

North Eastern Regional Power Committee

Agenda For

23rd NETeST Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 22nd July, 2022 (Friday)

Venue : “Hotel Nandan”, Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 22nd MEETING OF NETeST SUB-COMMITTEE OF NERPC.

The minutes of 22nd meeting of NETeST Sub-committee held on 17th March, 2022 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2020/3052-3089 dated 11th April, 2022.

The Sub-committee may confirm the minutes of 22nd NETeST of NERPC with the above modifications as no other comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

CATEGORY A: CONTROL CENTER RELATED ITEMS

A.1 Upgradation of SCADA/EMS of SLDCs:

As per CERC Regulations the useful life of SCADA/EMS is 15 years. Considering the same all NER SLDCs/ NERLDC have to upgraded by 2029-30 timeframe. In 22nd TCC/RPC meeting it was decided to upgrade with funding from PSDF.

State-wise DPRs for SCADA-EMS upgradation projects with a cost-estimate of around 44 crores (incl. AMC charges) has been shared with SLDCs for signing and subsequently submitting it to NERPC so that it can be sent to NLDC in a consolidated manner. The tendering activities can be taken up later in a consolidated manner as per MoU signed by SLDCs with POSOCO in order to same time, avoid integration issues, achieving uniform technical quality of products and get economy of scale benefits.

The status of MoU signing among SLDCs and NERLDC has been completed as per details given in table below.

S. N	Description	Remarks
1	Meghalaya SLDC (on behalf of MePTCL)	Signed on 28 th October 2021.
2	Mizoram SLDC (on behalf of P&ED-Mizoram)	Signed on 01 st November'21.
3	Assam	Signed on 06 th January'22.
4	Nagaland	Signed on 01 st March 2022.
5	Tripura	Signed on 20 th May 2022.
6	Manipur	Signed on 11 th June 2022.
7	Arunachal Pradesh	Signed on 07 th July 2022.

All state-utilities are requested to sign the DPRs (with necessary modifications, if required) and share with NERPC on priority so that it can be submitted to NLDC at the earliest.

Members may please discuss.

A.2 Cyber Security aspects in SCADA/IT systems at Load Despatch Centres in North Eastern Region:

State-Utilities may update the status with respect to CII Status by NCIIPC, ISO 27001:2013 implementation, VA-PT twice a year, Cyber Crisis Management Plan (CCMP), Cyber Management Team (CMT), patching of vulnerabilities and virus alerts from CERT-In/CERT-GO, etc, participation in various trainings and workshops on Cyber Security being conducted by CEA, Ministry of Power and POSOCO, etc. A summary of the state wise status of CII, CCMP etc., is attached as ***Annexure-A.2***.

A CISOs meeting was conducted by Sh. MAKP Singh (CISO, Ministry of Power) in presence of NCIIPC representatives, CERT-GO and CERT-Hydro at NERLDC premises on 11th June 2022 in which wide participation from all CISOs of NER utilities was registered. It was emphasized that Cyber Security guidelines laid down by CEA needs to be adhered with all stakeholders in power-sector and any difficulty being faced shall be reported to MoP/NCIIPC at the earliest.

NERLDC may please deliberate.

A.3 Issues of SLDCs in SCADA AMC:

EMS: Net model Database to be modified/rectified by the SLDCs with the assistance of M/s GE. Thereafter EMS will be commissioned.

State Estimator: Net model Database to be modified/rectified by the SLDCs with the assistance of M/s GE. Thereafter State Estimator will be commissioned.

Battery Bank/UPS: In 22nd NETeST meeting M/s GE informed about the difficulties in replacement of faulty battery bank at SLDC Assam. However, M/s GE assured that maintenance would be carried out to improve performance.

Summary of activities carried out by M/s GE/SLDC Assam:

- Battery Bank-1 charged using different charger after isolation
- Discharge test of Battery Bank-1

M/s GE, SLDC Assam may please intimate the latest status.

Deployment of manpower: Relevant experience as per contract: SCADA/EMS project was awarded to M/s GE T & D Limited in the year 2014 and ToC extended during January 2017. Since then, the SCADA/EMS system is under Comprehensive-AMC with M/s GE T&D Limited. As per the contractual terms and conditions, two (02) manpower with “5 years of working experience in delivered SCADA/EMS system” has to be deployed at each SLDC of North-Eastern region.

It has been observed that manpower deployed at various SLDCs are not as per the provision of the contract and due to this many-a-times, technical support through remote desktop needs to be extended from NERLDC. As a result, various works are getting hampered and delayed.

Replacement of anti-virus installed in OT system of LDCs in NER: M/s GE T&D India Limited has provided Microsoft System Center Endpoint Protection (SCEP) 2012 as antivirus solution for the SCADA system during the project implementation phase. The aforementioned anti-virus installed has been declared end-of-life by the OEM i.e., Microsoft from 12-July-2022 onwards which means that all associated definitions, engine and platform updates will not be available now.

Non-availability of antivirus is a critical cyber security vulnerability to the system. Therefore, M/s GE T&D India Limited has to replace and maintain an updated antivirus solution in SCADA system at all LDCs of NER. Further, all SLDCs have to follow up with M/s GE T&D India Limited regarding implementation of the same on priority basis.

NERLDC may please deliberate.

CATEGORY B: STATION LEVEL REPORTING

B.1 Deployment of new RTUs in selected sub-stations of NER:

As per deliberations and Minutes-of-Meeting of 22ndTCC/NERPC Board meeting held in March 2022, it was agreed that SLDCs in NER will explore the possibility of PSDF funding for its RTUs related projects with help of NERPC and NERLDC. State-wise DPRs for RTUs projects with associated cost-estimate has been shared with SLDCs for signing and subsequently submitting it to NERPC so that it can be sent to NLDC in a consolidated manner. The tendering activities can be taken up later in a consolidated manner in order to same time and get economy of scale benefits.

- **DoP-Arunachal Pradesh:** 43 RTUs i.e. □ **11,86,31,152 (incl. GST)**
- **Assam:** 33 RTUs i.e. □ **9,10,42,512 (incl. GST)**
- **Manipur:** 3 RTUs i.e. □ **82,76,592 (incl. GST)**
- **Meghalaya:** 20 RTUs i.e. □ **5,51,77,280 (incl. GST)**
- **P&ED-Mizoram:** 14 RTUs i.e. □ **3,86,24,096 (incl. GST)**
- **DoP-Nagaland:** 42 RTUs i.e. □ **11,58,72,288 (incl. GST)**

All state-utilities are requested to sign the DPRs (with necessary modifications, if required) and share with NERPC on priority so that it can be submitted to NLDC at the earliest.

NERLDC may please deliberate.

B.2 Delay in execution of real-time data availability works of OTPC station:

OTPC was requested to provide LV side data, RGMO, FGMO status and master trip signal data of all units in 20thNETeST meeting in which OTPC had given target of October-2021 to complete the works. The target date was revised twice in subsequent NETeST meetings i.e., April-22 in 21stNETeST (during Nov'21) and 22ndNETeST (during Apr'22). Email request shared with OTPC is attached as Annexure-1. OTPC is requested to update the status.

NERLDC may please deliberate.

B.3 Non-availability of telemetry data of 132kV Mohanpur S/S under NERPSIP:

Tripura owned 132kV Mohanpur s/s was charged on August-2021 without availability of any real-time data, voice communication and related integrations with the SCADA system of SLDC.

The station was charged by LILO of 132kV Agartala–Dhalabil circuit at 132kV Mohanpur S/s, during which OPGW portion was also removed and not yet restored by implementing agency. This has caused non-availability of data of 132 kV Dhalabil S/s.

As NERPSIP project also includes the communication system i.e., Fiber Optics, SDH, PDH, etc. readiness of the communication system, availability of the telemetry data, voice communication, etc. has to be ensured.

NERLDC may please deliberate.

B.4 Non-availability of telemetry data of 132kV Chiephobozou S/S under State project in Nagaland:

DoP Nagaland owned 132kV Chiephobozou s/s was charged on 03rd July2022 without availability of real-time data, voice communication and related integrations with SCADA system. The substation was charged by LILO of 132kV Kohima-Wokha line. During LILO work, the existing OPGW cable was also removed but not restored afterwards. This has impacted the communication link as well as telemetry data of 132kV Wokha s/s.

NERLDC may please deliberate.

B.5 Connectivity of 132kV Ambassa S/S upto 132kV PKBari(TSECL) S/S:

The LILO of 132 kV PK Bari – Ambassa at PK Bari (Indigrid) was carried out by M/s Sterlite during the project implementation phase. During this period, OPGW was laid from Ambassa to PK Bari (Indigrid) and PK Bari (Indigrid) to PK Bari (TSECL). As Ambassa S/s is connected directly with an ISTS station, the real-time data of same is important for grid monitoring and drawl calculation. Further, OPGW infrastructure is available, using which 132 kV Ambassa S/s can report till SLDC Tripura. The TSECL and Indigrid may submit the plan along with timeline to complete the work, if feasible.

NERLDC may please deliberate.

B.6 Restoration of real –time data of 132kV Umrangso S/S:

During special meeting for extending the power to Umrangso by connecting it directly with 132kV Khliehriat s/s, it was decided that real-time data of 132kV Umrangso will be restored using the following communication links i.e., 132kV Umrangso to 132kV Halfong(PG) on PLCC, further to SLDC Assam over OPGW.

NERLDC may please deliberate.

CATEGORY C: COMMUNICATION MEDIUM RELATED ITEMS

C.1 Establishment of VSAT Communication in selected remote locations for state :

As per deliberations and Minutes-of-Meeting of 22nd TCC/NERPC Board meeting held in March 2022, it was agreed that SLDCs in NER will explore the possibility of PSDF funding for its VSAT communication related projects with help of NERPC and NERLDC. State-wise DPRs for VSAT projects with associated cost-estimate has been shared with SLDCs for signing and subsequently submitting it to NERPC so that it can be sent to NLDC in a consolidated manner. The tendering activities can be taken up later in a consolidated manner in order to same time and get economy of scale benefits.

- **DoP-Arunachal Pradesh:** 42 stations plus VSAT at SLDC i.e. □ **2,22,02,549 (incl. GST)**
- **Assam:** 18 stations plus VSAT at SLDC i.e. □ **95,15,378 (incl. GST)**
- **Manipur:** 8 stations plus VSAT at SLDC i.e. □ **42,29,057 (incl. GST)**
- **Meghalaya:** 6 stations plus VSAT at SLDC i.e. □ **31,71,792 (incl. GST)**
- **P&ED-Mizoram:** 17 stations plus VSAT at SLDC i.e. □ **89,86,746 (incl. GST)**
- **DoP-Nagaland:** 51 stations plus VSAT at SLDC i.e. □ **2,69,60,238 (incl. GST)**
- **TSECL:** 15 stations plus VSAT at SLDC i.e. □ **79,29,482 (incl. GST)**

All state-utilities are requested to sign the DPRs (with necessary modifications, if required) and share with NERPC on priority so that it can be submitted to NLDC at the earliest.

NERLDC may please deliberate.

C.2 Establishment of second communication channel to telemeter data and voice from INDIGRID stations to NERLDC Shillong:

During the project commissioning phase of 400kV SM Nagar and 400kV PK Bari S/s, second communication channel was provided by M/s Sterlite Ltd. over Airtel MPLS point-to-point link. But in November 2021, the said link was discontinued resulting in only one communication link catering Voice communication, SCADA data and PMU data to NERLDC.

In 22nd NETeST meeting, Indigrid informed that second communication channel to telemeter data and voice from Indigrid stations will be provided using Powertel network. Indigrid was also requested to install firewall at all ends (including NERLDC) for the Powertel link.

Members may please discuss.

C.3 OPGW on 400kV Silchar-Azara and 400kV Bongaigaon - Azara:

Presently Protection and Station communication is via PLCC. As it is very important 400kV corridor, it is proposed for OPGW on 400kV Silchar – Azara and 400kV Bongaigaon – Azara with terminal equipments and upgradation of Protection Coupler.

Members may please discuss.

C.4 Long outage of ULDC links in Mizoram:

Various ULDC links in Mizoram were down since 20th May2022. The outage was intimated to NERTS-ULDC team, however the same is yet to be restored. Due to this outage, several state-owned stations' real-time data are not reporting to SLDC as well as NERLDC. The ULDC link is also being used as redundant ICCP communication link between NERLDC and Mizoram SLDC.

C.5 Allocation of fibers on existing links for Guwahati Islanding Scheme:

As per Special Meeting on 13.05.2022 it was decided that single pair of fiber would be dedicated for Guwahati Islanding Scheme. Amongst the following links the dedicated fiber has to allotted for the scheme:

Sl. No	Name of the link	Owner Utility	Total no. of pairs	Utilized fiber quantity(ULDC)	Utilized fiber quantity(Commercial)	Remarks
1	BgTTP – Bongaigaon(PG)	POWERGRID	24	6	18	
2	BgTTP – Bongaigaon(AS)	POWERGRID	24	6	18	
3	Kahilipara - Umtru	POWERGRID	12	6	6	
4	Umtru – Umiam Stg-3	POWERGRID	12	6	6	
5	Umiam Stg-3 to Umiam Stg-1	POWERGRID	12	6	6	
6	Umiam Stg-1 to NEHU	POWERGRID	12	6	6	
7	Misa- Samaguri	POWERGRID	24	6	18	
8	Khliehriat - Khliehriat	POWERGRID	12	6	6	
9	Misa – Kopili	POWERGRID	24	6	18	
10	Kopili – Khandong	POWERGRID	24	6	18	
11	Khandong – Khliehriat	POWERGRID	24	6	18	
12	Khliehriat(PG) - NERLDC	POWERGRID	24	6	18	
13	Bongaigaon(AS) - Agia	AEGCL	24	6	18	
14	Agia - Sarusajai	AEGCL	24	6	18	
15	Sarusajai - Kahilipara	AEGCL	24	6	18	
16	Samaguri - Sarusajai	AEGCL	12	6	6	
17	Sarusajai- Kahilipara	AEGCL	12	6	6	
18	Kahilipara - SLDC	AEGCL	12	6	6	
19	Azara - Mirza	AEGCL	24	6	18	
20	Sarusajai - Mirza	AEGCL	24	6	18	
21	Mirza - Boko	AEGCL	24	6	18	
22	Boko - Agia	AEGCL	24	6	18	
23	Bongaigaon(AS) – Dhaligaon	AEGCL	24	6	18	
24	Dhaligaon – Bornagar	AEGCL	24	6	18	
25	Bornagar – Rangia	AEGCL	24	6	18	

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26	Rangia – Sisugram	AEGCL	24	6	18	
27	Sisugram - Kahilipara	AEGCL	24	6	18	
28	Jawaharnagar - Sarusajai	AEGCL	24	6	18	
29	Samaguri - Sonabil	AEGCL	24	6	18	
30	Sonabil – Depota	AEGCL	24	6	18	
31	Depota – Rowta	AEGCL	24	6	18	
32	Rowta – Sipajhar	AEGCL	24	6	18	
33	Sipajhar - Rangia	AEGCL	24	6	18	
34	Sishugram - Rangia	AEGCL	24	6	18	
35	Sishugram- Kahilipara	AEGCL	24	6	18	

Members may please discuss.

C.6 Allocation of fibers on upcoming links for Guwahati Islanding Scheme:

Sl. No	Name of the link	Owner Utility	Total no. of fiber pairs	Name of the Scheme	Target	Remarks
1	Bongaigaon(PG) - Balipara	POWERGRID	48	NER-FO	2023	
2	Balipara - Misa	POWERGRID	48	NER-FO	2023	
3	NEHU – NERLDC	POWERGRID	48	Reliable Communication	2023	
4	Bongaigaon(AS) – Salakati(PG)	POWERGRID	48	NER-FO	2023	
5	Khliehriat(ME) - NEHU	MePTCL	48	NERPSIP	2022	

Respective utilities may please provide the confirmation of fiber allotment as and when the link is commissioned and also intimate the exact commissioning schedule.

Members may please discuss.

C.7 New OPGW links required for Guwahati Islanding Scheme:

The following lines are having no OFC connectivity and it is proposed for laying of OPGW (with terminal equipments, accessories) for the Islanding Scheme:

Sl. No	Name of the line/line section	Owner Utility	Proposed Total no. of fiber pairs	Remarks
1	220kV Bongaigaon(PG) – Salakati(PG)	POWERGRID	48	
2	220kV Sarusajai – Samaguri LILO at Jawaharnagar(LILO portion only)	AEGCL	48	
3	220kV Sarusajai – Samaguri LILO at Sonapur(LILO portion only)	AEGCL	48	
4	220kV Karbi Langpi - Sarusajai	AEGCL	48	
5	132kV Kamakhya - Sishugram	AEGCL	48	
6	132kV Kamakhya - Sausajai	AEGCL	48	
7	132kV Dispur - Kahilipara	AEGCL	48	
8	132kV Dispur - Chandrapur	AEGCL	48	
9	132kV Chandrapur - Sonapur	AEGCL	48	
10	132kV Narengi – Kahilipara	AEGCL	48	

Members may please discuss.

D. ITEMS FOR STATUS

D.1. Status of U-NMS:

In 20th TCC/NERPC meeting U-NMS was approved for the region under tariff mechanism with the following (not exclusive) features:

- U-NMS shall acquire data directly from existing NMS and also from nodes not integrated with existing NMS for all ISTS and all other Utility communication links. The U-NMS will acquire information of communication network of ISTS, State Utility and cross border communication system. The UNMS application shall facilitate for controlling, managing, operation, fault detection, restoration, and maintenance of ISTS and State communication system
- U-NMS configuration proposed at Regional and National levels shall provide graphical representation of topology of nodes and links, discovery of Network Elements and sub-systems, Facility of end to end provisioning of bandwidth centrally, Fast fault resolution and reduced restoration times, Proactive maintenance and Customer support and working out channel availability etc., apart from analytics for predictive maintenance etc
- U-NMS Project is conceived to facilitate Centralized Supervision for ISTS Communication in compliance to CERC Regulation for Communication System notified in May'17 as present NMSs do not have visibility of entire network and are not capable to support the requirements envisaged for ISTS Communication Minutes of 20th TCC & 20th NERPC Meeting held on 12th September, 2019 at Guwahati 34 in CERC Regulation. Proposed U-NMS configuration at regional level shall also consider integration of NMSs of State Communication Network to facilitate STUs monitor and maintain their network with the help of Work Station provided at their location having direct access of Regional Server.

NERTS-POWERGRID may please update the present status and confirm whether in event of one of the State-NMS being down, the links reporting to the State-NMS shall continue to report to the U-NMS.

NERTS-POWERGRID may please intimate the status.

D.2. Project status of NERPSIP and Arunachal Pradesh Comprehensive Scheme:

In the Special Meeting held on 13.05.2022 the detailed status as intimated by NERPSIP is given below:

Status of Communication works i.r.o. Assam under NERPSIP

S l N o	Line details		OPG W strin ging	FOTE end -1 status	FOTE end -2 status	DCPS end-1 status	DCPS end-2	Commis sioning	Rem arks
I	ASSAM STATE								
1	Samuguri SS (Ex)	Sankardev Nagar (Ex)	Strin ging comp leted	Supplie d but not installe d.	Supplie d but not installe d.	Will be complet ed by June 2022	Will be compl eted by	Jun-22	

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				Target Date: June-22	Target Date: June-22		June 2022		
2	132kV Sonabil (Ex)	132kV Balipara (Ex)	Stringing completed	Supplied but not installed. Target Date: June-22	Supplied but not installed. Target Month June - 22	Installed battery commissioned	Will be completed by June 2022	Jun-22	
3	132kV Rangia (Ex)	132kV Rowta (Ex)	Aug-22	Supplied but not installed. Target Date: Aug-22	Supplied but not installed. Target Date: Aug-22	Battery bank Supply in Aug-2022.	Battery bank Supply in Aug-2022.	Aug-22	Tower schedule to be obtained from AEG CL
4	132kV Tinsukia (Ex)	132kV Rupai (Ex)	Jul-22	Supplied but not installed. Target Date: Jul-22	Supplied but not installed. Target Date: Jul-22	Battery bank Supply in July 2022	Battery bank Supply in July 2022	Jul-22	
5	132kV N Lakhimpur (Ex)	132kV Dhemaji (Ex)	Stringing completed	Installed and commissioned. SAT is pending.	Installed and commissioned. SAT is pending.	DCPS supply will be done in Jul 2022	Completed	Commissioning done, However DCPS to be installed at N Lakhimpur end and SAT to be completed.	
6	132kV Gohpur (Ex)	132kV N Lakhimpur (Ex)	Stringing completed	Installed and commissioned. SAT is pending.	Installed and commissioned. SAT is pending.	DCPS supply will be done in Jul 2022	DCPS supply will be done in Jul 2022	Commissioning done, However DCPS to be installed at N Lakhimpur end and SAT to be completed.	
7	132kV Mariani (Ex)	132kV Golaghat (Ex)	Stringing completed	Supplied but not installed	Supplied but not installed	Will be completed by July	Will be completed	Jun-22	

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				d. Target Date: July-22	d. Target Date: July-22	2022	by June 2022		
8	132kV Golaghat (Ex)	132kV Bokajan (Ex)	Jun- 22	Supplie d but not installe d. Target Date: July-22	Supplie d but not installe d. Target Date: July-22	Supply and installa tion will be complet ed by Jul 2022.	Suppl y and install ation will be comple ted by Jul 2022.	Jul-22	
9	132kV Jorhat (Ex)	132kV Mariani(ex)	Jul- 22	Supplie d but not installe d. Target Date: Jul-22	Supplie d but not installe d. Target Date: Jul-22	Supply and installa tion will be complet ed by Jul 2022.	Suppl y and install ation will be comple ted by Jul 2022.	Jul-22	
1 0	132kV Nazira(Ex)	132kV Jorhat (Ex)	Strin ging comp leted	Supplie d but not installe d. Target Date: June-22	Supplie d but not installe d. Target Date: June-22	Battery bank is yet to supply, supply of battery will be informe d within 5 days. Only charger is supplie d	Batter y bank is yet to suppl y, suppl y of batter y will be infor med within 5 days. Only charg er is supplie d	Jun-22	
1 1	LILO of Rangia- Kamakhya Line	Kahilipara at	Aug- 22	Supplie d but not installe d. Target Date: Aug-22	Supplie d but not installe d. Target Date: Aug-22	Supply and installa tion will be complet ed by Aug 2022.	Suppl y and install ation will be comple ted by Aug 2022.	Aug-22	
1 2	LILO of Rangia- Kamalpur Line	Kahilipara at	Aug- 22	Supplie d but not installe d. Target Date: Aug-22	Supplie d but not installe d. Target Date: Aug-22	Supply and installa tion will be complet ed by Aug 2022.	Suppl y and install ation will be comple ted by Aug	Aug-22	

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						2022.	
13	SLDC	Jun-22	Supplied and installed	Not applicable	DCPS will be supplied and installed by June 2022	Not applicable	Jun-22

Further in the meeting it was decided that AEGCL & POWERGRID would carry out a survey for the port availability at MUX level for integration with existing network of AEGCL/ULDC respectively.

NERPSIP may please update along with the status of the other states.

POWERGRID may please update the status.

D.3. Status of FO works under different projects:

S. No.	Link name	Utilities to respond	As per 22 nd NETeST
I. Fiber Optic Expansion Projects			
Tripura State Sector			
1	132kV Rokhia (GBPP) - Surjamani Nagar (TSECL)	TSECL	<ul style="list-style-type: none"> Due to delay in line construction of 132 kV SM Nagar-Rokhia D/C and 132 kV SM Nagar – Monarchak the OPGW laying will be deleted from NERFO Expansion scope and will be proposed in NER Reliable communication. Action: TSECL and POWERGRID-NERTS may update the status.
2	132kV Surjamani Nagar (TSECL) - Monarchak (NEEPCO)		
Meghalaya State Sector			
3	132kV NEHU - NEIGRIMS	POWERGRID-NERTS	<ul style="list-style-type: none"> Stringing of OPGW is completed in February 2022. Laying of approach cable is pending which will be completed by March 2022. Action: POWERGRID-NERTS may update the status.
Central Sector			
4	400kV Bongaigaon (PG) - 220kV Salakati - 220kV BTPS	POWERGRID-NERTS	<ul style="list-style-type: none"> Delayed due to RoW. Target date: June 2022. Action: POWERGRID-NERTS may update the status.
5	400kV Mirza (Azara) - Byrnihat		

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6	400kV Silchar – Palatana		<ul style="list-style-type: none"> ▪ Stringing for 178km out of 248km completed. ▪ Target date is June 2022. ▪ Action: POWERGRID-NERTS may update the status.
7	132kV Pare – Chimpu		<ul style="list-style-type: none"> ▪ Work for stringing has initiated on 17th March 2022 and expected date for completion of link is May 2022. ▪ Action: POWERGRID-NERTS may update the status.
Manipur State Sector			
8	132kV Imphal (State) – Karong	MSPCL and POWERGRID	<ul style="list-style-type: none"> ▪ MSPCL informed that diversion work is not completed due to RoW issue in the line. MSPCL requested NERTS to lay the OPGW on the existing line and gave permission to carry out the work. ▪ Target date for completion of link is June-2022. ▪ Action: POWERGRID-NERTS may update the status.
Mizoram State Sector			
9	Aizawl Zemabawk II –	PE &D and POWERGRID-NERTS	Action: PE&D and POWERGRID-NERTS may update the status.

Members may please update the status.

D.4. Status and details of OPGW projects approved in 17th TCC/RPC meeting:

A. **Additional Communication Scheme:** Status as per 22nd NETeST meeting attached as Annexure-D.4(a)

Sl. No.	Lines	Target date	OPGW Stringing	Equipment Installation
1.	132 kV Silchar - Hailakandi (Part of line)	December 2021.	Stringing Completed. Approach cable laying pending.	Material Delivered
2.	132 kV Roing – Pasighat	December 2021.	--	Material Delivered
3.	132 kV Roing – Tezu	December 2021.	Stringing of 27/73 km is completed	Material Delivered
4.	132 kV Tezu – Namsai	December 2021.	Stringing of 82/96 km is completed	Material Delivered
5.	132 kV Tuirial – Kolasib	December 2021.	--	Material Delivered

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6.	400 kV Balipara – Kameng	December 2021.	Completed	Installed. DC supply Pending.
7.	400 kV Bongaigoan – Killing (Byrnihat)	December 2021.	Stringing of 198/202 km. Remaining 4km stringing will be completed after line diversion work is completed.	Material Delivered
8.	400 kV Silchar – Killing (Byrnihat)	December 2021.	Stringing of 43.3/216 km is completed	Material Delivered

B. Reliable Communication Scheme:

- a. POWERGRID has informed that addition of 132kV Longlak-Mokokchung, 132kV Umiam Stg-I –Stg-II, 132kV Umiam Stg-III to Umiam Stg-IV, 132kV Khliehriat –Mustem, 132kV NEHU- Mawlyndep and 132kV EPIP – Killing will be put up in 22nd NERPC/TCC agenda for approval.

POWERGRID-NERTS is requested to provide updated list of links which will be coming under the project after inclusion of new links.

List of links are attached as **Annexure-D.4(b)**.

Members may please update the status.

D.5. Selected cases of Sub-stations for rectification of corresponding data/communication related issues:

Utility	Station	Requirement	Remarks
NEEPCO	Ranganadi HEP	<ul style="list-style-type: none"> Second Channel via Pare-Chimpu 	<ul style="list-style-type: none"> It was decided that second channel for Ranganadi will be provided once 132kV Pare-Chimpu Fiber-Optic link is completed. which is expected to be completed by May-2022. BNC-Ranganadi link is also now available as per latest development. Thus, this link can also be used for second channel of RHEP. Action: NEEPCO and NERTS may update the status.
		<ul style="list-style-type: none"> Unit side (LV of GT) data needs to 	<ul style="list-style-type: none"> NEEPCO informed that OEM will be visiting the

Utility	Station	Requirement	Remarks
		telemeter from site.	plant in March 2022 and associated works will be completed by April 2022. ▪Action: NEEPCO may update the status.
	Doyang	<ul style="list-style-type: none"> • After changing/upgradation work of Current Transformer (CT) of all feeders, the real-time SCADA data is reporting wrong. The same modification is required in transducer of RTU. • Unit side (LV of GT) data needs to be telemetered. 	<ul style="list-style-type: none"> ▪NEEPCO informed that OEM will be visiting the plant in March 2022 and associated works will be completed by April 2022. ▪Action: NEEPCO may update the status.
OTPC	Palatana	<ul style="list-style-type: none"> • Unit side (LV of GT) data needs to be telemetered. 	<ul style="list-style-type: none"> ▪OTPC intimated that all works will be completed by June'2022. ▪Action: OTPC may update the status.

STUs may please update the status.

D.6 VSAT established at Roing, Tezu and Namsai stations in Arunachal Pradesh:

POWERGRID-NERTS mentioned that the issue of non-reporting of data in Namsai station was due to software and gateway issue in SCADA Gateway at site which was expected to be resolved by March 2022. The present status of data availability from afore-mentioned stations is stated in table below.

Sl. No.	Name of Station	Communication link	Telemetry status
1	Roing	Healthy	Intermittent due to gateway issue at site.
2	Tezu	Healthy	Healthy.
3	Namsai	Healthy	Intermittent due to SCADA Gateway software issues at site.

NERTS may please intimate the status.

D.7 Integration of Dikshi HEP real time data and pending Voice communication:

M/s Devi Energies informed that due to bandwidth and some technical limitations in VSAT link availed by it, the alternate arrangement for PLCC system has been made which will have provision for speech/data/protection. It was mentioned that installation and commissioning of PLCC will be completed by May 2021.

As per 21stNETeST meeting, NERPC informed the forum that M/s Devi Energies has committed via mail that they will complete the work by January-2022. Further, the forum decided that if M/s Devi Energies are not able to complete the work by January-2022, DoP, Arunachal Pradesh should take strong action against M/s Devi Energies which may include restricting their generation till work is completed.

As per 22nd NETeST meeting, M/s Devi Energies intimated to the forum through mail that all associated works will be completed by June 2022.

DoP Ar. Pradesh may please intimate the status.

D.8 Automatic Generation Control (AGC) in Indian Grid:

Station Name	Background	Status as per 22ndNETeST Meeting
BgTPP	Unit-2 needs to be integrated.	NTPC may update the status.
AGBPP (Kathalguri)	OEM visits was envisaged as per following – <ul style="list-style-type: none"> • Some units are of Mitsubishi make which require team from Japan to visit plant. • Other units are of GE-make and BHEL-make 	<ul style="list-style-type: none"> ▪ NEEPCO informed the forum that OEMs, GE-BHEL and Mitsubishi, submitted the quotation for necessary works. Thus, NEEPCO is planning for negotiation with OEM and will be able to update the status in the next NETeST meeting. ▪ Action: NEEPCO may update the status.
Kopili	NEEPCO may update the status	<ul style="list-style-type: none"> ▪ Plant is under R&M, and AGC package is considered under R&M also which is expected to be completed by 2023. ▪ Action: NEEPCO may update the status.
Kopili II	NEEPCO may update the status	<ul style="list-style-type: none"> ▪ Since plant has not completed the life cycle, the whole DCS will need to be replaced with new DCS along with AGC system. The R&M of Kopili II is pending in 2040, which is quite longer duration. Thus, forum requested

		<p>NEEPCO to go ahead with AGC implementation without waiting further.</p> <p>▪ Action: NEEPCO may update the status</p>
Doyang	NEEPCO may update the status	<p>▪ Since plant has not completed the life cycle, the whole DCS will need to be replaced with new DCS along with AGC system. The R&M of Kopili II is pending in 2040, which is quite longer duration. Thus, forum requested NEEPCO to go ahead with AGC implementation without waiting further.</p> <p>▪ Action: NEEPCO may update the status</p>
Khandong	NEEPCO may update the status	<p>▪ Plant will undergo R&M in 2024, and AGC package is considered under R&M also which is expected to be completed by 2024.</p> <p>▪ Action: NEEPCO may update the status</p>

NTPC/NEEPCO may please intimate the status.

D.9 RGMO/FGMO status:

It was discussed that stations may give target dates for respective plants as the requirements are long pending and COVID restriction are relaxed across the nation. Thus, the discussion is tabulated below:

Station name	RGMO status	FGMO status
Kopili Extension (1 unit)	<p>▪ LoA placed on 28th February 2022, work is expected to start by April 2022.</p> <p>▪ Action: NEEPCO may update the status.</p>	<p>▪ LoA placed on 28th February 2022, work is expected to start by April 2022.</p> <p>▪ Action: NEEPCO may update the status.</p>
Ranganadi (3 units)	<p>▪ NEEPCO said OEM will be visiting the plant in March 2022 and associate works will be completed by April 2022.</p> <p>▪ Action: NEEPCO may update the status.</p>	<p>▪ NEEPCO said OEM will be visiting the plant in March 2022 and associate works will be completed by April 2022.</p> <p>▪ Action: NEEPCO may update the status.</p>
OTPC (4 units)	<p>▪ OTPC intimated that all works will be completed</p>	<p>▪ OTPC intimated that all works will be completed</p>

	by June'2022. ▪ Action: OTPC may update the status.	by June'2022. ▪ Action: OTPC may update the status.
DHEP	▪ NEEPCO informed that all materials have reached the site and work is expected to be complete by April 2022. ▪ Action: NEEPCO may update the status.	▪ NEEPCO informed that all materials have reached the site and work is expected to be complete by April 2022. ▪ Action: NEEPCO may update the status.

The NERLDC has shared Input-Output (I/O) list related to RGMO and FGMO points to all power plants as and when the utilities are ready to provide the status.

NEEPCO/OTPC may please intimate the status.

D.10 Pending issues of State Utilities of NER:

The utility-wise discussion is tabulated below:

Utility	Pending issues	Remarks
Assam	SAS upgradation related works may be updated.	<ul style="list-style-type: none"> • AEGCL informed that the project is expected to be completed by September 2022. • Action: Assam-SLDC may update the status.
Tripura	Dhalabil	<ul style="list-style-type: none"> • Dhalabil FO is under diversion due to LILO works. • Ambassa will be restored over GPRS. Ambassa is already have FO infrastructure via PK Bari (Indigrid) and PK Bari (state) this should be considered for making telemetry available. • Sabroom and Satchand will be restored over GPRS. • Action: TSECL may update the status.
	Ambassa	
	Sabroom, Satchand	
	13 stations not covered under NER-FO expansion project	
Meghalaya	Procurement of DI card from PSDF is pending.	<ul style="list-style-type: none"> • MePTCL will propose procurement of new RTUs under DPR referred in Agenda 13. • Action: MePTCL may update the status.
Manipur	Churachandpur, Kongba and Kakching	<ul style="list-style-type: none"> • Cable laying and other works are in progress at site. • Once completed LoA to M/s GE will be placed for database work. • Action: MSPCL may update the status.
	Elangkhangpokpi, Thanlon, 132kV Thoubal	<ul style="list-style-type: none"> • MSPCL informed that RTUs are being proposed under DPR prepared by NERPC for the project of deployment of new RTUs in NER. • Action: MSPCL may update the status.
Nagaland	Meluri	<ul style="list-style-type: none"> • DoP-Nagaland will propose procurement of RTU under PSDF fund. • Action: DoP-Nagaland may update the

		status.
	Kiphire	<ul style="list-style-type: none"> • PLCC link Kiphire-Meluri-Kohima is under outage since the Meluri-Kohima line was out due to tower collapse. However, line was restored long back but the PLCC is yet to be restored. • As Kiphire is only station connected with LHEP, which is only generator of state, real time data of same is important to monitor state generation. • Action: DoP-Nagaland may update the status.
	LHEP	<ul style="list-style-type: none"> • DoP-Nagaland may update the forum for non-reporting of LHEP, which is only generator of state.
Mizoram	Luangmual	<ul style="list-style-type: none"> • PE&D, Mizoram will investigate the matter for restoration of GPRS connectivity. • Luangmual is supposed to connect with Aizawl (PG) over OPGW also. • Action: PE&D Mizoram may update the status.
	Zuangtui	<ul style="list-style-type: none"> • FO link has been completed, however RTU data is reporting partially. • Action: PE&D Mizoram may update the status.
	Kolasib	<ul style="list-style-type: none"> • Communication link is completed and RTU is reporting partially. • Action: PE&D Mizoram may update the status.
	Saitual, Khawzawl, Champhai, Serchhip, Lunglei	<ul style="list-style-type: none"> • No communication link and RTU available for stations.
Arunachal Pradesh	VSAT installation	<ul style="list-style-type: none"> • Commissioning of VSAT Communication will be commencing in March 2022. • Action: DoP, Arunachal Pradesh may update the status.

State utilities may please intimate the status.

D.11 Feasibility to connect Lekhi Substation over Fiber-Optic Network:

NERTS requested the forum to divert the material of 132kV Surjamani Nagar (TSECL) - Monarchak (NEEPCO) or 132kV Rokhia (GBPP) - Surjamani Nagar (TSECL) to Lekhi S/S, but NERPC informed that proposal may be kept on hold as NERPC will take up the matter with TSECL for completion of the above-mentioned links.

As per 22nd NETeST meeting, it was decided that due to delay in line construction of 132kV SM Nagar-Rokhia D/C and 132kV SM Nagar – Monarchak, the OPGW laying activities will be deleted from NER-FO Expansion project scope and will be

Agenda for 23rd NETeST Meeting to be held on 22nd July, 2022 included in NER Reliable communication scheme after getting request-in-writing from TSECL. Thus, end equipment (FOTE) of 132kV Rokhia station (TSECL) will be diverted to 132kV Lekhi S/s for terminating the fiber-optic at 132kV Lekhi station subject to confirmation of NERPSIP as equipment are under its ownership.

NERTS may please intimate the status.

D.12 Wrong status of Isolators and CB status at 132kV SM Nagar S/S:

TSECL requested NERTS to rectify the issue of CMR for the 132 kV SM Nagar – Comilla Line 1 and 2; 132 kV Palatana – SM Nagar line in SM Nagar station as the above lines are maintained by NERTS itself. TSECL will rectify the issue of all other bays in coordination with GE. A summary is tabulated below:

Sl. No.	Name of the bay	Status
1.	Comilla Bay - 1	Rectified
2.	Comilla Bay - 2	Rectified
3.	Palatana Line	Line Isolator status is reporting wrong value.
4.	Bus Coupler	Isolator status is reporting wrong value.
5.	SM Nagar (Indigrid) Line	Rectified
6.	BJ Nagar Line	Isolator status is reporting wrong value.
7.	Agartala Line-1	Isolator status is reporting wrong value.
8.	Agartala Line-2	Isolator status is reporting wrong value.
9.	132/33 kV ICT - 1	Isolator status is not reporting.
10.	132/33 kV ICT - 1	Isolator status is not reporting.

NERTS may please intimate the status

D.13 Integration of STERLITE owned OPGW with ULDC network:

Under NER Strengthening scheme, Indigrid (erstwhile Sterlite) has constructed following lines along with OPGW:

1. 132 kV R C Nagar – PK Bari (TSECL) D/c: Will provide additional path between Agartala and PK Bari
2. 400 kV Silchar – Misa D/c: Will provide additional link between south NER and North NER.
3. 132 kV BNC-Chimpu D/c: Will provide additional path between Arunachal Pradesh and rest of NER.
4. 132 kV PK Bari (TSECL) - PK Bari (IGT): Will provide secondary path for Indigrid Stations.

Feasibility to connect the above links with existing ULDC network needsto be explored for which it was requested to POWERGRID-NERTS and Indigrid to explore the possibility of utilization of the link as alternate path.

The status as per 22nd NETeST meeting is given below:

Sl. No.	Description	As per 22nd NETeST Meeting
1.	132 kV RC Nagar – PK Bari (TSECL)	<ul style="list-style-type: none"> ▪ Indigrid will hand-over six (06) nos. of fibers to NERTSULDC to be used till FODB at both ends. ▪ NERTS-ULDC will integrate the fibers with existing SDH/PDH of ULDC. ▪ Action: Indigrid and NERTS-ULDC may update the status.
2.	400 kV Silchar-Misa D/C	<ul style="list-style-type: none"> ▪ Indigrid will hand-over six (06) number of fibers to NERTS-ULDC till FODB at both ends. ▪ NERTS-ULDC will integrate the fibers with existing SDH/PDH of ULDC. Further, NERTS will use amplifier as the link length is 178 kms; for which Amplifier will be provided & installed by NERTS. ▪ Action: Indigrid and NERTS-ULDC may update the status.
3.	132 kV BNC – Chimpu D/C	<ul style="list-style-type: none"> ▪ Indigrid will hand-over six (06) number of fibers to NERTS-ULDC till FODB at both ends. ▪ NERTS will integrate the fibers with existing SDH/PDH of ULDC. ▪ Action: Indigrid and NERTS-ULDC may update the status.
4.	132 kV PK Bari (TSECL) - PK Bari (IGT)	<ul style="list-style-type: none"> ▪ As submitted in forum, the fiber as well as the end equipment of the said link belongs to TSECL. ▪ NERLDC requested Indigrid and TSECL to submit the feasibility to establish a connection over the said link which was agreed by the respective utilities. ▪ Action: Indigrid and TSECL may update the status.

Members may please discuss.

D.14 Non-reporting of telemetry data of APGCL owned generating stations:

The status of telemetry data of generating stations owned by Assam Power Generation Corporation Limited is summarized in the table given below:

Sl. No.	Name of Generating Station	Status of Telemetry data
1.	LRPP (Lakwa Replacement Power Project)	<ul style="list-style-type: none"> • All digital data are reporting wrong. • 132/11 ICT 2 LV side data re not reporting. • Unit 6 data is not reporting.
2.	LTPS (Lakwa Thermal Power Station)	<ul style="list-style-type: none"> • All CB are reporting wrong status. • All Isolators are not reporting. • All HV side data of GTs are not reporting.

Sl. No.	Name of Generating Station	Status of Telemetry data
3.	NRPP (Namrup Replacement Power Project)	<ul style="list-style-type: none"> • All digital and analog data are not reporting for GTG.
4.	NTPS (Namrup Thermal Power Station)	<ul style="list-style-type: none"> • CB of unit 3 is reporting wrong status. • All Isolators are not reporting. • Analog data of Unit 6 is not reporting.
5.	Langpi Hydro Station	<ul style="list-style-type: none"> • All digital data associated with units are not reporting. • Analog data of transmission lines are not reporting.

In 22nd NETeST meeting, SLDC-Assam informed that APGCL is restoring the analog data in phase-1 and will restore digital data in next phase.

APGCL may please intimate the status.

Any other item:

Date and Venue of next NETeST

CYBER SECURITY MEASURES IMPLEMENTATION STATUS FOR NER SLDCs (AS ON 01.07.2022)

SN	Cyber Security Measures	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
1	Preparation and approval of Cyber Crisis Management Plan (CCMP) for SLDCs	Draft CCMP submitted to CERT-GO on 20.07.21. Revised CCMP after incorporation of comments from CERT-GO and based on new template is being prepared.	Final CCMP approved by CERT-In with comments for incorporation.	Final CCMP approved by CERT-In with comments for incorporation.	Final CCMP approved by CERT-In with comments for incorporation.	Final CCMP approved by CERT-In with comments for incorporation.	Final CCMP approved by CERT-In with comments for incorporation.	Final CCMP approved by CERT-In with comments for incorporation.
2	Implementation status of Information Security Management System (ISMS) i.e., ISO 27001 and certification audit for ISO-27001	Under Process	LOA has been placed for ISMS and VAPT of IT & OT systems and Stage1, Stage2 Audit has been completed (Stage 2 completed on 31.05.2022).	LOA issued to CDAC, Hyderabad on 3rd Nov'21 for Implementation of ISMS (ISO-27001). Work is going on for implementation of ISMS	A two stage certification audit for ISO/IEC 27001:2013 was carried out by M/S DBS Certification Pvt Ltd, New Delhi for Meghalaya SLDC on the 11th May 2022 and 17th May 2022. The process for award of certification is expected after one month.	Budgetary offers had been collected from various CERT-IN empanelled vendors and were processed for approval of Management. They have asked for resubmission of the proposal. Now, DPR has been prepared and proposal has been submitted to Management for approving C-DAC on nomination basis. Approval awaited.	Work Order placed. M/S AKS visited SLDC, Nagaland on 24th -25th May 2022. Some policies and recommendation are to be followed for ISMS implementation.	LOA has been placed for Developing ISO 27001:2013 compliant ISMS policy, Certification and VAPT of IT Infrastructures at Tripura SLDC with CDAC on 02.05.2022 for unconditional acceptance. Following this, CDAC has visited Tripura SLDC on 01.06.2022 for face-to-face discussion. Revised LOA is under process.
3	Status of VA-PT on OT systems	Done once for FY 21-22 as part of SCADA Contract in Jan'22.	Done for FY 21-22 as a part of the AMC of SCADA/EMS project awarded to M/s GE T&D India Ltd. SLDC will be going for ISMS and VA-PT jointly for AEGCL.	Phase -1 of VAPT Audit for IT and OT systems of SLDC, Manipur was conducted by CDAC-Hyderabad from 21.12.2021 to 24.12.2021. VAPT for OT systems of SLDC by ASK Technology Services (part of GE Scada) from 12-15 Jan 2022. The VAPT was completed and the final report was generated on 6th April 2022. ☺	Mandatory Cyber Audit by GE has been completed for URTDSM system and SCADA system in Aug'21 and Jan'22 respectively. The Audit for OT and IT systems by C-DAC has been completed on April 2022.	Done twice for FY 21-22 as part of SCADA Contract on Apr'21 & Jan'22.	(1) Done once for FY 21-22 as part of SCADA Contract by OEM in Jan'22. (2) Work Order placed. M/s AKS Information Technology Services Pvt. Ltd, Noida will carry out the VA-PT on OT System.	Done twice for FY 21-22 as part of SCADA Contract on Apr'21 & Jan'22.

CYBER SECURITY MEASURES IMPLEMENTATION STATUS FOR NER SLDCs (AS ON 01.07.2022)

SN	Cyber Security Measures	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
4	Status of VA-PT on IT systems	Under Process	Preliminary VA of the IT systems has been done in May 2022. Reports are awaited.	Phase -1 of Cyber Security Audit for IT systems of SLDC, Manipur was conducted from 21.12.2021 to 24.12.2021 by CDAC-Hyderabad.	LOA issued to CDAC. Phase-1 of Cyber Security Audit by C-DAC has been completed in April 2022.	Budgetary offers had been collected from various CERT-IN empanelled vendors and were processed for approval of Management. They have asked for resubmission of the proposal. Now, DPR has been prepared and proposal has been submitted to Management for approving C-DAC on nomination basis. Approval awaited.	M/s AKS Information Technology Services Pvt. Ltd, Noida will carry out the VA-PT on IT systems as and when some policies are in place.	LOA has been placed for Developing ISO 27001:2013 compliant ISMS policy, Certification and VAPT of IT Infrastructures at Tripura SLDC with CDAC on 02.05.2022 for unconditional acceptance. Following this, CDAC has visited Tripura SLDC on 01.06.2022 for face-to-face discussion. Revised LOA is processing.
5	Notification of IT & OT systems at SLDCs as Critical Information Infrastructure (CII)	CII documents had been submitted to NCIIPC on 12/04/2022. Comments received from NCIIPC on 22.04.2022. Joint meeting involving SLDC, NCIIPC & NERLDC was carried out on 02.06.2022. Arunachal Pradesh SLDC has submitted the revised CII documents to NCIIPC on 23.06.2022.	Identified Systems of SLDC, Assam have been declared as CII by NCIIPC. Notification of CII as Protected Systems shall be issued by State Govt.	CII documents submitted to NCIIPC on 18/08/21. 1st Review meeting with East Zone held on 23/08/21. Last meeting held on 13/04/2022. Revised documents submitted on 23rd Mar'22. Comments received from NCIIPC on 22nd Apr'22. Joint meeting involving SLDC, NCIIPC & NERLDC was carried out on 02.06.2022. Final revised document shall be submitted soon.	Identified Systems of SLDC, Meghalaya have been declared as CII by NCIIPC. Notification of CII as Protected Systems has been issued by State Govt. on 18.04.2022.	CII documents submitted to NCIIPC for review on 09.11.21 email id coord.power@nciipc.gov.in. Email forwarded to us for record. Comments received from NCIIPC on 17th May'22. Joint meeting involving SLDC, NCIIPC & NERLDC was carried out on 02.06.2022. The revised CII documents have been submitted to NCIIPC on 06.06.2022.	Identified Systems of SLDC, Nagaland have been declared as CII by NCIIPC. Notification of CII as Protected Systems shall be issued by State Govt.	CII documents submitted to NCIIPC on 06/04/21. Has been resent to the email id coord.power@nciipc.gov.in on 19.07.21. First round of Review Meetings was carried out on 11th & 12th Aug'21. As advised modified CII document has been sent from official email ID of CISO-SLDC, TSECL (gm-transmission@tsecl.in), on 08.06.2022. However, NCIIPC has asked for resubmission after modifications.
6	Compliance of advisories from CERT-In, NCIIPC & other statutory agencies.		Being complied	Being complied	Being complied	Being complied	Being complied	Being complied
i	To be updated in Portal for monthly compliance by 10th of every month.	Not updated in the portal	Being Updated in Portal	Being Updated in Portal	Being Updated in Portal	Being Updated in Portal	Being Updated in Portal	Being Updated in Portal
ii	Compliance of advisories from Cyber Swachhta Kendra (CSK)	Being Resolved. No new alerts.	Being Resolved. No new alerts.	Being Resolved. No new alerts.	Being Resolved. No new alerts.	Being Resolved. No new alerts.	Being Resolved. No new alerts.	Being Resolved. No new alerts.
7	Status of Nomination of CISO:	Done	Done	Done	Done	Done	Done	Done

CYBER SECURITY MEASURES IMPLEMENTATION STATUS FOR NER SLDCs (AS ON 01.07.2022)

SN	Cyber Security Measures	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
	Alternate CISO (if any):	Yes	Yes	Yes	Yes	Yes	In the process	Yes
8	Cyber Security Certification:	No	No	No	No	No	No	No
9	IT - OT Integration:	Not present	Not present	Not present	Not present	Not present	Not present	Not present

Sl. No.	Name of the link	Length of OPGW	Status as in 17th RPC/TCC	Status as in 18th RPC/TCC	Status in 18th NETeST Meeting	Status in 19th NETeST Meeting	Status as in 21st NETeST Meeting		Status as in 22nd NETeST Meeting	
							OPGW Status	End Equipment Status	OPGW Status	End Equipment Status
1	132 kV Silchar - Hailakandi (Part of line)	17 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Stringing work is under progress.	Work under progress	Stringing work is completed except approach cable laying	Equipment supplied and delivered at site except DCPS system.
2	132 kV Roing – Pasighat	103 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Material is delivered in the month of November 2021. OPGW stringing is yet to be started.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is under progress.	Equipment supplied and delivered at site except DCPS system.
3	132 kV Roing – Tezu	73 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Material is delivered in the month of November 2021. OPGW stringing is yet to be started.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is under progress.	Equipment supplied and delivered at site except DCPS system.
4	132 kV Tezu – Namsai	96 KM	NA	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Material is delivered in the month of November 2021. OPGW stringing is yet to be started.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is under progress.	Equipment supplied and delivered at site except DCPS system.
5	132 kV Tuirial – Kolasib	70 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Material is delivered in the month of November 2021. OPGW stringing is yet to be started.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is yet to start.	Equipment supplied and delivered at site except DCPS system.
6	400 kV Balipara – Kameng	75 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Completed.	SDH/PDH installed but DCPS (DC Power Supply) is yet to deliver.	Completed.	Equipment supplied and delivered at site except DCPS system.
7	400 kV Bongaigoan – Killing (Brynihat)	200 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Stringing work is completed except a small portion in which line is under diversion due to upcoming railway line. POWERGRID-NERTS will complete the stringing after diversion work is completed.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is completed for 198kms/202 kms, except a small portion in which line is under diversion due to upcoming railway line. POWERGRID-NERTS will complete the stringing after diversion work is completed.	Material is delivered in the month of November 2021. Installation is yet to be started.
8	400 kV Silchar – Killing (Brynihat)	217 KM	Approved	Approved	Supply of material hampered due to COVID19	Material yet to reach site. Target date: December'21	Material is delivered in the month of November 2021. OPGW stringing is yet to be started.	Material is delivered in the month of November 2021. Installation is yet to be started.	Stringing work is completed for 43 kms/216 kms	Material is delivered in the month of November 2021. Installation is yet to be started.

List of Links to be implemented for replacement of old FO under Reliable Communication Scheme in NER region

SN	FROM	TO	KM	18th RPC	18th NeTEST	19th NeTEST	20th NeTEST	21st NeTEST	22nd NeTEST
1	NEHU	Shillong UNDER GROUND FO	6.23	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
2	Khliehriat(MESEB)	Khliehriat(PGCIL)	7.791	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
3	Khliehriat	Khandong(PGCIL)	40.99	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
4	Khandong(PGCIL)	Kopliili(PGCIL)	11.191	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
5	Misa(PGCIL)	Kopliili(PGCIL)	73.186	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
6	Misa(PGCIL)	Balipara(PGCIL)	94.046	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
7	Misa(PGCIL)	Dimapur(PGCIL)	119.192	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
8	Badarpur(PGCIL)	Khliehriat(PGCIL)	73.183	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
9	Badarpur(PGCIL)	Kumarghat(PGCIL)	117.519	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
10	Agartala Gas(PGCIL)	Kumarghat(PGCIL)	99.817	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
11	Agartala(PGCIL)	Agartala Gas(PGCIL)	7.416	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
12	Dimapur (PGCIL)	Kohima(PGCIL)	59.8	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
13	Kohima(PGCIL)	Imphal(PGCIL)	105.64	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
Sub Total SC&C			816						

List of Links to be implemented new under Reliable Communication Scheme in NER region

S No	Name of Link	From	To	Voltage in KV	Length in Kms 17th TCC	Length in 18th TCC	Remarks	18th RPC	18th NeTEST	19th NeTEST	20th NeTEST	22nd NeTEST	
1	Mariani (new)- Misa II	Mariani (new)	Misa	400	223	223	No fibre	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
2	Bongaigaon III (quad)-Balipara	Bongaigaon	Balipara	400	309	309	Redundant path for reliable communication as line have Four ckts and Telecom fibre in ckt-I only.	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
3	Silchar - P. k. Bari	Silchar	P. k. Bari	400	127	0	Administrative Issue for Laying OPGW over Silchar-PK Bari. Connectivity achieved through Silchar-Palatana repeater at PK Bari	--	--	--	--	--	--
4	Misa - Kopli	Misa	kopli	220	73	73	Redundant path for reliable communication as Line have three ckts and OPGW in only one ckt.	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
5	Jiribam - Haflong	Jiribam	Haflong	132	101	101	Redundant path for reliable communication	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
6	Biswanath Chariali - Biswanath Chariali(Pavoi)	Biswanath Chariali	Pavoi	132	13	13	No fiber. Double ckt line	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
7	Tezu-Namsai	Tezu	Namsai	132	96	0	Shifted to Add Communication	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
8	Silchar - Byrnihat	Sichar	Byrnihat	132	217	0	Shifted to Add Communication	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
9	Balipara -Bongaigaon-1	Balipara	Bongaigaon	400	0	290	No ULDC fiber	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
10	Koplii Khandong-other circuit	kopli	khandong	132	0	12	redundant path	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
11	Khandong Khliehriat other circuit	khandong	khliehriat	132	0	43	redundant path	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
12	Other Line Future	CS1	CS2	400/220/132	0	95	Provision Kept for CS or redunadnat link as required for ring formation	Project Approved	Tender is yet to be awarded	Tender is yet to be awarded	Tender is yet to be awarded	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months	Tender awarded on 12-November-2021 to M/s Apar Industries with completion target of 24 Months
					Total	1158	1158						