 1 and 220 kV Bus 2
2.	Misa (AS)	220 kV Bus 1, 220 kV Bus 2 and 220 kV Killing Line 1
3.	Samaguri	All Parameters

**Deliberation in the meeting**

NERLDC highlighted the issues related to disconnection of PMUs in Samaguri station in Assam due to upgradation works from conventional stations to SAS based stations. As the SAS activities have been completed, the PMUs need to be re-connected to the CT/PTs at the site. AEGCL has to procure cables to connect PMU to Kiosk with an approx. length of 2,000 m (total of multiple cables). AEGCL is requested to provide the target date for completion of the necessary work.

AEGCL will prepare a list of material required for the PMU re-installation works and also convey it to NERPC for information. NERPC stated that it will write a letter to CGM of AEGCL for the PMU re-installation works.

Angle error and rectification: Three (03) stations namely, 220 kV Dimapur (PG) S/s, 220 kV Mariani (AS) and 220 kV Tinsukia (AS) are still having the phase angle error. NERLDC will share the phase angle matrix with concerned utilities to carry out the necessary changes.

NERLDC mentioned that similar issues related to PMU re-installation are being faced in Sarusajai station also. NERPC requested NERLDC to take up the matter related to Sarusajai station with CGM (SLDC), AEGCL.

***The Sub-Committee noted as above.***

***Action: NERLDC, NERTS.***

**B.4 GPRS connectivity for Substations and Leased line for SLDC:**

In 14<sup>th</sup> NETeST meeting the following timeline(s) were agreed to by the different utilities:-

<b>Name of utility</b>	<b>GPRS SIM/Broadband</b>	<b>Lease Line connectivity at SLDC</b>
TSECL	2 (Dharmanagar and PK Bari) Locations completed (SAT not signed by TSECL) but for other locations, SIM (or broad band) is yet to be provided by State Utility. NERTS informed that Broadband connection shall be provided, wherever possible, for better data connectivity.	Provided & 7 stations completed. but Broad band/SIM yet to be given for rest stations.
MSPCL	All stations are reporting	Available.
DoP Nagaland	5 out of 11 locations (Nagarjan, Kiphire, Mokokchung, Kohima & LHEP) completed. For other locations, link could not be established due to poor network. Party requested DoP, Nagaland through letter dated 01.07.2019 to provide broadband connection.	Lease link Provided. For some new SIM/BB to be provided by DOP.
P&ED Mizoram	3G SIM & Internet link with static IP is yet to be provided.	New Link from other service provider other than NIC is to be provided by P&E

**Deliberation in the meeting**

NERLDC highlighted the issues of non-availability of real-time data and also high intermittency in data availability from stations on which GPRS communication set-up has been deployed as an interim arrangement till permanent Optical Fibre connectivity gets established.

POWERGRID intimated that State may monitor the activation/payment in time related to SIMs in service (and take up with service providers for better service) and take up to extend broad band connection wherever possible. Necessary modification for broad band compatibility has been done by vendor in Items/Modems as provided to States by PMAS/vendor. Extending broad band will increase the reliability.

Based on the experience with GPRS being faced of different utilities of NER, it was suggested by forum that proper planning for reliable connectivity (as service provider performance is not good in NER remote location, GPRS may not be encouraged further) may be done for locations where only GPRS connectivity is available at present. In this reference, CEA technical standard may be referred which will soon be approved by GoI in near future. Broadband, leased line communication may be adopted wherever available till a permanent communication system set-up is established such as Optical Fibre, PLCC, VSAT, etc.

***The Sub-Committee noted as above.***

***Action: P&ED Mizoram, DoP Nagaland, DoP AP, TSECL and NERTS.***

**B.5 Selected cases of sub-stations for rectification of corresponding data/communication related issues:**

**a) NEEPCO:**

**i. Ranganadi:** The matter was discussed in 14th NETeST Meeting and it was deliberated that NERTS will make 2nd path of PLCC between BNC and RHEP as BNC is wideband location. The proposed path will be Ranganadi to BNC (on PLCC) and BNC to NERLDC (on wideband) subsequently. The work will be completed by first week of Sep'19.' The status of completing the LILO part at BNC needs to be deliberated.

**ii. Kathalguri:** VoIP phone is not functioning since 21st January 2020.

NEEPCO may address the different issues of each station on priority with strict deadline.

**Deliberation in the meeting**

**i. Ranganadi:** NERTS stated that the 2nd communication path for data transfer will be made available by 15th March 2020.

**ii. Kathalguri:** Completed.

***The Sub-Committee noted as above.***

***Action: NEEPCO.***

**b) NTPC BgTPP:** Only one (01) VoIP phone is available and that too in "Switchyard Control Room". No phone is available in the Unit Control Room (03 in nos.).

The matter was discussed in 15th NETeST meeting but no representative from NTPC was present. However, the forum recommended that NTPC should provide dedicated VOIP phones in all Unit Control Rooms on priority.

NTPC may provide dedicated VoIP phones in all Unit Control Rooms on priority with strict deadline.

**Deliberation in the meeting**

NERTS will provide port-list to NTPC for VOIP configuration. NTPC will extend the VoIP phones after NERTS provides port details.

***The Sub-Committee noted as above.***

***Action: NTPC & NERTS.***

**c) POWERGRID Salakati:** The matter related to more time in pooling of data was discussed in 15th NETeST meeting on which NERTS informed that CPU card has been replaced. The RTU has become old and hence approval for its replacement has been accorded in NERPC meeting..

**Deliberation in the meeting**

It was reported by NERTS that the RTU installed in Salakati substation is old and GE has been requested to visit the site and give inputs related to the actions to be taken. The forum requested NERTS to replace the RTU if the issue remains unresolved.

***The Sub-Committee noted as above.***

***Action: NERTS.***

**d) OPTC Palatana:** Dual-channel availability for real-time data telemetry of Palatana station was to be ensured for which shut-down of 400 kV Palatana-Silchar D/C station was accorded in the OCC meeting held in Nov'19 in order to facilitate the putting up of OPGW in certain tower-crossing section on 132kV Palatana-Surjamani Nagar S/C line. Fibcom team once returned from Pallatana OTPC as was not allowed for entry for commissioning. However , team will, be redeployed.

**Deliberation in the meeting**

NERTS mentioned that the dual-channel availability will be established by February 2020 after completion of work in 132 kV SM Nagar-Palatana FO link. OTPC's scope is to arrange connection from RTU & C/Room telephone up to the PDH Mux & SDH Mux.

**The Sub-Committee noted as above.**

**Action: OTPC**

**e) NHPC Loktak:** New RTU/Gateway was under procurement process by NHPC and it was informed in 15th NETeST meeting that the award of work followed by the execution will be completed by Jan'20.

**Deliberation in the meeting**

NHPC mentioned that the Letter of Award for procurement of RTU/Gateway will be placed by March-2020. Commissioning will be done within 15 days.

**The Sub-Committee noted as above.**

**Action: NHPC.**

**f) Meghalaya:**

**i. Killing:** PLCC issues in the sub-station due to which the data is not stable.

**ii.** SLDC NEHU may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

Sl. No.	Station Name	Observation
1.	Ampati	Entire Station not modelled at SLDC.
2.	Rongkhon	EMS database not modelled in SLDC. Only SCADA database is modelled.
3.	Nangalbibra	EMS database not modelled in SLDC. Only SCADA database is modelled.
4.	Nongstoin	EMS database not modelled in SLDC. Only SCADA database is modelled.

**Deliberation in the meeting**

**i. Killing:** MePTCL is requested to the matter of frequent failure of PLCC which leads to instability of real-time data.

**ii.** NERPC stated that the matter may please be taken up on priority by NERLDC with Meghalaya-SLDC for rectification at SLDC end.

**The Sub-Committee noted as above.**

**Action: MePTCL, NERLDC.**

**g) Mizoram:**

**i. Kolasib:** The station has been handed over by POWERGRID to Mizoram State Govt. Hence, the data is not reporting at present.

**ii.** SLDC Mizoram may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

Sl. No.	Station Name	Observation
1.	Saitual	Entire Station not modelled at SLDC.
2.	Khawzawl	Entire Station not modelled at SLDC.
3.	Champhai	Entire Station not modelled at SLDC.
4.	Serchhip	Entire Station not modelled at SLDC.
5.	Lunglei	Entire Station not modelled at SLDC.

***Deliberation in the meeting***

**i. Kolasib:** RTU for Kolasib has not been delivered. It is to be installed by PGCIL.

**ii.** NERPC stated that the matter may please be taken up on priority by NERLDC with Mizoram-SLDC for rectification at SLDC end. Mizoram SLDC is requested to include all five stations in the SCADA system at the earliest.

**The Sub-Committee noted as above.**

**Action: DoP Mizoram, NERTS.**

**h) Nagaland:** SLDC Nagaland may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

Sl. No.	Station Name	Observation
1.	Meluri	EMS database not modelled in SLDC. Only SCADA database is modelled.
2.	Kiphire	EMS database not modelled in SLDC. Only SCADA database is modelled.

***Deliberation in the meeting***

NERPC stated that the matter may please be taken up on priority by NERLDC with Nagaland-SLDC for rectification at SLDC end. Nagaland SLDC is requested to include both stations in the SCADA system at the earliest.

**The Sub-Committee noted as above.**

**Action: DoP Nagaland, NERTS.**

**B.6 Status of pilot VSAT project:**

VSAT pilot project was envisaged using KPTCL hub. The estimated cost of Rs. 5.38 lacs for VSAT terminals and Rs. 1.4 Lacs for Terminal Servers (for converting 101 to 104 protocol), all the constituents in 13th NETeST meeting together agreed on cost sharing basis. However, NERLDC approached M/s Hughes Communication to demonstrate VSAT connectivity for RTU/SAS data transfer between NEHU SLDC and

Killing Substation of Meghalaya on no-cost basis. M/s Hughes dispatched two (02) numbers VSAT antenna and Indoor equipment on 23/11/2019. The antenna and indoor equipment was delivered on 03/01/2020. The antenna at SLDC NEHU was erected on 20/01/2020. The VSAT at Killing will be commissioned by February 2020. The entire process of pilot project will be completed by February 2020. The same will be operational for a period of one (01) month.

NERLDC and Meghalaya-SLDC to submit a detailed report on performance of VSAT pilot project in Killing station to NERPC for further consideration in using VSAT as a backup communication medium in North Eastern Region.

**Deliberation in the meeting**

NERLDC informed the forum that the pilot project has been commissioned free-of-cost for data transfer from Killing substation to Meghalaya-SLDC and the data-availability has been satisfactory without any interruption or delay. NERLDC also presented a draft report on technical feasibility of VSAT communication based on the experience Pilot Project at Killing substation of MePTCL and in Demo project at Tezu substation of POWERGRID .

The representative from MePTCL raised certain queries on transfer of voice signal on VSAT for which NERPC requested NERLDC for testing of Voice-data on VSAT from Killing station to Meghalaya-SLDC and report to the NETeST forum.

The voice-testing between Killing station to Meghalaya-SLDC was done jointly by team of SLDC and NERLDC using Session Initiated Protocol Phones (Grand stream-make, Model GXP 1625) and Indoor Unit (Hughes make, Model HT 1300) along with the VSAT set-up supplied by M/s Hughes Communication India Limited.

The forum unanimously agreed that VSAT is a reliable mode of communication for real-time data transfer and can be a suitable option for North-Eastern region which has a difficult hilly terrain and RoW issues for execution for projects related to terrestrial links like Optical-Fibre, etc. Moreover, it was envisaged that a dedicated hub for NER constituents can be established at a common location such as Assam-SLDC (which is a strategic location with wide-band hub of POWERGRID) or any other strategic location for which MoU needs to be signed between state utilities. It was suggested by NERLDC that NERTS/ CTU is the most suitable utility to execute the VSAT project of NER centrally for benefit of NER constituents.

POWERGRID representative intimated that a) The scheme is very good for the benefit of State utilities b) the scope is not assigned for CTU c) However, for benefit of NER constituents, NERLDC as take lead and necessary co-operation will also be extended by NERTS. NERLDC may write to POWERGRID CC/BDD for needful if required.

POWERGRID further intimated that as already communicated earlier, POWERGRID/CS stations in NER are not required to be covered under this scheme as necessary network planning has already been taken care by CTU/CC-LD&C Dept. for POWERGRID Stations. Meghalaya & Assam intimated that they will revert back on the scheme

The forum noted the above & agreed that VSAT scheme implemented for States will be beneficial to NER.

***The Sub-Committee noted as above.***

***Action: All utilities.***

#### **B.7 Drawal points data availability:**

The real-time data availability of the analog points being used in calculation of “State’s Actual Drawl” from grid should be maintained at the highest level as any error or non-availability of such data can mislead the grid operator in SLDCs and NERLDC in real-time decision making and such situations may also lead to huge commercial implications in the form of DSM charges to the utilities. A SCADA Vs SEM report is being sent regularly by NERLDC to all state-utilities.

#### **Deliberation in the meeting**

NERLDC requested all the state constituents to maintain the real-time data availability of respective drawl points. The real-time data availability of the analog points being used in calculation of “State’s Actual Drawl” from grid should be maintained at the highest level as any error or non-availability of such data can mislead the grid operator in SLDCs and NERLDC in real time decision making and such situations may also lead to huge commercial implications in the form of DSM charges to the utilities. A SCADA Vs SEM report is being sent regularly by NERLDC to all state-utilities.

***The Sub-Committee noted as above.***

***Action: All utilities.***

**B.8 VSAT For Roing Tezu Namsai:**

In the 15th NETeST meeting, DGM, NERTS informed the forum that demo for Tezu was completed. Similar methodology will be adopted for Roing Tezu Namsai-PG stations. Forum suggested for placement of PO to M/s NELCO/Tatanet (or any VSAT service provider) at the earliest.

NERTS informed that the Purchase Order for VSAT equipment along with full scope included will be placed by January, 2020. The Purchase Order for VSAT equipment along with its commissioning at site will be done by January, 2020.

NERLDC mentioned that the data-availability of over 95% was achieved from Tezu station during the VSAT demo period of 27-08-2019 to 30-09-2019.

**Deliberation in the meeting**

NERTS informed the forum that the respective file for VSAT implementation is pending at Corporate Centre, POWERGRID. After approval, NERTS will implement the VSAT at Roing, Tezu and Namsai.

***The Sub-Committee noted as above.***

***Action: NERTS.***

**B.9: Readiness for supply of CFEs in Badarpur (2<sup>nd</sup> TS Node)**

The Purchase Order for procurement of Terminal Servers along with necessary accessories had been placed on 04th November 2019 to M/s GE T&D India Limited which is expected to be delivered by end of Feb'2020.

NERLDC requested NERTS to provide the communication channel between Misa and Backup NERLDC on priority. And link between Badarpur to Back-up NERLDC after the commissioning of Badarpur Terminal Server.

**Deliberation in the meeting**

NERLDC informed the forum that Purchase order for two (02) numbers of Terminal Servers was placed on 04th November 2019. However, due to delay from OEM side the terminal servers are yet to be delivered. NERLDC is in continuous follow up with M/s GE T&D India Ltd to expedite the project at the earliest.

***The Sub-Committee noted as above.***

***Action: NERLDC.***

**B.10 Data validation status of all PGCIL owned substations:**

The database validation (Annexure-B.10) of POWERGRID owned sub-stations in NER has been completed from POSOCO end and the list of addresses has been shared with NERTS, POWERGRID.

NERTS has informed the forum that the data-validation activities with POWERGRID have been completed for 19 out of 23 stations and pending issues will be resolved at the earliest.

**Deliberation in the meeting**

NERLDC informed the forum that data validation of twenty stations (20) out of twenty-three stations of PGCIL owned substations is completed. The remaining stations are: 132 kV Roing, 132 kV Tezu and 132 kV Namsai, which will be completed once the communication channel between the stations and NERLDC is established over VSAT.

***The Sub-Committee noted as above.***

***Action: NERTS.***

**B.11 Data validation status of all stations of Assam:**

The database validation from POSOCO and Assam end has been completed. The corresponding data validation table can be referred as **Annexure-4**.

Several meetings with Assam-SLDC, AEGCL and APGCL have been done by NERLDC and corresponding MoM have been signed with action-plan for improvement in data-availability of each station of the Assam utilities but no significant improvement has been observed till yet.

**Deliberation in the meeting**

NERLDC informed the forum that a meeting was held between NERLDC and AEGCL on 27-03-2019 followed by preparation of action-points to be executed by AEGCL for improving the data availability of its substations. NERPC requested AEGCL to clarify the present status on the action points as per the signed MoM with NERLDC.

AEGCL representative mentioned that the updated status has been sent to NERLDC on e-mail which may be checked by NERLDC for further comments.

***The Sub-Committee noted as above.***

***Action: AEGCL, APGCL.***

**B.12. Data validation status of all stations of Meghalaya:**

The database validation from POSOCO and Meghalaya end has been completed. The corresponding data validation table can be referred as **Annexure-5**.

Several meetings with Meghalaya-SLDC, MePTCL have been done by NERLDC and corresponding MoM have been signed with action-plan for improvement in data-availability of each station of the MePTCL but no significant improvement has been observed till yet.

**Deliberation in the meeting**

NERLDC mentioned that several meetings with Meghalaya-SLDC, MePTCL have been carried out by NERLDC and corresponding MoM have been signed with action-plan for improvement in data availability of each station of the MePTCL but no significant improvement has been observed till yet. MePTCL stated that it will revert back to NERLDC with an updated status in a week.

***The Sub-Committee noted as above.***

***Action: MePTCL.***

**B.13. Data validation status of all stations of Nagaland:**

A meeting on data validation was conducted between POSOCO and DoP, Nagaland on 05th July 2019. And another meeting on VC was conducted between POSOCO, POWERGRID and DoP, Nagaland was conducted on 08th July 2019. The corresponding MoMs can be referred as Annexure-6.

The corrective actions for rectification to be done by DoP, Nagaland corresponding deadline to be conveyed and the status of rectification of data related issues as highlighted in the Validation-List with corresponding deadlines needs to be elaborated.

**Deliberation in the meeting**

NERLDC mentioned that a meeting on data validation was conducted between POSOCO and DoP, Nagaland on 05th July 2019. Another meeting on VC was conducted between POSOCO, POWERGRID and DoP, Nagaland was conducted on 08th July 2019. The corrective actions for rectification to be done by DoP, Nagaland corresponding deadline to be conveyed and the status of rectification of data related issues as highlighted in the Validation-List with corresponding deadlines needs to be elaborated.

Representative from DoP-Nagaland were absent in the meeting.

***The Sub-Committee noted as above.***

***Action: All concerned utilities.***

**B14. Dual channel availability for reliable and redundant communication system in NER:**

The Dual-channel availability for reliable and redundant communication system is to be provided at Main NERLDC, Shillong as well as Backup NERLDC, Guwahati.

Separate annexures for forced outages in communication links shall be included and reported to the NETeST forum. NERLDC has issued a letter to POWERGRID-NERTS regarding connecting present/temporary Backup NERLDC to wide-band node at Kahilipara through Fiber/ADSS on interim basis.

NERTS is requested to take appropriate action on it.

**Deliberation in the meeting**

NERLDC stated that the dual channel availability for reliable and redundant path should be provided to NERLDC Shillong and Backup-NERLDC Guwahati. NERLDC requested NERTS to connect the Backup NERLDC, Guwahati with wideband location of Kahilipara.

NERTS mentioned that letter Dtd.06.02.19 from NERLDC is received that it will facilitate the connectivity between Kahilipara and Backup NERLDC within 6 months. NERTS also requested NERLDC for early readiness of permanent building which NERLDC informed that same is little delayed and will be in place by August-December 2020.

***The Sub-Committee noted as above.***

***Action: NERTS and NERLDC***

**B.15. Utilities executing regional projects to submit monthly progress report to NERLDC/NERPC:**

The progress report is not getting shared with NERLDC for informational purposes.

NERLDC is sending a weekly data-telemetry report to all concerned utilities and the same needs to be checked and rectified at the earliest.

**State Utilities may elaborate on the action taken in rectifying the respective issues highlighted in the weekly data-telemetry report by NERLDC.**

**Deliberation in the meeting**

NERPC requested to submit the monthly progress report to NERPC & NERLDC on regular basis.

**The Sub-Committee noted as above.**

**Action: All Utilities.**

**B.16. Integration of Dikshi HEP real time data and pending Voice communication:**

The real-time data availability from Dikshi station is intermittent due to some technical issues as conveyed by the site. The voice communication has not been made available from Dikshi station yet. In case of Tenga station, the voice communication is not available at NERLDC as well as SLDC itself. A letter issued to M/s Devi Energy in this regard is attached as **Annexure-7**.

**Deliberation in the meeting**

NERLDC raised the concern about non-availability of voice communication between Dikshi HEP with SLDC Arunachal and NERLDC. Forums acknowledge the absence of representative from DoP, Arunachal as well as Devi Energies Private Limited.

NERPC informed the forum that matter will be taken to higher officials of concerned utilities by NERPC.

**The Sub-Committee noted as above.**

**Action: DoP, AP/NERLDC.**

**B.17. Issue of mismatch in timestamp of SoE of PGCIL owned Substations:**

Mismatch of timing between NERLDC SCADA time and field time is observed in substations of PGCIL. PGCIL has solved the issue in 132 kV Aizawl, 132 kV Kumarghat and 132 kV Nirjuli S/s. However, the issues of few stations are still pending and those are listed in the table below. As Sequence of Events (SoE) is important for grid disturbance analysis. The mismatch should be rectified at the earliest.

Sl. No.	Station Name	SOE mismatch	Present Status
1	Jiribam	30 min	Rectified
2	Mariani	60 min	Rectified
3	Salakati	60 min	60 min

4	Silchar	30 min	Rectified
5	Tezu	05:30 hr	05:30 hrs
6	Ziro	Date and Time	Date and Time
7	Imphal	20 min	Rectified
8	Khliehriat	15 min	Rectified
9	Mokokchung	60min	Rectified

During the 15th NETeST meeting, NERTS stated that SoE related issues in Mariani, Silchar and Imphal has been resolved. The SoE mismatch in Ziro will be resolved by January 2020 after procurement of new GPS device. SOE issues in Salakati will be rectified by December-2019

Issue of mismatch in timestamp of SoE of stations such as Salakati, Tezu and Ziro is still to be rectified.

***Deliberation in the meeting***

NERTS stated that all the issues related to SoE have been rectified except that in Tezu, Salakati and Ziro stations. The updated status in these referred stations is listed below:

- **Tezu:** It will be rectified by 15-03-2020.
- **Ziro:** It has a Chemtrols-make RTU which has been obsolete at present. An engineer from OEM will visit site by 15-03-2020 for addressing the issue.
- **Salakati:** The station has a GE-make RTU and the OEM has conveyed that it needs to be replaced. NERPC suggested NERTS to divert some RTUs from other projects, if possible and also told that AEGCL has upgraded many of its substations to SAS based stations; which might have resulted in many RTUs being disconnected and the same can be used by NERTS in its stations. NERTS agreed to communicate with AEGCL in this regard.

***The Sub-Committee noted as above.***

***Action: NERLDC/NERTS.***

**B.18. Automatic Generation Control(AGC) in Indian Grid:**

Hon'ble Central Electricity Regulatory Commission (CERC) has stipulated the implementation of AGC in Indian Grid.

Stations in NER to have AGC:

BgTPP, AGBPP, Kopili, Loktak, Doyang, Khandong.

In 164<sup>th</sup> OCCM NERLDC informed that FO communication path is available for all stations except Loktak HEP. However route redundancy/ alternate path is not available for any of the stations. Communication link availability status to be discussed in next NETeST meeting.

DGM, NEEPCO informed that in Dec'19 a Special meeting was held with NLDC wherein it was decided that all NEEPCO stations (except AGBPP) would be excluded from AGC till completion of R&M. The forum noted.

***Deliberation in the meeting***

NERLDC informed the forum that as per the CERC order on AGC, all the ISTS stations need to get connected with NLDC for receiving AGC signals.

- **BgTPP:** POWERGRID informed the forum that BgTPP is connected on optical-fibre links but the end equipment required for AGC needs to be procured by plants itself.
- **AGBPP:** Link between plant and NLDC is yet to be established and tested. NERTS informed that the link configuration is already completed and asked NERLDC for joint testing within a week. NEEPCO was requested to install and commission necessary hardware and software for the AGC at the earliest as the target date for completion of AGC in Pan-India is March-2020.
- **Kopili:** As station under recovery after incident of penstock burst, the plant will not come under AGC till the recovery of station.
- **Khandong and Doyang:** Manager, NEEPCO informed the forum that the plants are under renovation. Therefore, the plants will come under AGC scheme after completion of renovation.
- **Loktak:** Manager, NHPC informed the forum that the plant will undergo renovation work for implementing local SCADA system. It will not be possible for Loktak to implement AGC. NERLDC requested Loktak-HEP to write their concerns to NLDC via CC-NHPC.

***The Sub-Committee noted as above.***

***Action: All concerned utilities.***

**B.19. Allocation of fibre for line differential protection for short lines:**

Name of the line	Status of OPGW		Status of relay at both ends	
	Implementing utility	Latest status	Implementing utility	Latest status
132kV RHEP-Pare-2	DoP Ar. Pradesh		NEEPCO	Procurement process initiated.

In 164th OCCM, it was decided that for 132kV RHEP-Pare-2 a pair of fiber would be allocated for LDP from 132kV RHEP-Pare-Lekhi. NERTS to execute by February 2020. It is referred to next NETeST meeting

**Deliberation in the meeting**

Ranagandi-Parey FO will be made available by March 2020. NEEPCO may take care of optical distance while procuring relays/Tech spec of relays.

**The Sub-Committee noted as above.**

**Action: NERLDC/NERTS.**

**B.20. Allocation of Fiber from POWERTEL Link for power System purpose:**

In 164th OCCM, it was discussed that the power system data are being transferred across the region through ULDC fibre network as a main path. To increase the reliability of real time data transfer, the fibre network of Powertel may also be utilised as an alternate path to transfer Power System data.

After detailed deliberation the matter was referred to the next NETeST meeting.

**Deliberation in the meeting**

The State-utilities of NER stated that in case POWERGRID is unable to provide the communication links under FO expansion projects, then it should provide communication paths from its POWERTEL network free-of-cost for NER.

POWERGRID stated for redundancy/reliability, necessary planning & action is taken by CTU/CC-LD&C department (responsible for network plan as per CERC order 2017) of POWERGRID through ULDC/FO expansion/Reliable network. It was further noted that the links are being provided as per the CERC verdict against petition number 68/2010 with date of hearing as 23-11-2010 and Date of order as 08-12-2011. The same is being followed in other regions also. It requested that all constituents may be analyzed the matter and the same can be discussed accordingly later. NERTS also

specified that any cost-related views can be put up in commercial committee meetings of NER.

***The Sub-Committee noted as above.***

**B.21. Issue of PTW for Silchar-Pallatana TL OPGW stringing from OTPC:**

OPGW rectification works are required to be carried out in 400 KV Silchar - Pallatana - II from Loc no. 3 to Loc no. 13 from 15/02/2020 to 31/03/2020 (0900hrs to 1700hrs on day time basis). As such the auto-reclosure switch at both ends is required to be kept in Non-Auto mode for safety of working personnel. NERTS requested OTPC for PWT for the same.

Since Auto re closer will be switched off then palatana-silchar Line-2 will be tripped in case of any fault. This is a reliability issue for OTPC plant generation and hence OTPC requested the said activity to be rescheduled and may be planned after discussion and approval in OCC meeting.

**Deliberation in the meeting**

The matter was discussed elaborately and it was emphasized work of OPGW stringing over Silchar-Palatana is also very important and required to be completed soon. Delays have been reported due to non-issue of PTW. It was opined that OTPC end station & POWERGRID end station may issue PTW in time for OPGW stringing for Silchar Palatana which is planned in March – June, 2020. POWERGRID intimated that earlier due to non-issue of PTW, gang sat idle and also left site. Based on discussion, POWERGRID will request M/s TCIL (Executing agency) to redeploy soon. Forum told necessary intimation will be given by POWERGRID to OTPC/NETC & as required before & during execution. All co-operation will be extended from NERLDC.

**Date & Venue of next NETeST meeting**

It is proposed to hold the 17<sup>th</sup> NETeST meeting of NERPC in second week of May, 2020. However, the exact date and venue will be intimated in due course.

The meeting ended with thanks to the Chair.

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**Annexure-I****List of Participants in the 16<sup>th</sup> NETeST Meeting held on 20.02.2020**

<b>SN</b>	<b>Name &amp; Designation</b>	<b>Organization</b>	<b>Contact No.</b>
	<b>No Representatives</b>	<b>Ar. Pradesh</b>	
1	Sh. Pranab Saha, AGM (Communication)	Assam	09435361717
2	Sh. Arup Sarmah, DM	Assam	09707854367
3	Sh. Roshan Oinam, Manager, MSPCL	Manipur	09863895218
4	Sh. H. K. Malngiang, AE	Meghalaya	09774459674
5	Sh. B. Narry, AEE, PLCC, MePTCL	Meghalaya	09089000911
6	Sh. C. W. Chen, AE, SLDC	Meghalaya	09863093311
7	Sh. A. Shullai, AEE	Meghalaya	09436334458
8	Sh. R. Rharmaco Phlang, AEE	Meghalaya	08787693359
	<b>No Representatives</b>	<b>Mizoram</b>	
	<b>No Representatives</b>	<b>Nagaland</b>	
	<b>No Representatives</b>	<b>Tripura</b>	
9	Sh. Ankumoni Hatimnria	NEEPCO	09435339733
10	Sh. Ashim Kr. Sarmah, Manager	NEEPCO	09435078860
11	Sh. Nayan Jyoti Das, Manager	NEEPCO	09435577727
12	Sh. M.K. Ramesh, GM	NERLDC	09449599174
13	Sh. Sakal Deep, Engineer	NERLDC	09774528218
14	Sh. Akhil Singhal, Chief Manager	NERLDC	09650598187
15	Sh. R. Sutradhar, CGM	NERLDC	09436302714
16	Sh. V. Suresh, ED	NERLDC	09449599156
17	Sh. S. Paul, Chief Manager	PGCIL	09433379985
18	Sh. Roshitesh Kumar, Asst. Manager	PGCIL	09402184618
19	Sh. M. K. Baruah, GM	PGCIL	09401454830
20	Sh. P. J. Singh, Jr. Engg.	PGCIL	09435303572
21	Sh. Pulak Deka, Manager(M)	NHPC	06900178738
22	Sh. A. Mustafa Choudhury, AGM, C&I	NTPC	09650994553
23	Sh. Anvesh Chema, Manager, EMD	NTPC	09401073326
24	Sh. Gopal Patodia, Manager	NTPC	07369000150
	<b>No Representatives</b>	<b>OTPC</b>	
25	Sh. A. K. Thakur, MS	NERPC	09810271963
26	Sh. B. Lyngkhai, Director (O&P)	NERPC	09436163419
27	Sh. S. Mukherjee, Dy. Director	NERPC	08794277306
28	Sh. Sadiq Imam, AD-I	NERPC	07004133772

**1. Status of OPGW Links for Manipur State: MSPCL ( considered under NER FO Expansion Project) – ANNEX-A.01**

SN	Link Name	OPGW (in km)		Target Completion	Remarks
		Supply	Erection		
1	132kV Loktak(NHPC) ~ Ningthoukhong	11.2	11.2	Completed	<p><b>Equipment Nodes:</b> 1.Churachandpur, 2.Imphal State(SLDC), 3.Jiribam State, 4.Kakching, 5.karong, 6.Kogba, 7.Rengpang, 8.Thoubal, 9.Yaingangkokpi, 10.chandel, 11.Hungdung.</p> <p>ROW (for extra compensation) &amp; monetary demand from miscreants at deep remote sites are delaying project. Matter taken up with MSPCL &amp; Administration.</p> <p>SN.5# For equipment at Churachandpur&amp;Nongthoukong, Kakching&amp; some other stations , rodent issue is affecting equipment &amp; data . Same to be sorted out by MSPCL Manipur.</p> <p>SN#8,9-Matter to be resolved by MSPCL after issues resolved, 3months will be required as re-mobilization of Team might bet required</p>
2	132kV Yurembam ~ Yaingangpokpi	42	42	Completed	
3	132kV Yaingangpokpi ~ Kongba	33.6	33.6	Completed	
4	132kV Kongba ~ Kakchinglilo at Thoubal	57.7	57.7	Completed	
5	132kV Kakching ~ Churachandpur	38	38	Completed Rectification at CC Pur/Kakching by 15.03.20	
6	132kV Yaingangpokpi ~ Hungdung	32	32	Completed	
7	132kV Kakching ~ Chandel	25	25	Completed	
8	132kV Loktak(NHPC) ~ Rengpang	47	15	ROW/miscreant problem faced demanding money/ransom (email from exec agency shared with NERPC). Taken up with MSPCL/Admin/ Target-June2020 if matter sorted by March20	
9	132kV Imphal(State) ~ Karong	60	45.4	Work under halt since 2months. TL Route Diversion issue from MSPCL&, ROW to be solved. Matter intimated to State MSPCL. ROW issue between T-281 to T-282.Target-May2020(if matter is resolved by March20)	
10	132kV Jiribam ~ Jiribam state	1	0	Completed	
11	132kV Ningthoukhong ~ Churachandpur	32	32	Completed	
	<b>Total</b>	<b>379.5</b>	<b>331.9</b>		Completion April 20 except for links where ROW/administrative issue persists.

**Note1:** Data of most stations ( includingChandel, Churachandpur, Kongba, Hungdung ) are already made reporting through GPRS by POWERGRID in coordination with MSPCL. Spare OPGW & HW-8km also supplied.

**ANNEXURE – A.02**

**2. A. Microwave Vacation OPGW PROJECT–NER- PART – 1(corresponds to Installation of OPGW of 950km ,17nodes – KEC- Part which is already completed**

**2. B. Microwave Vacation OPGW PROJECT–NER- PART – 2. Following Table corresponds to Left over portion, OPGW stringing by M/s TEN DOT (Equipment are clubbed with NER FO Expansion)**

<b>S N</b>	<b>Link Name</b>	<b>OPGW Stringing status</b>	<b>Overall reporting of end stations to NERLDC/ SLDC</b>	<b>Remarks (w.r.t terminal equipment &amp; others)  DOCO will be done at one go for all left over links under MW Vacation OPGW Proj</b>
1	132KV Silchar-Srikona	Complete	Data reporting	Completed
2	132KV Mariani-Mariani	Complete	Data reporting	Completed
3	132KV Nirjuli- Ranganadiwith Parey	OPGW part completed (except Railway/high way diversion part where work is stopped due to ROW)/ Matter taken up through NERPC Rest Part Completion : 03 months after ROW is resolved	Nirjuli, Rangandi, Parey data reported)	Completed Project scope was that CS link was to connect SLDC Chimpu with NERLDC ( via Wide band Nirjuli ). SLDC- NERLDC connectivity & same Completed (NERLDC- SLDC-AP link established).
4	132KV LILO of Nirjuli- Ranganadi at Lekhi-  This is extended part of Sl.No.3			Parey, Ranagandi ,Nirjuli, Ranganadi –all data reported. Chimpu SLDC is also connected with wide band( tempo U/G used for ROW part). DOCO will be accordingly done.  Part of OPGW which is not done due to severe ROW & delaying project till date will be done alter.
5	132kV Imphal(PG)- Imphal (State)	Complete	Complete	Completed

6	LILO of 132kV Aizawl-Zemabawk-II at MelriatSS  (connected with SN.11)	Complete	Completed	Completed Reason of Delay: P&E dept, Govt of Mizoram has planned to shift the Zimabawk-2/Zuntui substation to new location which is apx.1km away from earlier placed station. P&E is take up for shifting all items which are already installed. DOCO will be done for scope of work already completed with Melriat,Aizawl link reporting.
7	132KV Melriat-Sihmuii	Complete	P&E dept to expedite power supply	Completed but one end Front not ready. (Melriat end reported)  Melriat end station data reported.Reason of Delay Sihmuii end State end, P&E Mizoram station notready -Not charged. Integration will be done by PGCI after station is powered up by state. DOCO will be done with scope of work completed
8	132KV Mokokchung(PG)-Mokokchung (state)	Complete	Completed	Completed
9	Ranganadi-Gohpur (Part-I)- via Nirjuli-Gohpur	Complete	Data and voice reported	Completed
10	Ranganadi-Gohpur (Part-II)-via Ranga-Balipara	Complete		May be considered as single link
11	Aizawl-Zemabawk-II  (Connected with SN6)	Complete	Original scope completed but link connectivity pending for issue at P&E end	Completed.  Hindrance/reason of delay is same as S.N6:Fibcom/Equipmenegt team is not allowed by P&E dept for integration work as per original scope. This is delaying the project due to Substation renovation&shift(1km away) plan by P&E dept, Govt of Mizoram . DOCO will be done wrt original scope completion. However integration will be done by PGCI once P&E,dept completes its scope. Aizawl end is reported
11	Dimapur-Dimapur	Complete	Completed & reporting	Completed
12	132kV Ranganadi-Ziro	Complete	Completed & reporting	completed

13	<p>132KV Lekhi-Itanagar -- Chimpu SLDC</p> <p>(Part of PG WB Nirjuli-Leikhi-Chimpu SLDC—i.e to connect SLDC, scope was to connect SLDC with WB)</p>	Complete	Completed	<p>Completed</p> <p>SLDC AP Chimpu is connected to Wide band( by temporary O/H U/G FO) SLDC to NERLDC ICCP link established</p> <p>But same link's main OPGW(some) part is affected by NirjuliRanganadi LINK LILO at Leikhi which is extended from Leikhi to Chimpu SLDC. DOCO will be done as per scope completed.</p>
14	BNC LILO-25km	Delayed due to Flood	<p>Completed.</p> <p>Work was earlier delayed due to shut down which was approved in last OCC &amp; erection completed</p>	Completed

**2. C. Microwave Vacation OPGW PROJECT–NER- PART – 3: Status Up gradation of ULDC SDH-PDH equipment (as per 15<sup>th</sup>NERPC—A.16& A.18) is also clubbed & included in MW Vacation OPGW project.--**

S.N	Name of Nodes	SDH Eqpt (ECI Make)	PDH Equipment (ECI Make)	PDH Equipment (Valiant Make)	Status
1	Umium-III	1	0	2	Completed
2	Umium-I	1	0	2	Completed
3	Nehu	1	0	0	Completed
4	Shillong RSCC	1	2	0	Completed
5	Khliehriat	1	0	2	Completed
6	Khandong	1	0	2	Completed
7	Kopili	1	0	2	Completed
8	Dimapur	1	0	2	Completed
9	Imphal	1	0	0	Completed
10	Kohima	1	0	0	Completed
11	Badarpur	1	0	2	Completed
12	Kumarghat	1	0	2	Completed
13	79Tilla, Agartala Gas-RC Nagar NEEPCO	1	0	2	Completed
14	Agartala-79Tilla	1	0	3	Completed
15	Bongaigaon	0	2	0	Completed
16	Repeater between Bongaigaon&Balipara	1	0	0	Space not available in between Trans line at intermediate position/ROW issue for space shelter repeater finalization. Proposed & agreed to be shifted to Kopili new or kept as spare
17	Umtru	1	2	0	Installation Completed . Earlier Shillong due to anti-CAA/ILP is affecting completion/commissioning
18	Misa	0	0	2	Completed
19	Balipara	0	0	2	Completed
Total Up gradation/ Replacement		16	6	25	Completed

Also PDH (Tejas/ECI) upgraded in 12locations location s Khliehriat, Badarpur, Kumarghat, Agartala Gas ,Agartala SLDC, Khandong, Kopili,Misa, DimapurImphal, Umiam-I Umiam-III & work is completed. The same is verified wrt NMS

**3. Project: NER FO EXPANSION (Status of “Establishment of Fiber Optic Communication system under wide band communication expansion plan in NER”-----**

SI No	Link Name	OPGW Stringing status	End Equipment Status	Overall reporting of end stations to NERLDC/ SLDC
	<b>Central Sector</b>			
1	132kV Melriat (PG) ~ Silchar (PG)	Complete	Complete	Node reported dtd 31.03.2019. SAT Pending.
2	132kV Khandong~Halflong (PG)	-do-	Do	Completed & Link reported
3	132kV Dimapur (PG)~ Doyang (NEEPCO)	-do-	Do	Completed & Link reported
4	132kV Doyang (NEEPCO)~ Mokokchung (State)	-do-	Do	Completed & Link reported
5	220kV Mokokchung (PG)~ Mariani (PG)	-do-	Do	Completed & Link reported
6	400kV Mariani (PG)~ Kathalguri (NEEPCO)	-do-	Do	Completed & Link reported
7	400kV Surajmaninagar (TSECL) ~ Pallatana (OTPC)	-do-	Do	Shut down was approved on 30.11.19. However , later online works suffered due to NRC/CAA issue in Dec'19 & Jan20- Gang fled .  Work at present completed. Data reporting by Feb2020
8	132kV Badarpur(PG) ~ Jiribam(PG)	Both end made reported via FO taken from other link. OPGW part work pending	Do	Already reported
9	Bongaigaon (PG-400 kV) ~ 220kV Salakati- 220 kV BTPS	0/4.5 Km	Partial	Bongaigaon&Salakati made reported via fibcom/tejas, Salakati-BTPS is already made reported. This redundant path is pending. June2020
10	400kV Mirza (Azara) ~ Byrnihat	9.7/47.208 Km	No .Planned Gang fled due to ILP issue	June 20. Planned Gang fled due to ILP issue of Meghalaya. Also Sapce issue in Byrnihat for

			of Meghalaya	equipment
11	400kV Silchar ~ Pallatana	Stringing Complete: 61.146/24 7.409 Km/ROW issue  Work delayed for different reasons including repeated cancellation of PTW by OTPC for work start	No	June 20. Team/Gnags left site earlier for non-issue of PTW by OTPC & delay to be taken care in NERPC forum .  Both end data will be reported by taking fiber of other link by March20
12	132kV Agartala(TSECL) ~RC Nagar (NEEPCO)	Complete	Complete	Space is provided by NEEPCO of late
13	132kV Jiribam (PG) (Manipur) ~ Loktak (NHPC)	16/82.461Km.  WIP	Equipment installed but not commissioned	June202020 . Earlier gang faced ROW issue and fled site near/on route to Lokatak. However Work restarted. Team in that area Jiribam-Loktak is facing multiple hindrances from miscreants and matter is being solved by taking up with Local district administration and so progress is slow Photographic evidences were shared during 16 <sup>th</sup> NETEST meeting (e.g. damaging vehicle)
14	132kV Loktak (NHPC) ~ Imphal (PG)	Complete	Completed	Node is reported to NMS in Dec-Jan2020. NHPC Loktak has been asked to connect to RTU with modem from PDH. PDH could not be placed near RTU as there is no space
15	PK Bari (TSECL)--LILO of (NETCL) Belonia	0/10.441Km	Work to be started. To be done along with Silchar-Pallatana ( PTW issue) gang mobilization	May2020
16	132kV Pare ~ Chimpu	0/31Km	Yet to start. GST registration issue Intimated by contractor	June 2020
<b>Manipur State Sector</b>				
1	132kV Yurembam ~ Yaingangpokpi	Complete-42/42	completed	completed

2	132kV Yaingangpokpi ~ Kongba	Complete-33.6/33.6	completed	completed
3	132kV Kongba ~ Kakching with LILO at Thoubal	Complete#57/57	completed	completed
4	132kV Imphal(State) ~ Karong	Complete#45.4/60. OPGW Stringing in progress/ ROW Faced	Installed not commissioned	Work under halt since 2months. TL Route Diversion issue from MSPCL a. Further, ROW to be solved. Matter intimated to State MSPCL. ROW issue between T-281 to T-282.Target-May2020(if matter is resolved by March20)
5	132kV Kakching ~ Churachandpur	Complete#38/38	Completed. Rectification at CC Pur by 10.03.20	Completed For equipment at Churachandpur&Ningthoukong, Kakching& some other stations , rodent /rat issue is affecting equipment & data . Same to be sorted out by MSPCL Manipur.
6	132kV Loktak(NHPC) ~ Ningthoukhong	Complete# 11.2/11.2	completed	Completed.
7	132kV Yaingangpokpi ~ Hundung	Complete 30/30Km	To be started	By 10.03.20
8	132kV Kakching ~ Chandel	25/25 completed	Completed Rectification at Kakching by 10.03.20	completed
9	132kV Loktak(NHPC) ~ Rengpang	0/47Km	. ROW/miscreant problem faced. Assistance of supervisor sought from MSPCL	ROW/miscreant problem faced demanding money/ransom (email from exec agency shared with NERPC). Taken up with MSPCL/Admin/ Target-June2020 if matter sorted by March20
10	132kV Jiribam ~ Jiribam state	1/1Km- Complete	Equipment isntallaed.	node reporting by March2020
11	132kV Ningthoukhong ~ Churachandpur	16.80/32Km	OPGW Stringing in progress	completed
Note1: MSPCL may take care of ROW issue, help during sorting local Law & order situation, solve fiber cut due to rodent issue/rat within substation				
<b>Tripura State Sector</b>				
1	132kV Agartala(TSECL) ~ Barumura(GTP)	Complete	Complete	Node Reporting. TSECL has been asked to bring PLCC nodes as & where required
2	66kV 79 Tilla Grid (TSECL) ~ Badharghat	-do-	-do-	Do

3	132kV Surajmaninagar(TSECL) ~ Budhungnagar	-do-	-do-	-do-
4	132kV Agartala(TSECL) ~ SM Nagar (TSECL)	-do-	-do-	-do-
5	132kV Pallatana(OTPC) ~ Udaipur(TSECL)	-do-	-do-	Work Completed in 18.02.2020. For final SAT Fibcom Team is deputed. But as reported by site, Railway diversion ( OPGW Cut but not restored by Railway dept) is delaying the data reporting & final SAT . TSECL to take up with Railway. Site will be revisited by PGCi soon by 28.2.2020 and report will be shared with NERPC.
6	132kV Udaipur(TSECL) ~ Rokhia GTP	-do-	-do-	Work Completed in 18.02.2020. For final SAT Fibcom Team is deputed. But Link connection with SLDC is dependednt on Pala-udaipur& Railway diversion issue which is delaying
7	66kV Udaipur(TSECL) ~ Gumti HEP	-do-	-do-	Do
8	66kV Gumti HEP ~ Amarpur(TSECL)	-do-	-do-	Do
9	66kV Satchand(TSECL) ~ Sabroom(TSECL)	-do-	-do-	This is islanded link. TSECL to bring data up to nearest WB station.Matter intimated to TSECL
10	132kV 79 Tilla Grid (TSECL) ~ Dhalabil(TSECL)	-do-	-do-	Completed Multiple Card failure at Dhalabil due to poor Earth condition & savvy condition surrounding of PDH panel. Matter intimated to TSECL for rectification
11	132kV Rokhiya (GBPP) ~ Surajmaninagar(TSECL)	Supply Complete. Front Not ready ( <b>TL under construction</b> )	Front Not Ready	Link to be deleted. Supply material isto be handed over to TSECL. DOCO will be done with consent from TSECL
12	132kV Surajmaninagar(TSECL) ~ Monarchak (NEEPCO)	-do-	Front Not Ready	
TSECL may ensure proper earthing at Locations. Due to earthing , card-failures are delaying link data reporting as well. Within substation, any rodent etc is to be taken care in advance by anti rodent spray/blocking cable trench etc.				

<b>Meghalaya State Sector</b>				
1	132kV Nehu ~ Neigrihms	0/7.7Km	OPGW stringing work yet to start.	May-June 20. This Link is interdependent on outage of Main NERLDC-NEHU SLDC connectivity. Hence Outage planning is to be done.
2	132kV Khliehriat(PG) ~ Khlehriat (State)	7/7	Completed	Node Reporting work under Progress. Completion 15.03.2020
3	132kV Khliehriat(State) ~ MyntduLeshka-HEP	24.932/24.932	Completed	Completed. Power supply issue at Leshka, matter taken up with RE-MrPoshna,Leshka.  Equipment team will revisit soon. March2020
4	132kV Khliehriat(PG) ~ Lumshnong (S/C)	25.19/25.19Km	Completed	Node Reporting work under Progress. March2020
<b>Nagaland State Sector</b>				
1	132kV Kohima (132KV) ~ Kohima (220KV)	0/25Km	OPGW stringing work yet to start.	Link under Construction. DOP to ensure completion of Links of LILO of Wokha Kohima at New Kohima/Jadhima. Front is not available. Target- by 3months wrt front availability.
2	132kv Kohima ~ Wokha	58/58Km	Completed	Communicated to DOP,Nagland. Node reporting by March 2020.
3	132kV Doyang (NEEPCO) ~ Sanis	0/10Km	At Sanis, no RTU is present and so link work is postponed.	Target: June 2020. This Link was not originally in DPR and LOA to executing agency. DOP Nagaland has been asked to bring data by PLCC up to Doyang
MEPTCL may kindly take advance action for proper earthing/earth pit , any rodent issue, if any by anti rodent spray/blocking cable trench etc.				
<b>Mizoram State Sector</b>				
01	Aizawl--Zemabawk I	0/1Km	OPGW stringing work yet to start.	May 2020.
P&E Department, Mizoram to connect SLDC Mizoram with wide band and make arrangement of shifting all materials(RTU/OPGW/Eqpt) available & installed at Zuntui( Zimabawk-2) which was earlier installed by POWERGRID. Names of parties already shared				

States & POWERGRID may do joint testing for links which are completed & certify in form of SAT & as required at the earliest possible.

**NOTE A:Remarks for owner of Stations/Owner of Links for scope**

- 1. All concerned stations (State or ISTS/ISGS) where End equipment being installed are to provide**

- a) Auxiliary power as input to charger of DCPS
- b) Air conditioning environment for equipment under ULDC-LD&C packages
- c) PDH distance to RTU should be within 20 meter of RTU/Gateway if data path is serial type
- d) SDH distance to PDH should be within 15-20 meter of PDH & SDH is to be placed within 15-20 meter of FODP
- e) Respective station owner has to arrange of their own-
  - 1) 2 wire normal telephone (along with telephone wire from control desk/control room up table) to the PDH/SDH to be provided by user
  - 2) For RTU data also, necessary cable is to be provided by RTU-owner/owner of station.
  - 3) one Ethernet cable (shielded) for serial data (if K 101) reporting by RTU & one Ethernet cable (shielded) to be laid & connected ( between RTU/GATEWAY up to the Communication equipment-SDH/PDH for data & voice by user/owner RTU station
- f) State will jointly check with POWERGRID & one dedicated coordinator at State SLDC/Department will be assigned for communication.
- g) State can opt to keep Earth Wire or may ask contractor to take the same back.
- h) AMC (equipment part) after execution will be supervised by respective state & paid by respective state directly to contractor. However for achieving competitive price, AMC rate was included in original tender.

**NOTE B: Different reasons of delay** Following issues have delayed the project from time to time:

The project has suffered delay for different reasons beyond control viz. Flood, remoteness/critical terrain in NER, Bandh-Strikes, ROW for extra compensation, ROW-unrest due to Law & order situation, socio-political issues like NRC-CAA-CAB & strikes/hindrances thereof etc. However POWERGRID has been keen in taking up the matter and expedite as possible for completion of the scope of work at the earliest possible for betterment power system communication. Some chronological history of issues has hindered project:

- 1) Strike, Curfew in Ar Pradesh in the month of Feb-19
- 2) Strike, Curfew in Meghalaya in the month of May-Jun-18. Curfew/Anti CAA Issues in February 2020
- 3) Floods in Assam & Manipur –July 2017, 2018
- 4) ROW issues (paddy field/ asking additional compensation)
- 5) Work connected to Trans line connected to Loktak was stopped due to .
- 6) Recent flood in June & July 19 across upper Assam, Lower & South Assam has hindered movement of Fibcom team, Tejas team to Tripura, Meghalaya & AP. However teams have been re-mobilized.
- 7) Removal of Gang from Site for Multiple times for non-approval of Shut down of S.M.Nagar-Pallatana & Silchar-Pallatana as online works were not possible due to crossing & safety issue.
- 8) Withdrawn of Gang from Site-Tripura, Meghalaya, Assam due to unrest at sites during anti-CAB & anti-CAA

protest at NER during Dec2019, Jan2020.

9) The gang mobilization was restricted due to new rules & regulation ( for teams/gangs coming from outside region ) including gate pass/ILP/NPR etc.

10) Non availability of shut down/PTW in time. However matter is solved with help of NERPC & NERLDC time to time

#### 4. Project: URTDSM PROJECT Phase1: STATUS-NER

N	Equip.	Scope		Status				Status / Remarks
		Nos.		Erection	SAT	Reporting/ Commission	Data Validation	
1	SPDC	1	NERLDC	1	1	1	NA	Completed 26.3.19/PTOC issued after SAVT
2	PDC	1	Assam	1	1	1	NA	Completed 26.3.19/PTOC issued after SAVT
3	PDC	1	Meghalaya	1	1	1	NA	Completed 26.3.19/PTOC issued after SAVT
4	PDC	1	Tripura	1	1	1	NA	Completed 08.12.2019 along with SAVT
	<b>Total</b>	<b>4</b>						
5	PMU	3	Salakati	3	3	3	3	Completed
6	PMU	6	Balipara	6	6	6	6	Completed
7	PMU	6	Bongaigaon	6	6	6	6	Completed
8	PMU	4	BNC	4	4	4	4	Completed
9	PMU	4	Silchar	4	4	4	4	Completed
10	PMU	7	Misa	7	7	7	6	Completed
11	PMU	3	Mariani	3	3	3	3	Completed
12	PMU	5	Dimapur	5	5	5	5	Completed
13	PMU	1	RHEP - NEEPCO	1	1	1	1	Completed
14	PMU	2	Kopili -	2	2	2	2	Completed

			NEEPCO					
15	PMU	4	Samaguri – Assam	4	4	4	4	Completed
16	PMU	2	Agia - Assam	2	2	2	2	Completed
17	PMU	2	Mariani Assam	2	2	2	2	Completed
18	PMU	2	Tinsukia - Assam	2	2	2	2	Completed
		<b>51</b>		<b>51</b>	<b>51</b>	<b>51</b>	<b>50</b>	Note: There was some delay ( around months July & Aug19) due to Flood in South Assam, South Tripura & North Tripura

**Over all Target-URTDSM project**

1. PDC/System at SLDC Tripura: Completed
2. UPS etc.: Completed
3. Analytical Software: Completed for Installation of 5nos. Software at NERLDC-SPDC, SLDC-PDCs of Assam, Tripura, Meghalaya. 1software pending.
4. Issues/ Reasons of Delay as mentioned above in Note B in NER FO expansion project have also affected the delay of URTDSM project in NER. Further delay was due to change of control centre system/PDC from Arunachal Pradesh to Tripura



**पावरग्रिड  
POWERGRID**

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)

**POWER GRID CORPORATION OF INDIA LIMITED**  
(A Government of India Enterprise)

Ref: NEKHL/OS/F-509E-Pkg-IVA/IVC/509SE/349 A .

Date: 03.02.2020

To,

Executive Engineer, SLDC-Aizawl  
P&E Department, Govt of Mizoram

**Sub: Status of OPGW link, Equipment(SDH-PDH) under "MW Vacation OPGW project" & "FO Cable Pkg for NERFO expansion under establishment of FO Communication system in NER" & RTU/GPRS scheme under "SLDC Expansion" project as approved in diff NERPC(14<sup>TH</sup> to 19<sup>th</sup>) meetings: Regarding request to P&E dept, Govt of Mizoram for taking up some pending issues.**

1.0 This has reference to the different ongoing OPGW works related to communication & RTU system of different stations & SLDC under P& E Mizoram as was covered in projects of LD&C/ULDC (NER FO Expansion, MW Vacation, SLDC Expansion etc.)

2.0 Following points may kindly be noted in this regard

S N	Name of OPGW link & Proj ref	Status	Link & Node Readiness & Other Remarks
1	132kV Aizawl PG-Zemabawk-II(Sate) along with LILO Melriat PG SS  -CS Link under MW Vacation OPGW project by POWERGRID/LD&C project	OPGW Link completed as per original Scope by POWERGRID through M/s Ten Dot	Melriat PG node & Aizawl PG-Equipment(SDH-PDH) commissioned & data is already reporting to NERLDC via Fibcom(SDH) & Tejas/ECI(PDH).  But Zimabawk-II(Zuntui), P&E end is not reporting as equipment Team (Fibcom) is not allowed by P&E for installation & commissioning. As reported P&E dept, Govt of Mizoram is now planning to shift the Zimabawk-2/Zuntui substation to new location which is apx.1km away from earlier placed station.  <b>P&amp;E-Govt of Mizoram is to take up for shifting all items (RTU under SLDC project already commissioned &amp; Equipment under NER FO expansion/MW project already delivered ) which are already installed. The additional OPGW which is required to connect can be arranged under NER FO Expansion project through POWERGRID. However installation is to be taken up by P&amp;E Dept, Govt of Mizoram</b>  As alternate communication, GPRS modem for communication is already installed at Zuntui(Zimabawk-2). <b>But due to technical issue with lease line( taken from NIC) at SLDC end RTU is not reporting to SLDC</b>
2	132KV Melriat-Sihmuii - CS Link under MW Vacation	Do	Terminal Equipment at both end supplied, installed long back & tested. Melriat PG end station , equipment

REGIONAL HEAD QUARTERS, NERTS : SHILLONG-793006, ULDC-AM DEPT

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Corporate Office: "Saudamini", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel.: 0124-2571700-719

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P-1/3



**पावरग्रिड  
POWERGRID**

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उपक्रम)

**POWER GRID CORPORATION OF INDIA LIMITED**  
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	OPGW project by POWERGRID/LD&C		commissioned data reported. At Sihmuii, P&E station , power supply is not ready
3	Aizawl PG-Zemabawk-1 (Luangmual) -State link under NER FO expansion Project/ POWERGRID/LD&C	(Work to be taken up) Target: May2020 by TCIL	RTU supplied & commissioned. Even though OPGW is not there, as alternate path, GPRS modem under GPRS communication scheme/SLDC is already installed at Zimabawk-1( Luangmual )S/S . <b>But due to technical issue** with lease line( taken from NIC) at SLDC end RTU is not reporting to SLDC.</b>
4	Zuntui to SLDC Aizawl-OPGW link- in scope of P&E,Mizoram*  Project-ref Not available	Not confirmed by P&E. Earlier arranged FO is reportedly being shifted(rout e modified)	This is in scope of P&E Department-Mizoram. It is reported from site that OPGW is not yet installed over the 33kV Line and further original Zuntui(Zimabawk-2) is being shifted to new location by P&E Dept. Equipment at both end is already supplied by M/s Fibcom( SDH) & Tejas( PDH). <b>P&amp;E may immediately make the fiber/OPGW ready (Zuntui- SLDC) so that equipment can be commissioned. Further in case, OPGW is not yet arranged, P&amp;E &amp; POWERGRID Aizawl may jointly explore if OPGW can be spared from spare quantity under NBER FO expansion scheme. However erection/stringing is to be arranged by P&amp;E dept</b>

**Note1\*:** It may be noted that as per MOM Dtd. 18-19.07.2014(Copy attached- **Annex-A**) scope of equipment at all above locations & OPGW links (SN.1-3 as per original locations) was in scope of POWERGRID and same is completed(except constraints as mentioned beyond POWERGRID control). Link of SN.4 was in scope of P&E,dept Mizoram.

**Note2\*\*:** Previous Communication in respect of technical Issue with lease link is attached **Annex-B**. **P&E department may arrange alternate lease link with static ip for GPRS server at SLDC.** Onward once GPRS link is established, joint testing with P&E, PMAS(GPRS agency) & POWERGRID can be carried out for Site acceptance testing

### 3.0 Under above stated conditions, P&E Dept-Mizoram is requested to take up &

- Arrange necessary shifting of OPGW(rerouting & stringing etc),RTU/ delivered etc from old Zuntui(Zimabawk-2) station to newly located Zuntui(Zimabawk2-new) station as per site conditions/ requirement of P&E dept.
- Confirm readiness of OPGW link between Zuntui to SLDC-Mizoram.
- Arrange suitable lease link for internet connectivity to GPRS M2M Server at SLDC Mizoram.

**4.0** Based on above, testing of Terminal Equipment(at both end of a link) will be taken up. During Testing of Equipment(i.e, SDH-Fibcom make; PDH-Valiant-make/Tejas) at substations of P&E-Mizoram [ i.e. Shimui, SLDC-Mizoram, Zuntui (Zimabawk-2), Luangmual(Zimabawk-1)] , P&E dept is hereby requested to nominate representative/ team ( Both at substation RTU Site & SLDC end) during substation end to SLDC end testing( jointly with FIBCOM/Tejas & POWERGRID). In parallel, P&E dept-SLDC Mizoram may take up with GE for integration of link/RTU with SLDC SCADA.

REGIONAL HEAD QUARTERS,NERTS ; SHILLONG-793006, ULDC-AM DEPT

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P-2/3



**पावरग्रिड  
POWERGRID**

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)

**POWER GRID CORPORATION OF INDIA LIMITED**  
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5.0 Coordinator from POWERGRID side & Executing agency-during Equipmet/Link Testing is as follows:

S.N.	Tejas Team	Fibcom Team	For NERLDC/ POWERGRID	For PG stations & SLDC Mizoram end
1	Sh Biswajit Sen or his Representative 9365020986	Mr Amrit Ranjan Or his Representative 09650382172/ 07015185196	Shri Rohitesh Kumar-9402184618 P Johny Singh/Sh Supriya Paul or his representative	Sh H Siama ,GM Melriat-Aizawl or his representative.  9436352277

6.0 Further already communicated earlier during NERPC/ NETeST Meeting, P&E,Dept as requested to arrange/ensure for (stations owned by P&E)

- 1) bringing data/voice through PLCC links upto above wideband locations from other nearby stations as required, Telephone set(02 wire/VoIP) & power supply arrangement
- 2) Cables (LAN, serial etc)
  - 1) for connection of the Phones/RTU etc to configured ports of SDH/PDH Mux at all stations (except SLDC Loc.)
  - 2) for connectivity of all 02wire/04wire voice channels (FXO and E&M card) of PDH Mux & Ethernet port (Merging port of VoIP link) of SDH Mux upto the respective termination/ports of Exchange (At SLDC location)
  - 3) For connectivity of all the RTU channels (101/104) from PDH/SDH Mux upto CFE (communication front end) of SCADA (At SLDC Location). Further, taking up for integration with GE & SLDC/RLDC
  - 4) Air conditioned & rodent free environment in Communication room (where these panels are being installed)

The above is for your information and further needful action for betterment of power system data telemetry please.

Thanking You,

Encl: As stated.

Yours Faithfully,  
  
(S. Paul) 12/02/2020  
DGM, AM ULDC-NERTS

सुप्रिय पाल / Supriya Paul

उपमहानिर्देशक (प्र.से.) / DGM, Manager (OS)

पावरग्रिड, उपक्षेत्राध्यक्ष, शिलांग / POWERGRID, NERTS, Shillong.

Copy ( For kind information pl)

1. Engineer-in-Chief, P&E dept-Transmission, Govt of Mizoram; Aizawl
2. Chief Engineer, P&E department, Govt of Mizoram, Aizawl
3. GM-ERP/C&M-Guwahati, NERTS, POWERGRID
4. Sr GM, AM I/C, NERTS, POWERGRID
5. GM -Melriat/ Aizawl Substation, NERTS, POWERGRID

REGIONAL HEAD QUARTERS, NERTS ; SHILLONG-793006, ULDC-AM DEPT

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Corporate Office: "Saudamini", Plot No. 2, Sector-29, Gurugram-122001. (Haryana) Tel.: 0124-2571700-719

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Website: www.powergridindia.com

Ref: NESH/OS/F-509 GPRS/f-509SE /317

Date: 03.01.2020

To

The General Manager

Tripura State Electricity Corporation Ltd. (TSECL)

Bidyut Bhaban, Banamalipur, Agartala, Tripura

**Copy: Coordinator-DGM/ SLDC-For kind action & co-ordination please.****Subject: Implementation of GPRS scheme for different RTUs of TSECL: Request for handing over of SIMs(data activated) at RTU sites (& Broad band connection as back up wherever feasible) under SLDC Expansion/Up gradation Project.**

Purchase Order/NOA Ref: NESH/CSM/630/NOA/448 Dtd.28.03.17 &amp; LOA ref: NESH/CSM/630/LOA/448 dtd 19.05.2017 to M/s Process &amp; Machines Automation System.

Dear Sir,

- 1) This has reference to the GPRS scheme implementation for RTU-communication at Substations of TSECL for connecting SLDC(79Tilla) of TSECL. During 17th NERPC Dtd.04.10.2016, it was agreed that POWERGRID will facilitate implementation of GPRS scheme as requested from State utilities including TSECL. Onward, the supply & installation of items for GPRS scheme was awarded to PMAS vide aforesaid NOA in March'2017.
- 2) The same was intimated to TSECL in April'2017 along with details pre-requisite as to be arranged from owner, TSECL & later through various emails. (Annex-A-earlier communications attached). The matter of providing SIMs( & later Broad band) was also discussed in elaborate way in various NETeST meetings, sub-committee of NERPC(6th NETEST Dtd 11.5.2017 onward).
- 3) The names of the stations as supposed to cover were P.K Bari, Baramura, Satchand, Sabroom, Amarpur, Dharmanager, Gumoti, Rabindranagar, Belonia, Bagofa, Rokhia Demo for two stations were completed long back with special request form TSECL. As discussed/intimated to us, the handing over of activated SIMs has been delayed due to different reasons beyond control and POWEWRGRID has always co-operated for the same. It may be noted that the executing agency is pursuing us continuously for handing over of all activated SIMs as pending at one go( along with broad band connection as & where possible). It may be noted that till date only two SIMs provided which are already installed in two nos. RTU locations. We are yet to get handing over of pending SIMs(data activated) .

क्षेत्रीय मुख्यालय: शिलांग

RHQ: Shillong

दूरभाष:

Tel:

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- 4) It is again requested that
- A. All pending SIMs (main SIM & back up SIM ) may kindly be provided to M/s PMAs through POWERGRID. Back up SIM to be provided for those locations only where Main SIM provided but broad band connection not possible.
- B. **Broadband connection may be given at RTU sites as back up to main SIM (3G-GPRS data activated) wherever broad-band connection is possible/feasible .**  
Wherever main SIM & broad band connection given, 2<sup>nd</sup> SIM/Back up SIM is not required.
- SIMs once ready may be jointly checked for data activation and be handed over to M/s PMAs through POWERGRID Agartala representative please.
- 5) The commissioning of GPRS scheme , as was planned, will facilitate TSECL to get more telemetry data to SLDC where no other connection is available and same will be put with redundancy to OFC(NER FO Project target-March-April 2020)/PLCC in some cases as well. The same will be beneficial to overall power system grid (EHV/HV) management of TSECL Transmission system.

We hope that both POWERGRID & TSECL will take necessary steps to complete the pending works under above project at the earliest possible for benefit of grid management/operation of Tripura State

The above is for your kind information and further needful action, please.

Thanking You,

Encl. Annex-A .

Yours Faithfully

(S. Paul)

Dy Gen Manager, AM / Supply Paul

उपप्रबंधक (प्र.से.) / Dy. Manager (OS)  
पावरग्रिड, उपक्षेपाप्र, शिलांग / POWERGRID, NERTS, Shillong.

Copy ( For kind information pl)

1. The Director( Technical), TSECL./ PS to CMD-TSECL
2. DGM/Sr Manager-TSECL, SLDC
2. Sr GM-AM(I/C), RHQ-NERTS-POWERGRID
3. GM, ERP/C&M/ULDC-Guwahati, NERTS-POWERGRID
4. Sr DGM-Kumarghat/Agartala, NERTS-POWERGRID

क्षेत्रीय मुख्यालय: शिलांग

RHQ: Shillong

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ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
POWER GRID CORPORATION  
OF INDIA LIMITED



(A Government of India Enterprise)

Dongtieh, Lower Nongrah, Lapalng, (Shillong)-793001  
Phone: (0364) 2536178, Fax: (0364) 2536397, nerts\_os@yahoo.in

उत्तर - पूर्वी क्षेत्र

NORTH EASTERN REGION

Ref: NESH/OS/F-509E-Pkg IVa/IVC/DoP-Nagaland/

Date: 13.09.2019

To  
Executive Engineer -Communication Division,  
Dept. of Power, Govt. of Nagaland, Nagaland

Copy: SE/EE- Electrical Transmission Division/ SLDC, Dimapur-For kind co-ordination please.

**Sub: Readiness SDH & PDH nodes in stations of DoP, Nagaland under MW Vacation & NER FO Expansion project & plan joint testing for telemetry/communication channels of different stations covered under said projects: Reg.**

Dear Sir,

1.0 This has reference to the subject mentioned above in line with diff.t MOMs of NETeSTs etc.

2.0 Following are the present progress/status of links & nodes which will facilitate telemetry of some of the stations of DoP, Nagaland as covered under: (Table1)

SN	Name of OPGW Link (Sector : Name of project)	Readiness of OPGW FODP-FODP	Nodes-SDH PDH ( which will facilitate telemetry of diff RTUs of DoP,Nagaland.)	Readiness of eqpt-Yes/No Other Remarks
1	Dimapur-PG---to-- Dimapur/Nagarjan State- to--SLDC-Nagaland (central sector under MW Vcation)	Yes	Diampur PG, Nagarjan/Dimapur- State, SLDC All reporting to NMS	Yes. Node Port Details shared.  <i>DoP to connect additional 3 nodes with PLCC at Nagarja-State</i>
2.	Doyang---to--- MokokchungPG- Mokokchung State  (central sector under MW Vacation)	Yes	Doyang-Central, Mokokchung-State, Mokokchung-PG, All reporting to NMS	Yes. Node Port Details shared.  <i>DoP to connect additional 1 node through PLCC at Doyang( Sanis to be connected) &amp; 3 nos. stations to be connected to Mokokchung- State</i>
2	Wokha-Kohima with LILO at new Kohima  (State Sector under NER FO Expansion)	Work in Progress. Target Dec'19. Constraint: LILO not ready	Work under Progress (6/56km)	No.  <i>DoP to take up for early completion of LILO part connecting New Kohima</i>

3.0 As already communicated earlier during NETeST & OCC Meetings, respective station owner, DoP-Nagaland has to arrange the following-

i) 2wire Analog telephone or IPphone set (along with telephone wire to be laid from control desk/control room up table ) to the PDH/SDH .

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(भारत सरकार का उद्यम)  
POWER GRID CORPORATION  
OF INDIA LIMITED



(A Government of India Enterprise)

Dongtiéh, Lower Nongrah, Lapalng, (Shillong)-793001  
Phone: (0364) 2536178, Fax: (0364) 2536397, nerts\_os@yahoo.in

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NORTH EASTERN REGION

ii) For RTU connection to SDH/PDH also, necessary cable is to be provided by RTUowner/owner of station in following way:

ii-a) one Ethernet cable(shielded) for serial data & one Ethernet cable(shielded) to be laid between RTU/GATEWAY up to the Communication equipment-SDH/PDH-Mux for data reporting by owner of RTU station. Wherever GPRS scheme available, same will act as back up path

ii-b) Shielded data cable to be laid from each serial output of PLCC/modem up to the Fiber equipment node PDH-Mux at a FO node station where data from other nearby stations is being brought via PLCC network. Spare ports at PDH(Tejas/Valiant) node is shared by us. PLCC engineer deputed by DoP, Nagaland will tie up with PDH team as given below.

ii-c) Similarly at SLDC end, from Mux-PDH( or SDH\* ) , serial cables (or Ethernet cable\*) are to be laid up to the SCADA CFE, Communication front end (or Router)

Note: After Links are OK, necessary SCADA integration of new RTU data is to be taken up by SLDC Ngaland through GE as & when required.

4.0 It may be noted that joint testing/checking will be done by DoP, Nagaland with POWERGRID for SAT(site acceptance test) of SDH(Fibcom)/PDH(Tejas) equipment. One dedicated coordinator at State SLDC/Department will be assigned for checking during end to end communication Link testing.

A. Co-ordinator from POWERGRID end/ DoP, Nagaland sites :

- 1) Shri Ponen, GM-Dimapur (09436302819) or his representative
- 2) Shri S P Jou , Manager Mokokchung(09402830632) or his representative

B. Co-ordinator from Tejas/Valiant-PDH equipment Team: Mr Biswajit Sen(09365020986)

C. Co-ordinator from Fibcom End, Mr Vikrant Kr-09818592589

5.0 We will soon share exact schedule of SAT /testing (tentatively wef 20.09.19 -15.10.19) for completed nodes(S.1-2 of Table1) which are already connected by FO.

This is for further needful at your end please

Thanking You,

Encl. Port Details/As stated

Copy:

1. GM-ERP/ULDC-Guwahati
2. Sr GM-AM (I/C), NERTS
3. Chief Engineer (T&G),DoP, Nagaland,Kohima

Received on  
18/02/2020

(P. TIAMAGA TIMCHUNGER)  
Junior Engineer  
SLDC  
Dimapur : Nagaland

Yours faithfully,

(S. Paul)

DGM-ULDC-NERTS

Ref: NESH/OS/F-509E-Pkg IVa/IVC/TSECL-Tripura/307

Date: 23.12.2019

To- The General Manager  
Tripura State Electricity Corporation Ltd. (TSECL)  
Bidyut Bhaban, Banamalipur, Agartala, Tripura  
Copy: Coordinator-SLDC-For kind co-ordination please.

**Sub: Port details of Data & Voice channels established from different wideband location (New) of TSECL, Tripura under NER FO Expansion project [Establishment of Fibre Optic Communication System under Wide Band Communication Expansion Plan in North-Eastern Region] : Reg.**

Dear Sir,

1.0 This has reference to the ongoing works related to establishment of Fibre Optic Communication System in Tripura State. The FO links (as considered under above project under LD&C scheme approved through 15<sup>th</sup> & revised in 18<sup>th</sup> NERPC) for the data/voice reporting of stations of Tripura are

i) **Tripura State Sector Links: (Fibre Optic Expansion Project)**

1)	132kV 79Tila-Barmura(GTP)
2)	132kV Surjamaninagar- Budhjungnagar
3)	132kV Udaipur-Palatana
4)	132kV Rokhia-Udaipur
5)	132kV 79Tila -Dhalabil
6)	66kV 79Tila- Badharghat
7)	66kV Udaipur-Gumti##
8)	66kV Gumti-Amarpur
9)	66kV Satchand-Sabroom
10)	132kV SM Nagar-Monarchak (Transmission Line Under Construction)
11)	132kV SM Nagar-Rokhia (Transmission Line Under Construction).

ii) **Central Sector Link: (Fibre Optic Expansion Project)**

1)	132kV SM Nagar-Pallatana- Work under final stage
----	--

2.0 The above State Sector FO links are completed (except SM Nagar- Monarchak and SM- Nagar-Rokhia [TL under TSECL's construction]). The end equipment (SDH/PDH) at stations/nodes viz. Dhalabil, Badharghat, Baramura, SM Nagar and Budhjungnagar can be made reported to the State Load Dispatch Center (SLDC 79Tilla). Accordingly ports are configured for these stationed as tabulated below

Start Station (Wide Band Location)				End Station		PLCC Routing upto interfacing wideband node	Path for reporting of Wideband loc to SLDC Dimapur
Start Station	Channel	Equipment Name and Model	Interface	Equipment Name and Model	Interface		
Dhalabil	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-1	FXO-CH-1	Local wideband	Main Channel
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-1	4W E&M-CH-20	PLCC link	

श्रेणीय मुख्यालय: शिलांग  
RHC: Shillong

दूरभाष:  
Tel:

केन्द्रीय कार्यालय: "सौदामिनी", प्लॉट नंबर 2, सेक्टर -29, गुरुग्राम -122001, (हरियाणा) दूरभाष: 0124-2571700-719  
Corporate Office: "Saudamin", Plot No. 2, Sector-29, Gurugram-122001, (Haryana) Tel.: 0124-2571700-719

पंजीकृत कार्यालय: बी -9, कुतुब इस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली -110 016. दूरभाष: 011-26560112, 26560121, 26564812, 26564892, CIN: L40101DL1989GOI038121

Registered Office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016. Tel: 011-26560112, 26560121, 26564812, 26564892, CIN:

L40101DL1989GOI038121

Website: www.powergridindia.com

	Voice (VoIP)	FIBCOM 6335	EMAP8S_21/5	FIBCOM 6335	EMAP8S_21/5	Local wideband	Redundant Channel	
	Data (104)	FIBCOM 6335	EMAP8S_21/3	FIBCOM 6335	EMAP8S_21/3	Local wideband		
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-1	V.24-RS232(20)	Local wideband		
	Voice (02 wire)	VCL-MX-2	FXS-CH-1	VCL-MX-2	FX0-CH-1	Local wideband		
	Voice (04 wire)	VCL-MX-2	4W E&M-CH-1	VCL-MX-2	4W E&M-CH-20	PLCC link		
	Data (104)	FIBCOM 6335	EMAP8S_22/3	FIBCOM 6335	EMAP8S_22/3	Local wideband		
	Data (101)	VCL-MX-2	V.24-RS232(01)	VCL-MX-2	V.24-RS232(20)	Local wideband		
Badharghat	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-1	FX0-CH-2	Local wideband	Main Channel	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-1	4W E&M-CH-21	PLCC link		
	Voice (VoIP)	FIBCOM 6335	EMAP8S_21/5	FIBCOM 6335	EMAP8S_21/5	Local wideband		
	Data (104)	FIBCOM 6335	EMAP8S_21/3	FIBCOM 6335	EMAP8S_21/3	Local wideband		
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-3	V.24-RS232(25)	Local wideband	Redundant Channel	
	Voice (02 wire)	VCL-MX-2	FXS-CH-1	VCL-MX-2	FX0-CH-2	Local wideband		
	Voice (04 wire)	VCL-MX-2	4W E&M-CH-1	VCL-MX-2	4W E&M-CH-21	PLCC link		
	Data (104)	FIBCOM 6335	EMAP8S_22/3	FIBCOM 6335	EMAP8S_22/3	Local wideband		
Baramura	Data (101)	VCL-MX-2	V.24-RS232(01)	VCL-MX-3	V.24-RS232(25)	Local wideband	Main Channel	
	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-1	FX0-CH-3	Local wideband		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-1	4W E&M-CH-22	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-2	VCL-MX-1	4W E&M-CH-23	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-3	VCL-MX-1	4W E&M-CH-24	PLCC link		
	Voice (VoIP)	FIBCOM 6335	EMAP8S_21/5	FIBCOM 6335	EMAP8S_21/5	Local wideband		
	Data (104)	FIBCOM 6335	EMAP8S_21/3	FIBCOM 6335	EMAP8S_21/3	Local wideband		
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-3	V.24-RS232(26)	Local wideband		
	Data (101)	VCL-MX-1	V.24-RS232(02)	VCL-MX-3	V.24-RS232(27)	Local wideband		
	Data (101)	VCL-MX-1	V.24-RS232(03)	VCL-MX-3	V.24-RS232(28)	Local wideband		
	Voice (02 wire)	VCL-MX-2	FXS-CH-1	VCL-MX-2	FX0-CH-3	Local wideband		Redundant Channel
	Voice (04 wire)	VCL-MX-2	4W E&M-CH-1	VCL-MX-2	4W E&M-CH-22	PLCC link		
	Voice (04 wire)	VCL-MX-2	4W E&M-CH-2	VCL-MX-2	4W E&M-CH-23	PLCC link		
	Voice (04 wire)	VCL-MX-2	4W E&M-CH-3	VCL-MX-2	4W E&M-CH-24	PLCC link		
Data (104)	FIBCOM 6335	EMAP8S_22/3	FIBCOM 6335	EMAP8S_22/3	Local wideband			
Data (101)	VCL-MX-2	V.24-RS232(01)	VCL-MX-3	V.24-RS232(26)	Local wideband			
Data (101)	VCL-MX-2	V.24-RS232(02)	VCL-MX-3	V.24-RS232(27)	Local wideband			
Data (101)	VCL-MX-2	V.24-RS232(03)	VCL-MX-3	V.24-RS232(28)	Local wideband			
Surajmaninagar	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-1	FX0-CH-15	Local wideband	Main Channel	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-1	4W E&M-CH-1	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-2	VCL-MX-1	4W E&M-CH-2	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-3	VCL-MX-1	4W E&M-CH-3	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-4	VCL-MX-1	4W E&M-CH-4	PLCC link		
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-5	VCL-MX-1	4W E&M-CH-5	PLCC link		

क्षेत्रीय मुख्यालय: शिलांग

दूरभाष:

MHQ: Shillong

Tel:

केन्द्रीय कार्यालय: "सौदामिनी", प्लॉट नंबर 2, सेक्टर -29, गुरुग्राम -122001, (हरियाणा) दूरभाष: 0124-2571700-719

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Registered Office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016. Tel: 011-26560112, 26560121, 26564812, 26564892, CIN:

L40101DL1989GOI038121

Website: www.powergridindia.com

	Voice (04 wire)	VCL-MX-1	4W E&M-CH-6	VCL-MX-1	4W E&M-CH-6	PLCC link	
	Voice (VoIP)	FIBCOM 6335	EMAP8S_21/5	FIBCOM 6335	EMAP8S_21/5	Local wideband	
	Data (104)	FIBCOM 6335	EMAP8S_21/3	FIBCOM 6335	EMAP8S_21/3	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-1	V.24-RS232(01)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(02)	VCL-MX-1	V.24-RS232(02)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(03)	VCL-MX-1	V.24-RS232(03)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(04)	VCL-MX-1	V.24-RS232(04)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(05)	VCL-MX-1	V.24-RS232(05)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(06)	VCL-MX-1	V.24-RS232(06)	Local wideband	
	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-2	FX0-CH-15	Local wideband	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-2	4W E&M-CH-1	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-2	VCL-MX-2	4W E&M-CH-2	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-3	VCL-MX-2	4W E&M-CH-3	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-4	VCL-MX-2	4W E&M-CH-4	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-5	VCL-MX-2	4W E&M-CH-5	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-6	VCL-MX-2	4W E&M-CH-6	PLCC link	
	Data (104)	FIBCOM 6335	EMAP8S_22/3	FIBCOM 6335	EMAP8S_22/3	Local wideband	Main Channel
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-2	V.24-RS232(01)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(02)	VCL-MX-2	V.24-RS232(02)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(03)	VCL-MX-2	V.24-RS232(03)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(04)	VCL-MX-2	V.24-RS232(04)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(05)	VCL-MX-2	V.24-RS232(05)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(06)	VCL-MX-2	V.24-RS232(06)	Local wideband	
Budhjungnagar	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-1	FX0-CH-7	Local wideband	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-1	4W E&M-CH-09	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-2	VCL-MX-1	4W E&M-CH-10	PLCC link	
	Voice (VoIP)	FIBCOM 6335	EMAP8S_21/5	FIBCOM 6335	EMAP8S_21/5	Local wideband	Main Channel
	Data (104)	FIBCOM 6335	EMAP8S_21/3	FIBCOM 6335	EMAP8S_21/3	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-1	V.24-RS232(09)	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(02)	VCL-MX-1	V.24-RS232(10)	Local wideband	
	Voice (02 wire)	VCL-MX-1	FXS-CH-1	VCL-MX-2	FX0-CH-7	Local wideband	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-1	VCL-MX-2	4W E&M-CH-09	PLCC link	
	Voice (04 wire)	VCL-MX-1	4W E&M-CH-2	VCL-MX-2	4W E&M-CH-10	PLCC link	Redundant Channel
	Data (104)	FIBCOM 6335	EMAP8S_22/3	FIBCOM 6335	EMAP8S_22/3	Local wideband	
	Data (101)	VCL-MX-1	V.24-RS232(01)	VCL-MX-2	V.24-RS232(09)	PLCC link	
Data (101)	VCL-MX-1	V.24-RS232(02)	VCL-MX-2	V.24-RS232(10)	Local wideband		
Gumti	Work in Progress ,Equipment are installed, Target: March-2020						
Amarpur	Work in Progress ,Equipment are installed, Target: March-2020						

क्षेत्रीय मुख्यालय: शिलांग

RHQ: Shillong

दूरभाष:

Tel:

केन्द्रीय कार्यालय "सौदामिनी", प्लॉट नंबर 2, सेक्टर -29, गुरुग्राम -122001, (हरियाणा) दूरभाष: 0124-2571700-719  
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Satchand, & Sabrum	No optical connectivity with existing/New Wideband location. However OPGW between Satchund-Sabrum completed
Rokhia	Work in Progress ,Equipment are installed, Target: March-2020
Monarchak	Front Not ready as TL Rokhia-Monarchak is not ready, OPGW could not be laid. Materials handed over to TSECL

**Note1** :The ports are configured for data/voice reporting of the local stations (mentioned as local wideband in above table) & for the stations that can be brought to this wideband location via PLCC (mentioned as PLCC link in above table).

**Note2**: There is no direct optical connectivity for Satchand & Sabroom with any of the existing/new wide band stations/nodes. As intimated during NETeST , TSECL is to bring those data up to nearest Wide band. However OPGW link in between Satchand & Sabrum is completed

**Note3**: Monarchak station couldn't be optically connected as Monarchak is a tail end station and OPGW link connecting Monarchak with SM Nagar couldn't be completed as Transmission line is under construction.

**Note4**: AMC work OPGW/ADSS over TSECL links not in scope of vendor. Same is under scope of owner TSECL for state owned links & in scope of POWERGRID for CS links.

**3.0** As already communicated earlier during NERPC/ NETeST Meeting, owner TSECL shall range/ensure

- 1) bringing data/voice through PLCC links upto wideband locations for other stations
- 2) Phone (02 wire/VoIP) & power supply arrangement
- 3) Cables (LAN, serial etc)-supply & laying:
  - i. for connection of the Phones/RTU etc to configured ports of SDH/PDH Mux at all stations (except SLDC loc)
  - ii. for connectivity of all 02wire/04wire voice channels (FXO and E&M card) of PDH Mux & Ethernet port (Merging port of VoIP link) of SDH Mux upto the respective termination/ports of Exchange (At SLDC location)
  - iii. for connectivity of all the RTU channels (101/104) from PDH/SDH Mux upto CFE (communication front end) of SCADA (At SLDC Location). Further, taking up for integration with GE & SLDC/RLDC
  - iv. **Air conditioned & rodent free environment** in Communication room (where these panels are being installed)

The above is for your information and further needful action, please.

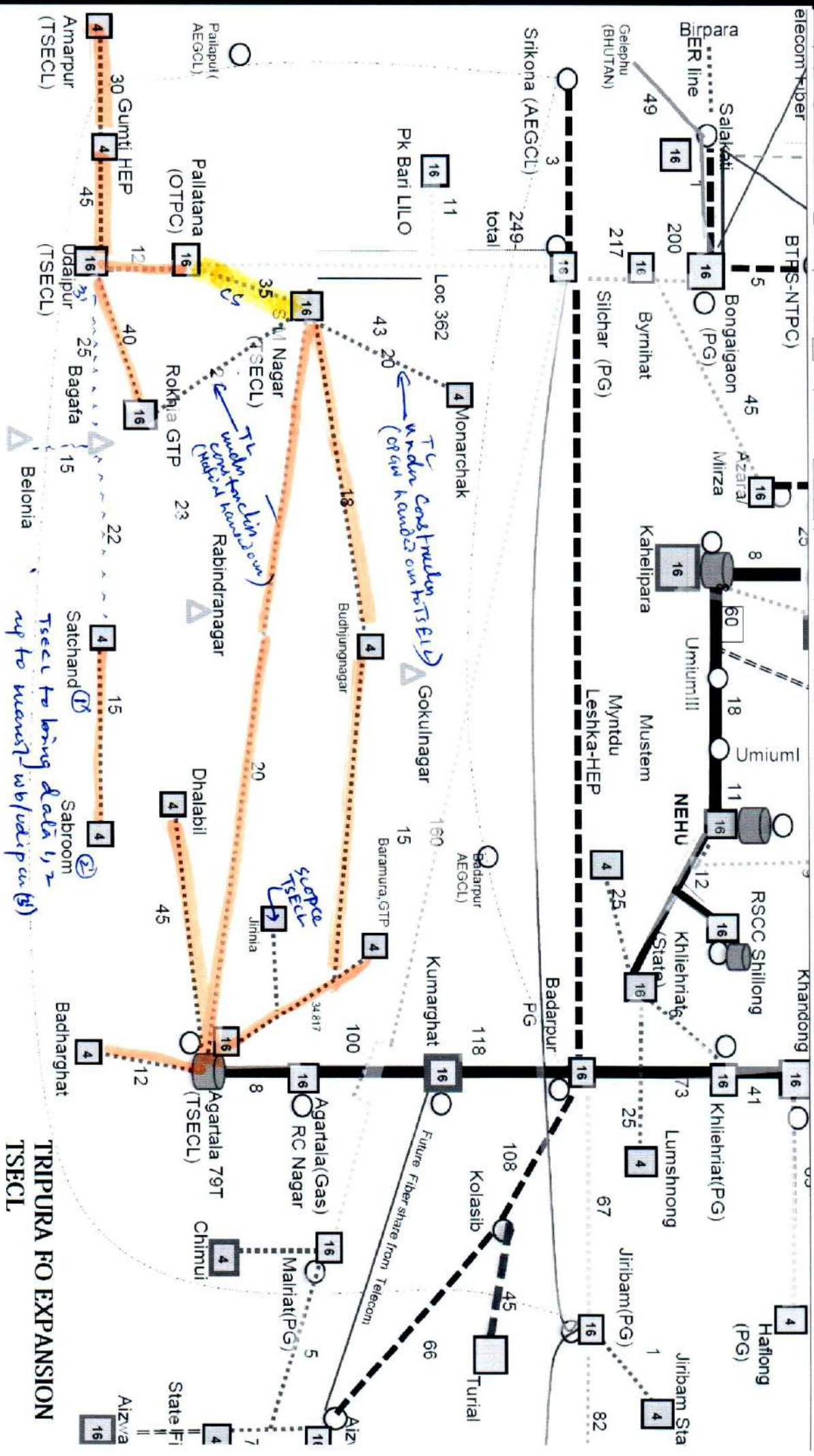
Thanking You,

Encl: OPGW Map

Copy ( For kind information pl)

1. The Director( Technical), TSECL.
2. DGM/Sr Manager-TSECL, SLDC
2. Sr GM-AM(I/C), RHQ-NERTS-POWERGRID
3. GM, ERP/C&M/ULDC-Guwahati, NERTS-POWERGRID
4. Sr DGM-Kumarghat/Agartala, NERTS-POWERGRID

*(Signature)*  
Yours Faithfully,  
(S. Paul) 23/12/2019  
Dy Gen Manager, AM -ULDC  
सुप्रिय पाल / Supriya Paul  
उपप्रबंधक (प्र.से.) / Dy. Gen Manager (OS)  
पावरग्रिड, उपखेपाप, शिलांग / POWERGRID, NERTS, Shillong.



*Handwritten signature*



Ref: NEKHL/OS/F-NER FO EXPANSION/

Date: 05.02.2020

To,  
Executive Engineer,  
Transmission Division, MEPTCL, Shillong Meghalaya

Copy:

1. In charges/ RE (Substations: MyntduLeshka, Lumshnong, Khliehriat, NEHU)
2. EE, Communication /PLCC division, MEPTCL, Shillong, Meghayala
3. EE, SLDC-NEHU, Shillong, Meghalaya

**Sub: Intimation regarding status of OPGW link and request for checking End to End Port link under "Fiber Optic Cable Package for NER fiber optic expansion under establishment of Fiber Optic Communication system in Northern Region-Meghalaya Part" as approved in 15-18<sup>th</sup> NERPC: Reg.**

1.0 This has reference to the ongoing OPGW works related to establishment of Fibre Optic Communication System in Meghalaya State under above project. The FO links as considered are:

SN	Name of Link under Meghalaya sector & Length in Km(apx)	Status of OPGW strung(FODP-FODP)& Equipment (SDH-Fibcom, PDH-Tejas) installation work	Remarks
1	132kV Khliehriat(PG) to Khlehiat (State)-7km	Complete	Fibcom&Tejas Team will be visiting by 15.02-15.03.2020 for end( State node) to end(SLDC) test/configuration. Target-March2020
2	132kV Khliehriat(State) - MyntduLeshka- HEP – 24.932 km	Complete	Completed. Power supply issue at Leshka, New Cable delivered. Fibcom&Tejas Team will be visiting by 15.02-15.03.2020 for end( State node) to end(SLDC) test/configuration Target-March2020
3	132kV Khliehriat(PG) ~ Lumshnong (S/C)– 25.19km	Complete	Fibcom&Tejas Team will be visiting by 15.02-15.03.2020 for end( State node) to end(SLDC) test/configuration. Target-March2020
4	132kV Nehu ~ Neigrilms-7km	Not started. The work would be looked after by Shillong POWERGRID. Equipment at NEHU SLDC installed	. This is related to break in traffic of main path NEHU to Kahilipara& so related to shut down of Telemetry traffic & power line . Target - May2020

KHLIEHRIAT SUBSTATION: NERTS: POWERGRID

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Website: www.powergridindia.com

3/01/20



2.0 You are hereby intimated to take kind necessary action and depute team ( Both Site & NEHU SLDC end, from MEPTCL side) during end to end testing ( Site to NEHU SLDC, jointly with FIBCOM/Tejas& POWERGRID) and do needful for link integration with SLDC SCADA. Coordinator from POWERGRIDside& Executing agency is as follows:

S.N.	Tejas Team	Fibcom Team	For NERLDC/NEHU end-POWERGRID	For Site End
1	Sh. Biswajit Sen or Representative 9365020986	Mr. Amrit Ranjan Or Representative 09650382172/ 07015185196	Shri Rohitesh Kumar-9402184618 P Johny Singh/Sh Supriya Paul or representative	Shri Y.D. Singh or his representative 7005669824

3.0 As already communicated earlier during NERPC/NETeST Meeting, MEPTCL as owner is requested to arrange/ensure for

- 1) bringing data/voice through PLCC links upto above wideband locations from other stations
- 2) Phone (02 wire/VoIP) & power supply arrangement
- 3) Cables (LAN, serial etc)
  - 1) for connection of the Phones/RTU etc to configured ports of SDH/PDH Mux at all stations (except SLDC Loc.)
  - 2) for connectivity of all 02wire/04wire voice channels (FXO and E&M card) of PDH Mux & Ethernet port (Merging port of VoIP link) of SDH Mux upto the respective termination/ports of Exchange (At SLDC location)
  - 3) For connectivity of all the RTU channels (101/104) from PDH/SDH Mux upto CFE (communication front end) of SCADA (At SLDC Location). Further, taking up for integration with GE & SLDC/RLDC
  - 4) Air conditioned & rodent free environment in Communication room (where these panels are being installed)

The above is for your information and further needful action for betterment of power system data telemetry please.

Thanking You,

Yours Faithfully,

*अमरिष*  
05/02/2020  
(ए.जे.गोगोई)

Sr. GM, Khliehriat

Copy (For kind information plz)

1. Sr. GM (I/C-AM), NERTS.
2. AEE, NERPC, Shillong
3. Chief Engineer-Transmission, MEPTCL, Shillong

KHLIEHRIAT SUBSTATION: NERTS: POWERGRID

केन्द्रीय कार्यालय: "सौदामिनी", प्लॉट नंबर 2, सेक्टर -29, गुरुग्राम -122001, (हरियाणा) दूरभाष: 0124-2571700-719

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Website: www.powergridindia.com

MOM Regarding installation of GPRS modem and SIM at Nagaland

Dated: 16-07-2019

PMAS representative Mr. Manash Das reached Nagaland on 15-07-2019 and as per discussion with SLDC representative and PGCIL representative visited 66KV Power house substation on same day and installed and configured GPRS Modem and SIM. As on date 66KV Power house substation's data is reporting in Exon test simulator at SLDC end and yet to report in SCADA.

On 16-07-2019, PMAS representative visited 132 KV Ganesh Nagar SS with SLDC and PGCIL representatives and installed and configured GPRS Modem and SIM, but due to problem of SIM network, communication to SLDC could not establish. In this place PMAS suggested to provide a broadband connection for data communication to SLDC.

SLDC Representatives:

1. Viswasan Pillai  
17/07/19
2. J. Chakraborty

Sub-Divisional Officer (E)  
State Load Despatch Centre (SLDC)  
Dimapur, Nagaland

PGCIL Representatives:

1. [Signature]
2. [Signature]

PMAS Representative:

1. Manash Das  
17-7-19
- 2.

**MOM Between POWERGRID, DOP-Nagaland & M/s PMAS regarding installation of GPRS modem and SIM based connectivity at Wokha, Zunheboto, Tuli & Tuensang substations of DOP Nagaland**

**Dated: 25-07-2019**

PMAS representative Mr. Manash Das reached Mokokchung Nagaland on 19-07-2019 and as per discussion with SLDC, Nagaland representative and POWERGRID representative visited following locations for checking healthiness of network signal and installation of GPRS modem.

1. 132 KV Wokha SS on 19-07-2019
2. 66kV Zunheboto SS on 20-07-2019
3. 66kV Tuli SS on 23-07-2019
4. 66kV Tuensang SS on 24-07-2019

At 132 KV Wokha SS, signal of SIM network (Vodafone & Airtel) is not good and reliable. Though communication was established between Wokha SS and SLDC over GPRS network, PMAS not able to get RTU data in 101 protocol. In this place Representative of POWERGRID, DOP, Nagaland & PMAS suggested and recommended to provide a broadband connection for healthy data communication to SLDC.

At 66kV Zunheboto SS, signal of SIM network (Vodafone & Airtel) is not good and reliable. Though communication was established between Zunheboto SS and SLDC over GPRS network, PMAS not able to get RTU data in 101 protocol. In this place Representative of POWERGRID, DOP, Nagaland & PMAS suggested and recommended to provide a broadband connection for healthy data communication to SLDC.

At 66kV Tuli SS, signal of SIM network (Vodafone & Airtel) is not good and reliable. Though communication was established between Tuli SS and SLDC over GPRS network, PMAS not able to get RTU data in 101 protocol. In this place Representative of POWERGRID, DOP, Nagaland & PMAS suggested and recommended to provide a broadband connection for healthy data communication to SLDC.

At 66kV Tuensang SS, signal of SIM network (Vodafone & Airtel) is not good and reliable. Though communication was established between Tuensang SS and SLDC over GPRS network, PMAS not able to get RTU data in 101 protocol. In this place Representative of POWERGRID, DOP, Nagaland & PMAS suggested and recommended to provide a broadband connection for healthy data communication to SLDC.

PMAS Representative left the site on 26.07.2019

POWERGRID Representatives:

SLDC Representatives:

PMAS Representative:

1. S. P. ZOU, **MANAGER (S/S)**  
POWERGRID  
MOKOKCHUNG

2. SHALO REPPEN, ENGINEER

1. **Sub-Divisional Officer**  
Transmission Sub-Division  
Mokokchung, Nagaland.

2.

1. MANASH DAS

# FW: OPGW Works are hindered due to Law & Order situation/Bandh/Strike etc. in NER-NER FO Expansion proj

Supriya Paul {सुप्रिय पॉल}

Thu 12-12-2019 10:58

To: nerpc@ymail.com <nerpc@ymail.com>; mukherjeesrijit2010@gmail.com <mukherjeesrijit2010@gmail.com>;  
sadiqimam.4u@gmail.com <sadiqimam.4u@gmail.com>;

Cc: ms-nerpc@gov.in <ms-nerpc@gov.in>; erashoka1@yahoo.com <erashoka1@yahoo.com>; BRIEFLEE LYNGKHOI  
<brieflee.lyngkhoi@gmail.com>; M K Baruah {एम.के. बरूआ} <mk.baruah@powergridindia.com>; Upananda Kataki {यु. कटोकी}  
<u.kataki@powergridindia.com>; B Anantha Sarma {बी. अनंत शर्मा} <basarma@powergridindia.com>;

Dear Sir,

This is to inform you that the teams (TCIL-NER FO expansion) working in Tripura for OPGW stringing is withdrawn gangs/teams keeping in view prevailing safety/law & order situation. Gang will be re-deployed once situations are normal

It is informed from from other parts of north east also that works are at halt(or teams leaving) i.r.o Nagaland-Manipur/Assam border(Byrni-Azara). It may be noted that teams deployed for OPGW stringing in NER are mostly from outside region

However we along with TCIL are looking for early solution once Law & order situation/Strike etc. return to normalcy .

This is for kind information please

सादर, Regards,

सुप्रिय पाल/S.Paul,

उपमहाप्रबंधक/DGM(AM-ULDC)

NERTS: POWERGRID, ऊ.पू.क्षे.पा.प्र:पावरग्रिड

दूरभाष/Tel:+91 9435379985

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**From:** kumar shiva [kshiva.tcil@gmail.com]

**Sent:** 11 December 2019 22:47:03

**To:** AGARTALA TL O&M OFFICE

**Cc:** Supriya Paul {सुप्रिय पॉल}; Subhasis pal

**Subject:** Fwd: OPGW Works in Tripura

Dear Sir,

This has reference to the prevailing curfew in Tripura. Our team, working on SM Nagar - Palattana TL, has informed us via the trailing mail that they are withdrawing their labors from the site in view of the prevailing law and order situation in the state.

The team also confirms in the same mail that they will mobilise the gangs as soon as the situation normalises.

This is for your information please.

--

Thanks & Regards,

Kumar Shiva,

AGM-TCIL, A Govt of India Enterprise

----- Forwarded message -----

From: **Anil Jain**

Date: Wed, 11 Dec, 2019, 21:12

Subject: Work in NER

To: kumar shiva <[kshiva.tcil@gmail.com](mailto:kshiva.tcil@gmail.com)>, <[subhasis.pal@tcil-india.com](mailto:subhasis.pal@tcil-india.com)>

Cc: ATD POWERCON <[atdpec@yahoo.com](mailto:atdpec@yahoo.com)>

Dear Mr. Shiva

This is to humbly inform you that due to curfew in NER, we are withdrawing the labour from the site in veiw of their safety.

As soon as situation gets normal, we will start the work immediately.

# Fw: Extortion money demanded by Insurgent Militant (IM)- NER FO Expansion project Loktak-Rengpang-Loktak Link

Supriya Paul {सुप्रिय पॉल}

Tue 11-02-2020 15:57

To: M SK Singh <mshkpgcl@gmail.com>; NERTS Imphal <nerts\_imphal@powergrid.co.in>;

Cc: nerts pesm (nerts\_pesm@powergrid.co.in) <nerts\_pesm@powergrid.co.in>; nerpc@ymail.com <nerpc@ymail.com>;  
bjluwang@yahoo.com <bjluwang@yahoo.com>; Upananda Kataki {यु. कटोकी} <u.kataki@powergridindia.com>; M K Baruah {एम.के.  
बरूआ} <mk.baruah@powergridindia.com>;

Dear Sir,

It is proposed that POWERGRID Imphal may take up the matter with MSPCL, Manipur again ( & MSPCL may take up with District administration for early solution). This is in reference to email from TCIL/RP Construction for OPGW stringing

सादर, Regards,

सुप्रिय पाल/S.Paul,

उपमहाप्रबंधक/DGM(AM-ULDC)

NERTS: POWERGRID, ऊ.पू.क्षे.पा.प्र:पावरग्रिड

दूरभाष/Tel:+91 9435379985

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**From:** R P Construction <rpconstruction2017@gmail.com>

**Sent:** 05 February 2020 12:39

**To:** Subhasis pal

**Cc:** kumar shiva; NERTS Imphal; SHIVALINI SINHA; Supriya Paul {सुप्रिय पॉल}; Rohitesh Kumar {Rohitesh Kumar};  
dayamoysingha11@gmail.com; David Ningomba

**Subject:** Extortion money demanded by Insurgent Militant (IM)

Dear Sir,

This is to inform you that today morning (05.02.2020 ) when our team were working at Rengpang - Loktak link at Rengpang end some unknown miscreants of IM has come and collected our supervisor's contact number and threatened him to pay 5% of our work order value as extortion money or else have to face the worst consequences.

Kindly look into the matter & resolve the issue at the earliest to avoid any work hamper at site.

Regards

R P Adhikari

# FW: Delay in NER Dec 19 Planned activity due to Protest against CAB in across NER- Intimation by FIBCOM(Equipment Team) NER FO Expansion

Supriya Paul {सुप्रिय पॉल}

Thu 19-12-2019 18:38

To:nerpc@ymail.com <nerpc@ymail.com>; mukherjeesrijit2010@gmail.com <mukherjeesrijit2010@gmail.com>;  
sadiqimam.4u@gmail.com <sadiqimam.4u@gmail.com>;

Cc:ms-nerpc@gov.in <ms-nerpc@gov.in>; erashoka1@yahoo.com <erashoka1@yahoo.com>; BRIEFLEE LYNGKHOI  
<brieflee.lyngkhoi@gmail.com>; M K Baruah {एम.के. बरूआ} <mk.baruah@powergridindia.com>; Upananda Kataki {यु. कटोकी}  
<u.kataki@powergridindia.com>; Rohitesh Kumar {Rohitesh Kumar} <rohiteshkumar@powergridindia.com>;

📎 6 attachments

Protest againgt CAB in NER\_3.png; Protest against CAB in NER-2.png; Protest Against CAB in NER\_1.png; Protest against CAB in NER\_6.png; Protest against CAB in NER-4.png; Protest against CAB in NER-5.png;

Good afternoon Sir,

This for your kind information that progress of NER FO Expansion OPGW project is hugely hindered in Dec19 for some issues beyond control.

The trailing email from M/s Fibcom, an MSME ( Equipment-Supplier/Executing Agency under NER FO Expansion Project) is self explanatory as teams was called back on safety/Law&order/communication/connectivity grounds.( Earlier we intimated about TCIL-OPGW agency also on 12.12.19)

However agencies have assured to re-mobilize teams to NER once situations are normal ( in January 20)

सादर, Regards,

सुप्रिय पाल/S.Paul,

उपमहाप्रबंधक/DGM(AM-ULDC)

NERTS: POWERGRID, ऊ.पू.क्षे.पा.प्र:पावरग्रिड

दूरभाष/Tel:+91 9435379985

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**From:** arvind srivastav [arvind.srivastava@fibcom.com]

**Sent:** 19 December 2019 17:17:28

**To:** Rohitesh Kumar {Rohitesh Kumar}; Supriya Paul {सुप्रिय पॉल}

**Cc:** Anand Singh; Bobby Saran; A M Gopalakrishnan; kvikrant singh; archana kumari; sachin seth; Shyama Kumari {श्यामा कुमारी}; Nutan Mishra {नूतन मिश्रा}; Sundeep Kr Gupta {संदीप कुमार गुप्ता}; Vishal Badlas {Vishal Badlas}

**Subject:** Delay in NER Dec 19 Planned activity due to Protest against CAB in across NER

Dear Sir,

We had planned 3 team, 6 Engineers (4 Engineers for Tripura DCPS & SDH SAT & 2 Engineers for Mizoram for SDH SAT) in 2nd Week of Dec 19.

Team reached at 11th Dec but none of the planned activity executed due to **protest against CAB across NER.**

After discussion with PGCIL region & local officials, team return back to Delhi & FE will be available in NER for completion Tripura & Mizoram planned activity in the First week of Jan 20.

**Note:** Attaching some pic. of protest for your reference.

Best Regards

Arvind Kumar Srivastava  
(Manager CS)  
Fibcom India Ltd.  
9350955761

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Thank you.

Fibcom India Limited



**पावरग्रिड**  
**POWERGRID**

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
**POWER GRID CORPORATION OF INDIA LIMITED**  
(A Government of India Enterprise)

Ref. No.: NEIP/05/SS/MSPCL/OPGW/2019-20/789

Date: 25.01.2020

To,

OSD (Planning),  
Manipur State Power Company Limited,  
Keishampat, Imphal West,  
Manipur-795001.

**Sub: Stringing of OPGW on state utilities transmission line of MSPCL under Wide Band Expansion Project on 132KV Karong-Imphal TL.**

Sir,

Stringing of OPGW on 132KV Karong Imphal TL couldn't be completed due to ROW issue in between Loc. No. 182-183. The local people has built a house underneath the transmission corridor in between Loc. T-182 to Loc. T-183 where the lower conductor has more sag. As such, the local is not allowing to work unless the lower conductor is lifted upwards. Therefore, kindly depute your representative to resolve the issue and their availability at site till the completion of the work.

This is for further necessary action please.

Thanking you

Yours Faithfully,

(MSK SINGH)  
General Manager,  
POWERGRID, Imphal

Copy to:

- 1) Managing Director, MSPCL for kind information please.
- 2) Sr. GM (AM), RHQ Shillong for kind information.

**STATUS OF GPRS SCHEME(ass with SLDC Exp scheme NER) by M/s Process Machine Automation System,PMAS Jaipur-**

**ANNEX- GPRS STATUS**

S.NO.	SECTOR	MRHOV/SRV	M2M Device I&C	M2M SAT Signed	Leased line ready or not	RTU SITE LOCATION	48V/110V Available-Scope Of State	Modem Installation Completed	Site Acceptance Testing Signed	Remarks	
1	MSPCL, MANIPUR	DONE	DONE	DONE	YES	Churchandpur (132/33 KV)	YES	YES	YES	Beyond commissioning( all completed for Manipur & made reported), future activity like PO for re-attending is to be arranged by MSPCL through PO etc	
2						Chandel (132/33KV)	YES	YES	YES		
3						Hundung (132/33 KV)	YES	YES	YES		
4						Rengpang (132/33 KV)	YES	YES	YES		
5						Jiribam (132/33 KV)	YES	YES	YES		
6	DoP, NAGALAND	DONE	DONE	DONE	YES	Nagarjan 132kV	YES	YES	YES	Beyond commissioning( all completed for Manipur), future activity like PO for re-attending is to be arranged by DOP,AP through PO etc. For example for Wokha Linkwas reported, but SIM rplaced by DOP Nagaland . DoP-AP may send the modem to PMAS for checking or place a PO for PMAS for 2nd visit. However remote support ( if some one works at site & asks query/ team viwer etc) is always ensured by PMAS	
7						Kohima 132kV	YES	YES	YES		
8						Mokuukchung 132kV	YES	YES	YES		
9						Power house (barma camp)	YES	YES	YES		
10						Tuli 66kV	YES	YES	YES		
11						Kiphire 132kV	YES	YES	YES		
12						Wokha 132kV	YES	YES	YES		
13						LHEP 132kV	YES	YES	YES		
14						Zuheneboto 66kV	YES	YES			(Vodafone,Airtel) SIM signal problem, modem installed in the month of July 2019 & was intermittently reporting. <b>SAT not signed by customer.</b> Brodband required
15						Tuensang 66kV	YES	YES			(Vodafone,Airtel) SIM signal problem, modem installed in the month of July 2019. <b>SAT not signed by customer.</b> Brodband required
16	Ganesh Naagr/ Paren	YES	YES		(Vodafone,Airtel) SIM signal problem, modem installed in the month of August 2019. <b>SAT not signed by customer.</b> Brodband required						
17	Mon	YES			will be installed within Feb 2020, new SIM to be provided and will be attended soon. DOP asked to provide broad band/lease line						
18	MIZORAM	DONE	DONE		NO	Indoor Substation , P&E Complex	NA	NA	NA	Leased line Staic IP issue took from NIC Mizoram. P&E Mizoram is to arrange Lease link from other vendor BSNL,POWERTEL, AIRTEL instead of NIC as issues issues reklated to NIC link is not sorted for a long time. Further Zuntui Station RTU is not ready & front is to be made ready by State	
19						Luangmual (State) / Zemabawk-I	NA	NA	NA		
20						Zemabawk - II / Zuangtui	NA	NA	NA		
21	ARUNACHAL Pradesh, DOP AP	DONE	DONE		YES	Nahorlogun (Lekhi)	NO, Converter used	YES		Data reported at SCADA System, but stability is not good. <b>SAT Report not signed by customer</b>	
22						Along	YES	YES		data reported in Axon test simulator on 22-08-2019, However modem to be reconfigured due to change in IP scheme. Also GPRS signal issue	
23						Bhalukpung	YES	YES		Data reported at SCADA System, but stability is not good. <b>SAT Report not signed by customer</b>	
24						Khupi	NO, Converter Used	YES		Data reported at SCADA System, but stability is not good. <b>SAT Report not signed by customer</b>	
25						Jairampur	NO, Converter used			will be installed within Feb 2020	
26						Deomali	YES			will be installed within Feb 2020	
27						Daporijo	YES			RTU not in communicating condition, to be confirmed by customer about helthyness of RTU by taking up with GE. RTU is reportedly burnt through Fire accident. DOP,AP to take up with GE for restoration	
28						Pasighat	Not ready	YES		modem installed on 17-02-2020. Signal strenght of GPRS network is not good., hence modem not communicated.	
29	TSECL, SLDC Agartala	DONE.	DONE		YES	P K BARI	YES	YES	YES	Data reported at SCADA System,TSECL ias akxed to arrange Broad band as well	
30						DHARMANAGAR	YES	YES	YES		
31						BAGAFA	YES	YES	YES		
32						AMARPUR	YES	YES			
33						SATCHAND	YES	YES			
34						BELONIA	YES	YES			
35						RABINDRANAGAR	YES	YES			
36						AMBASA (in place of Gumoti )	YES	YES			
37						BARMURA					SIM not ready as on date by State TSECL
38						SABROOM					SIM not ready as on date by State TSECL
39	ROKHIA				SIM not ready as on date by State TSECL						

Earlier delay occurred in all states( except Manipur) for issue of Leased link & SIMs(apx1-2year). However present status is given above.

1. All State to see for brad band connection where only SIM is provided. States to regularly take up/follow up with Service providers for better service and keep payment related to SIM activation/recharge/leaselink been tpaid/taken care in time
2. One or two personnel from State authority may be associated during the works so that minnum trouble shoting can be done by themselves
3. Any AMC/future work may be directly taken up by State with M/s PMAS, Jaipur

**Annexure 1****Average Availability of Constitutents for Month of January-2020**

<b>Sl. No.</b>	<b>Name of Consituent</b>	<b>Analog %age</b>	<b>Digital %</b>	<b>Total %</b>	<b>RTU %</b>
1	PGCIL	83.83%	83.62%	83.69%	82.08%
2	NEEPCO	77.90%	83.42%	81.08%	84.97%
3	NTPC	96.49%	96.04%	96.20%	95.72%
4	NHPC	84.98%	81.35%	82.64%	99.98%
5	OTPC	99.87%	99.85%	99.86%	99.88%
6	Arunachal Pradesh	11.63%	19.90%	16.36%	10.35%
7	Assam	43.31%	43.01%	43.13%	43.16%
8	Manipur	39.69%	46.58%	43.74%	41.68%
9	Meghalaya	51.95%	32.03%	40.42%	47.53%
10	Mizoram	16.88%	20.64%	18.55%	19.94%
11	Nagaland	24.58%	44.37%	35.13%	26.00%
12	Tripura	26.27%	10.11%	17.15%	23.54%
	NER	48.85%	50.27%	49.70%	44.17%