



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/2019/ **780-817**

Dated: May 14, 2019

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, Dongtiah-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, Dongtiah, 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 13th NETeST Meeting.

Sir/Madam,

Please find enclosed herewith the minutes of 13th NETeST Meeting held at Guwahati on the **09th April, 2019** 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 13th NER Telecommunication, SCADA & Telemetry

(NE-TeST) COORDINATION

SUB-COMMITTEE MEETING OF NERPC

Date : 09/04/2019 (Tuesday)
Time : 10:00 hrs
Venue : "Hotel Nandan", Guwahati.

The List of Participants in the 13th NE-TeST Meeting is attached at **Annexure - I**

Shri P.K. Mishra, Member Secretary, NERPC welcomed all the participants to the 13th North Eastern Telecommunication, SCADA & Telemetry meeting. He congratulated Sh M.K. Ramesh, Sr.GM(SL), NERLDC and his team for completing the Communication Map of NER. He brought to the notice of the forum of the request from some utilities for holding the NETeST meeting monthly. He stated that if the meetings are held monthly then field work would be hampered and there would be no progress at the actual ground level. So, the NETeST meeting is to be conducted quarterly in line with prevailing methodology adopted in other regions. In order for better monitoring he requested the executing utilities(of various regional projects) to submit progress report monthly to NERLDC/NERPC. Regarding ADMS project he informed that NIT would be floated in April'2019 and requested all utilities to submit their nominations for Tender Evaluation Committee.

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 12th MEETING OF "NORTH EASTERN TELECOMMUNICATION, SCADA & TELEMTRY (NETeST)" SUB COMMITTEE OF NERPC.

Director, NERPC informed that minutes of the 12th NETeST Meeting held on 10th January, 2019 at Guwahati were circulated by NERPC vide letter No. NERPC/SE(O)/TeST/2019/ dated 23rd January, 2019.

The Sub-committee confirmed the minutes of the 12th NETeST Meeting as no comments/observations were received from the constituents.

A.1 Status of SLDCs in NER:

The status of setting-up of SLDC as informed by POWERGRID during 13th NETeST meeting is given below:

SN	Utility	Status as informed in 12 th NETeST	Status as informed in 13 th NETeST
UPGRADATION OF SLDCs			
1	Assam	DG set installed. Commission by 2nd week Jan19	Completed in all respects.
2	Tripura	Completed in all respects.	Completed in all respects.
3	Meghalaya	Completed in all respects.	Completed in all respects.
4	NERLDC	Completed in all respects.	Completed in all respects.
NEW SLDCs			
5	Manipur	DG Set installed. Commissioning by 3rd week Jan19	Completed in all respects.
6	Nagaland	DG Set installed & commissioned. RTUs installed but non-reporting.	RTUs installed but non-reporting.
7	Mizoram	DG Set installed, SAT by 1 st week Feb19. RTUs installed but non-reporting.	RTUs installed but non-reporting.
8	Ar. Pradesh	DG Set installed & commissioned. RTUs installed but non-reporting.	RTUs installed but non-reporting.
9	Backup NERLDC	Completed in all respects.	Completed in all respects.

Deliberation in the meeting

Member Secretary congratulated all the states and utilities especially POWERGRID involved for the successful commissioning of SLDCs in all the states. The forum decided to drop the agenda item and review non-reporting of RTUs to SLDCs as separate agenda item.

The Sub-committee noted as above.

A.2 Status of FO works under different pprojects:

Name of the Project	Status as in 12 th NETeST
---------------------	--------------------------------------

MW Vacation &
OPGW Project

M/s KEC

- a. All 17 links already commissioned.
- b. 3 nos. of links down due to failure of AEGCL 132kV Srikona-Panchgram tower. AEGCL intimated that there is no place for erection of ERS and 2-3 pile foundation needs to be done. AEGCL informed that tower restoration will take time possibly by Jan'19.

Communication Links are restored via new path i.e.

Jiribam PG -Pailapool (AEGCL) - Srikona (AEGCL) - Silchar (PG)--Shillong

Badapur (Panchgram) AEGCL data is reporting via Badarpur PG upto SLDC.

NERTS replied that Communication Links are restored via new path i.e.

Jiribam PG -Pailapool (AEGCL) - Srikona (AEGCL) - Silchar (PG)--Shillong

Badapur (Panchgram) AEGCL data is reporting via Badarpur PG upto Shillong

NERLDC is requested to verify the same

- c. 4 nos. Link requires detail assessment for rectification and job is in progress. Expected completion of rectification by Dec'18.

Rectification work for the links viz. BTPS-Agia, Agia-Sarusajai, Samaguri-Mariani, Namrup-Tinsukia shall be completed by Dec-18.

NERTS intimated that the rectification work is completed. Links are jointly tested as well. BTPS-Agia-{with Boko/Mirza (LILO)} - Sarusajai , Jiribam-Pailapul-Srikona are declared commissioned w.e.f 31.12.2018. AEGCL also confirmed

	<p>Sub-committee noted.</p> <p>M/s TENDOT</p> <ul style="list-style-type: none"> d. WIP in all 14 links e. Progress affected due to ROW. f. Expected completion March'19. <p>NOTE</p> <p>Arunachal Pradesh may please provide new tower route schedule & readiness for LILO part (Lekhi connectivity from existing Nirjuli-Ranganadi line). The schedule completion 2 months from receipt of new tower route schedule.</p> <p>Railway diversion of POWERGRID also suffering due to ROW in 3 locations to be resolved by Arunachal Pradesh.</p> <p><i>NERTS replied that Ranganadi is presently reporting to NERLDC by commissioning of OPGW via part of Ranganadi-Balipara & part of Nirjuli-Gohpur up to Gohpur (Ranganadi-Ghpur link) & then via Gohpur-Balipara in 18-19.01.2019. ROW issue in Nirjuli-Ranganadi(LILO at Leikhi & Parey) is yet to be sorted.</i></p> <p><i>Action: DoP Ar.Pradesh</i></p>
<p>NER</p> <p>FO</p>	<p>TRIPURA</p> <ul style="list-style-type: none"> • 257 of 320 .319 (Actual 257, 63km-no front) Km Completed. Details attached • 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 • Completion Status : <p>NOTE1: Silchar-Pallatana OPGW work under halt due to objection of NETC & OTPC for transient lightning related fault in rainy season.</p>

Expansion/Additional requirement of OPGW	a. NOTE:2: Manipur: Supply – Complete, Erection: 160/365km km, Team is mobilized by M/s TCIL. Target completion: July-19. Battery bank/DCPS under NERFO- Supplied & installed
Upgradation of ULDC FO node	<p>15 Location Completed</p> <p>Except Umtru Power Station. MePTCL informed that there is space constraint in the present PLCC room. A separate room will be needed to accommodate the equipments under this project.</p> <p>NERTS informed that official from NERTS had visited for collection of card and found there is still no space. Without the same, project cannot be completed. And so help from MEPTCL/G division is requested.</p> <p>2nd visit made. Report submitted to Director, Generation-MePGCL. Further space inside UMTRU is to be cleaned & AC system not working.</p>

Critical Issues against project implementation may be discussed

Name of the Project	Critical Issue
Upgradation of ULDC FO node	Space constraint in Umtru, non availability of fiber in Misa-Dimapur-Imphal(old OPGW) & Space in Kohima
MW Vacation	ROW issue in Nirjuli-Ranganadi Line, , non readiness of two tower peak in DoP AP transmission Line for LILO to Leikhi. Stoppage of work due to ROW/Peddy field etc.

The detail status with target completion link-wise is given in **Annexure-A.2**.

The Sub-committee noted as above.

Action: State Utilities, NERTS, NERPC.

B. NEW ITEMS

B.1 Strengthening of PLCC System by NER States:

In 12th NETeST meeting, after detailed deliberation it was decided that a consolidated map would be prepared on 24.01.2019, with the following inputs:

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

Deliberation in the meeting

NERLDC informed that a communication map (**Annexure B.1**) has been prepared with inputs from NERPSIP FO project, NER FO, NER MW, ULDC, AEGCL communication department and Meghalaya department.

NERPC requested all the constituents to give any comments on the communication map by 15th April'19 else the map will be considered as final. Director, NERPC suggested to all the state utilities that for their tail end stations PLCC link must be strengthened at the earliest.

NERTS informed that RHEP, Pare end is to confirm readiness of back up path by supply & installation of PLCC as back up for link from RTU End to next Wideband node.

The Sub-Committee noted as above.

Action: All state utilities/POWERGRID/NERLDC.

B.2 Improvement of Data Availability of NER

Deliberation in the meeting

NERLDC presented a report on the present data availability in NER(attached at **Annex. B.2**). The forum congratulated NTPC, OTPC for maintaining 100% data availability. Members also noted the falling trend in data availability for Manipur and Meghalaya system.

NERLDC informed that due to poor availability of data system operators are facing inconvenience in grid operation. Further, it was discussed to overcome the poor availability of data, the projects should be completed with strict timeline. Member Secretary suggested that to give priority to complete and rectify all the issues of NERTS POWERGRID and Assam followed by that of other constituents, as the geographical spread POWERGRID and Assam are maximum.

NHPC Action plan: As discussed with NHPC, NHPC addressed the forum that LOA for purchase of new RTU/Gateway for Loktak will be placed by August'19. And all work of new RTU/gateway will be completed by December'19. GM (SL, NERLDC) suggested procuring RTU/Gateway with multiple port minimum 4 ports with support of IEC 101 & 104 protocol, so that data can be transmitted to multiple locations.

Until then NHPC will rectify the data from old S900 RTU. As discussed **each bay of NHPC will be completed on each working day from 15 April 2019**. Engineer (SL, NERLDC) shared the contact details for expediting the above-mentioned work.

NEEPCO Action plan: NEEPCO requested to address the issue of Doyang inconsistency in weekly telemetry report. Furthermore, NEEPCO informed the OEM engineer of the Doyang RTU would be available by April'19 for rectification of following elements:

- a. 132 kV Sanis Line data.
- b. Unit 3 data

A field visit comprising of NERTS, NERLDC and NEEPCO was suggested to Kopili and Khandong for rectification of issues related to real time data. Tentative dates are 23rd – 24th April 2019.

Meghalaya Action Plan: MePTCL representative informed that as of 09.04.19 4 stations are not reporting with 63.18% of data available. As of now there are no termination points for isolators in Meghalaya Substations. The new 132 KV Isolators at various sub stations under PSDF project. The revised extended completion date is June 2019.

Meghalaya informed that Umtru S/s under R&M. Therefore, its data are not available.

Meghalaya informed that the telemetry list of NERLDC to be checked with their SCADA list. NERLDC informed that NERLDC SCADA team would be visiting SLDC

Meghalaya in the month of May'19 for database and telemetry validation of Meghalaya Stations. The tentative dates are 1st Week of May'19.

Ar. Pradesh: After detailed deliberation it was decided that Arunachal Pradesh would give detailed action taken report. This would encompass the non-reporting of RTU from all stations except Chimpu. Since SIMs have already been furnished, the forum requested DoP Ar.Pradesh to provide Static IP at SLDC at the earliest.

Mizoram, Nagaland and Tripura: Due to non-availability of representative from mentioned states, the issues related to non-availability of real time data could not be discussed.

AEGCL representative informed that telemetry of some stations would improve after completion of R&U works. Since the stations would be having new SAS, gateway/RTU integration is critical. The forum requested NERPC to monitor the progress of PSDF R&U works station wise for better clarity in timelines.

The Sub-Committee noted as above.

Action: All utilities as above.

B.3 Status of URTDSM

In 12th NETeST meeting NERTS intimated the following status:

All PMUs are reporting except Ranagandi (Target 2nd week Feb). Dimapur Target (2nd week March19). Rectification in Assam SLDC PDC done. SAT of NERLDC signed.

Deliberation in the meeting

NERTS informed that SPDC & associated system at NERLDC, PDC & associated system at PDCs at CC/SLDC-Meghalaya & SLDC-Assam has been commissioned (SAVT started on 21.2.19 & completed on 05.03.19). 51/51 PMUs (in 14 stations) are reporting.

Angle error and rectification:

DGM,NERTS informed that PMUs under this project are installed in in R,Y,B phases as designated & shown by owner of stations state utility (Assam) & central utilities(POWERGRID & NEEPCO). M/s GE has installed accordingly. These stations where PMUs installed are centrally monitored by NERLDC (with consolidated data) as system operator & necessary network study is done by NERLDC-POSOCO. POWERGRID has requested to Study group/NERLDC for needful study and intimate/suggest (what is to be done wrt existing in form of a tabular/matrix wrt a

location) to respective owner/POWERGRID for implementing changes (secondary or primary, yard end or control panel end)as required in line with system study. POWERGRID/NERTS will implement the same in coordination with owner of station. NERLDC informed that the matrix is under preparation stage and once completed will be sent to the concerned utilities/NERTS.

Flexibility of trend window TDF UI and ETV (5 min & 15 min).

NERTS informed the features are as per approved technical specifications. Though NERTS will explore the possibilities of changing features, if implemented in other RLDCs. NERTS will revert with the details before next NeTEST meeting.

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

DGM, NERTS informed about 06 modules of URTDSM analytical software and will be loaded first three modules by May'19.

The Sub-Committee noted as above.

Action: NERLDC, NERTS.

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

In 13th NETeST meeting the following timeline(s) were agreed to by the different utilities:-

Name of utility	GPRS SIM/Broadband	Lease Line connectivity at SLDC
TSECL	Balance SIM is yet to be provided	Not Available.
MSPCL	All stations are reporting	Available
DoP Nagaland	4stations reporting. DoP to take up with GE for Nagarjan. Further DOP to take up with Service provider & BSNL higher authority for proper 3G network	Not Available
P&ED Mizoram	3G SIM & Internet link with static IP is yet to be provided	Not Available

Deliberation in the meeting

Due to absence of representatives from TSECL, DoP Nagaland and P&ED Mizoram the timeline for providing SIMs and leased line connectivity at SLDC could not be updated.

The Sub-Committee noted as above.

Action: P&ED Mizoram, DoP Nagaland, TSECL.

B.5 Outage of Telemetry:

Deliberation in the meeting

Pls refer to discussion in item No. **B.2.**

The Sub-Committee noted as above.

Action: All utilities

B.6 Discussion on visit to KPTCL regarding VSAT(Merged with NERLDC agenda B.16):

Deliberation in the meeting

NERLDC discussed detailed plan for execution of VSAT pilot project in 12thNETeST meeting, and also presented quotation for the pilot project(**Annexure B.6**). In 154th OCCM, forum decided all the constituents would share the cost. Further, Brynihat S/s was identified as the location for pilot project. AEE, MePTCL shared with the forum the following difficulties/queries for resolution

1. Gateway external port configured for data transfer.
2. Serial port Com 2 configured as IEC 90870-5-101 Slave used for data Transfer to SLDC.
3. Serial port Com 6 configured as IEC 90870-5-101 Slave used for RHMI.
4. Serial port Com 3 and 4 not configured.
5. Ethernet Port 5 and 6 IEC 61850 master.
6. Ethernet port 1,2,3,4 not configured.

MePTCL representative also shared reservations regarding the transfer of data over IEC 104 protocol. Since the internal LDMS communications and communications to SLDC is done via IEC 101, the communication over IEC 104 may expose the station and further power system to cyber threats. In addition it may also be noted that there is no firewall and antivirus at 400/220kV Brynihat presently. Further, the comments and observations observed by AEE Killing Sub Station will be officially furnished to NERLDC/NERPC.

The forum decided that that since the project is a pilot one, the order may be given to M/s KPTCL. Accordingly, CGM-NERLDC was requested to convey the same to M/S KPTCL. The details regarding data security and connectivity at Brynihat would be addressed by the vendor/Ms KPTCL subsequently.

The Sub-Committee noted as above.

Action: NERLDC.

B.7 Drawal points data availability:

A list of drawl points is prepared and is attached in Annexure-C. To effectively monitor the deviation of states and generators as per 4th Amendment of DSM regulation, the drawl points data indicated in the list are very important.

It is requested to every constituent to maintain the data availability of drawl points to help themselves for better real time monitoring of the grid and the deviation from schedule.

In 12th NETeST meeting, it was decided that NERLDC will share list of drawl points with each constituent and constituent will make sure for data availability of those points.

Deliberation in the meeting

NERLDC presented the latest status of drawal points data availability(attached at **Annexure-B.7**). The forum noted the alarmingly high non-reporting RTUs of Ar. Pradesh, Mizoram, Nagaland and Tripura. Members requested NERPC to write to the higher authorities of the respective organisations apprising them of the indirect loss (by way of DSM 4th amendment) due to non-reporting of RTUs to the SLDCs.

The Sub-Committee noted as above.

Action: All STUs/NERPC.

B.8 VSAT For Roing Tezu Namsai:

This is in line with discussion in 9th NETEST. POWERGRID has taken up a proposal based on VSAT technology (The DPR is attached as ref. Annexure-PGCI VSAT-based on i-direct technology with extended C-Band in compliance with TS as recommended by CEA 's draft technical standard of communication system. Earlier cost is now reduced and revised cost is apx. 54,653,880.00 for 5 years. The same will not be taken from PSDF and proposed to be invested by POWERGRID and be recovered on cost plus basis on POC from tariff.

Deliberation in the meeting

NERTS presented the Cost break up(attached at **Annexure B.8**). Further, NERTS has asked NELCO for demo in one site.

DGM, NERTS informed that the higher cost/station (vis-a-vis VSAT project for NER) is due to allocation of 2Mbps link considering future AMR requirement etc. GM(SL), NERLDC was of the view that 128Kbps is sufficient for RTU data and speech.

After detailed deliberation the forum decided the following:

- By April'2019 demo date to be finalised
- By May'19 demo to be completed
- If demo successful then order to be placed by June'19
- Prior to placing of order exact bandwidth would be decided in the corresponding NETeST meeting.

The Sub-Committee noted as above.

Action: NERTS.

B.9: Readiness for supply of CFEs in Badarpur (2nd TS Node)

Supply & installation of additional CFEs in Badarpur has been taken up by NERLDC. Accordingly channel routing & requirement for data reporting via Misa & Badarpur (Back up RLDC & RLDC) may be proposed by NERLDC and same link/channel plan is to be approved by CTU LD&C so that additional number of PDH cards V.24 as required Misa & Badarpur may be taken care (If required would additionally be procured).

Links from Badarpur & Misa already provided up to NERLDC in last Aug18. However, Onward 2nos. Links from Badarpur & Misa up to Back Up NERLDC will be taken from POWERTEL on add cost basis once Terminal servers are in place, channels re-routing is approved and requisite number of PDH cards are procured.

The 12th NETeST forum requested NERLDC to discuss with GE and revert back with a solution & target completion date

Deliberation in the meeting

NERLDC informed that the status would be intimated in the next NETeST meeting after discussion with GE.

The Sub-Committee noted as above.

Action: NERLDC.

B.10 Non-availability of ICCP data:

Nagaland SLDC intimated that data of Doyang GS & Karong is available at NERLDC & SLDC/NERLDC respectively. But same is not available over ICCP at Nagaland SLDC. NERLDC may kindly coordinate in this matter for needful

The 12th NETeST forum requested NERLDC to check and revert back.

Deliberation in the meeting

NERTS informed that the data is presently available at Nagaland SLDC. The forum decided to drop the agenda item.

The Sub-Committee noted as above.

B.11 Telemetry Status of all constituents:

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 1, which is less than 50% in the region.

Deliberation in the meeting

Pls refer to discussion in item No. B.2.

The Sub-Committee noted as above.

Action: All concerned utilities.

B.12. Data validation status of all PGCIL owned substations:

As per agenda B.4 of 12th NETeST, Data validation is under progress with PGCIL and 20 out of 23 substations are completed under data validation. Out of 20 substations, issues of 04 substations are rectified at site level (Annexure 2).

NERTS expedite the work in remaining stations and complete the work within a month. Deployment of work force in multiple team for the rectification of data at site level is required.

Deliberation in the meeting

NERTS informed that as per earlier MOM of 11th NETeST, after joint verification at RLDC end , it was agreed that data will be jointly verified at RTAMC end(common node for apx.50% PG CS station data source). This is proposed to be completed by 15days. Further it has been found that there are some address mismatch wrt those implemented at site(RTU/Gateway database-PG stations) and those incorporated in NERLDC SCADA. This issue can also be sorted once joint verification at RTAMC level is done. Some Site architecture need visit of OEM/Service engineer for changing

database. Work at site level will be started soon and schedule will be shared with NERLDC for same. Further NERTS informed that for 11 out of 23 stations; namely Badarpur, Balipara, BNC, Dimapur, Haflong, Nirjuli, Jiribam, Khleiriat, Kumarghat, Mokokchung and Ziro require OEM engineer to rectify the issues. NERTS informed that these locations require data base modification, which is NOT covered under AMC hence they will place LOA on OEM for deputing their engineers by 1st Week of June'19 (taking in to account of contract processing period), and work will be completed by July'19 subject to timely work by the vendor.

Joint Data validation was completed for all the NERTS stations by 08/04/2019. NERLDC requested to expedite the placement of LoA as it is on OEM and the issue is critical requirement and of long pending. The forum advised NERLDC to rectify this sort of address related issues prior to DoCO of the station in the future.

The Sub-Committee noted as above.

Action: All concerned utilities.

B.13. Data validation status of all stations of Assam:

As per agenda B.4 of 11th and 12th NETeST, Database and Telemetry validation of all stations of AEGCL were completed by NERLDC team along-with SLDC Assam from 27th to 29th March 2019. The relevant letters and MoM of the meeting are attached in Annexure 3.

Deliberation in the meeting

APGCL, AEGCL to carry out the data validation activities as per the agreed schedule(attached at **Annex. B.13**)

The Sub-Committee noted as above.

Action: APGCL, AEGCL

B.14. No representative of APGCL for database and telemetry validation

On request from NERLDC, APGCL was requested to attend the meeting at SLDC Assam 27th – 29th, but there was no representative from APGCL. Because of which, following stations of APGCL were not validated:

- a. Namrup**
- b. NRPP**
- c. Lakwa**

NERLDC, with consent of NERPC, request the forum to adhere to efforts for completion of data validation.

Deliberation in the meeting

APGCL representative agreed to carry out data validation by April'19

The Sub-Committee noted as above.

Action: APGCL

B15. Schedule for completion of FO projects under execution:

As per clause 7.2 of CERC (Communication system for inter-state transmission of electricity) regulation, 2017 CTU is responsible for carrying out the communication link projects in the region. NER FO and NER MW vacation project is under execution and already delayed. Untimely completion of these projects will be consider as non-compliance of CERC. (Communication system for inter-state transmission of electricity) regulation, 2017.

NERTS may kindly provide detailed schedule of completion of all FO projects under execution with details comprises of: commissioning of link, commissioning of end equipment and data to be transferred over the link as per Annexure 5.

Deliberation in the meeting

NERTS provided the list of links with latest status attached in **annexure B.15**. In addition, NERTS informed that completion of FO Expansion Project remains same as was intimated in 19th NERPC meeting(July19) . However, in some critical links(4links) , it may extend up to Dec19.

A committee comprising of NERPC, NERTS and NERLDC will review the status of link in 2nd week of May'19. NERLDC requested for senior level participation of the meeting and if possible the senior level representative of respective contractors.

The Sub-Committee noted as above.

Action: NERTS

B.16. Status of pilot VSAT project:

NERLDC discussed detailed plan for execution of VSAT pilot project in 12th NETeST meeting, and also presented quotation for the pilot project(annexure 6). In 154th OCC, forum decided all the constituents would share the cost. Further, Brynihat S/s was identified as the location for pilot project. Action: Forum may discuss the forthcoming plan for execution of the same.

Deliberation in the meeting

Pls refer to discussion in item No. **B.6.**

The Sub-Committee noted as above.

Action: NERLDC/NERPC.

B.17. Status of URTDSM punch points:

- a. Angle error and rectification, NERLDC requested NERTS expedite the work with timeline for the each station as per annexure 7.a.
- b. Flexibility of trend window TDF UI and ETV (5 min & 15 min). Action: NERTS may take up with GE T&D for resolution.
- c. Status of Loading of Power System Analysis package by IIT Mumbai.

Deliberation in the meeting

Pls refer to discussion in item No. **B.3.**

The Sub-Committee noted as above.

Action: NERTS.

B.18. Shut Down Procedure for Optical Links:

As discussed in 12th NeTEST meeting, procedure presented (Annexure 8) by NERLDC will be accepted until NERTS gets conformation from their management.

Deliberation in the meeting

The forum decided to follow the procedure already finalised in the 12th NETeST meeting.

The Sub-Committee noted as above.

Action: All utilities/NERLDC.

B.20. Dual channel availability for reliable and redundant communication system in NER:

As per section 10 of CERC communication regulations, 2017 "all users of CTU, NLDC, RLDCs, SLDCs, STUs shall maintain the communication channel availability at 99.9% annually: Provided that with back up communication system, the availability of communication system should be 100%". As such to improve the reliability of the communication system it is required to establish dual channel as a

part of back up communication system. The attached list in Annexure-10 shows the status list of central sector stations with dual channel. Central sector stations provide dual channel for respective stations.

Deliberation in the meeting

NERTS informed that dual channel for all the stations will be made available as the FO projects completes, by July'19.

The Sub-Committee noted as above.

Action: NERTS.

B.21 Long outage of RTU data:

As per clause 11.ii of CERC (Communication system for inter-state transmission of electricity) regulation, 2017 communication provide shall explore and provide route diversion during outage of original. Nevertheless, there were significant long outages of real time data of various RTUs due to link failure. During these periods, data were restored after restoration of links only. NERTS may divulge the reason for non-compliance with aforementioned clause. Please find the details in Annexure 11. Forum may discuss for the steps to avoid such long outages.

Deliberation in the meeting

NERLDC explained the list of long outage of real time data from substations. DGM, NERTS noted and explained reason for long outage. However, DGM NERTS suggested that in addition to mail intimation telephonic intimation to the concern station's in-charge will facilitate early restoration accordingly contact details of site agreed to share by NERTS.

The Sub-Committee noted as above.

Action: NERTS.

B.22. Standard procedure to exchange the information regarding the SCADA database between SLDC and NERLDC.

Mismatch in SCADA database between SLDCs and NERLDC is affecting the availability of telemetry at NERLDC. As data is exchanged between SLDCs and NERLDC over ICCP, which needs synchronised database between the both the control centres. As a standard procedure followed at NERLDC, NERLDC apprise about any changes in NERLDC SCADA to NLDC within a week of the implementation of changes. Action: NERLDC suggest forum to follow the same practice in order to

mismatch in database, which will help in increase in telemetry availability of the region.

Deliberation in the meeting

DGM, NERLDC informed that due to non-updation of corresponding database at NERLDC in sync with the database at SLDC lots of mismatch is happening. The forum requested all the SLDCs and NERLDC to maintain their databases in sync and inform in case of any changes.

The Sub-Committee noted as above.

Action: All SLDCs/NERLDC.

B.23. Updated Communication map of NER:

A communication map (Annexure 13.a) is prepared by the inputs from NERPSIP FO project, NER FO, NER MW, ULDC, AEGCL communication department and Meghalaya department. Action: Forum may discuss about the path diversification of all stations. Moreover, envisage about the alternate path of tail end stations, as enclosed in Annexure 13.b.

Deliberation in the meeting

Pls refer to discussion in item No. **B.1.**

The Sub-Committee noted as above.

B.24. Establishment of Link between Badarpur to Backup Guwahati and Misa to Backup Guwahati (earlier agenda B.9):

As terminal server is installed at Misa and terminal server will be installed at Badarpur, NERLDC request NERTS to establish following links:

- a. Misa to Guwahati
- b. Badarpur to Guwahati.

Deliberation in the meeting

NERTS informed that the same was already discussed in 12th NETeST, and NERLDC may kindly install the terminal server and intimate. Within 20 days of same, Links will be provided.

The Sub-Committee noted as above.

Action: NERLDC, NERTS.

B.25. The time line for OPGW connectivity to the following Power Stations of NEEPCO:

- i) AGBP
- ii) DHEP
- iii) PaHEP

It may kindly be noted that due non-availability of standby data channel and dedicated voice channel, RLDC is not giving clearance for 10MVA SST (Regional Spare) which had been kept ready since long time. The station is now totally dependent on emergency DG set only in case of outage of machines.

Deliberation in the meeting

NERTS informed that the OPGW connectivity for the above stations are covered under NER-FO project and timeline(s) are as follows:

- i) AGBP - July'19
- ii) DHEP - July'19
- iii) PaHEP - Dec'19.

The Sub-Committee noted as above.

Action: NERTS.

B.26. Disturbance of data of RHEP of NEEPCO:

Snapping of OPGW has taken place between Balipara- Gohapur- Restoration of the same should be done by Assam immediately. At present RHEP data is not report to RLDC.

Deliberation in the meeting

AEGCL informed that work is underway and data has been restored to NERLDC via redundant link on 09.04.2019.

The Sub-Committee noted as above.

Action: AEGCL.

B.27. SCED Project Link-NERLDC to NLDC:

NERTS intimated that as per urgent request from NLDC, link from NLDC to NERLDC at 10MBPs has by POWERGRID with link been taken from POWERTEL. The cost will be booked to additional communication project in NER.

Deliberation in the meeting

DGM, NERTS informed that since 400kV ER-NER OPGW links are under NKN, there is no Fibre connectivity of POWERGRID available for inter-regional or pan India

Links. The 220kV Birpara-Salakati is taken up by ERTS. Hence POWERTEL link would be resorted to and cost will be booked appropriately.

The Sub-Committee noted as above.

Action: NERTS.

B.28. Exploring Back Up SLDC:

Keeping in view geographical set up and security concern, SLDCs in NER may explore creating Back Up SLDC. However cost can be optimized if SLDC of one state may become back up to the other (& vice versa) with minimum addition of hardware/software. Feasibility of same may be studied by NERLDC in coordination with SLDCs.

Deliberation in the meeting:

DGM, NERTS opined that one SLDC can be backup for another SLDC. This would ensure insurance of data and operational viability of all SLDCs in event of any catastrophe. GM NERLDC stated that first completion of the existing SCADA system by integrating all RTU datas and making SLDCs fully operational with EMS is required. DGM, NERTS expressed communication is possible after completion of FO Exp project and requested NERLDC to support for SCADA hardware design requirement.

The forum appreciated the scheme and decided to discuss after completion of Main SCADA system.

The Sub-Committee noted as above.

B.29. Lack of information w.r.t tripping of 132kV Kopili-Khandong-II on 06.03.2019

Deliberation in the 154th OCC meeting:

It was observed that at 132kV Kopili-Khandong -II no status was available at local level/NERLDC: After detailed deliberation the forum decided that the availability of data at LDMS/NERLDC to be ensured. Matter was referred to next NeTEST meeting.

Deliberation in the meeting

NEEPCO requested forum for joint team from NEEPCO, NERTS and NERLDC to visit tentatively on 23-24th April 2019 to find out the solution.

The Sub-Committee noted as above.

Action: NERLDC, NEEPCO & NERTS

B.30. Upgradation of Communication System under MePTCL Network:

Need for reliable communication is necessary for coordinating preventive measure to be taken by authorities on receive of warning for Natural Disaster and also during restoration operation during natural calamities and grid disturbances.

Deliberation in the meeting

MePTCL highlighted the requirement of reliable communication since the state faces severe weather conditions due to lightning and thunderstorm. The forum noted the requirement and requested MeECL to draw up a comprehensive communication scheme taking into account all future substations and redundant paths.

The Sub-Committee noted as above.

Action: MePTCL

Date & Venue of next NETeST meeting

It is proposed to hold the 14th NETeST meeting of NERPC on second week of June, 2019. However, the exact date and venue will be intimated in due course.

The meeting ended with thanks to the Chair.

Annexure-I**List of Participants in the 13th NETeST Meeting held on 09.04.2019**

SN	Name & Designation	Organization	Contact No.
	No Representatives	Ar. Pradesh	-
1.	Ramendra Choudhury, GM, APGCL	Assam	09435143426
2.	Sh. Pranab Saha, AGM, AEGCL	Assam	09435361717
3.	Sh. Ranjit Das, AGM, APGCL	Assam	09957152975
4.	Th.Sushanta, DM, MSPCL	Manipur	09862448363
5.	Sh. M.Romeo, DM, MSPCL	Manipur	09012657280
6.	Sh. F.E.Kharshiing, SE, SLDC	Meghalaya	09863066960
7.	Sh. D. J. Lyngdoh, E.E (S.M), SLDC	Meghalaya	09774285158
8.	Sh. B. Narry, AEE, PLCC, MePTCL	Meghalaya	09089000911
9.	Sh. Alvin Shullai, AEE, C&E	Meghalaya	09436334458
	No Representatives	Mizoram	-
	No Representatives	Nagaland	-
	No Representatives	Tripura	-
10.	Sh. Joypal Roy, Sr. Manager (E/M)	NEEPCO	09435577726
11.	Sh. Ashim Kumar Sarmah, Dy. Mgr	NEEPCO	09435078860
12.	Sh. M.K.Ramesh, GM	NERLDC	09449599174
13.	Sh. V.Suresh,CGM	NERLDC	09449599156
14.	Sh. Ashutosh Kumar, Engineer	NERLDC	07005375868
15.	Sh. Sakal Deep, Asst. Engineer	NERLDC	09774528218
16.	Sh. P.Kanungo, Sr. GM (AM)	PGCIL	09436302823
17.	Sh. M.K.Baruah, GM, NLDC	PGCIL	09401454830
18.	Sh. S.Paul, DGM, ULDC	PGCIL	09436302995
19.	Sh. Roshitesh Kumar, Asst. Manager	PGCIL	09402184618
20.	Sh. P.J.Singh, JE	PGCIL	09435303572
21.	Sh. N.Yugandhar, Sr.Manager	NHPC	09800003819
22.	Sh. P.K. Mishra, MS	NERPC	09968380242

23.	Sh. B. Lyngkhai, Director/S.E (C&O)	NERPC	09436163419
24.	Sh. Srijit Mukherjee, AEE	NERPC	08794277306

Annexure-A.2

STATUS OF ESTABLISHMENT OF OPGW COMMUNICATION LINK IN NER UNDER NER FO EXPANSION PROJECT

Sl No	Link Name	Status as per 12th NETeST	OPGW stringing Commissioning Target as per 12th NETeST	Target As per 19 th NERPC-MoM	OPGW Stringing status	End Equipment Status	Overall reporting of end stations to NERLDC/S LDC
	Central Sector						
1	132kV Melriat (PG) ~ Silchar (PG)	WIP	Apr-19	July19	Complete	Complete	Data and voice reported dtd 31.03.2019. SAT Pending
2	132kV Khandong~Halflong (PG)	WIP	Apr-19	July19	Complete	Supply and Installation over. SAT/Commissioning Pending.	July19
3	132kV Dimapur (PG)~ Doyang (NEEPCO)	WIP	Apr-19	July19	-do-	-do-	July19
4	132kV Doyang (NEEPCO)~ Mokokchung (State)	WIP	Apr-19	July19	-do-	-do-	July19
5	220kV Mokokchung (PG)~ Mariani (PG)	WIP	Mar-19	July19	-do-	-do-	July19
6	400kV Mariani (PG)~ Kathalguri (NEEPCO)	WIP	Mar-19	July19	-do-	-do-	July19
7	400kV Surajmaninagar(TSECL) ~ Pallatana(OTPC)	WIP	Apr-19	July19	Stringing Completed: 27.967/36.714 Km	-do-	July19
8	132kV Badarpur(PG) ~ Jiribam(PG)	Supply Pending	Jul-19	July19	Supply: Part supply pending-	Supply Pending	Sept-19

					Target: June Stringing Complete d:28/67.1 66 Km		
9	Bongaigaon (PG-400 kV) ~ 220kV Salakati- 220 kV BTPS	Supply Pending	Jul-19	July19	Supply: Pending, Target: June	-do-	Sept-19
10	400kV Mirza (Azara) ~ Byrnihat	WIP	Jul-19	July19	0 Km	Supply Pending	Aug-19
11	400kV Silchar ~ Pallatana	Supply Pending	Aug-19	July19	Stringing Complete d: 61.146/2 47.409 Km/ROW issue	-do-	Dec-19
12	132kV Agartala(TSECL) ~ RC Nagar (NEEPCO)	WIP	Mar-19	July19	Complete	Supply Complete. Installatio n Pending due Space Constrain t	Jul-19
13	132kV Jiribam (PG) (Manipur) ~ Loktak (NHPC)	WIP	Jul-19	July19	0/82.461 Km	Supply Pending/. ROW during initial survey- Hilly area	Dec-19
14	132kV Loktak (NHPC) ~ Imphal (PG)	WIP	Jul-19	July19	Complete	Supply Pending	Jul-19
15	PK Bari (TSECL)--LILO of (NETCL) Belonia	WIP	Jul-19	July19	Supply Pending.	Supply Pending	Dec-19
16	132kV Parey ~ Chimpu	Supply Pending	Jun-19	July19	Supply Pending.	Supply Complete	Dec-19
	Manipur State Sector						

1	132kV Yurembam ~ Yaingangpokpi	WIP	Jul-19	July19	Complete	-do-	Jul-19
2	132kV Yaingangpokpi ~ Kongba	WIP	Jul-19	July19	Complete	-do-	Jul-19
3	132kV Kongba ~ Kakching	WIP	Jul-19	July19	Complete	-do-	Jul-19
4	132kV Imphal(State) ~ Karong	WIP	Jul-19	July19	28/60Km. WIP	Supply Complete	Jul-19
5	132kV Kakching ~ Churachandpur	WIP	Jul-19	July19	12.45/38 Km. WIP	-do-	Jul-19
6	132kV Loktak(NHPC) ~ Ningthoukhong	WIP	Jul-19	July19	WIP for other Manipur SS Links	-do-	Jul-19
7	132kV Yaingangpokpi ~ Hundung	WIP	Jul-19	July19	WIP for other Manipur SS Links	-do-	Jul-19
8	132kV Kakching ~ Chandel	WIP	Jul-19	July19	-do-	-do-	Jul-19
9	132kV Loktak(NHPC) ~ Rengpang	WIP	Jul-19	July19	-do-	-do-	Jul-19
10	132kV Jiribam ~ Jiribam state	WIP	Jul-19	July19	-do-	-do-	Jul-19
11	132kV Ningthoukhong ~ Churachandpur	WIP	Jul-19	July19	-do-	-do-	Jul-19
Tripura State Sector							
1	132kV Agartala(TSECL) ~ Barumura(GTP)	WIP	Apr-19	July19	Complete	Complete	Data and voice reported dtd 31.03.2019. SAT Pending July19
2	66kV 79 Tilla Grid (TSECL) ~ Badharghat	WIP	Apr-19	July19	-do-	Complete	-do-

3	132kV Surajmaninagar(TSECL) ~ Budhungnagar	WIP	Apr-19	July19	-do-	Complete	-do-
4	132kV Agartala(TSECL) ~ SM Nagar (TSECL)	WIP	Apr-19	July19	Complete	Complete	-do-
5	132kV Pallatana(OTPC) ~ Udaipur(TSECL)	WIP	Apr-19	July19	-do-	Supply Complete	July19
6	132kV Udaipur(TSECL) ~ Rokhia GTP	WIP	Apr-19	July19	-do-	-do-	July19
7	66kV Udaipur(TSECL) ~ Gumti HEP	WIP	Apr-19	July19	-do-	-do-	July19
8	66kV Gumti HEP ~ Amarpur(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
9	66kV Satchand(TSECL) ~ Sabroom(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
10	132kV 79 Tilla Grid (TSECL) ~ Dhalabil(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
11	132kV Rokhiya (GBPP) ~ Surajmaninagar(TSECL)	WIP	Apr-19	July19	Supply Complete. Front Not ready (TL under construction)	-do-	Link to be deleted. Supply material is to be handed over to TSECL
12	132kV Surajmaninagar(TSECL) ~ Monarchak (NEEPCO)	WIP	Apr-19	July19	-do-	-do-	
	Meghalaya State Sector						
1	132kV Nehu ~ Neigrihms	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19
2	132kV Khliehriat(PG) ~ Khliehriat (State)	WIP	July-19	July19	Supply Completed . Stringing Pending	Supply Complete	July19
3	132kV Khliehriat(State) ~ MyntduLeshka-HEP	WIP	July-19	July19	-do-	Supply Complete	July19
4	132kV Khliehriat(PG) ~ Lumshnong (S/C)	WIP	July-19	July19	-do-	Supply Complete	July19
	Nagaland State Sector						

1	132kV Kohima (132KV) ~ Kohima (220KV)	WIP	July-19	July19	Supply Completed . Stringing Pending	Supply Pending	July19
2	132kv Kohima ~ Wokha	WIP	July-19	July19	-do-	-do-	July19
3	132kV Doyang (NEEPCO) ~ Sanis	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19
	Mizoram State Sector						
01	Aizawl-Zemabawk I	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19

STATUS OF ESTABLISHMENT OF OPGW COMMUNICATION LINK IN NER UNDER NER MW VACATIONPROJECT(equipment are clubbed with NER FO Expansion)

SN	Link Name	Status as per 12th NETeST	OPGW Commissioning Target as per 12th NETeST	Link Commissionioi Target As per 19 th NERPC-MoM	OPGW Stringing status	End Equipment Status	Overall reporting of end stations to NERLDC/ SLDC
1	132KV Silchar-Srikona	WIP	Comple ted	Complete	Complete	Complete	Data reporting
2	132KV Mariani-Mariani	WIP	Mar-19	Mar-19	Complete	-do-	Data and voice reported dtd 31.03.2019. SAT Pending/J un19
3	132KV Nirjuli-Ranganadi with Parey	WIP	Mar-19	Mar-19	ROW issue	Supply and Installatio n over. SAT/Com missionin g Pending.	** 03 months after ROW is resolved

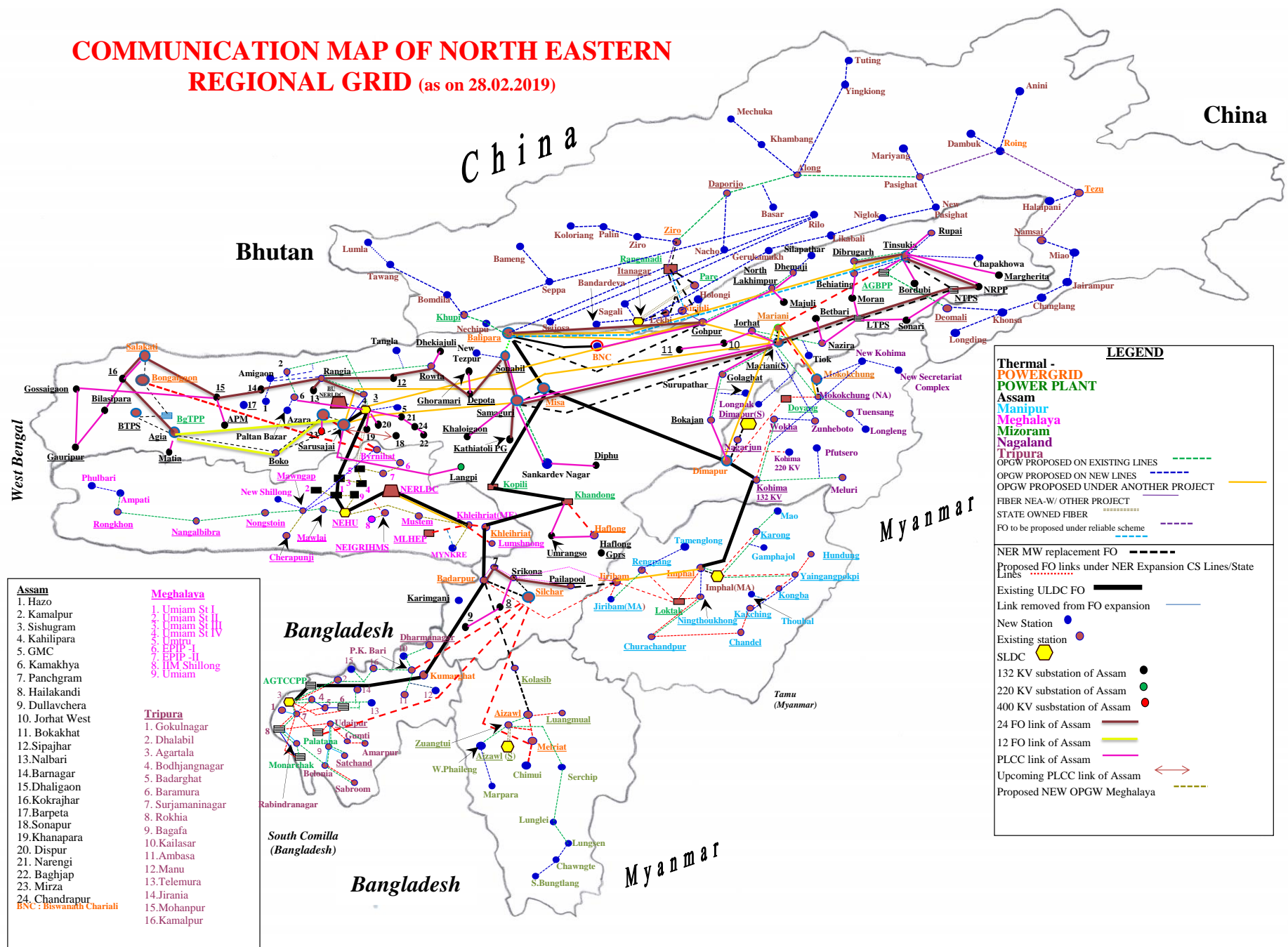
4	Imphal(PG)-Imphal (State)	WIP	Mar-19	Mar-19	-do-	Supply Complete	June-19
5	132KV LILO of Aizawl-Zemabawk-II at Melriat SS	WIP	Mar-19	Mar-19	-do-	Complete	Data and voice reported dtd 31.03.2019. SAT Pending/June19
6	132KV Melriat-Shimmui	WIP	Mar-19	Mar-19	-do-	Supply Complete. Installation Pending	June-19
7	132KV Mokokchung-Mokokchung	WIP	Mar-19	Mar-19	-do-	-do-	June-19
8	Ranganadi-Gohpur (Part-I)	WIP	Mar-19	Mar-19	-do-	-do-	Data and voice reported dtd 18.01.2019. /june19
9	Ranganadi-Gohpur (Part-II)				-do-	-do-	
10	Aizawl-Zemabawk-II	WIP	Mar-19	Mar-19	-do-	-do-	June-19
11	Dimapur-Dimapur	WIP	Mar-19	Mar-19	-do-	-do-	June-19
12	132kV Ranganadi-Ziro	WIP	Mar-19	Mar-19	-do-	-do-	June-19
13	132KV Lekhi-Itanagar/Chimpu SLDC	WIP	Mar-19	Mar-19	-do-	-do-	June-19
14	132KV LILO of Nirjuli-Ranganadi at Lekhi	WIP	Mar-19	Mar-19	ROW issue	-do-	** 03 months after ROW is resolved

Note: Above mentioned communication links got delayed due to certain unavoidable situation like;

- 1) Strike & Protest in Northeast due to GST Amendment bills
- 2) Strike, Curfew in Ar Pradesh in the month of Feb-19
- 3) Strike, Curfew in Meghalaya in the month of May-Jun-18

- 4) Floods in Assam & Manipur –July 17
- 5) ROW issues (peddy field/ asking additional compensation)
- 6) Supply Containers are subjected additional checks on transit (from China to Destinations/of India) in last 1year after doklam

COMMUNICATION MAP OF NORTH EASTERN REGIONAL GRID (as on 28.02.2019)



TAIL END STATION OF ASSAM		
Sl No.	STATION	
1	RUPAI	
2	CHAPAKHOWA	NERPSIP
3	SILAPATHAR	NERPSIP
4	MARGHERITA	
5	BORDUBI	
6	NEW TEZPUR	NERPSIP
7	HAZO	NERPSIP
8	PALTAN BAZAR	NERPSIP
9	DULLAVCHERA	
10	BOKAKHAT	
11	BAGHJAP	
12	LANGPI	
13	KHALOIGAON	
14	KATHIATOLI PG	
15	DIPHU	
16	GHORAMARI	
17	APM	
18	MATIA	
19	SONAPUR	
20	KHANAPARA	
21	NALBARI	
22	DHEKIAJULI	
23	MAJULI	
24	BETBARI	
25	MIRZA	
26	DISPUR	
27	GUWAHATI MEDICAL COLLEGE	NERPSIP

STATION NOT CONNECTED OVER COMMUNICATION LINK

1. Karimganj (ASSAM)	NERPSIP
2. Barpeta (ASSAM)	NERPSIP

TAIL END STATION OF MIZORAM		
Sl No.	STATION	
1	MARPARA	NERPSIP
2	CHIMUI	NERPSIP
3	LUANGMUAL	
4	S.BUNGTLANG	NERPSIP

TAIL END STATION OF NAGALAND		
Sl No.	STATION	
1	NEW SECRETARIATCOMPLEX	NERPSIP
2	LONGLENG	NERPSIP
3	MELURI	

TAIL END STATION OF ARUNACHAL PRADESH		
Sl No.	STATION	
1	LONGDING	NERPSIP
2	ANINI	NERPSIP
3	DAMBUK	NERPSIP
4	MARIYANG	NERPSIP
5	TUTING	NERPSIP
6	MECHUKA	NERPSIP
7	BAMENG	NERPSIP
8	KOLORIANG	NERPSIP
9	HALAIPANI	NERPSIP
10	HOLONGI	NERPSIP
11	SEIJOSA	NERPSIP
12	LUMLA	NERPSIP
13	BANDERDEVA	NERPSIP

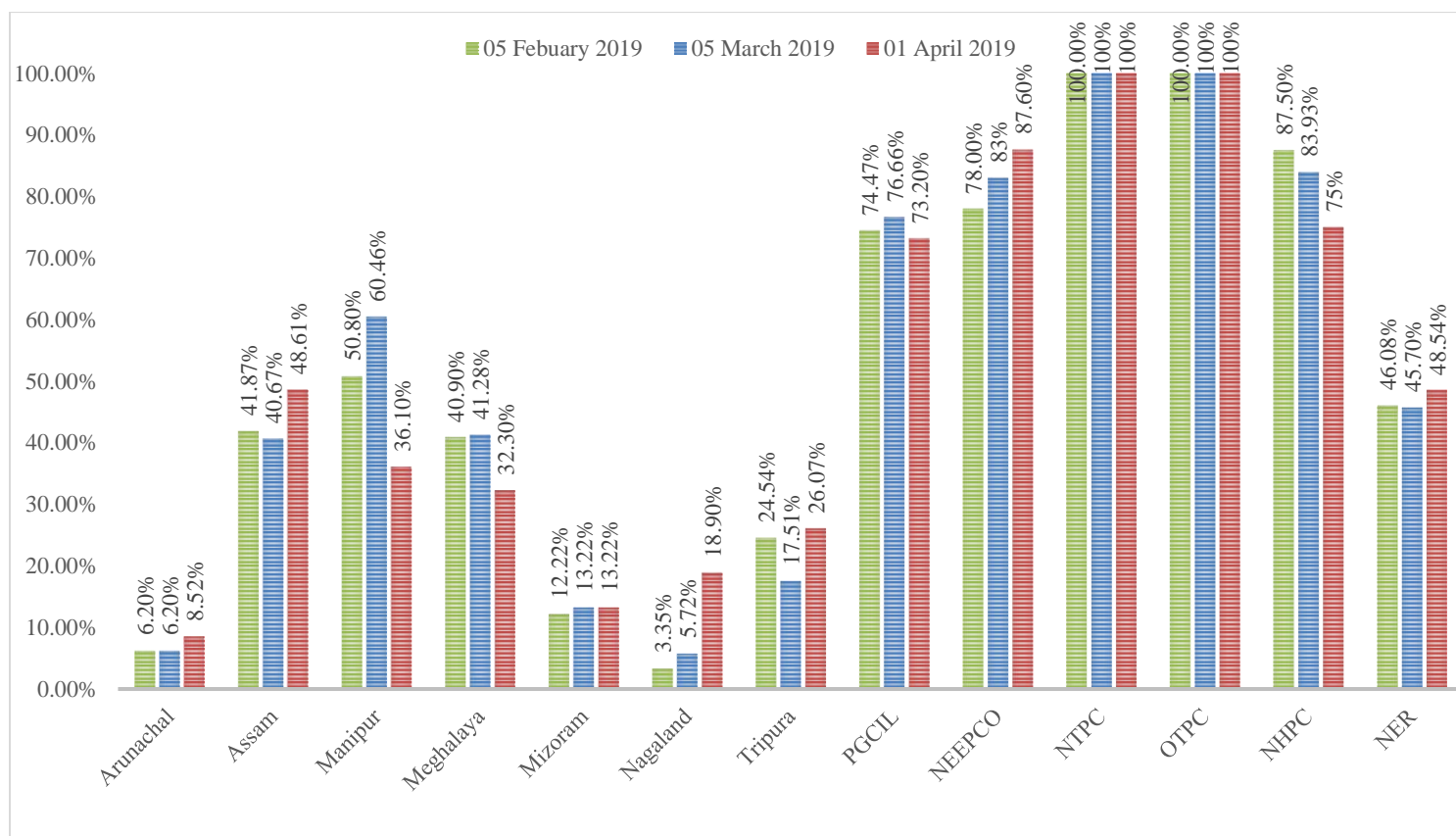
TAIL END STATION OF MEGHALAYA		
Sl No.	STATION	
1	PHULBARI	NERPSIP
2	NEW SHILLONG	NERPSIP
3	UMIAM STG-II	
4	MLHEP	
5	IIM SHILLONG	
6	CHERAPUNJEE	
7	LUMSHONG	

TAIL END STATION OF TRIPURA		
Sl No.	STATION	
1	GOKULNAGAR	
2	TELEMURA	NERPSIP
3	SATCHAND	
4	SABROOM	
5	AMBASA	
6	JIRANIA	
7	DHARMANAGAR	

TAIL END STATION OF MANIPUR		
Sl No.	STATION	
1	MAO	NERPSIP
2	TAMENGLONG	NERPSIP
3	HUNDUNG	

Telemetry Availability Status at NERLDC from Constituents (as on 01-04-2019):

To Be Presented in 13th NeTEST Meeting



Arunchal Pradesh:

Only 01 no of RTUs is reporting partially out of 09 Nos. of RTUs. Chimpu (Itanagar) was integrated during RLDC visit to SLDC Itanagar in 2018. Arunchal Pradesh is requested to strict time line for completion of the remaining following RTUs:

Sl. No.	RTU STATION	TARGET DATE
1.	ALONG	
2.	BHALUKONG	
3.	DAPORIJO	
4.	DEOMALI	
5.	JAIRAMPUR	
6.	KHUPI	
7.	LEKHI	
8.	PASIGHAT	

Assam:

Out of 66 RTUs of Assam, only 44 are reporting partially. As Assam is the largest constituent of NER, the telemetry availability of the state is utmost important. As current status is 48%, Assam should provide a forthcoming plan for bringing the data up-to the level of 95%. Assam is requested to provide detailed status of SAS along with Gateway implementation project in all across the stations with strict target time. Furthermore, Assam is requested to provide completion date of all communication link projects.

Manipur:

Only 04 Nos. of RTUs are reporting partially out of 12 Nos. of RTUs. It has been observed that RTUs reporting over GPRS are not reporting consistently. Manipur should layout plan for more robust communication system. As per draft technical standards of communication, GPRS will not be entertained for substations of 132 kV and above.

RTU data of 132kV Hundung S/S, 132kV Chandel S/S, 132 kV Tipiamukh S/S and 132kV Kongba S/S through GPRS.

Meghalaya:

Only 13 Nos. of RTUs are reporting partially out of 23 Nos. of RTUs. 400 kV Killing(Brynihat) is not reporting at NERLDC .

Mizoram:

Only 01 Nos. of RTU is reporting partially out of 05 Nos. of RTUs. As maximum stations are in close range of SLDC Aizawl. Mizoram is requested to provide reasons for the non-availability. In addition, strict dates for resolving the issues of the below mentioned RTUs:

Sl. No.	RTU STATION	TARGET DATE
1.	BAIRABI	
2.	LUANGMUAL	
3.	SIHHMUI	
4.	ZUANGTUI	

Nagaland:

Out of 17 RTUs of Nagaland, only 02 nos. are reporting partially. It is to bring your notice that data of 132 kV Kohima S/S is reporting wrong data, which is highlighted in every Weekly Telemetry Reports. Nagaland state is requested to provide strict time-line for reporting of the RTUs.

Tripura:

Out of 25 RTUs of Tripura, only 08 nos. are reporting partially. Tripura state is requested to provide strict time-line for reporting of the RTUs. 132 kV Dharmanagar S/s is important S/s for calculating the real time drawl Tripura may provide strict time line for integrating real time data.

PGCIL:

The availability of PGCIL is flat around 73-75%. The details will be discussed in agenda no. 2.

NEEPCO:

3 x 25 MW DHEP is not reporting consistently, NEEPCO may discuss forthcoming plan for maintaining the consistency of data of the same.

NTPC & OTPC:

BgTPP and Palatana are maintaining the data availability 100 %, NERLDC appreciates the efforts.

NHPC:

As brought into the knowledge of the forum in 12th NETeST, RTU of Loktak is S900 which is of ULDC project and AMC of S900 is not provided by the vendor. NHPC may give the strict time line for replacement of S900 RTU with new RTU or Gateway.

Sl. No.	Name of the Constituents	Total Analogue Data points	Total Digital Data points	Total Data Points	Analogue Data points Reporting	Digital Data Points Reporting	Total Reporting	Total Percentage of data Availability as on 01.04.2019
1	Arunachal Pradesh	108	150	258	10	12	22	8.52%
2	Assam	1313	1904	3217	624	940	1564	48.61%
3	Manipur	180	255	435	58	99	157	36.1%
4	Meghalaya	409	388	797	210	47	257	32.3%
5	Mizoram	71	50	121	9	7	16	13.22%
6	Nagaland	237	270	507	28	68	96	18.9%
7	Tripura	524	715	1239	144	179	312	26.07%
8	PGCIL	664	1199	1863	456	908	1364	73.2%
9	NEEPCO	205	295	500	168	270	438	87.6%
10	NTPC	28	49	77	28	49	77	100%
11	OTPC	41	78	119	41	78	119	100%
12	NHPC	20	36	56	17	25	42	75%
	NER	3780	5351	9131	1776	2357	4433	48.54%



Organisation	North East SLDC
Address	Vidyut Bhawan, Arunachal Pradesh
Submitted to	Ramesh
Submitted by	Ranbir
Proposal Date	23-01-2019 11:38
Proposal Version	Ver. 1.0

Commercial Proposal for Ex- C band VSAT Connectivity

Investment Summary

		Total (Rs)
One Time Charges	(One Time)	
Recurring Charges - Year 1 (BW)	(Annual)	
Recurring Charges - Year 2 to and 3 (AMC+BW)	(Annual)	
		0

Investment Details

Product Code	Description	Qty.	UOM	Unit Price (Rs)	Total Price (Rs)	Remarks
One Time Charges						
1	Equipment - 1.2 Meter Ext-C Band Antenna, 2 Watt BUC, Satellite modem RF cables (upto 30 meters pair) and integration material.	4	nos	94,558	3,78,233	3*remote sites + 1* SLDC site
2	Installation & commissioning + Freight Forwarding + Transit Insurance+ SACFA Charges	4	nos	13,571	54,286	Subject to site readiness for VSAT I&C
3	Cisco ISR 4221 router at Nelco Hub (2*FE ports)	1	nos	85,000	85,000	Cisco standard IOS software
4	DC-DC Converter (48V-24V)	4	nos	4,500	18,000	Optional line item
5	VSAT Platform Charges			25,000		Optional line item
Annual Recurring charges					5,35,518	
5	Satellite BW : Plan 512-EXT-C (Typical BW - UP- 192 kbps, Down- 384 Kbps , Burstable BW - UP- 64 Kbps , Down-128 Kbps)	1	nos	2,02,020	2,02,020	PO on TNSL ,GST Extra
6	Satellite BW - Plan 128 Kbps (Typical BW - UP- 16 kbps, Down- 32 Kbps , Burstable BW - UP- 32 Kbps , Down-96 Kbps)	3	nos	61,875	1,85,625	PO on TNSL ,GST Extra
7	VAS -Proactive monitoring Services a) Site up/down monitoring portal b) Auto email alert for site going down c) Auto SMS alert for site going down d) Fault ticket raise/close auto email	4	nos	3,000	12,000	PO on Nelco ,GST Extra
AMC					3,99,645	
8	VSAT Hardware AMC from 2nd year onwards	4	nos	9,000	36,000	
9	Router AMC from 2nd year onwards	1	nos	9,800	36,000	

** As per Tata Code of conduct above prices are confidential and intended for use only by the individual or entity to which it is addressed.

NOTES

Refer to detailed ' Terms and Conditions' sheet attached for general T&C.

Per locam 1,30,129.5
Per locam 99,911-
Per locam

AP			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
1	Nirjuli Transformer Incomer-I	DATA WRONG	
2	Nirjuli Transformer Incomer-II	DATA WRONG	
3	132 KV Naharlagun-Pare	YES	NO
4	132 KV Ziro - Ranganadi	YES	NO
5	132 KV Deomali - Kathalguri	YES	YES
6	132 KV Balipara - Khupi	YES	NO
7	132 KV Pare-Chimpu	YES	NO
8	132 KV Ranganadi-Chimpu	YES	NO

MANIPUR			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
1	132KV IMPHAL(S) - IMPHAL (PG) - 1	YES	YES
2	132KV IMPHAL(S) - IMPHAL (PG) - 2	YES	YES
3	132KV KARONG - KOHIMA	NO	YES
4	132/133KV TRF AT JIRIBAM (MANIPUR CONSUMPTION)	YES	NA
5	132KV IMPHAL(PG) - NINGTHOUKONG	YES	YES
6	132KV JIRIBAM(PG) - JIRIBAM(MN)	YES	NO
7	IMPHAL(PG) END ICT- 1	YES	NA
8	IMPHAL(PG) END ICT- 2	YES	NA
9	132 KV LOKTAK - RENGPAING	YES	NO
10	132 KV LOKTAK - NINGTHOUKHONG	YES	YES

MEGHALAYA			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
1	132KV LUMSHNONG- BDR(ASEB)	YES	NO
2	132KV KHLRT (MeSEB) - KHLRT(PG) - 1	YES	YES
3	132KV UMTRU - KAHALUPARA - 1	YES	YES
4	132KV UMTRU - KAHALUPARA - 2	YES	YES
5	132KV UMTRU - SARUSAJAI - 2	YES	YES
6	132KV UMTRU - SARUSAJAI - 1	YES	YES
7	132KV KHLRT (PG) - KHLRT(MeSEB) -2	YES	YES
8	220KV MISA - BYRNHAT(KILLING) - 1	YES	NO
9	220KV MISA - BYRNHAT(KILLING) - 2	YES	NO
10	400KV BYRNHAT(KILLING) - B'GAON	YES	NO
11	400KV BYRNHAT(KILLING) - SILCHAR - 2	YES	NO
12	132KV AGIA - N' BIBRA	YES	YES

NAGALAND			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
1	132 KV DIMAPUR (PG) - DIMAPUR (S) -1	YES	NO
2	132 KV KOHIMA - KARONG	YES	NO
3	132 KV DHEP - SANIS	YES	NO
4	132 KV DHEP - MOKOKCHUNG	YES	NO
5	132KV DIMAPUR(PG) - KOHIMA(S)	YES	NO
6	132KV DIMAPUR (PG) - DIMAPUR(S) -2	YES	NO
7	132KV MOKOCHANG(S) - MOKOK(PG) -1	YES	NO
8	132KV MOKOCHANG(S) - MOKOK(PG) -2	YES	NO

ASSAM			
	DRAWAL POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
	132 KV KAHALUPARA - UMTRU - 1	YES	YES
	132 KV KAHALUPARA - UMTRU - 2	YES	YES
	220 KV MARIANI - KATHALGURI	YES	NO
	220 KV MARIANI - MISA	YES	NO
	132KV PANCHGRAM - LUMSHNONG	NO	YES
	132 KV PANCHGRAM - BOP (PG)	YES	NO
	132 KV D' CHERRA - D'NGAN	YES	NO
	132 KV S' SUJAI - UMTRU -1	YES	YES
	132 KV SAFLONG-HAFLONG	YES	YES
	132 KV GOHPUR - NIRJULI	YES	NO
	132 KV UMRANGSOO-KHANDONG	YES	NO
	132 KV UMRANGSOO-HAFLONG	YES	NO
	220 KV SAMAGURI - MISA -1	YES	YES
	220 KV SAMAGURI - MISA -2	YES	YES
	220 KV SONABIL - BALIPARA	NO	YES
	220 KV SALAKATI - BTPS - 1	YES	YES
	220 KV SALAKATI - BTPS - 2	YES	YES
	132 KV S' SUJAI - UMTRU - 2	YES	YES
	132 KV BALIPARA - DEPTA	YES	NO
	132 KV BALIPARA - SONABIL	YES	NO
	132 KV RANGIA - MOTONGA	NA	YES
	132KV SRIKONA - SILCHAR -1	YES	NO
	132 KV SRIKONA - SILCHAR -2	YES	NO
	132 KV HAILAKANDI - SILCHAR - 1	YES	NO
	132 KV HAILAKANDI - SILCHAR - 2	YES	NO
	132 KV AGIA - MENDAR	YES	YES
	400 KV AZARA - SILCHAR	YES	YES
	220 KV KATHALGURI - TINSUKIA - 1	YES	NO
	220 KV KATHALGURI - TINSUKIA - 2	YES	NO
	132 KV JIRIBAM - PAILAPOOL	YES	NO
	132 KV DIMAPUR - BOKAJAN	YES	YES
	400 KV AZARA - BONGAGAON	YES	YES
	132 KV BNC - PAVOI -1	YES	NO
	132 KV BNC - PAVOI -2	YES	NO
	220 KV NTPC-BTPS -2	YES	YES

MIZORAM			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
	132KV AIZAWL(PG) - LUANGMUJAL	YES	NO
	132KV AIZAWL(PG) - ZUANGTUI	YES	NO
	132KV KOLASIB - BADARPUR(PG)	YES	NO
	132KV KOLASIB - AIZAWL(PG)	YES	NO

TRIPURA			
	SEM POINTS	DATA AVAILABILITY	
		CS/PG END/OTHER State END	CONSTITUTENT END
	132 KV AGARTALA - AGTPP - 2	YES	YES
	132 KV KUMARGHATI(PG) - P.K.BARI	YES	NO
	132 KV DHARMANAGAR - DULAV	YES	NO
	132 KV PALATANA - UDAIPUR	YES	NO
	132 KV PALATANA - SM NAGAR	YES	YES
	132 KV PK'BARI - SILCHAR - 1	YES	NO
	132 KV PK'BARI - SILCHAR - 2	YES	NO
	132 KV AGARTALA - AGTPP - 1	YES	YES

VSAT connectivity for 3nos. Remote
Locations(NERTS) through
NELCO/Other-Scope &
Budgetary Offer

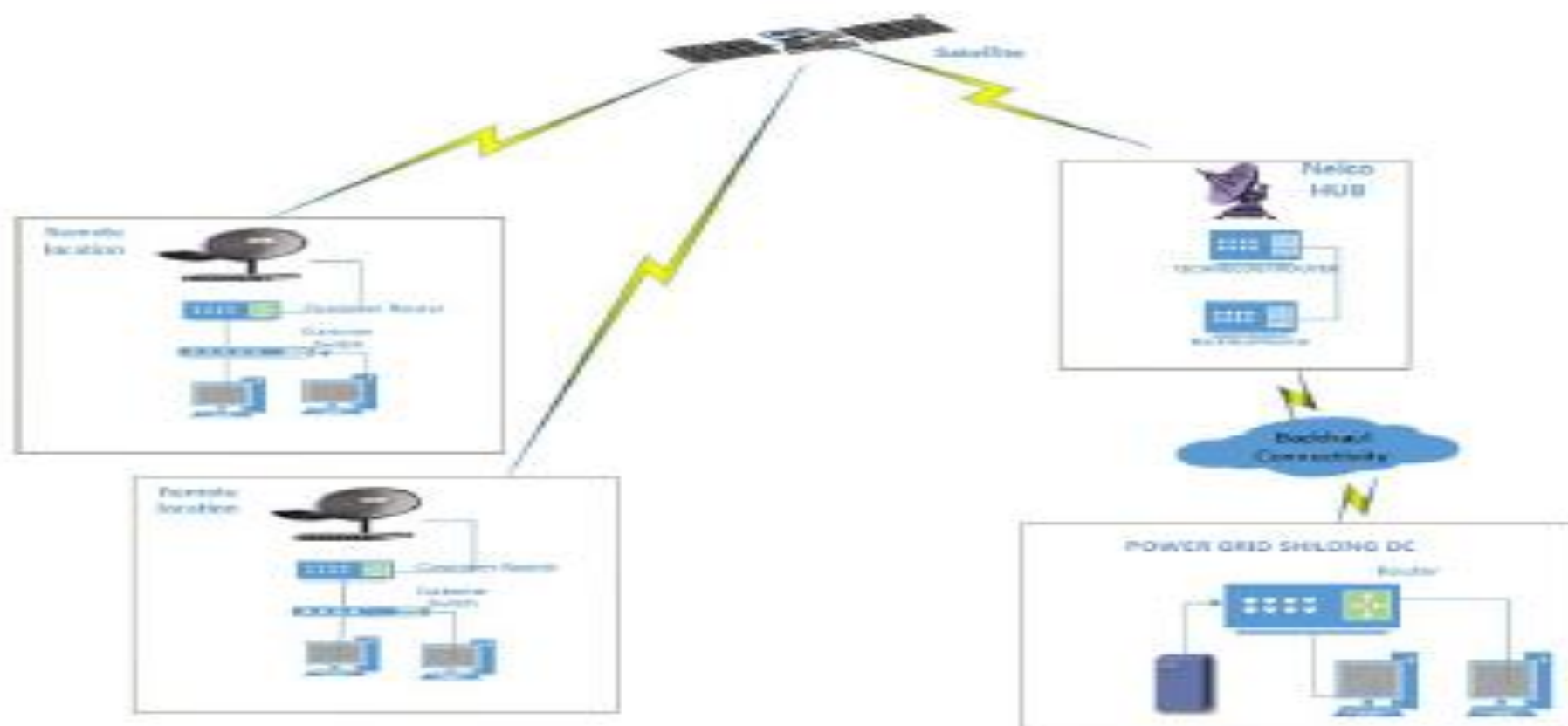
Proposed Solution

Nelco proposes its state-of-the-art iDirect TDMA technology to cater Power grid requirements for connecting POWER GRID 3 remote locations with Shilong DC over X Mbps Pooled Bandwidth(2/3/4 Mbps / Location). iDirect is the worldwide industry leader in VSAT Industry. The iDirect solution is robust and stable, while offering better performance than any other technologies.

The proposed solution is designed to cater following requirements,

- concurrent users from each remote location (simultaneous calling & data pooling from SCADA end/ RLDC)
- To support Data (SCADA, Meter Data, Sending Protection data/DR through minimum email/erp traffic)

6. Connectivity Diagram



7. Traffic Flow

The data traffic (SCADA, mail and ERP) from remote will first come to Nelco HUB and from HUB traffic is routed to Power grid through dedicated backhaul link between Nelco HUB to Power grid. The return traffic will also flow through same path. The traffic travelling on the Backhaul link will be highly secured as it will be within the CUG network on a private cloud. Logical separation would be provided to keep the traffic segregated and secured.

SI NO	Item Description	Unit	Qty	Unit Rate (INR) per Annum per location	Total Amount in 1 year	Total Amount for 5 years	Total Amount in 3years
A	B	C	D	E	F=D*E	F=D*E*5	F''=DXEX3
	Supply, Installation, operation and Annual Maintenance of pooled VSAT Bandwidth (RTU/PMU/ AMR/ & connectivity to each 3 location of Power Grid for 3 & 5 Years	NO	3.00	27,32,694.00	8198082	40990410	24594246
	Taxes and Duties : GST extra as applicable						

Either for 3 years or for 5 years, provision for extension of 1year will be kept at the same terms & condition & rate

Scope of Work -

A. Nelco Scope

- To provide, install and maintain Ex-C band TDMA VSAT using 1.8-meter antenna, 2-watt BUC, LNB and 30-meter RF cable
- To provide the router port (1 no) at Nelco HUB for backhaul termination
- To provide and maintain appropriate backhaul connectivity from Nelco HUB to Power Grid (Shilong)
- To provide the VSAT BW as agreed term between Nelco and Power Grid
- 24 X 7 X 365 days helpdesk support from Nelco HUB
- To provide 99.5 % uptime for VSAT connectivity
- Online portal to know the VSAT UP /Down status
- SPOC for Project Management
- Over-all data availability will not be less than 95% calculated yearly

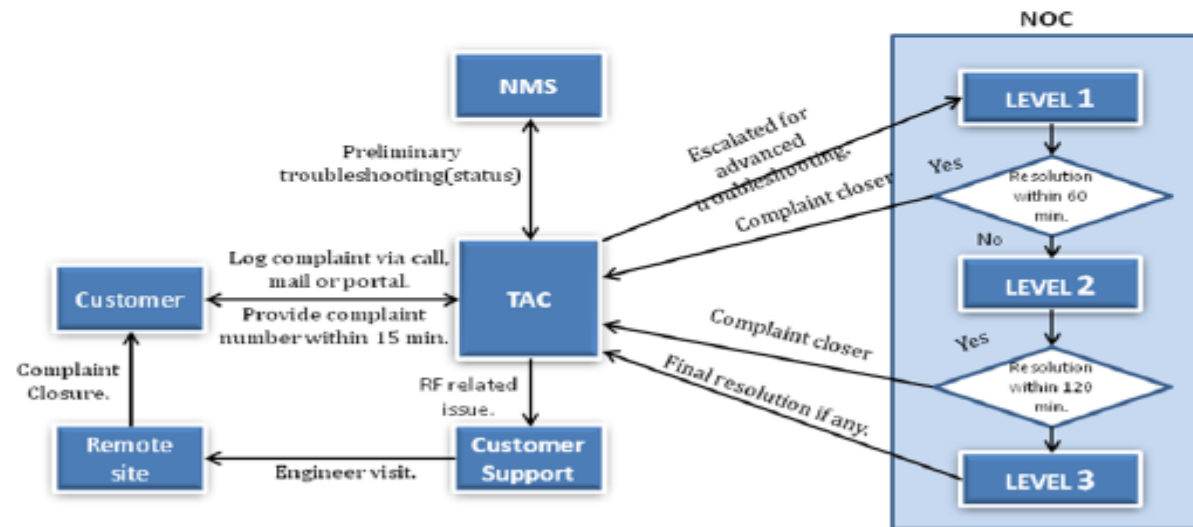
B. Customer Scope

- To provide Router at Power grid Shilong location for backhaul termination.
- Online UPS power with earthing at remote location for VSAT IDU installation
- To provide and maintain Router and Switch at each remote location for VSAT link termination
- LAN cabling from VSAT modem to existing Router / Switch
- De-installation of existing equipment and keep it in safe custody in case required.
- Platform / monkey cage at remote VSAT location where ever required
- Local authority permission for VSAT installation
- Rack space for VSAT IDU
- Rack space for backhaul router installation

8. Nelco HUB Infra

Nelco has a 365X24X7 Network Operating Centre (NOC), which enables centralized remote network monitoring and management of VSAT network(s) with the help of experienced and skilled network & technology experts, and state of the art monitoring tool sets and devices. Nelco uses a combination of self-developed and open-source software tools to provide advanced monitoring and management services. All mission-critical systems pertaining to daily operations have been sourced from best-of-breed platforms and vendors, and operate with a minimum of N+1 redundancy enabling Tatanet to provide high network uptime of 99.5%

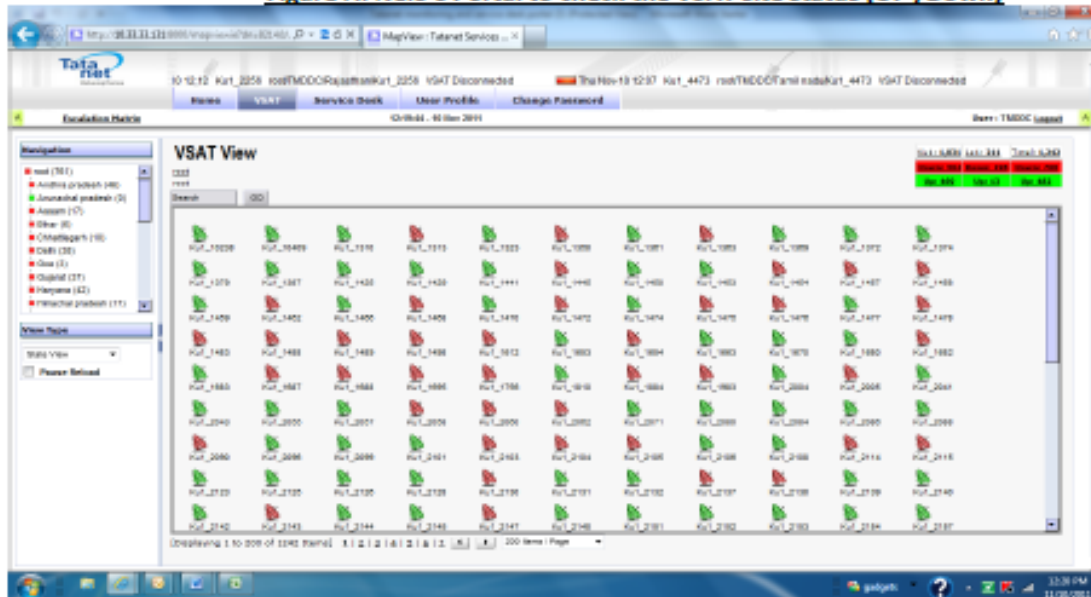
9. Trouble Ticket management and Call handling



- Tatanet provides different access for call logging –
 - Through mail
 - Through Telephone
- Customer will have to log a call with Tatanet if they face any issue related to VSAT connectivity.

- c. Once the call is logged with Tatanet on its call management portal, it is assigned to L1 shift engineer.
- d. The L1 engineer does the basic troubleshooting and tries to fix the issue. If the issue is resolved, it will confirm the same with customer and then close the complaint.
- e. If the L1 engineer is not able to resolve the call within 1 hr., it is escalated to L2 engineer who does a detailed diagnosis of the issue and resolves it.
- f. If the L2 engineer is not able to resolve the issue remotely then he escalates the call to field support team for filed visit to the site for rectification of the issue.
- g. The support team assigns the JOB to the field engineer who is nearer to the remote location.
- h. The field engineer will attend the site within the stipulated timelines and rectify the problem onsite.
- i. The field engineer then co-ordinates with the NOC team for resolution.
- j. Then the same is confirmed with customer before closure of the call.

Figure A: Nelo's Portal to check the VSAT site status (UP /Down)



THANK YOU

Telemetry Data Validation between SLDC Assam, NERLDC and Communication Department of AEGCL(Annexure D)

SL No.	NAME OF STATION	Assam SLDC Status as on 28/03/2019	Reason for Not Reporting	Responsibility	Target to Complete	Remarks
1	Agia	Yes	RTU database to be rectified at site and SAS upgradation in progress	CGM T&T, and CGM SLDC AEGCL	Aug-19	Material not reached the site. ERL make.
2	ASHOK PAPER MILL (APM)	No	PLCC is not working and RTU is faulty. SAS upgradation in progress	CGM T&T, and CGM SLDC AEGCL	Aug-19	KIOSK building completed for installation of SAS panels.
3	AZARA	Yes	Non-available points will be checked jointly by SLDC and Communication department	CGM T&T, and CGM SLDC AEGCL	Aug-19	
4	PANCHGRAM	Yes	Non-available points will be checked jointly by SLDC and Communication department	CGM T&T, and CGM SLDC AEGCL	Aug-19	
5	BEHIATING	No	Gateway commissioning is pending after SAS completion already meeting held with M/S Techno for completion of the same	CGM T&T, and CGM SLDC AEGCL	Jul-19	
6	BILASIPARA	Yes	Only ICT 1 bay to be rectified	CGM T&T, and CGM SLDC AEGCL	Jul-19	
7	BNC(AS)	No	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Jul-19	
8	BOKAJAN	Yes	ICT2 data is not available and isolators coming wrong. SAS work under progress	CGM T&T, and CGM SLDC AEGCL	Jul-19	
9	BOKAKHAT	Yes	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Apr-19	
10	BOKO	Yes	RTU database to be rectified at site.	CGM T&T, and CGM SLDC AEGCL	Apr-19	
11	BONGAIGOAN (BIPS)	Yes	SAS commissioning under progress.	CGM T&T, and CGM SLDC AEGCL	Apr-19	
12	BORDUBI	No	Gateway commissioning is pending after SAS completion already meeting held with M/S Techno for completion of the same	CGM T&T, and CGM SLDC AEGCL	May-19	
13	BORNAGAR	No	Gateway commissioning is pending after SAS completion	CGM T&T, and CGM SLDC AEGCL	Apr-19	
14	CHANDRAPUR	No	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Jul-19	
15	DEPOTA (TEZPUR)	No	Under Progress to be completed by 29/03/2019	CGM T&T, and CGM SLDC AEGCL	May-19	Completed
16	DHALIGAON	Yes	SAS upgradation under progress. Old CRP panels connection to RTU connections removed.	CGM T&T, and CGM SLDC AEGCL	May-19	
17	DHEKIAJULI	Yes	Only Voltage data wrong. Will have to call Vension Electric service engineer to rectify the same	CGM T&T, and CGM SLDC AEGCL	May-19	
18	DHEMAJI	No	SAS upgradation under progress. PLCC link to be rectified and will request NERPSIP to expedite the project	CGM T&T, and CGM SLDC AEGCL	Jul-19	
19	DIBRUGARH	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	Jul-19	
20	DIPHU	Yes	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Jul-19	
21	DISPUR	Yes	Link is fluctuating	CGM T&T, and CGM SLDC AEGCL	Apr-19	
22	DULLAVCHERA	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	Apr-19	
23	GAURIPUR	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Apr-19	
24	GOHPUR	Yes	RTU database to be rectified at site. SAS upgradation under progress.	CGM T&T, and CGM SLDC AEGCL	Jul-19	
25	GOLAGHAT	Yes	Data to be checked. Data upgradation under SAS under progress.	CGM T&T, and CGM SLDC AEGCL	Jul-19	
26	GOSSAIGAON	No	Earth Mat work under progress	CGM T&T, and CGM SLDC AEGCL	Aug-19	
27	HAFLONG	Yes	Link work under progress	CGM T&T, and CGM SLDC AEGCL	Oct-19	
28	HAILAKANDI	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Apr-19	
29	JAGIROAD	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Apr-19	
30	JAWAHARNAGAR	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Apr-19	

Saha
30/3/19
AGM, AEGCL

Barua
30/3/19
Barua
30/3/19

Barua
30/3/19

Barua
30/3/19
GM(SL), NERLDC

Barua
30/3/19

31	JORHAT(GARMUR)	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Apr-19
32	JORHAT(WEST)	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	
33	KAHELIPARA	Yes	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	May-19
34	KAMAKHYA	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	
35	KAMALPUR	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	Apr-19
36	KOKRAJHAR	No	No issue	CGM T&T, and CGM SLDC AEGCL	
37	NORTH LAKHIMPUR	No	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Apr-19
38	LITPS	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
39	KARBI LANGPI	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	Jul-19
40	LANKA	Yes	RTU database to be rectified at site.	APGCL, SLDC	
41	MAJULI	No	Link to be established	CGM T&T, and CGM SLDC AEGCL	
42	MARGHERITA	No		CGM T&T, and CGM SLDC AEGCL	Jul-19
43	MARIANI	Yes	Data to be checked	CGM T&T, and CGM SLDC AEGCL	Jul-19
44	MORAN	No	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Aug-19
45	MATIA	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	Jul-19
46	NAGAON	No	Gateway commissioning is pending after SAS completion already meeting held with M/S Techno for completion of the same	CGM T&T, and CGM SLDC AEGCL	Apr-19
47	NALBARI	Yes	Data stability to be checked	CGM T&T, and CGM SLDC AEGCL	May-19
48	NAMRUP	Yes	Coordination with APGCL is required for database and telmetry	CGM T&T, and CGM SLDC AEGCL	Apr-19
49	NAMRUP PS I	No	Coordination with APGCL is required for database and telmetry	APGCL, SLDC	
50	NARANGI	Yes	Database Issue	APGCL, SLDC	
51	NAZIRA	Yes	Digital and analog data to be checked, data are reporting	SLDC department	
52	PAILAPOOL	No	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
53	RANGIA	Yes	RTU database to be rectified at site.	CGM T&T, and CGM SLDC AEGCL	
54	ROWTA	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
55	RUPAI	No	-	CGM T&T, and CGM SLDC AEGCL	
56	SAMAGURI	Yes	Digital and analog data to be checked, data are reporting, RTU database to be rectified at site.	CGM T&T, and CGM SLDC AEGCL	Jul-19
57	SARUSAJAI	No	SAS commissioning under progress	CGM T&T, and CGM SLDC AEGCL	Jul-19
58	SIBSAGAR	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	Apr-19
59	SIPAJHAR	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
60	SISHUGRAM	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
61	SONABIL	Yes	Bus data to be checked and ICTs to be removed from database	CGM T&T, and CGM SLDC AEGCL	
62	SONARI	No	Gateway commissioning is pending after SAS completion already meeting held with M/S Techno for completion of the same	CGM T&T, and CGM SLDC AEGCL	
63	SRIKONA	Yes	Digital Data to be checked	CGM T&T, and CGM SLDC AEGCL	Jul-19
64	SONAPUR	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	
65	TINSUKIA	Yes	Digital and analog data to be checked, data are reporting	CGM T&T, and CGM SLDC AEGCL	
66	UMRANGSHU	Yes	No issue	CGM T&T, and CGM SLDC AEGCL	
Reporting		46	SLDC responsibility		
Not Reporting		20	Communication Department responsibility		
			SLDC and Communication Department Joint responsibility		1
			APGCL, SLDC and Communication Department		0
			No issues		0
					9

30/03/19

Forma

~~Am~~
30/3/19
GM(SL), NERLDC

msd

ANNEXURE-B.15

STATUS OF ESTABLISHMENT OF OPGW COMMUNICATION LINK IN NER UNDER NER FO EXPANSION PROJECT

Sl No	Link Name	Status as per 12th NETeST	OPGW stringing Commissioning Target as per 12th NETeST	Target As per 19th NERPC-MoM	OPGW Stringing status	End Equipment Status	Overall reporting of end stations to NERLDC/S LDC
	Central Sector						
1	132kV Melriat (PG) ~ Silchar (PG)	WIP	Apr-19	July19	Complete	Complete	Data and voice reported dtd 31.03.2019. SAT Pending
2	132kV Khandong~Halflong (PG)	WIP	Apr-19	July19	Complete	Supply and Installation over. SAT/Commissioning Pending.	July19
3	132kV Dimapur (PG)- Doyang (NEEPCO)	WIP	Apr-19	July19	-do-	-do-	July19
4	132kV Doyang (NEEPCO)- Mokokchung (State)	WIP	Apr-19	July19	-do-	-do-	July19
5	220kV Mokokchung (PG)- Mariani (PG)	WIP	Mar-19	July19	-do-	-do-	July19
6	400kV Mariani (PG)- Kathalguri (NEEPCO)	WIP	Mar-19	July19	-do-	-do-	July19
7	400kV Surajmaninagar(TSECL) ~ Pallatana(OTPC)	WIP	Apr-19	July19	Stringing Completed: 27.967/36.714 Km	-do-	July19
8	132kV Badarpur(PG) ~ Jiribam(PG)	Supply Pending	Jul-19	July19	Supply: Part supply pending-Target:	Supply Pending	Sept-19

					June Stringing Complete d:28/67.1 66 Km		
9	Bongaigaon (PG-400 kV) ~ 220kV Salakati- 220 kV BTPS	Supply Pending	Jul-19	July19	Supply: Pending, Target: June	-do-	Sept-19
10	400kV Mirza (Azara) ~ Byrnihat	WIP	Jul-19	July19	0 Km	Supply Pending	Aug-19
11	400kV Silchar ~ Pallatana	Supply Pending	Aug-19	July19	Stringing Complete d: 61.146/2 47.409 Km/ROW issue	-do-	Dec-19
12	132kV Agartala(TSECL) ~ RC Nagar (NEEPCO)	WIP	Mar-19	July19	Complete	Supply Complete. Installation Pending due Space Constraint	Jul-19
13	132kV Jiribam (PG) (Manipur) ~ Loktak (NHPC)	WIP	Jul-19	July19	0/82.461 Km	Supply Pending/. ROW during initial survey-Hilly area	Dec-19
14	132kV Loktak (NHPC) ~ Imphal (PG)	WIP	Jul-19	July19	Complete	Supply Pending	Jul-19
15	PK Bari (TSECL)--LILO of (NETCL) Belonia	WIP	Jul-19	July19	Supply Pending.	Supply Pending	Dec-19
16	132kV Parey ~ Chimpur	Supply Pending	Jun-19	July19	Supply Pending.	Supply Complete	Dec-19
	Manipur State Sector						

1	132kV Yurembam ~ Yaingangpokpi	WIP	Jul-19	July19	Complete	-do-	Jul-19
2	132kV Yaingangpokpi ~ Kongba	WIP	Jul-19	July19	Complete	-do-	Jul-19
3	132kV Kongba ~ Kakching	WIP	Jul-19	July19	Complete	-do-	Jul-19
4	132kV Imphal(State) ~ Karong	WIP	Jul-19	July19	28/60Km. WIP	Supply Complete	Jul-19
5	132kV Kakching ~ Churachandpur	WIP	Jul-19	July19	12.45/38 Km. WIP	-do-	Jul-19
6	132kV Loktak(NHPC) ~ Ningthoukhong	WIP	Jul-19	July19	WIP for other Manipur SS Links	-do-	Jul-19
7	132kV Yaingangpokpi ~ Hundung	WIP	Jul-19	July19	WIP for other Manipur SS Links	-do-	Jul-19
8	132kV Kakching ~ Chandel	WIP	Jul-19	July19	-do-	-do-	Jul-19
9	132kV Loktak(NHPC) ~ Rengpang	WIP	Jul-19	July19	-do-	-do-	Jul-19
10	132kV Jiribam ~ Jiribam state	WIP	Jul-19	July19	-do-	-do-	Jul-19
11	132kV Ningthoukhong ~ Churachandpur	WIP	Jul-19	July19	-do-	-do-	Jul-19
Tripura State Sector							
1	132kV Agartala(TSECL) ~ Barumura(GTP)	WIP	Apr-19	July19	Complete	Complete	Data and voice reported dtd 31.03.2019. SAT Pending July19
2	66kV 79 Tilla Grid (TSECL) ~ Badharghat	WIP	Apr-19	July19	-do-	Complete	-do-

3	132kV Surajmaninagar(TSECL) ~ Budhungnagar	WIP	Apr-19	July19	-do-	Complete	-do-
4	132kV Agartala(TSECL) ~ SM Nagar (TSECL)	WIP	Apr-19	July19	Complete	Complete	-do-
5	132kV Pallatana(OTPC) ~ Udaipur(TSECL)	WIP	Apr-19	July19	-do-	Supply Complete	July19
6	132kV Udaipur(TSECL) ~ Rokhia GTP	WIP	Apr-19	July19	-do-	-do-	July19
7	66kV Udaipur(TSECL) ~ Gumti HEP	WIP	Apr-19	July19	-do-	-do-	July19
8	66kV Gumti HEP ~ Amarpur(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
9	66kV Satchand(TSECL) ~ Sabroom(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
10	132kV 79 Tilla Grid (TSECL) ~ Dhalabil(TSECL)	WIP	Apr-19	July19	-do-	-do-	July19
11	132kV Rokhiya (GBPP) ~ Surajmaninagar(TSECL)	WIP	Apr-19	July19	Supply Complete. Front Not ready (TL under construction)	-do-	Link to be deleted. Supply material isto be handed over to TSECL
12	132kV Surajmaninagar(TSECL) ~ Monarchak (NEEPCO)	WIP	Apr-19	July19	-do-	-do-	
	Meghalaya State Sector						
1	132kV Nehu ~ Neigrihms	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19
2	132kV Khliehriat(PG) ~ Khliehriat (State)	WIP	July-19	July19	Supply Completed . Stringing Pending	Supply Complete	July19
3	132kV Khliehriat(State) ~ MyntduLeshka-HEP	WIP	July-19	July19	-do-	Supply Complete	July19
4	132kV Khliehriat(PG) ~ Lumshnong (S/C)	WIP	July-19	July19	-do-	Supply Complete	July19

	Nagaland State Sector						
1	132kV Kohima (132KV) ~ Kohima (220KV)	WIP	July-19	July19	Supply Completed . Stringing Pending	Supply Pending	July19
2	132kv Kohima ~ Wokha	WIP	July-19	July19	-do-	-do-	July19
3	132kV Doyang (NEEPCO) ~ Sanis	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19
	Mizoram State Sector						
01	Aizawl~Zemabawk I	Supply Pending	July-19	July19	Supply Pending	Supply Complete	July19

STATUS OF ESTABLISHMENT OF OPGW COMMUNICATION LINK IN NER UNDER NER MW VACATIONPROJECT(equipment are clubbed with NER FO Expansion)

SN	Link Name	Status as per 12th NETeST	OPGW Commissioning Target as per 12th NETeST	Link Commissioning Target As per 19 th NERPC-MoM	OPGW Stringing status	End Equipment Status	Overall reporting of end stations to NERLDC/ SLDC
1	132KV Silchar-Srikona	WIP	Completed	Complete	Complete	Complete	Data reporting
2	132KV Mariani-Mariani	WIP	Mar-19	Mar-19	Complete	-do-	Data and voice reported dtd 31.03.2019. SAT Pending/Jun19
3	132KV Nirjuli-Ranganadi with Parey	WIP	Mar-19	Mar-19	ROW issue	Supply and Installation over. SAT/Com	** 03 months after ROW is resolved

						missionin g Pending.	
4	Imphal(PG)-Imphal (State)	WIP	Mar-19	Mar-19	-do-	Supply Complete	June-19
5	132KV LILO of Aizawl-Zemabawk-II at Melriat SS	WIP	Mar-19	Mar-19	-do-	Complete	Data and voice reported dtd 31.03.201 9. SAT Pending/J une19
6	132KV Melriat-Shimmui	WIP	Mar-19	Mar-19	-do-	Supply Complete. Installatio n Pending	June-19
7	132KV Mokokchung-Mokokchung	WIP	Mar-19	Mar-19	-do-	-do-	June-19
8	Ranganadi-Gohpur (Part-I)	WIP	Mar-19	Mar-19	-do-	-do-	Data and voice reported dtd 18.01.201 9. /june19
9	Ranganadi-Gohpur (Part-II)				-do-	-do-	
10	Aizawl-Zemabawk-II	WIP	Mar-19	Mar-19	-do-	-do-	June-19
11	Dimapur-Dimapur	WIP	Mar-19	Mar-19	-do-	-do-	June-19
12	132kV Ranganadi-Ziro	WIP	Mar-19	Mar-19	-do-	-do-	June-19
13	132KV Lekhi-Itanagar/Chimpu SLDC	WIP	Mar-19	Mar-19	-do-	-do-	June-19
14	132KV LILO of Nirjuli-Ranganadi at Lekhi	WIP	Mar-19	Mar-19	ROW issue	-do-	** 03 months after ROW is resolved

Note: Above mentioned communication links got delayed due to certain unavoidable situation like;

1) Strike & Protest in Northeast due to GST Amendment bills

- 2) Strike, Curfew in Ar Pradesh in the month of Feb-19
- 3) Strike, Curfew in Meghalaya in the month of May-Jun-18
- 4) Floods in Assam & Manipur –July 17
- 5) ROW issues (peddy field/ asking additional compensation)
- 6) Supply Containers are subjected additional checks on transit (from China to Destinations/of India) in last 1year after doklam