

### 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

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### No. NERPC/TCC & NERPC/2025/4317-4394

Date: 10th, 03.2025

To:

- 1. Hon'ble Dy. Chief Minister & In-charge of Power, Govt. of Arunachal Pradesh, Itanagar 791 111
- 2. Hon'ble Minister of Power, Govt. of Manipur, Imphal 795 001
- 3. Hon'ble Minister of Power, Govt. of Meghalaya, Shillong 793001
- 4. Hon'ble Minister of Power, Govt. of Mizoram, Aizawl 796 001
- 5. Hon'ble Minister of Power, Govt. of Nagaland, Kohima 797001
- 6. Hon'ble Minister of Power, Govt. of Tripura, Agartala-799001
- 7. Member (GO&D), CEA, Sewa Bhavan, R. K. Puram, New Delhi 110 066
- 8. Commissioner & Secretary (Power), Govt. of Arunachal Pradesh, Itanagar 791 111
- 9. Principal Secretary (Power), Govt. of Assam, Dispur, Guwahati 781 006
- 10. Commissioner & Secretary (Power), Govt. of Manipur, Imphal 795001
- 11. Commissioner & Secretary (Power), Govt. of Meghalaya, Shillong 793001
- 12. Commissioner & Secretary (Power), Govt. of Mizoram, Aizawl 796001
- 13. Principal Secretary (Power), Govt. of Nagaland, Kohima 797001
- 14. Principal Secretary (Power), Govt. of Tripura, Agartala 799001
- 15. Chairman, APDCL/AEGCL/APGCL, Bijuli Bhavan, Paltan Bazar, Guwahati 781 001
- 16. CMD, MeECL (MePDCL/MePGCL/MePTCL), Lumjingshai, S. R. Road, Shillong 793 001
- 17. Chairman, TSECL, Agartala 799001
- 18. Managing Director, AEGCL, Bijuli Bhavan, Paltan Bazar, Guwahati 781 001
- 19. Managing Director, APDCL, Bijuli Bhavan, Paltan Bazar, Guwahati 781 001
- 20. Managing Director, APGCL, Bijuli Bhawan, Paltan Bazar, Guwahati 781 001
- 21. Managing Director, TSECL, Agartala 799001
- 22. Managing Director, TPGL, Agartala 799001
- 23. Chairman & Managing Director, NEEPCO Ltd., Lower New Colony, Shillong 793 003
- 24. Director (Technical), NHPC Ltd., NHPC Complex, Sector-33, Faridabad 121 003
- 25. Director (Finance), NTPC Ltd. NTPC Bhawan, Scope Complex, Institutional Area, Lodhi Road 03
- 26. Managing Director, OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi 110019
- 27. Director (Operation), POWERGRID, Saudamini, Plot No. 2, Sector-29, Gurgaon, Haryana 122 001
- 28. CEO, NVVNL, Core 5, 3rd Floor, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi 03
- 29. Chairman & Managing Director, PTC, NBCC Tower, 15 Bhikaji Cama, Place, New Delhi 110066
- 30. COO, CTUIL, Plot No.2, sector-29, Gurgaon, Haryana 122001
- 31. ED, NLDC, B/9, Qutub Institutional Area, Katwaria Sarai, New Delhi 16
- 32. ED, NERLDC, Dongtieh-Lower Nongrah, Lapalang, Shillong-793006
- 33. COO, ENICL, IndiGrid, Unit No. 101, Windsor, Off CST Road, Vidyanagari Marg, Kalina, Santacruz East, Mumbai 400 098

28वीं टी.सी.सी और 28वीं एन.ई.आर पावर समिति की बैठकों का कार्यवृत्त / Minutes of the 28th TCC & 28th NER Power Committee Meetings - Reg.

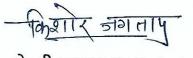
महोदय/महोदया.

कृपया 20 और 21 फ़रवरी, 2025 को होटल रेडिसन ब्लू, गुवाहाटी में आयोजित 28वीं टी.सी.सी और 28वीं एन.ई.आर पावर समिति की बैठकों के कार्यवृत्त अपनी जानकारी और आवश्यक कार्रवाई के लिए प्राप्त करें। यह एन.ई.आर.पी.सी की वेबसाइट: www.nerpc.gov.in पर भी उपलब्ध है।

Sir/Madam,

Please find enclosed herewith the minutes of the  $28^h$  TCC and  $28^{th}$  NER Power Committee meetings held on  $20^{th}$  and  $21^{st}$  February'2025 respectively at Hotel Radisson Blu, Guwahati for your kind information and necessary action. The same is also available on NERPC website: <a href="https://www.nerpc.gov.in">www.nerpc.gov.in</a>.

भवदीय/Yours faithfully,



(के. बी. जगताप /K. B. Jagtap) सदस्य सचिव/Member Secretary

Copy to:

1. PS to Chairman, NERPC and Hon'ble Power Minister, Govt. of Assam, Dispur.

### Copy for kind information

- 1. Director (Distribution), MePDCL, Lumjingshai, S.R. Road, Shillong 793 001
- 2. Director (Generation), MePGCL, Lumjingshai, S.R. Road, Shillong 793 001
- 3. Director (Transmission), MePTCL, Lumjingshai, S.R. Road, Shillong 793 001
- 4. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal 795 001
- 5. Managing Director, MSPDCL, Secure Office Bldg. Complex, Near 2nd MR Gate, Imphal 795 001
- 6. Director (Tech.), TSECL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
- 7. Director (Generation), TPGL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
- 8. GM (Transmission), TPTL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
- 9. Executive Director (O&M), NEEPCO Ltd., Lower New Colony, Shillong-793003.
- 10. Regional ED (East -II), NTPC, 3rd Floor, OLIC Bldg., Pl No- N.17/2, Nayapalli, Bhubaneswar-12
- 11. Executive Director, NERTS, PGCIL, Lapalang, Shillong 793006
- 12. Executive Director (O&M), NHPC, NHPC Office Complex, Faridabad-121003.
- 13. Executive Director (Marketing), PTC, NBCC Tower, 15 Bhikaji Cama, Place, New Delhi 110066
- 14. Chief Engineer (GM), CEA, 6th Floor, Sewa Bhawan, R.K.Puram New Delhi-110066.
- 15. Engineer-in-Chief, P&E Dept., Govt. of Mizoram, Aizawl 796 001
- 16. Engineer-in-Chief, Dept. of Power, Govt. of Nagaland, Kohima 797 001.
- 17. Chief Engineer (TPMZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar-1
- 18. Chief Engineer (WEZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar-1
- 19. Chief Engineer (EEZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar-1
- 20. Chief Engineer (Commercial) -cum- CEI, Deptt. of Power, Govt. of Arunachal Pradesh, Itanagar- 11
- 21. VP (Plant), OTPC, Palatana, P.O Udaipur, Gomati Dist., Tripura 799105
- 22. GM (BD), NVVNL, Core 5, 3rd Floor, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-3
- 23. CGM, AEGCL, Bijuli Bhawan, Paltan Bazar, Guwahati 781 001
- 24. CGM, APGCL, Bijuli Bhawan, Paltan Bazar, Guwahati 781 001
- 25. CGM, APDCL, Bijuli Bhawan, Paltan Bazar, Guwahati 781 001
- 26. CGM (LDC), SLDC Complex AEGCL, Kahelipara, Guwahati-781019.
- 27. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar-791111
- 28. Head of SLDC, Dept. of Power, Govt. of Manipur, Keishampat, Imphal-795001
- 29. Head of SLDC, MeECL, Lumjingshai, S.R. Road, Shillong-793001
- 30. Head of SLDC, P&E Dept., Govt. of Mizoram, Aizawl-796001
- 31. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur
- 32. Head of SLDC, TSECL, Agartala 799001
- 33. ED, NLDC, Grid-India, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi-16
- 34. Dy. COO, CTUIL, Plot No.2, Sector-29, Gurgaon, Haryana-122001
- 35. Executive Director, NERLDC, Grid-India (POSOCO), Lapalang, Shillong 793006
- 36. Head & VP- Regulatory & Contracts, ENICL, Windsor Building, Near Raheja Centre Point, Off CST Road, Kalina, Santacruz (East), Mumbai-400098

### Special Invitee(s):

- 1. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Calcutta 700 033
- 2. Member Secretary, NRPC, NRPC Complex, 18-A, S.J.S. Marg, Katwaria Sarai, New Delhi 16
- 3. Member Secretary, WRPC, MIDC Area, Marol, Andheri (E), Mumbai 400 093
- 4. Member Secretary, SRPC, 29 R.C. Cross Road, Bangalore 560 009
- 5. Chief Engineer (NPC), CEA, Sewa Bhavan, R. K. Puram, New Delhi 110066

### Non-member participants:

- 1. Head, Transmission, KMTL, 7th Floor, Fulcrum, Sahar Road, Andheri (E), Mumbai-400099
- 2. Head (O&M), MUML, 9<sup>th</sup> Floor, Udyog Vihar Phase 3, Gurugram, Harayana-122008
- 3. MD, NETC, 3<sup>rd</sup> Floor, DMRC Building, Dwarka Sector-21, New Delhi-77

सदस्य सचिव/Member Secretary



भारत सरकार

### **Government of India**

विद्युत मंत्रालय

## **Ministry of Power**

उत्तरपूर्वी क्षेत्रीय विद्युत समिति

**North Eastern Regional Power Committee** 

### **MINUTES**

**OF** 

### 28<sup>TH</sup> TCC & NERPC MEETINGs

(UNDER THE AEGIS OF PTC India Ltd)

Venue : Radisson Blu Hotel, GUWAHATI

Date (TCC & NERPC) : February 20<sup>th</sup> & 21<sup>st</sup>, 2025



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# ANIN ROB

### NORTH EASTERN REGIONAL POWER COMMITTEE

### Annexure List

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I & II	List of Participants of TCC & NERPC
III	Speech of Shri Prasanta Phukan, Hon'ble Power Minister, Govt. of Assam
IV	Speech of Shri A. T. Mondal, Hon'ble Power Minister, Govt. of Meghalaya
V	Keynote Address of Shri K. B. Jagtap, Member Secretary, NERPC
1.3	Action taken report on decisions taken in 27th TCC/NERPC meeting
2.4	Workforce Adequacy Guidelines for Load Despatch Centres (LDCs)
2.7	NHIDCL Diversion Impacting 132KV Jiribam-Loktak Line & 400KV D/C Silchar-Imphal Lines
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MINUTES OF 28<sup>TH</sup> TCC & NERPC MEETINGS HELD ON 20<sup>th</sup> & 21<sup>st</sup> FEBRUARY'2025

### 1. MEETING SCHEDULE, CONFIRMATION OF MINUTES & ATR

### 1.1. Meeting Schedule

SN	Meeting	Date	Time	Venue
1	тсс	20.02.2025	10:30hrs	Radisson Blu Hotel, Guwahati
2	NERPC	21.02.2025	11:00hrs	Radisson Blu Hotel, Guwahati

28<sup>th</sup> Meeting of the Technical Coordination Sub-Committee (TCC) and 28<sup>th</sup> Meeting of NER Power Committee were held on 20<sup>th</sup> & 21<sup>st</sup> February 2025 respectively at Guwahati. The meetings were hosted under the aegis of PTC India Ltd.

The list of participants is enclosed at Annexure - I & II.

### Proceedings of the 28th TCC Meeting

**Shri Harish Saran, Director (Marketing), PTC** in his welcome address, extended a warm welcome to all esteemed members to the 28<sup>th</sup> TCC meeting in the beautiful city of Guwahati. He wished all the delegates and participants a pleasant stay and productive deliberations during the meeting.

**Shri Bibhu Bhuyan, Chairman, TCC,** in his address, welcomed all the dignitaries and officials. He has submitted the achievement for the year 2024-25. Among the achievements he has highlighted the followings:

- (1) Better coordination between all the member states and Central PSUs.
- (2) Emphasizing the specific need of North East Region for gas-based power as gas-based power station can integrate intermittent RE power.

  In this connection, a high level ministerial committee from MoPNG has been properly briefed on 23<sup>rd</sup> Dec'24 about the requirement of gas based



power station and the concern of the NER states has been adequately represented.

(3) Reopening of PSDF funding for some of the critical pending issues of NE region, which was closed for entire country.

He also emphasized some of the work that was planned but can be taken up in next TCC meeting:

- (1) Co-ordination of all NER power plants for revamping and modernization to achieve the best out of each power plant for the region.
- (2) Inter-state Energy Highways to be strengthened with a master plan.
- (3) Construction of Green Corridor across North-eastern region for transportation and integration of RE power.

He also emphasized on resource adequacy for intra state region basis for emergency restoration services in challenging North East terrain. He also called for strategically deploying additional generating units to mitigate disruptions due to geo-political reasons.

In conclusion, he wished for meaningful deliberations in the 28<sup>th</sup> TCC meeting, aiming to enhance power infrastructure and operational resilience for the North Eastern region.

Sh. K.B. Jagtap, Member Secretary, NERPC, welcomed all dignitaries and members of TCC. He expressed gratitude to PTC India Limited for hosting the meeting and for ensuring a comfortable stay for all esteemed delegates of TCC forum. He highlighted the key achievements made from the last (27th TCC/NERPC) meeting. He informed the forum regarding the implementation of 5-Minute Interface Energy Meters with AMR System and request of NER for AMR implementation with PSDF funding as a special case for NER, with completion expected by 2027. He informed that special meeting on matter of DISCOM Operational Issues was held on 4th February 2025 (as per the 15th NPC decision) wherein matter of AT&C loss reduction, smart metering, and DISCOM modernization discussed. In the said meeting 30 GW rooftop solar integration under PM Surya Ghar Yojana was also deliberated. He also

informed that NERPC is set to host the 16<sup>th</sup> NPC meeting as per the roster system. He also highlighted that a Resource Adequacy Workshop was conducted by CEA to develop a long-term roadmap for NER and CERC Member (Technical) will hold a meeting on 24<sup>th</sup> February 2025 in Guwahati to discuss workforce adequacy, resource adequacy, and LGBR issues and urged active participation from SLDCs and DISCOMs.

He further outlined key agenda items for discussion, including workforce adequacy at SLDCs, SCADA-EMS upgradation, overloading in Manipur's 132 kV Loktak-Ningthoukhong line, N-1-1 reliability concerns in Upper Assam, and implementation of Islanding Schemes in NER.

He concluded by emphasizing the need for collaborative efforts to strengthen power infrastructure, improve grid security, and accelerate renewable energy integration in NER. He urged all stakeholders to expedite the execution of key projects and thanked PTC India Limited for their hospitality. He wished all participants a successful and productive meeting.

### Proceedings of the 28th NERPC Meeting

**Dr. Manoj Kumar Jhawar, CMD (Additional Charge), PTC** delivered the welcome address, extending a warm welcome to all delegates attending the 28<sup>th</sup> Meeting of NERPC in the beautiful city of Guwahati. He expressed his hope that all participants are having a comfortable stay at the venue.

Shri Prasanta Phukan, Hon'ble Power Minister, Govt. of Assam & Chairman, NERPC, welcomed all dignitaries to the 28<sup>th</sup> NERPC Meeting, emphasizing the need for power sector advancements in the North Eastern Region (NER). He highlighted Assam State installed capacity of 2037 MW, its heavy reliance on gas-based generation (31%), and its commitment to adding 5.719 GW of renewable energy by 2030.

He reflected on key deliberations from the 27<sup>th</sup> NERPC meeting, stressing SCADA-EMS modernization, Automatic Fault Analysis System (AFAS),

transmission upgradation, and capacity-building initiatives. He urged to expedite the implementation of critical projects, including Karbi Langpi HEP modernization and strengthening financial sustainability through PSDF utilization and clearing outstanding dues.

He also highlighted the proposal of 25 MW/100 MWh Battery Energy Storage System at Namrup Thermal Power Station from APGCL. He stated that the project shall be of immense benefit to the grid and can be used in emergency response systems for grid stability, ramp rate control and during black starts to provide quick energy at a good response rate.

He urged Arunachal Pradesh to assist Assam to develop one or two hydro projects like 225 MW Talong Londa Hydro Power Project. He also urged Hon'ble Power Minister of Meghalaya to resolve the issue of 55 MW Kulsi HEP for greater benefit of NE region in energy safeguard.

He called for enhancing grid reliability, strengthening communication & cybersecurity, and improving financial health of state utilities. He reiterated the need for collaborative efforts and policy reforms to ensure sustainable power development in NER and looked forward to meaningful deliberations.

His full speech is placed at **Annexure - III.** 

Shri A. T. Mondal, Hon'ble Power Minister of Meghalaya, welcomed all dignitaries at the 28th NERPC Meeting and expressed gratitude to NERPC and PTC for hosting the event. He expressed happiness that Meghalaya is producing totally clean and green energy, with 9 operational hydro projects (367.5 MW) producing 1200 MU annually and upcoming hydro projects totalling of 320 MW. He informed the forum that Meghalaya is taking various steps towards harnessing the potential of hydro power in the State which includes 6 MW Riangdo SHP and 210 Leshka Stage-II, 320 MW(through PVT Players) and 61 .70 MW State SHP. He stated that Meghalaya is always looking forward to improve transmission reliability, cyber security measures. He impressed upon improving of grid reliability and efficiency along with

introduction of modern technology with optimum investment. He stressed that financial assistance from CEA/MoP for intra-state and inter-state transmission projects will help the state to evacuate the power to consumer smoothly and urged NERPC forum to push for early funding approval for key projects.

He thanked all stakeholders and expressed confidence in NERPC's leadership in addressing Meghalaya's power sector challenges.

His full speech is placed at **Annexure – IV.** 

**Shri Hemant Jain, Member (Go&D), CEA,** emphasized the importance of logical and well-structured decision-making under the 28<sup>th</sup> TCC and the role of NERPC in addressing key power sector challenges. He highlighted that the onus of resolving major inter regional issues lies with CEA, ensuring that all concerns are handled in a coordinated manner.

He reiterated the necessity for timely completion of PSDF projects, noting that special dispensations for the North Eastern Region have been acknowledged by MoP. The support of the NERPC forum is essential in ensuring smooth implementation.

He acknowledged the unique challenges faced by the NER, especially due to mainly domestic consumers, making DISCOM-related issues more complex. The Central Government has taken note of these concerns and expects tangible improvements in the region's power infrastructure and financial health.

He urged utilities to avoid deferment of planned maintenance, as MoP has assured proactive measures to prevent power crises. Additionally, he commended Assam and Manipur for securing positions in the Top 15 DISCOM rankings, setting an example for other states to follow.

He highlighted the significance of the DRIPS portal, stressing the need for better monitoring and data reporting for enhanced disaster preparedness.

Regarding AMC for critical infrastructure, he suggested that a two-year financial support proposal can be pursued under the DoNER scheme.He further mentioned that to boost power sector projects, efforts are being made to reduce approval timelines for PSP schemes, ensuring faster implementation.

In conclusion, he thanked all NERPC members and expressed optimism for productive deliberations, ensuring collective progress in strengthening NER's power sector.

**Shri K.B. Jagtap, Member Secretary, NERPC,** welcomed all dignitaries of 28th RPC and appreciated PTC India Ltd. for hosting the 28th NERPC Meeting. He acknowledged the support of CEA/MoP & PSDF Committee in securing funding to NER as special case for critical infrastructure of NER including SCADA, reconductoring and OPGW projects in NER.

He emphasized the importance of resource adequacy, urging SLDCs and DISCOMs to participate in the CERC meeting on 24th February 2025. He stressed the urgent need for skilled manpower in SLDCs, citing GOI guidelines on workforce adequacy, and highlighted the criticality of establishing Security Operation Centres (SOC). He stated that essentiality of accelerating Hydropower Development in NER while addressing community concerns and strengthening Transmission & Distribution Networks to reduce AT&C losses along with improvement DISCOM financial health are prime concerns in NER.

He concluded with hope for fruitful deliberations and decisive actions in this meeting which will help to strengthen the NER power sector.

His full speech is placed at **Annexure - V.** 

### 1.2. Confirmation of the minutes of 27th NERPC Meeting

The minutes of the 27<sup>th</sup> TCC & 27<sup>th</sup> North Eastern Regional Power Committee (NER Power Committee) meetings held on 7<sup>th</sup> & 8<sup>th</sup> November'2024 respectively in Guwahati were circulated vide letter no. NERPC/TCC &

NERPC/2024/2995-3074 dated 25th November'2024.

No comments or observations were received from any constituents.

NER Power Committee confirmed the minutes of 27<sup>th</sup> TCC & 27<sup>th</sup> NERPC Meetings.

# 1.3. Action Taken Report on decisions taken in 27th TCC/NERPC Meetings

Action taken report on decisions taken in 27<sup>th</sup> TCC & NERPC Meeting is enclosed (**Annexure-1.3**) for kind information.

### 1.4. Arrangement of Agenda of 28th NERPC Meeting

SN	DESCRIPTION	CATEGORY
1	ITEMS FOR DISCUSSION	A
2	ITEMS FOR APPROVAL	В
3	COMMERCIAL ISSUES	С
4	ITEMS FOR INFORMATION/UPDATE	D
5	ITEMS RECOMMENDED FOR REFERRAL TO SUB- COMMITTEE	E

### 2. PART-A: ITEMS FOR DISCUSSION

## 2.1. Progress of SCADA-EMS upgradation/replacement systems at Regional/State level in North-Eastern Region: NERLDC

The extended AMC period for existing (ULDC-Phase II) of the SCADA-EMS Project for SLDC-Assam State ends on 11th November 2024, and for SLDC-Meghalaya ends on 31st March 2025. Moreover, NER states are already facing financial difficulties in paying the AMC charges for the ongoing SCADA projects, which is hindering the proper service delivery by the vendor, M/s GE T&D India Limited. M/s GE T&D, India is quoting AMC amounts that are three (3) times higher than previous rates for further extension, exacerbating the financial strain. Additionally, the existing SCADA-EMS systems are facing cybersecurity risks due to outdated critical devices(firewall) and the aging servers are unable to support new operating systems due to hardware limitations.

Hence, in view of the same the SCADA-EMS upgradation/replacement is being taken up by NER SLDCs in consultation with Grid-India. NER SLDCs has approached PSDF for 100% funding. Monitoring Committee, PSDF in its 21st meeting held under Chairmanship of Secretary (Power) on 17th August 2023, agreed for funding of the SCADA/EMS projects (ULDC-Phase III) for the seven NER SLDCs including AMC for 7 years.

Subsequently, the Detailed Project Reports (DPRs) for SCADA/EMS project at main as well as backup control centers and Part B (Civil Works) for setting up of backup control centre of SCADA-EMS for the Load Despatch Centers of the North Eastern Region (NER), for each of the seven NER states, were submitted to PSDF Committee for approval on 16<sup>th</sup> August 2024.

In view of the 86<sup>th</sup> Meeting of the TESG of PSDF held on 22<sup>nd</sup> October 2024, TESG has requested all NER States to submit a signed copy of point-wise replies addressing all observations and deliberations made by TESG members, along with the supporting documents, at the earliest.

The status of submission of the required is documented below, state may provide the updated status:

S. No.	Name of state	Status of submission of Documents to PSDF
1	Arunachal	Submitted on 07/02/2025
1	Pradesh	, ,
2	Assam	Submitted on 03/02/2025
3	Manipur	Expected to be submitted by 10/02/2025
4	Meghalaya	Submitted on 07/02/2025
5	Mizoram	Submitted on 06/02/2025
6	Nagaland	Submitted on 04/02/2025
7	Tripura	Expected to be submitted by 14/02/2025

### Deliberation of the TCC:

NERLDC informed that all the NER SLDCs have submitted their replies on observations/comments made by TESG committee to PSDF Secretariat/NLDC through mail on 14.02.2025, which has been subsequently forwarded to all the committee members of TESG. PSDF Secretariat of NLDC has confirmed verbally about the receipt of hardcopies of five (05) NER SLDCs. Hardcopies of SLDC-Mizoram and SLDC-Meghalaya are in transit and will be delivered in two-three days. The matter is presently with TESG committee for further consideration.

Member Secretary, NERPC informed the forum that the matter will be discussed with Member (GO & D), CEA during 28<sup>th</sup> NERPC meeting scheduled on 21<sup>st</sup> February 2025 for further guidance.

#### **Deliberation of the NERPC:**

Member Secretary, NERPC informed that the matter of release of PSDF fund for SCADA-EMS upgradation Project of NER(which is already approved by Monitoring Committee) is under examination of TESG Committee and requested intervention of Member (Go&D), CEA for early release of PSDF fund.

Member (Go&D), CEA assured that necessary support will be extended to NER State in this regard.

NERPC forum noted as above.

### 2.2. Status of Construction of Backup SLDC in NER states: NERLDC

As deliberated in 86th Meeting of the TESG of PSDF held on 22nd October 2024, TESG has communicated the NER States that civil construction for setting of infrastructure for backup control centres at NER SLDCs is not being funded through PSDF as per the laid guidelines. Hence, all NER state has to arrange necessary fund for construction of backup SLDC on their own resources.

The status of construction of backup SLDCs in tabulated, states may provide the updated status:

SL No.	Name of state	Status of submission of Documents to PSDF
1	Arunachal Pradesh	Backup Control Centre will be constructed for SCADA/EMS System at the new 132 kV New Pasighat (Napit) Substation.
2	Assam	Tariff petition is filed in AERC, which is expected to be approved in March 2025.
3	Manipur	Site Survey with NERLDC was carried out in 400 kV Thoubal S/s on 15th January 2025.
4	Meghalaya	In principle board approval accorded on 24th January 2025, the LoA will be placed in six months.
5	Mizoram	Proposal was submitted to the Government of Mizoram on 6th December 2024 for allocation of funds during the FY 2025-26. The Government of Mizoram typically prepares budgetary allocations in April.
6	Nagaland	A new two-storey building is being constructed for the Backup Control Centre at the 220/132 kV Zhadima Substation
7	Tripura	Team of SLDC and NERLDC conducted a site survey for the proposed Backup SLDC location. The site survey was carried out on 9th January 2025 at the SM Nagar Grid Substation Complex, where an one-story building, previously designated as a Training Institute, has been identified for conversion into the Backup SLDC.

NERLDC requests all state to provide the target date for completion of the backup building as per requirement, along with periodic updates from time to time and demonstrate a substantial progress before the pre-bid stage of tendering, as it will be difficult to make provision for SCADA/EMS equipment for Backup SLDC afterwards.

### **Deliberation of the TCC:**

SLDC Arunachal Pradesh informed the forum that they have requested Comprehensive T&D-POWERGRID to submit the strength report of building which has been constructed at 132 kV New Pasighat (Napit) substation, which is still awaited. SLDC Assam informed the forum that they are exploring other means also for getting necessary funding which is required for construction of Backup SLDC.SLDC Manipur informed the forum that minor modification (space for battery) is required in the existing control room building of 400 kV Thoubal Substation, the tentative cost is minimal; so they will be able to complete the same well within the time frame. SLDC Meghalaya informed the forum that in principle board approval has been obtained on 24th January 2025, the work will be completed well within the time frame. SLDC Mizoram informed the forum that budget allocation from Government is expected in April 2025, after which necessary work will be started. SLDC Nagaland informed the forum that they have changed the location of Backup SLDC and will be constructing it in 132 kV New Secretariat Substation, Kohima. SLDC Tripura informed the forum that minor modification is required in the existing training centre building of 132 kV Surjyamani Nagar Substation, the agenda is being put in upcoming TPTL board meeting for the fund approval. Tripura requested for making provision data visibility at discom end.

NERLDC requested all NER-states to show substantial progress before the finalization of pre-bid meeting, as it would be difficult to delete the scope of SCADA/EMS equipment for Backup SLDC after finalization of pre-bid discussion. NERLDC requested the forum to conduct monthly progress review

meetings so that there should not be any slippage on construction of civil infrastructure which is required for setting up Backup SLDCs in the respective NER States.

### **Deliberation of the NERPC:**

The forum agreed with the decision taken in TCC and impressed all states to complete the formality of completion of construction of civil part of Back up SLDCs in coordination with NERLDC (Grid India).

NERPC forum noted as above.

### 2.3. Resolving the operational challenges at the DISCOM level: NERPC

NERPC has taken a significant step to resolve operational challenges at the **DISCOM level** by addressing issues of AT&C losses, smart metering, and infrastructure modernization in its **first meeting on 4th February 2025**. Discussions focused on streamlining operations, integrating 30 GW rooftop solar under PM Surya Ghar Yojana, and ensuring smooth coordination. Special attention was given to region-specific challenges in North Eastern states. This initiative will help strengthen DISCOMs, enhance power reliability, and improve financial sustainability.

#### **Deliberation of the TCC:**

MS, NERPC briefed that as per the 15<sup>th</sup> NPC decision, a special meeting was conducted on 4<sup>th</sup> February 2025 to discuss and resolve DISCOM operational issues. He further apprised that discussions were held on specific issue such as AT&C loss reduction, smart metering implementation, infrastructure modernization, and rooftop solar integration under PM Surya Ghar Yojana. In special committee meeting, it was suggested that these issues of DISCOM could be discussed in the monthly OCC meetings / separate sub-committee for DISCOMs. DISCOM representatives expressed that a separate sub-committee should be formed to focus on these issues.

The forum decided that the a separate sub-committee meetings will be held quarterly to review and address DISCOM operational challenges.

TCC Chairperson suggested that the first one or two quarters should be focused on Resource Adequacy (RA)/Demand Forecasting to assess the current operational scenario of DISCOMs. It was also suggested by him that a climate resilience scheme should be incorporated within the Resource Adequacy (RA) framework to address such concerns.

Member Secretary informed that Distribution Planning Criteria 2023 published by CEA will be shared with all DISCOMs for reference and implementation.

#### **Deliberation of the NERPC:**

NERPC forum acknowledged the need for a separate sub-committee for discussing and resolving the operational issues of DISCOMs, which will meet quarterly to address the said challenges.

NERPC forum noted as above.

# 2.4. Workforce Adequacy and Short-Term Knowledge-Sharing Exchange Program for Load Despatch Centres: NERLDC

The Minister of Power has issued Workforce Adequacy Guidelines for Load Despatch Centres (LDCs) in October 2024 (Annexure-2.4) to ensure their smooth operation and enhance capacity building at State Load Despatch Centres (SLDCs). In line with these efforts, the Ministry has introduced guidelines titled as "Workforce Adequacy for Load Despatch Centres and Deputation of Workforce from SLDCs to GRID-INDIA for fixed Terms."

As part of these guidelines, a **short-term knowledge-sharing exchange program** has been proposed between Regional Load Despatch Centres (RLDCs) and SLDCs. This program, ranging from **2 to 10 days**, aims to

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strengthen coordination, improve technical expertise, and enhance operational efficiency.

The rollout of this exchange program is scheduled to commence in **April 2025 (FY 2025-26).** In this regard, all SLDCs are requested to take the necessary steps and submit their implementation plans to **NERPC and NERLDC** at the earliest not later than 24-02-2025.

Workforce Staffing Norms, as per Workforce Adequacy Guidelines for Load Despatch Centres (LDCs) issued by MoP are as follows:

LDCs - Workforce Staffing Norms							
SN	Function	Medium SLDC	Emerging SLDC				
System Operation							
1	System Operation - Operational Planning	16	9				
2	Real Time Grid Operation (For SO only)	26	18				
3	Post-Despatch	10	4				
	Sub -Total (SO)	52	31				
	Market Operation						
4	Open Access Administration	1	1				
5	Market Coordination	3	1				
6	Inter-face Energy Metering, Accounting and Settlement	4	1				
7 Regulatory Affairs, Market Operation Planning and Coordination 1							
Subtotal - MO 9 4							
_	Logistics		T				
8	logistics _Operation technology	8	3				
9	IT logistics	6	3				
10	Communication logistics	2	2				
	Subtotal - Logistics	16	8				
	REMC	1	T				
11	REMC Logistics	2	1				
Cyber Security							
12	Cyber Security Support Functions	13	10				
13	Contract Services	2	2				
14	Finance and Accounts	5	3				
15	HR & Admin	4	3				
	Subtotal -Support Functions	11	8				
	Grand-Total	103	62				

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Existing manpower\* of NER SLDCs against Workforce Adequacy guidelines for Load Despatch Centres are as follows:

SI. No	SLDC	System Operation	Market Operation	Logistics	REMC	Cyber Security	Support Functions(Contract Services, HR & Admin, F&A)	Total
1	Arunachal Pradesh		des 3 Top mana	•	e remaining 4	executives	ital 7 executives are are handling any of	7/62
2	Assam	17/52	7/9	6/16	0/2	1/13	2/11	33/103
3	Manipur	14/31	5/4	2/8	0/1	0/10	0/8	21/62
4	Meghalaya	14/31	2/4	0/8	0/1	0/10	0/8	16/62
5	Mizoram	3/31	2/4	1/8	0/1	1/10	2/8	9/62
6	Nagaland	6/31	2/4	2/8	0/1	0/10	0/8	10/62
7	Tripura	15/31	0/4	2/8	0/1	0/10	0/8	17/62

<sup>\*</sup>As on 01/01/2024

#### **Deliberation of the TCC:**

MS, NERPC informed that as per the Ministry of Power's resolution dated 24.10.2024, the Workforce Adequacy Guidelines for Load Despatch Centres (LDCs) were issued to ensure smooth operations and enhance capacity building at SLDCs.

It was noted that all NER SLDCs have workforce availability in the range of 20-30% of the required under Workforce Adequacy Guidelines. It was also noted that in the cybersecurity domain, four states currently have zero dedicated personnel, indicating a critical gap in cybersecurity readiness.

NERLDC informed that a short-term knowledge-sharing exchange program (2-10 days) has been proposed between RLDCs and SLDCs, and an official notification will be issued for LDCs to nominate personnel for training at RLDCs. Similarly, NERLDC personnel will also visit SLDCs for on-site knowledge sharing. NERLDC emphasized that a 2-10 day exchange program



is feasible even with the existing manpower constraints and should be prioritized.

Chairperson, TCC suggested that generating stations (GENCOs) should also be invited to participate in the knowledge-sharing sessions to improve coordination.

It was noted that managing the required manpower immediately would be difficult, and the implementation should be done in a phase wise manner rather than all at once.

The forum acknowledged the serious manpower constraints in NER SLDCs and agreed that a phased approach would be required to address workforce adequacy while ensuring participation in the exchange program.

### **Deliberation of the NERPC:**

CMD, MeECL suggested exploring the possibility of a centralized agency that could cover cybersecurity and other specialized functions for the entire NER region in absence of cyber security experts in SLDCs.

Tripura stated that they have formed their own team to address challenges in cybersecurity.

Member (GO&D), CEA suggested that this forum may highlights the workforce shortages issue and critical gaps in SLDCs across NER through resolution to MoP.

NERPC forum noted as above.

# 2.5. Recovery of Relinquishment charges as per the direction of CERC in order dated 08.03.2019: NERPC

1. A letter from SRPC wherein, it is referred that the CERC Order dated 08.03.2019 in Petition No. 92/MP/2015, directed CTU to assess the stranded transmission capacity and calculate the charges payable towards relinquishment and the relinquishment charges paid by LTA customers shall be used for reducing transmission charges payable by other long term and medium term customers in the year in which such



compensation is due in the ratio of transmission charges payable for that year by such long term customers and medium term customers. Accordingly, the relinquishment charges had been computed by CTUIL and uploaded on its website (Before the CERC Order, many IPPs/generators had relinquished the LTA and the charges were being recovered from the beneficiaries).

- 2. It is noted that some of the generators filed appeal in APTEL against the recovery. Insolvency proceedings (CIRPL) of some generators, among the above generators have been completed. Insolvency proceedings of some generators are currently underway. CTUIL informed that APTEL stayed raising of invoices against generators who are not under insolvency proceedings.
- 3. The Southern Regional Power Committee (SRPC) has been closely following up the matter of recovery of relinquishment charges and the implications of the APTEL stay order on raising bills, with the CTUIL and deliberating the issue in the successive meetings of RPC and commercial subcommittee, ever since. During recent SRPC meeting, it has been emphasized that coordinated efforts across all RPCs are essential to address this matter effectively.
- 4. The current litigations led to delays in the recovery of charges and have impacted the beneficiaries across regions. CTUIL has been actively pursuing the vacation of the APTEL stay order and requested the support of all stakeholders, including DISCOMs, through representation/implead in the APTEL case.
- 5. In light of the discussions and recommendations of SRPC members in the meeting held on 18.11.2024, it is requested that each RPC may actively participate in the matter and the following suggestions emerged in the SRPC meeting are forwarded for further needful:



- i) **Representation**: Encourage all DISCOMs in the Region to actively participate in the Judicial proceedings. This collective action can emphasize the liabilities of beneficiaries and the financial impact on the pool.
- ii) **Expert Legal Consultation**: Obtain and share expert legal opinions on the relinquishment charge recovery to strengthen the case, across judicial platforms.
- iii) **Awareness and Preparedness**: CTUIL has assured the sharing of hearing schedules and the list of appeals with constituents. It is suggested that this practice be adopted by all RPCs to ensure better preparedness for court proceedings.
- iv) **Coordination across RPCs**: Propose regular communication among RPCs to exchange updates and formulate a unified approach to address the matter of recovery of relinquishment charges and stay order/legal issues effectively.

It is felt that by collectively engaging in this matter, the resolution of the challenges can be expedited and ensure equitable recovery, as early as possible, that would protect the interests of all stakeholders. SRPC remains committed to supporting collaborative efforts and is open to further discussions to facilitate this process.

SRPC requested that each RPC may deliberate on the above points and initiate suitable actions.

In 54<sup>th</sup> CCM, as representative from CTUIL was not present in the meeting. MS, NERPC stated that this agenda will be taken up in the next RPC meeting.

#### **Deliberation of the TCC:**

CTU representative apprised the forum that in line with CERC Order dated 8.3.2019 passed in Petition No.92/MP/2015, CTU calculated relinquishment charges for LTAs relinquished by various generators and uploaded the same on its website from time to time. However, the relinquishment charges computed and notified by CTU in line with above CERC Order 08.03.2019 in Petition No. 92/MP/2015 was disputed by the relinquishing IPPs, who had

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filed appeals in APTEL which are pending adjudication. In view of pending disputes and GST issues concerning the raising of invoices, CTU issued demand letters to concerned relinquishing LTA customers pending disposal of appeals in APTEL. APTEL vide its order dated 08.10.2020 had restrained CTU from raising invoices with respect to the relinquishment charges during pendency of similar Appeals except where insolvency proceedings are faced by the generators. All the appeals on relinquishment charges are yet to be decided as on date and matter is being pursued by CTU. Further, where the IPPs are undergoing insolvency proceedings, CTU had filed claims before RPs/Liquidators for recovery of relinquishment charges. Meanwhile, CTU encashed the CBGs of some of the IPPs who have abandoned their projects or undergoing insolvency proceedings and the encashed BG amount of approx.

CTU apprised that ₹247 Cr was received through direct payments, while ₹400 Cr was realized through bank guarantees (BG), totalling ₹647 Cr recovered.

It was informed that the total relinquishment charges amounted to ₹6925 Cr, out of which ₹2615 Cr pertains to companies that have been acquired by new entities, and these amounts cannot be released. Additionally, ₹2191 Cr remains unbilled, as invoices could not be raised due to ongoing legal and insolvency proceedings.

States were informed that they may participate in the judicial proceedings if they wish, as the non-recovery of relinquishment charges could increase the financial burden on the beneficiaries.

It was noted that NER utilities are expected to receive around ₹18 Cr from the recovered relinquishment charges.

To strengthen the case in APTEL, the forum suggested that a special meeting to be convened in coordination with SRPC to discuss legal strategies and coordinated efforts among stakeholders.

### **Deliberation of the NERPC:**

CTU apprised that some cases are still pending with APTEL, and ₹2191 Cr in relinquishment charges remains unbilled due to ongoing legal and insolvency proceedings. ₹2021 Cr worth of bills have been raised, and partial recoveries are being made. CTU further highlighted that NER utilities are expected to receive around ₹18 Cr from recovered relinquishment charges with approximate share of Assam State being ₹9.2 Cr.

Member (GoD), CEA emphasized that entities should be vocal in supporting the case for better recovery prospects. He further suggested that collective support from NER states in legal proceedings could strengthen the case.

CMD, PTC stated that since the matter is sub-judice, the court's decision should be awaited, and further actions should align with legal proceedings.

The forum agreed to explore the possibility of Assam representing all NER states in legal proceedings and suggested coordinated efforts strategize the way forward. Further CTU agreed to conduct the special meeting with NER state to create awareness.

NERPC forum noted as above.

# 2.6. Proposal for Establishment of Security Operation Centre (SOC) at Meghalaya SLDC with Five (5) Years Comprehensive AMC funded through PSDF: SLDC Meghalaya

The State Load Dispatch Centres are apex bodies to ensure integrated operation of the power system in their respective States. SCADA and URTDSM systems of SLDC-Meghalaya have been declared as Critical Information Infrastructure (CII) by Gazette Notification of the State Government.

Information and Operational Technologies are vital to SLDC operations for 'automating' its operations for more productive, knowledge-based work environment and improved decision-making. Cyber security has become a major concern over the past few years as hackers have penetrated the OT/IT infrastructure of various enterprises with increasing frequency and

sophistication. The protection of critical information infrastructure and preservation of the confidentiality, integrity, and availability of information in cyberspace is the essence of a secure cyber space.

As stated in clause 3(j) of the "Information Security Practices and Procedures for Protected System" dated 22-05-2018, "an organization having protected systems shall establish a Cyber Security Operation Center (C-SOC) using tools and technologies to implement real time preventive, detective and corrective controls to secure against advanced and emerging cyber threats. In addition, Cyber Security Operation Center is to be utilized for identifying unauthorized access to "Protected System", and unusual and malicious activities on the "Protected System", by analyzing the logs on regular basis. The records of unauthorized access, unusual and malicious activity, if any, shall be documented."

Also, keeping in view the foreign geographies, increasing innovative & advanced cyberattacks and malwares, threats emanating from emerging technologies bots, dark web, social engineering, cloud etc., it is important that facility for constant monitoring of the existing controls and establishing suitable platform to correlate the organizational network traffic and user behavior with the security threat intelligence to gain necessary insight of the possible threats and vulnerabilities, be established and operated on 24 x 7 basis.

Accordingly, Meghalaya SLDC intends to set-up on-premises state of-the-art Security Operations Centre (SOC) which can collate, integrate and analyze logs/ data form various security devices and end-points at extremely high concurrency operating on 24x7x365 basis.

In the 36<sup>th</sup> meeting of the Appraisal Committee of PSDF, the bench mark cost for the SOC proposals were deliberated wherein the Appraisal Committee had decided the following:

a) The Benchmark cost for SOC projects shall be up to Rs. 12 Crore (including 18%GST). The Benchmark cost includes supply and



installation & commissioning Cost of Software & Hardware and 2 years' comprehensive AMC. The projects will be eligible for funding under 5.1 (c) and 6.2 of the revised Guidelines of PSDF.

- b) Expenditure incurred by any Entity beyond the respective PSDF grant shall be borne by the Entity from its own sources.
- c) Cost of AMC for other than 2 years shall be taken care of by the Project Entity from its own sources.
- d) Sanction Order to be issued for these SOC projects shall explicitly mention the following:

"During the first year of operation of SOC project, the OEMs personnel have to operate the Security Operation Centre (SOC) and will have to train the personnel of the entity. During the second year, the entity shall operate the SOC under the supervision of OEMs, so that theentity may get fully prepared to operate the Security Operation Centre (SOC) by its personnel after completion of two years of AMC period."

While the move is very much welcome to cash strapped NER constituents, it may be stated that all NER SLDCs are facing severe shortage of manpower for grid operation, market operation, system logistics not to mention cyber security which is relatively new to the other departments. Along with the absence of requisite manpower to man the SOCs 24x7, there is no exposure or expertise among other things in analysis of logs and forensic analysis of threats.

In this regard, given the criticality of having requisite trained / skilled and relatively experienced manpower to man the SOCs on a 24x7 basis in the light of acute shortage of manpower, the forum is requested to kindly consider requesting the Monitoring Committee of PSDF to kindly consider the following:

"Increasing the ceiling of Rs.12/- (twelve) crores for setting up of Security Operation Centers along with two (2) years' AMC to an additional proportionate



amount so as to include an additional three (3) years of AMC for NER states considering their shortage of dedicated, skilled and trained manpower and lack of funds for the additional AMC period of three (3) years".

The forum is requested to deliberate on the matter and decide on the further course of action in this regard.

#### **Deliberation of the TCC:**

The forum agreed to request PSDF committee to consider increasing the funding ceiling to include a total of five (5) years of AMC for the proposed Security Operation Centre (SOC) at SLDCs as a special case of NER. It was emphasized that NER states face acute manpower shortages in cybersecurity operations, making it essential to extend the AMC period beyond the currently approved two years.

The forum opined that a structured training and supervision mechanism during the 5 years' AMC period is to be ensured for gradually building cybersecurity expertise within SLDCs.

A resolution in this regard would be sent to MoP requesting to consider the above as a special case of NER.

#### **Deliberation of the NERPC:**

Member (GoD), CEA suggested that requesting a 5-year AMC upfront might delay the approval process. Instead, the priority should be on implementing the SOC project first under the approved framework. It was advised that once the initial 2-year AMC is completed, a separate request for AMC extension can be taken up based on operational requirements and performance evaluation.

The forum acknowledged the manpower shortage in cybersecurity and agreed that structured training mechanisms should be integrated within the existing framework.

Forum agreed with view of Member (Go&D), CEA to proceed with the current approval framework while keeping the AMC extension request for future deliberation.

NERPC forum noted as above.

### MIN MIN TO THE

### NORTH EASTERN REGIONAL POWER COMMITTEE

# 2.7. Urgent Intervention Required for NHIDCL Diversion Impacting 132KV Jiribam-Loktak Line & 400KV D/C Silchar-Imphal Lines: POWERGRID

The ongoing NHIDCL (National Highways & Infrastructure Development Corporation Limited) road diversion project in Manipur has raised serious concerns regarding its impact on critical transmission infrastructure. Despite multiple correspondences, NHIDCL has not adhered to the Standard Operating Procedures (SOPs) prescribed by the Ministry of Power, particularly regarding joint site visits and pre-identification of vulnerable tower locations for alternate routing. Instead, it has proceeded with earth excavation along the corridor of the transmission route without obtaining consent from POWERGRID, exacerbating the risks to essential power transmission infrastructure. As a result, several towers on the 132KV Jiribam-Loktak line (viz loc. No. 18, 48, 52, 129, 130) and 400KV Silchar-Imphal transmission line (viz. loc. No. 201, 217, 231, 262, 303) have become highly vulnerable (Annexure-2.7) with some positioned dangerously close to the edges of excessive soil cutting. While POWERGRID has already implemented temporary preventive measures to protect these towers wherever feasible, and for permanent solutions, such as shifting the affected towers to safer locations, remains critical. The situation demands immediate intervention, as continued excavation by NHIDCL without proper coordination poses a significant risk of tower collapses, particularly with the onset of the monsoon season. The issue is particularly critical for the 132KV Jiribam-Loktak Line, a major power evacuation route, as the 132KV Imphal-Loktak Line will remain under continuous outage for HTLS reconductoring, making Jiribam-Loktak the sole evacuation route for the region. If timely action is not taken, the potential failure of these lines could lead to severe power disruptions across Manipur. Considering this, NERPC's urgent intervention is requested to direct NHIDCL to halt excavation work near vulnerable tower locations. As NHIDCL is not adhering to the SOPs, NERPC is requested to escalate the issue to the Ministry of Power and the Ministry of

Road Transport & Highways (MoRTH) for immediate intervention to protect critical transmission infrastructure.

### **Deliberation of the TCC:**

PGCIL raised concerns regarding the ongoing NHIDCL road diversion project in specially in Manipur, which has been proceeding without adhering to the Standard Operating Procedures (SOPs) prescribed by the Ministry of Power.

It was noted that NHIDCL had not conducted joint site visits or pre-identified vulnerable tower locations before excavation in Manipur, as mandated by the SOPs.

As per Clause 11 of the SOP, no soil cutting within 10 meters of tower structures (110 kV and above) shall be permitted without written permission from the transmission line owner.

It was decided that NERPC will escalate the matter through resolution to the Ministry of Power (MoP) and to the Ministry of Road Transport & Highways (MoRTH) for urgent intervention to protect critical transmission infrastructure in Manipur.

### **Deliberation of the NERPC:**

Member (Go&D), CEA emphasized that non-adherence to SOPs by NHIDCL in Manipur poses a serious risk to the transmission system and that immediate action is required.

NERPC forum opined that a formal resolution highlighting the criticality of the issue would be sent to Ministry of Power (MoP) and Ministry of Road Transport & Highways (MoRTH).

NERPC forum noted as above.

# 2.8. Implementation of 25 MW / 100 MWh Battery Energy Stage Project at Namrup Thermal Power Station: APGCL

Name of the requesting     Organization / Utility :	Assam Power Generation Corporation Limited
2. Short Summary of Project / School	eme / Activity
a. Name and location of the Project / Scheme / Activity :	Implementation of 25 MW /100 MWh BESS at Namrup Thermal Power Station
b. Objective of the Project / Scheme / Activity:	Funding for the development of Battery Energy Storage Systems (BESS), to bridge the gap between the cost of infrastructure projects and their economic viability. due to high up aiming to boost the adoption of renewable energy sources.  Energy generated during the day can be stored, and used during periods of law
	stored and used during periods of low sunlight or high demand. This <b>maximizes the self-consumption of solar energy and</b> maintaining grid frequency within a safe range and preventing outages during peak consumption hours.
c. Nature of the Project / Scheme / Activity: Inter – State / Intra – State (Please Specify)	Intra-State incident to Inter-State system
d. Identified Beneficiaries	The state of Assam in particular and the nation in general.
e. Merits of the scheme	BESS systems are gaining traction for both technical and commercial reasons. Technically, they provide immense benefits to the grid:  Use in emergency response systems or for storm outages
	<ul> <li>Frequency regulation</li> <li>Grid stability</li> <li>Reduction of grid congestion</li> <li>Ramp rate control</li> <li>Energy arbitrage</li> <li>Peak shaving</li> </ul>



	• Black start – providing quick energy or stabilizing energy to get the grid started at a good response rate.
f. Limitations, if any	Limitations of Battery Energy Storage Systems (BESS) include:  Higher upfront costs Integration challenges into existing operations High initial capital expenditures
g. Time frame for Implementation	The scheme is scheduled to be completed Schedule within 15 months progressively from the date of receipt of sanction of the fund/grant
h. Estimated Cost of Project / Scheme / Activity	Rs. 169,04,00,000.00
i. Category under which the project is classified (Please refer Para 5.1 of the Guidelines/Procedure)	

### **Deliberation of the TCC:**

NERPC inquired whether a proper study, including transmission constraints, had been conducted to assess the feasibility of the project of 25 MW / 100 MWh BESS at Namrup Thermal Power Station.

APGCL confirmed that a detailed study had been carried out, addressing all technical and operational aspects, including integration into the grid, and transmission capacity requirements.

The forum acknowledged that the project aligns with national objectives for renewable energy integration and grid stability, providing benefits such as frequency regulation, emergency response, peak shaving, and black start capabilities. It was noted that as per PSDF guidelines, the project is eligible for funding.

### **Deliberation of the NERPC:**

TCC Chairperson emphasized that the BESS project at Namrup is not only beneficial for Assam but for the entire NER region, contributing to grid stability and renewable energy integration. It was further noted that part of the project cost will be funded by APGCL, demonstrating commitment from the state utility.

Member (GoD), CEA suggested that APGCL should explicitly mention in the DPR that a portion of the funding will be borne by the utility, strengthening the proposal for PSDF. The forum acknowledged the project's significance and recommended for funding under PSDF as per guideline.

NERPC forum noted as above.

# 2.9. Laying of OPGW in the existing lines under NERPSIP – Mizoram: Mizoram

The scope of OPGW laying in the following lines are included under NERPSIP – Mizoram. The laying work could not be completed at few locations due to various issues in the existing transmission line.

Though these existing lines are made for 132kV, currently these lines are charged under 33kV level. 33kV poles are used at few locations instead of 132kV Towers and the existing tower peaks are missing at few locations at these lines.

- a) **132kV West Pheileng Zemabak TL:** 6 KM balance OPGW to be laid out of 51KM. The balance work is long pending as poles are to be replaced with towers & damaged tower peak to be rectified by state P&E deptt. Mizoram.
- b) **132kV Lunglei Lungsen TL:** 1 KM balance to be laid out of 27 KM: The balance work is long pending as poles are to be replaced with towers & damaged tower peak to be rectified by state P&E deptt. Mizoram.

Since the repairing works of the existing TL are not been carried out by state utility after several intimations, it is requested State utility to take over the balance materials from POWERGRID-NERPSIP for laying balance OPGW, as the quantum of work is minimum and the same may be laid by State during the restoration of the existing TL. TOC may be given by P&E Department Mizoram, so that the existing contract can be closed.

### <u>Deliberation of the TCC/NERPC</u>:

Mizoram representative informed that repair work (poles were damaged due to landslides) will commence this year, subject to fund availability.

Member (GoD), CEA emphasized that closing the existing scheme is necessary to qualify for new funding under future schemes.

Forum advised Mizoram to take over the balance materials from POWERGRID-NERPSIP for laying balance OPGW, as the quantum of work is minimum and the same may be laid by State during the restoration of the existing TL and Mizoram can provide the TOC to POWERGRID-NERPSIP at the earliest so that the existing contract can be closed, allowing further progress on new projects.

NERPC forum noted as above.

### 2.10. Chairmanship of NERPC for F.Y. 2025-26: NERPC

As per Principal Resolution dated 25th May 2005 of Ministry of Power, Government of India, subsequent amendments dated 29th November 2005, 9th May 2008, 5th May 2017, 21st December 2017 and Resolution dated 3rd December 2021 relating to the establishment of North Eastern Regional Power Committee (NERPC), Chairperson of the NERPC would represent the States of the region by rotation in alphabetical order. Members of the NERPC from that particular State would nominate the Chairperson of NERPC from amongst themselves. The term of the Chairperson would be for a period of one year.

For F.Y. 2024-25 Chairmanship is with the State of Assam; accordingly, as per alphabetical order the next Chairmanship i.e. for F.Y 2025-26 shall be with the **State of Manipur**.

### **Deliberation of the TCC:**

Forum opined that as President's Rule has been imposed in Manipur, Chairmanship of NERPC for FY 2025-2026 as per the alphabetical order may be represented by **State of Meghalaya**.

TCC forum in principle agreed for the Chairmanship of NERPC for FY 2025-2026 to represented by State of Meghalaya and recommended for approval of NERPC forum.

### Deliberation of the NERPC:

Hon'ble Power Minister, Meghalaya agreed to take over the Chairmanship of NERPC for the upcoming term (FY 2025-26) as recommended by TCC.

NERPC forum noted as above.

### 3. PART-B: ITEMS FOR APPROVAL

# 3.1. Laying a part of OPGW through the 132 KV line on 132 KV towers and a part to be laid underground from Myntdu Leshka Stage-I Power Station to Myntdu Leshka Stage-I Dam: MePGCL

The approved Proposal for Installation of Communication System with OPGW from Myntdu Leshka Stage-I Power Station to Myntdu Leshka Stage-I Dam was proposed to be laid along the existing 33 kv line, which was also proposed for Re-engineering on the 33 KV Lattice structures etc. However, after detail deliberations the Re-engineering of the existing line on the 33 KV Lattice structures etc., was not approved and the 27th TCC & NERPC meetings approved only the Proposal for Installation of Communication System with OPGW from Myntdu Leshka Stage-I Power Station to Myntdu Leshka Stage-I Dam.

MePGCL considered the project thoroughly and found that it is not feasible to lay the OPGW along the existing 33 KV line due to very low ground clearance and very short, damaged and weak poles all along the line which is also prone to snapping of the conductor and interruptions due to falling of trees and bamboos of the very thick forest, falling on the line very frequently.

Hence this approved agenda for Installation of Communication System with OPGW from Myntdu Leshka Stage-I Power Station to Myntdu Leshka Stage-I Dam is now proposed to be laid on the existing Transmission line through 132 KV towers from Myntdu Leshka Stage-I Power Station to the tower location number '12' at Suchen village area and then the OPGW shall be laid underground up to Myntdu Leshka Stage-I Dam. As the matter is very important and urgent for optimum management of the Dam water Level visar- vis power generation for stability of the Grid, the same may be kindly be considered for approval under PSDF scheme.

### **Deliberation of the TCC:**

Meghalaya apprised the forum that the tentative cost of the project is around Rs. 10 Cr.

Considering the importance of matter for optimum management of the Dam water Level vis-a- vis power generation for stability of the Grid, TCC forum, in principle agreed to the proposal to be considered for approval under PSDF scheme and recommended it to NERPC for approval.

#### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

3.2. Laying a part of OPGW through the 132 KV line on 132 KV towers and a part to be laid underground for Installation of Communication System with OPGW from Umiam Umtru-Stage-III Power Station to Umiam-Umtru Stage-IV Dam up to Umiam-Umtru Stage-IV Power Station, Nongkhyllem: MePGCL

The approved Proposal for Installation of Communication System with OPGW from Umiam Umtru-Stage-Ill Power Station to Umiam-Umtru Stage-IV Dam up to Umiam-Umtru Stage-IV Power Station, NongkhyHem was proposed to be laid along the existing 33 kv line, which was also proposed for Re-engineering on the 33 KV Lattice structures etc. However, after detail deliberations the Re-engineering of the existing line on the 33 KV Lattice structures etc., was not approved and the 27th TCC & NERPC meetings approved only the Proposal for Installation of Communication System with OPGW from Umiam Umtru-Stage-III Power Station to Umiam-Umtru Stage-JV Dam up to Umiam-Umtru Stage-IV Power Station, Nongkhllem.

MePGCL considered the project thoroughly and found that it is not feasible to lay the OPGW along the existing 33 KV line due to very low ground clearance and very short, damaged and weak poles all along the line which is also prone to snapping of the conductor and interruptions due to falling of trees and bamboos of the Reserved forest, falling on the line very frequently.

Hence this approved agenda for Installation of Communication System with OPGW from Umiam Umtru-Stage-Ill Power Station to Umiam-Umtru Stage-IV Dam up to Umiam-Umtru Stage-IV Power Station, Nongkhyllem is now proposed to be laid on the existing Transmission line through 132 KV towers from Umiam Umtru-Stage-III Power Station up to Umiam-Umtru Stage-IV Power Station, Nongkhyllem and from the tower location number number '7' of line 2 to Umiam-Umtru Stage-IV Dam the OPGW shall be laid underground. As the matter is very important and urgent for optimum management of the Dam water Level vis-a-vis power generation for stability of the Grid, the same may be kindly be considered for approval under PSDF scheme.

#### **Deliberation of the TCC:**

Meghalaya apprised the forum that the tentative cost of the project is around Rs. 10 Cr.

Considering the importance of matter for optimum management of the Dam water Level vis-a- vis power generation for stability of the Grid, TCC forum, in principle agreed to the proposal to be considered for approval under PSDF scheme and recommended it to NERPC for approval.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.3. Requirement of staff quarters in PGCIL substations: POWERGRID

The requirement of staff quarters in substations depends on several factors, including the location, the size of the substation, the role of the staff, and operational needs. Below are some common considerations for providing staff quarters in substations:

#### 1. Location of the Substation

Remote Areas: Substations (Roing/ Tezu/ Ziro) are located in remote or rural areas feeding loads to vital districts of Arunachal Pradesh. Staff quarters are required to ensure that operational staff can be on-site for maintenance, monitoring, and emergency response without the need for long travel.

#### 2. Nature of Staff Roles

Operational and Maintenance Staff: Technicians, operators, and maintenance staff may need to stay on-site, especially if the substation operates continuously or requires 24/7 monitoring. During the auxiliary supply failures immediate service of DG set required in order to restore auxiliary power for Battery Chargers, Batteries, Relays etc.to maintain the grid. • Emergency Response Teams: Grid is susceptible to failures/ disturbances and hence, quick access to the substation for emergency repair teams or fault-clearing teams may warrant nearby staff accommodations.

#### 3. Shift Work

Communication Break Down: All the above-mentioned SS are remote operated from RTAMC, Shillong. However, during the communication failure the operation has to be done manually for which staffs are required and SS to be manual for 24x7.

Shift Rotations: In areas where there is a significant amount of shift work, it may be more efficient to provide staff with temporary or rotating quarters.

### 4. Safety during Pandemic Outbreak

Access to Sub-Station: During Pandemic situation (similar to COVID-19) it is not possible for the staffs to visit SS from outside the premise. It becomes extremely difficult to maintain the SS in such condition. Electricity is essential and any interruption is not tolerable. For staff health and safety, it's essential to provide basic amenities like clean water, food, restrooms, and proper sleeping quarters. In summary, the requirement for staff quarters in substations typically reflects operational needs, geographic location, the number of personnel, and the nature of their work shifts. It ensures that staff can be quickly available for emergency repairs, monitoring, and day-to-day operations while maintaining their safety and well-being.

### **Expenditure Details:**

S/n	SS Name	Amount	Remarks
1.	Roing SS	1,78,90,937/-	The estimate is tentative in nature and will be finalised
2.	Tezu SS	2,10,11,646/-	during execution.
3.	Ziro SS	1,98,55,599/-	

In 54<sup>th</sup> CCM, CC forum noted and in principle agreed the proposal of NERTS and recommended to place the matter before next RPC for information/approval. The expenditure will be booked under PoC Mechanism.

Members may discuss/approve.

### **Deliberation of the TCC:**

Powergrid apprised the forum that the tentative cost of the proposed staff quarters in above identified substations is around Rs. 6-7 Cr. and the expenditure will be booked under PoC Mechanism.

TCC forum in principle, agreed to the proposal and referred it to NERPC forum for approval.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.4. Reliable Communication Scheme in Mizoram: Mizoram

As per draft/ model DPR for Reliable Communication Scheme circulated in the special meeting of Reliable Communication held on 9th January 2024 and meeting minutes of 29th NETeST meeting held on 5th September 2024, DPR for State Reliable Communication and Data Acquisition System upto 132kV Sub-station in the state of Mizoram in NER amounting to Rs. 36.76 crore was prepared and submitted to PSDF Secretariat on 12th November 2024. The DPR was prepared to be executed through 100% funding from PSDF in line

with clause 6.2 (iv) of Revised Guideline for the disbursement of funds from the PSDF dated 12th March 2024.

In this regard, the 87<sup>th</sup> Techno Economic Sub-Group (TESG) meeting held on 30th January 2025 instructed Power & Electricity Department, Govt. of Mizoram to obtain recommendation/approval from NERPC for the DPR. As such P&ED, Mizoram request recommendation/approval of NERPC for State Reliable Communication & Data Acquisition System upto 132kV Sub-station in the State of Mizoram in NER amounting to **Rs.36.76 crore.** 

### Deliberation of the TCC:

The forum requested details of the elements covered under the scheme, which Mizoram shared during the discussion. It was noted that as per PSDF guidelines, the scheme is eligible for PSDF funding.

The list of lines and substations covered under the scheme is as follows:

### List of Lines for Implementation of OPGW:

- 1. 132 kV Luangmual Melriat (Mz) 17.60 km (57 locations/posts)
- 2. 132 kV Khawzawl E.Lungdar 49.35 km (100 locations/posts)
- 3. 132 kV Saitual-Vankal & 132 kV Vankal-Khawzawl (LILO) 8.24 km (15 locations/posts)

Total Line Length: 75.19 km (172 locations/posts)

## List of Substations to be Covered for End-Equipment (SDH Based) and RTU:

- 1. 132 kV Melriat Sub-Station
- 2. 132 kV Champhai Sub-Station
- 3. 132 kV Khawzawl Sub-Station
- 4. 132 kV Saitual Sub-Station
- 5. 132 kV Bukpui Sub-Station

- 6. 132 kV Khawiya Sub-Station
- 7. 132 kV E.Lungdar Sub-Station
- 8. 132 kV Kawmzawl Sub-Station
- 9. 132 kV Lawngtlai Sub-Station
- 10. 132 kV Bairabi Sub-Station
- 11. 132 kV Mamit Sub-Station
- 12. 132 kV W.Phaileng Sub-Station
- 13. 132 kV Marpara Sub-Station
- 14. 132 kV Lungsen Sub-Station
- 15. 132 kV Vankal Sub-Station

TCC provided in-principle agreed for the scheme and recommended to NERPC for approval.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

Member (GO&D), CEA advised all the states to submit the DPRs for reliable communication to PSDF secretariat at the earliest. He further stated that for DPR preparation regarding RDSS, help can be taken from CEA and in respect of DPR preparation of communication schemes, Powergrid may extend help to the states.

NERPC forum noted as above.

## 3.5. Metering Philosophy used in NERLDC for energy accounting: NERLDC

As per IEGC Clause 49(12)(h), RLDCs shall forward IEM readings to the concerned RPC on a weekly basis by each Thursday for the preceding week. It is noted that on certain occasions, not all the Main SEM data in the region are available within the prescribed timelines due to any number of reasons (DCD

failure, Internet issue, Local PC software/Hardware issue etc.). In such cases, it is required to substitute the Main meter data with Check/Standby Meter data. In absence of Check/Standby meters, Net Bus summation is used to substitute Main meter. In absence of Net Bus Meters, SCADA/PMU data (to be provided by concerned entity/constituent) has been proposed here. The procedure to be used by NERLDC for the same is hereby annexed (Annex-5.9).

In the 222<sup>nd</sup> OCC meeting of NERPC forum agreed in principle to the draft metering philosophy prepared by NERLDC until a unified approach is adopted by NPC. The forum also invited comments from all stakeholders and referred the draft metering philosophy to commercial forum for further deliberation.

In 54<sup>th</sup> CCM, CC Forum in principle agreed to the draft metering philosophy prepared by NERLDC until a unified approach is adopted by NPC. It will be also taken up in next NERPC meeting for information/approval of the forum.

Members may approve.

### **Deliberation of the TCC:**

The forum took note of the matter for information and agreed to place it in the 28<sup>th</sup> NERPC meeting for approval.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.6. Blending of Gas at OTPC Palatana Project: OTPC

Palatana station was successfully commissioned by OTPC in 2014-15 and the plant has been running successfully serving the NE beneficiary states with very competitive priced power. The fuel supplier had also been maintaining a good supply of the fuel gas to the station despite several operational challenges.

NE region has a high reliance on gas-based generation as nearly 30% power is supplied from gas station. This is evident from CEA's Report on Energy Generation Programme and PLF of Gas Stations, in which OTPC generated

4,575 MUs (Gross) in FY 2023-24 and exported 4,383 MUs to the beneficiary states. Given that OTPC accounts for nearly 50% of the total gas-based power generation in the Northeast (including state generation), it is essential for the Northeast region to keep the Palatana plant operating at base load.

OTPC, being the largest gas-based power station in the Northeast Region (NER), not only plays a pivotal role in meeting the region's energy demand but also contributes significantly to maintaining the overall system stability. By providing a reliable and consistent power supply, OTPC helps balance fluctuations in the grid, ensuring a stable and secure energy infrastructure for the entire region.

However, lately there has been a reduced gas supply to Palatana due to reasons beyond the control of the fuel supplier and the fuel supply has not been restored to desired level despite best efforts of the fuel supplier. Other gas stations in NE have also been experiencing deficit fuel supplies and improvement in gas supplies in near future also remains uncertain.

The situation has been persisting for a while and Palatana is operating at close to technical minimum levels. This has started affecting our cash flows and continuous low load operations shall affect our Plant and Machinery. Being a single-plant company, OTPC must secure an alternative gas supply to remain operational successfully. Therefore, OTPC has been exploring various options for sourcing alternative fuel to ensure the Palatana plant continues to operate successfully.

One potential solution is blending existing gas supply with an additional fuel source, which would enable OTPC to increase generation to the desired levels. It is anticipated that with the existing gas supply of 2.18 – 2.38 MMSCMD from existing fuel supplier, combined with blending of additional gas up to 0.3 - 0.5 MMSCMD, OTPC will be able to salvage its revenue stream while improving supply of reliable RTC power for NE beneficiaries.

Recently, GAIL has offered to supply about 0.3 MMSCMD additional gas to Palatana via the GAIL network/ ONGC Network/ Indhradhanush Gas Grid



Ltd. (IGGL) which could be increased to 0.5 MMSCMD in coming future. Based on the current gas supply of 2.18-2.38 MMSCMD and the offer from GAIL to provide an additional 0.3 MMSCMD of gas, we have formulated a detailed commercial proposal for blending 0.3 MMSCMD - 0.5 MMSCMD gas at Palatana with existing gas supplies. The proposal PPT is attached herewith for discussion and kind approval.

The proposal letter and PPT was shared with all beneficiary states in November 2024 for kind consideration and approval. OTPC officials have also visited all beneficiary states to discuss the proposal in person and have been maintaining regular communication with beneficiary states regarding the progress for the approval of the blending proposal.

The blending proposal aims to optimize Palatana's operations, ensuring its successful functioning while maximizing the availability of electricity for our beneficiary states.

In view of the above it is kindly requested to:

- 1. Allow Palatana to source up to 0.5 MMSCMD of alternative fuel gas for blending with the existing fuel supply, ensuring the plant operates at an optimal PAF for the benefit of the beneficiary states.
- 2. Allow sourcing this 0.5 MMSCMD of additional gas at a price as notified by MoPNG/PPAC as per its latest guidelines.
- 3. Allow sourcing of this additional gas for a minimum period of 3 years from the signing of the Gas Supply and Purchase Agreement (GSPA).

The forum is requested to discuss and pass a resolution in favour of the proposal to allow blending of gas at Palatana. NERLDC is also requested to make suitable changes in the WBES for scheduling of Palatana using blended gas.

In the 220<sup>th</sup> OCC meeting of NERPC OCC forum opined that OTPC Palatana station is crucial for supplying base load power in NE region and its successful operation at good PLFs will help all the beneficiary states to meet their energy

requirements. The beneficiaries too supported the proposal. OCC forum advised OTPC to place the commercial details of the proposal in the forthcoming CC meeting.

In 54<sup>th</sup> CCM, OTPC representative made the brief presentation on the matter (Presentation attached as **Annexure 3.6**). He highlighted the commercial details of the proposal with blending of upto 0.3 to 0.5 MMSCMD of additional gas with existing supplies. The estimated tariff of Palatana with 0.3 MMSCMD, the tariff cost will increase by 45-55 paisa/unit and for 0.5 MMSCMD blending the tariff cost will increase by 75-85 paisa/unit. OTPC had also shared the proposal with all the beneficiary states and had been pursuing the proposal individually with them.

After detailed deliberations, Forum opined that Palatana being a very crucial power plant of NER catering around 726.6 MW and by considering the gas constraints issues faced by the plant since past few years, a short-term measure is necessary to run the plant at reasonable PLF and PAF and to comply the environmental norms (NOx). Therefore, forum recommended the proposal of OTPC Palatana with blending of 0.3 MMSCMD additional gas as short-term measure subject to approval from RPC forum. Further forum requested all the beneficiaries of OTPC Palatana to take the matter with their higher authority and communicate the same to OTPC at earliest so that OTPC can take necessary steps in this regard with CERC.

### **Deliberation of the TCC:**

OTPC informed that they have received positive responses from beneficiary states, and the matter is being taken up with the higher authorities of the respective states for approval.

It was reiterated that GAIL will provide the additional gas through the existing gas network, ensuring a viability model for OTPC.

The proposed tariff increases due to blending of 0.3 MMSCMD additional gas was estimated to be around 45-50 paise per unit, and OTPC assured that the

plant would be able to generate an additional 80 MW with the proposed gas blending.

The forum suggested OTPC that the overall tariff should be such that after blending it ensures affordability for all beneficiaries.

The forum advised all the states to expedite the approval process.

TCC forum recommended the proposal of OTPC Palatana with blending of 0.3 MMSCMD additional gas as short-term measure (to meet the growing demand of NER State) subject to approval from RPC forum.

### **Deliberation of the NERPC:**

CMD, MeCL informed that NER States have long term agreement (MoUs) with OTPC to provide the power supply at CERC determined rate. OTPC has also existing agreement with ONGC to supply requisite amount of gas. ONGC should honour the MoU and provide the requisite amount of gas as per agreement. He opined that forum cannot take decision on the matter of Tariff which is determined by CERC.

After detailed deliberations, forum opined that OTPC Palatana may take up the matter with CERC and approach beneficiary states for their board approvals.

NERPC forum noted as above.

# 3.7. NERPC Secretariat Budget Estimates (BE) for FY 2025-26 and Annual Contribution towards "NERPC Secretariat Establishment Fund" For FY 2025-26: NERPC

The proposed BE for FY 2025-26 is placed below:

Sub-Head/Minor Head/Name of Scheme	Proposed Budget Estimates 2025- 26(in thousands INR)	Remarks	
Salary	0	Budget for Salary would continue to be provided by CEA/MoP	
Medical (MED)	1000		
Domestic Travelling Allowances	2500		

# ्राष्ट्री के स्वयमेव जयते

### NORTH EASTERN REGIONAL POWER COMMITTEE

Fuels and Lubricants	500	
Professional Services	10	
Office Expenditure	10000	
Minor Work	6000	NERPC Complex is not under any annual maintenance contract. Budget includes estimates for Annual Electrical Maintenance & Annual Civil Maintenance & other Minor works for Office Complex
TOTAL	20010.000	

The actual contribution amount towards FY 2025-26 will be intimated by NERPC Secretariat separately.

### **Deliberation of the TCC:**

MS, NERPC apprised the forum that an additional amount of Rs. 60 lakhs under OE Head has to be added for AMC of PDMS for FY 2025-2026. Accordingly, the total budget would be Rs 26010.00 (in thousand).

NERPC may approve.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the total budget of Rs 26010.00 (in thousand) for FY 2025-2026. NERPC secretariat will send to NERPC members to contribute at the earliest

## 3.8. OPGW laying work on 132kV Dharamnagar-Dullavcherra and 132kV Dullavcherra- Halaikandi line: CTU

SL. No.	Items	Details
1.	Scope of the scheme	a) OPGW(48F) laying work on 132kV Dharamnagar-
		Dullavcherra (37 km)(jointly owned by Assam and
		Tripura) and 132kV Dullavcherra- Halaikandi (31.4
		km) line(Assam owned).

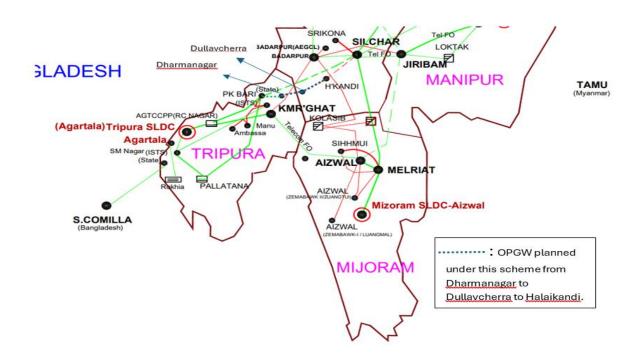


	1	
		b) Supply and Installation work of three nos. of STM16
		FOTEs, One each at Dharamnagar, Dullavcherra,
		Halaikandi S/s along with required interfaces for ISTS
		and STU connectivity of the 132kV P K Bari(state)-
		Dharamnagar- Dullavcherra – Halaikandi-Silchar link.
2.	Depiction of the	As depicted in <b>Appendix-I</b>
	scheme on FO Map	
3.	Objective /	In the 6th CPM of NER region held on 23.08.2024, NERLDC
	Justification	stated that OPGW connectivity for 132kV Dharamnagar-
		Dullavcherra deemed ISTS line is crucial for grid parameter
		monitoring of the concerned states. This deemed ISTS line
		though exist between Tripura and Assam but has the
		ownership of states(Tripura & Assam) so states have the first
		right to lay OPGW. However, if the states do not agree then
		it may be considered to lay OPGW in ISTS schemes. Tripura
		stated that for the Dharamnagar to Dullavcherra line,
		Tripura has submitted a proposal to CEA for OPGW laying
		along with reconductoring of the line in their section. But,
		this is in proposal state only and hence it may be considered
		to lay OPGW in ISTS scheme. NERLDC/Tripura/Assam
		stated that this being important ISTS line, OPGW laying may
		be done in ISTS scheme rather than by states.
		It was further deliberated in the forum that as OPGW laying
		on Halaikandi to Silchar line and P K Bari(state) to
		Dharamnagar line is already under implementation so
		OPGW laying on Dullavcherra-Halaikandi may also be
		planned as it will strengthen the ISTS OPGW connectivity in
		NER. It was agreed in the forum that OPGW laying from
		Dharamnagar- Dullavcherra and Dullavcherra- Halaikandi
		may be planned in ISTS scheme so as to connect these
		stations on OPGW.
4.	Estimated Cost	Rs. 4,66,20,000/- (approx.) (Four Crores & Sixty Six Lacs and
		Twenty Thousands only) including taxes and duties as
		applicable.
5.	Implementation time	24 months from date of allocation.
	frame	
	1	



6.	Implementation	To be implemented by POWERGRID in RTM mode.
	agency	
7.	Deliberations	The agenda for OPGW laying on 132kV Dharamnagar-
		Dullavcherra line was deliberated in the in the 6th CPM of
		NER region held on 23.08.24. The agenda was also
		deliberated in $7^{ m th}$ CPM dated $20/01/25$ . The same agenda
		was also deliberated in 29th NETeST meeting held on
		$05.09.2024$ and $30^{th}$ NETeST meeting held on $24.01.2025$ .
		In the 30 <sup>th</sup> NETeST meeting, Tripura and NERPSIP
		POWERGRID apprised the forum that there is currently
		STM-4 at Dharmanagar, P.K Bari(state) and Hailakandi
		substations. In the meeting, it is suggested that existing
		STM-4 at Dharmanagar, P.K Bari and Hailakandi
		substations needs to be upgraded to STM-16 to avoid
		congestion. Also, as per the proposed scheme, another STM-
		16 is required at Dullavcherra.
		In the 30th NETeST meeting, the forum advised CTU to
		resubmit the scheme with the revised cost estimate
		considering the requirement of STM-16 equipment at PK
		Bari, Dharamnagar, Dullavcherra, Halaikandi S/s in the
		upcoming CCM.
		However, vide email dated 06.02.2025(attached as
		<b>Annexure 3.8</b> ), UNMS team has confirmed the STM 16 port
		availability at P K Bari(state) node which may be used to form
		the P K Bari-Dharamnagar- Dullavcherra – Halaikandi-
		Silchar link. Hence, the requirement of STM 16 FOTE at P K
		Bari(state) node has not been taken in this scheme.
		Accordingly, this scheme i.e. OPGW laying work on 132kV
		Dharamnagar- Dullavcherra and 132kV Dullavcherra-
		Halaikandi line has been prepared and after NERPC review
		the same shall be put up to NCT for approval.

Appendix-I



### **Deliberation of the TCC:**

TCC, in principle, agreed to the proposal and recommended for NERPC forum approval.

### Deliberation of the NERPC:

NERPC forum noted and approved the recommendation of TCC.

Further, the forum emphasized that in case of Right of Way (RoW) issues, the respective States/utility will provide necessary support to resolve the matter.

## 3.9. Procurement of cold spare transformers and reactor for Northern Eastern Region: POWERGRID

CERC had set up a committee on dated 15.03.2018 consisting of representatives from CERC, NLDC, CEA & POWERGRID under the Chairmanship of the Chief (Engineering) of the CERC to assess the

requirement of regional spares including bus reactors, line reactors, ICTs, etc. This would ensure reliability of the grid and reduce downtime in case of any failure/outage.

1. As per CERC Committee recommendation, the following spares transformers & reactors are required to be kept as spare for North Eastern Region as per POWERGRID assets base:

#### Trans former:

MVA Rating of Transfor mers	Voltage Rating	Total Installed unit in POWERG RID	Spare Required as per CERC report	RPC Approved Spares	Qty Proposed for procurement	Location /State of spare requirem ent
3Ø- 315MVA	400/132/ 33kV	1	1	0	1	Assam
3Ø- 160MVA	220/132k V	6	2	1	1	Nagaland
3Ø- 100MVA	220/132k V	2	2	1	1	Assam
3Ø- 50MVA	132/33kV	4	2	1	1	Manipur
TOTAL:			4			-
Tentative Cost			43.94 Cr			

### Reactors:

MVAR Rating of Reactors	Voltage Rating	Total Installed unit	Spare Required as per CERC report	RPC Approved Spares	Qty Proposed for procurem ent	Spare requirement
3Ø- 125MVAR #	420kV	6	2	1	1	Manipur
3Ø- 63MVAR*	420kV	32	3	2	1	Manipur

Tentative Cost				34.5	6 Cr		
TOTAL:				7			
3Ø- 20MVAR	132kV	7	3		0	3	Manipur, Mizoram, Tripura
3Ø- 20MVAR	245kV	1	1		0	1	Assam
3Ø- 31.5MVA R	245kV	1	1		0	1	Nagaland

Quantity considered for both 125MVAR & 80MVAR reactors in Manipur. In case of failure of existing 80MVAR reactor, replacement can be done with 125MVAR.

Quantity considered for both 50MVAR & 63MVAR reactors. In case of failure of existing 50MVAR reactor, replacement can be done with 63MVAR.

In view of the above, it is requested for approval for procurement of cold spare transformers & reactors of various ratings as per CERC. The tariff for the investment made is to be shared by constituents as per the provisions of CERC Regulation.

As per the deliberation of the 220<sup>th</sup> OCCM, the forum requested PGCIL to submit the complete details regarding state wise requirement of spares as well details of available spares. Accordingly, PGCIL has submitted the requisite details via e-mail dated 29/11/24. The list is attached as **Annexure 3.9**.

As per the deliberations in 221st OCC forum, representative of Tripura intimated the forum that they would submit their views in the next OCC forum. Further, NERPC advised NERLDC to conduct a detailed study about the requirement of reactors, installed in short T/Ls(<100kM) and their impact on grid voltage. And if any reactor is found to be redundant (having nominal effect on the grid voltage) after the due study, the same can be taken out and be used as a spare.

In the 222<sup>nd</sup> OCC meeting of NERPC NERLDC presented the study regarding the requirement of reactors and their impact on grid voltage particularly for 400 kV Balipara-BNC corridor. The study also highlighted that the line reactor (switchable) at Balipara end is necessary to maintain the grid voltage once Lower Subansiri HEP comes into service.

The forum agreed in principle to the proposed number of spare reactors at different locations and further deliberations shall follow in commercial subcommittee meeting.

In 54<sup>th</sup> CCM, CC forum noted and in principle agreed the proposal of NERTS for spares transformers & reactors and recommended to place the matter before next RPC for information/approval. The expenditure will be booked under PoC Mechanism.

### **Deliberation of the TCC:**

TCC, in principle, agreed to the proposal and referred it to NERPC for approval.

#### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

Member(GO&D), CEA suggested that PGCIL may explore the possibility of ER and NER common assets inventory for spare.

3.10. Provisional Tariff for Khandong Hydro Power Station (2x50MW=50MW) after Reconstruction, Renovation and Modernization: NEEPCO

After completion of Reconstruction, Renovation and Modernization of the 2x50 MW Kopili Hydro Power Station, 1st Unit of the is scheduled for commissioning in the month of May 2025 and last unit in the month of July 2025.

Consent for undertaking the Reconstruction, Renovation & Modernization works of the Power Station with levelized tariff over the expected 25 years useful life of Rs. 3.24/unit has been conveyed by all the beneficiaries.

However, after certain modifications in the DPR due to submergence of the Power Station, cost for R&M has increased substantially and accordingly the tariff is expected to increase from the previously calculated value. The revised Civil and E/M cost has already been approved by the CEA and the approval of IDC &IEDC is awaited as on date. Further, a Petition has already been filed before the Hon'ble CERC for approval of the DPR.

Application for determination of tariff shall be filed before the Hon'ble Commission on completion of the works as per the Regulation 9 of the Central Electricity Regulatory Commission (Terms and condition of Tariff) Regulations, 2024. However, till determination of tariff by CERC, it is proposed that a provisional Tariff of Rs.3.24/unit as agreed by the beneficiaries be adopted by the House for the purpose of billing for power supplied from the Power Station from COD till issuance of tariff by CERC. The proposal for billing at the proposed provisional tariff of Rs. 3.24/kWh is subject to suitable adjustment on determination of final tariff by CERC.

Therefore, the proposal is placed for deliberation and approval in the house under the aegis and guidance of NERPC.

In 54<sup>th</sup> CCM, CGM(Comml.), NEEPCO informed the forum that 1<sup>st</sup> Unit of the Khandong HEP is scheduled for commissioning in the month of May, 2025 and last unit in the month of July, 2025. He further informed that the application for determination of tariff shall be filed before the Hon'ble Commission on completion of the works as per the Regulation 9 of the CERC (Terms and condition of Tariff) Regulations, 2024. However, till determination of tariff by CERC, it is proposed that a provisional Tariff of Rs.3.24/unit as agreed by the beneficiaries be adopted by the House for the purpose of billing for power supplied from the Power Station from COD till issuance of tariff by CERC. The proposal for billing at the proposed provisional tariff of Rs. 3.24/kWh is subject to suitable adjustment on determination of final tariff by CERC.

After detailed deliberation forum agreed for the provisional tariff of Rs. 3.24/kWh, which is subject to suitable adjustment on determination of final tariff by CERC.

### **Deliberation of the TCC:**

TCC forum in principle, agreed for the provisional tariff of Rs. 3.24/kWh, which is subject to suitable adjustment on determination of final tariff by CERC and recommended to NERPC forum for approval.

#### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.11. Proposal to include NETC as permanent member of NERPC: NERPC

North East Transmission Company Ltd. (NETC) is one of the transmission licenses operating in the North Eastern Region. NETC has the following shareholders:

- OTPC-26%
- PGCIL-26%
- AEGCL-13%
- Govt. of Tripura-10%
- Govt. of Nagaland-4%
- Govt. of Mizoram-10%
- Govt. of Manipur-6%
- Govt. of Meghalaya-5%

From the above it has found that NETC is a kind of PSUs which has more than 50% share of CPSUs.

As per Ministry of Power resolution dated 25<sup>th</sup> May 2005 "A representative of every transmission licensee including deemed licensees operating in the region will be the member of RPCs. In view of the above it is proposed to include NETC as permanent member of NERPC as NETC falls under the category of PSU.

MS NERPC stated that as per MoP resolution NETC will be member of RPCs as it having share of 52% from PSU.

NETC representative agreed for NERPC proposal to NETC as permanent member.

In 54<sup>th</sup> CCM, CC forum noted and in principle agreed the proposal of NERPC to include NETC as permanent member of NERPC and recommended to place the matter before next RPC for information/approval.

TCC may approve.

### **Deliberation of the TCC:**

TCC forum, in principle, agreed to the proposal and referred it to NERPC for approval.

#### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.12. Contribution of Non-Regular Members of NERPC: NERPC

Non-members utilities participating in various meetings of NERPC and availing the services of NERPC are termed as non-regular members of NERPC as per NERPC CBR 2024. It is proposed that non-regular members may pay participation fees as provided below:

Participation fee for	NERPC Establishment	NERPC Board Fund
Non-Regular Members	Fund	
	Rs. 10,00,000/-	Rs. 4,00,000/-

TCC may approve.

### **Deliberation of the TCC:**

TCC forum, in principle, agreed to the proposal and referred it to NERPC for approval.

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

## 3.13. Proposal for procuring 1 no. of 100 KVA Backup DG set at NERPC Secretariat: NERPC

The power back up at NERPC Secretariat and residential campus is currently provided by a 100 KVA DG set of M/s Cummins make. This DG set was set up in the period 2014-15. It is to be mentioned that inspite of regular checkups and periodic maintenance, this old DG set has been developing frequent problems recently. There have been incidents of oil leakage and frequent trippings during its operation. These incidents have been treated on case-tocase basis for a long time now. These interruptions in power supply have been creating hurdles in day-to-day operations of NERPC Secretariat. Power failures during on going meeting sessions disrupt the important discussions and create problems for the delegates visiting NERPC for official purposes. Moreover, the delegates residing in the guest house of NERPC also go through a lot of inconvenience in case of no power back up. NERPC Secretariat and the residential campus being located in Shillong in the state of Meghalaya experiences extreme cold especially during winter. This makes it necessary to have uninterrupted power flow to keep the heating equipments running. Unprecedented maloperation of the DG system creates inconvenience for the family members in the residential quarters. It is to be mentioned here that there is a requirement of a back up 100 KVA DG set for NERPC Secretariat for parallel operation with the existing 100 KVA DG set. The Annual Maintenance Contract document of the existing 100 KVA DG set of M/s Cummins make mandates under Customer Responsibility, Sl. No. 9 to have N+1 redundancy of the existing DG set. Non compliance of this clause under Customer Responsibility defeats the purpose of the AMC and the liability of the consequences have to be borne by NERPC. In light of the above circumstances, it is proposed to procure a back up 100 KVA DG set for NERPC Secretariat for parallel operation with the existing 100 KVA DG set. This will ensure compliance of the Customer Responsibility clause of AMC to have N+1 redundancy of the existing system. Moreover, parallel operation of both the 100 KVA DG sets will lower the load burden on the existing old 100 KVA DG

set and at the same time will enhance the uninterrupted power back up capability of NERPC Secretariat. The estimated cost for back up 100 KVA DG set (excluding civil work) will be ₹10 lakh plus applicable taxes/GST. The financial implication for the back up 100 KVA DG set shall be borne out of "NERPC Secretariat Establishment Fund".

In 54th CCM, CC forum noted and approved the proposal of NERPC and recommended to place the matter before next RPC for information/approval.

### **Deliberation of the TCC:**

TCC forum, in principle, agreed to the proposal and referred it to NERPC for approval.

#### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 3.14. Proposal for sanction of budget for organizing 16<sup>th</sup> NPC Meeting: NERPC

As per the roaster finalized in the 5<sup>th</sup> NPC meeting and the subsequent decision made by the NPC committee in the 15<sup>th</sup> NPC meeting, it was agreed that the 16<sup>th</sup> NPC meeting would be hosted by NERPC as per roaster. The estimated cost for organizing the 16<sup>th</sup> NPC meeting will be around ₹25 lakh.

The proposed expenditure will be met through "NERPC Board Fund".

No additional fund required from NERPC constituents. The surplus amount in board fund will be utilized for organizing 16th NPC Meeting.

In 54<sup>th</sup> CCM, CC forum in principle agreed the proposal of NERPC to host the 16<sup>th</sup> NPC meeting and recommended to place the matter before next RPC for information/approval.

### **Deliberation of the TCC:**

TCC forum in principle, agreed to the proposal and referred it to NERPC for approval.

### Deliberation of the NERPC:

NERPC forum noted and approved the recommendation of TCC.

### 3.15. Roster for TCC/NERPC Meeting -NERPC

As members of NERPC are aware that TCC & NERPC are being hosted by constituents on rotation basis. In this regard 29<sup>th</sup>, 30<sup>th</sup>, 31<sup>st</sup> & 32<sup>nd</sup> meetings has been proposed as:

Sr. No.	Meeting	Hosted by
1.	29 <sup>th</sup>	DoP Mizoram
2.	30 <sup>th</sup>	Tripura
3.	31st	OTPC
4.	32 <sup>nd</sup>	NVVN

For kind approval/information.

### **Deliberation of the TCC:**

The revised roster as per the deliberation which refereed to NERPC forum for approval is given below:

Sr. No.	Meeting	Hosted by
1.	29 <sup>th</sup>	DoP Mizoram
2.	30 <sup>th</sup>	OTPC & NETC
3.	31 <sup>st</sup>	Tripura
4.	32 <sup>nd</sup>	NVVN

### **Deliberation of the NERPC:**

NERPC forum noted and approved the recommendation of TCC.

### 4. PART C: COMMERCIAL ISSUES

## 4.1 DICs-wise Outstanding status for Legacy dues and Deficit recovery statement: NERLDC

Following are the DICs-wise Outstanding status for Legacy dues and Deficit recovery statement for the period 16.09.2024 to 22.12.2024.

Outstanding against Legacy dues

	Outstanding	Paid for	Outstanding Dues	
State/ Drawee	dues	Weeks	for Instalment	
मणिपुर / Manipur	₹ 4,75,68,600	0	20	
मिजोरम / Mizoram	₹ 1,91,62,598	6	14	
त्रिपुरा / Tripura	₹ 5,97,04,096	4	16	

Outstanding against Deficit recovery statement for the period 16.09.2024 to 22.12.2024

State/ Drawee	Outst	tanding dues
मणिपुर / Manipur	₹	27,78,240
अरुणाचल प्रदेश / Ar. Pradesh	₹	28,43,106
नगालैंड / Nagaland	₹	22,01,173
त्रिपुरा / Tripura	₹	47,56,413

NERLDC have issued reminders regarding the said Outstanding vide letters dated 03.12.2024, 26.12.2024 and 04.02.2025.

It is requested to make the payment as per the enclosed Statement within the due date in the Regional Deviation and Ancillary Services Pool account. If payments by the drawee DICs are delayed beyond ten (10) days from the instalment due date, the drawee DICs shall be liable to pay simple interest @ 0.04% for each day of delay.

Hence, it is requested to all concerned constituents to clear all the dues at the earliest.

### **Deliberation of the TCC:**

All the concerned utilities were advised to pay the outstanding amount in due time.

### **Deliberation of the NERPC:**

NERPC forum noted as above and requested all the concerned utilities to clear their outstanding dues at the earliest.

### 4.2 RLDC Fees & Charges outstanding: NERLDC

The following outstanding is pending from MSPDCL against payment of NERLDC Fees and Charges.

S1.					Outstanding
No	Bill Description	Bill No	Bill Date	Due Date	Amount (₹)
1	Closing Balance as per reconciliation statement for Q3				-11947
2	Monthly bill for December' 24	NER/2024- 25/0234	01.01.2025	15-Feb- 25	9,49,989
3	Monthly bill for January' 25	NER/2024- 25/0263	03.02.2025	20-Mar- 25	9,49,989
			Total		18,88,031

In view of the same, NERLDC vide email dated 07.02.2025 requested MSPDCL to clear the above-outstanding amount.

### **Deliberation of the TCC:**

All the concerned utilities were advised to pay the outstanding amount in due time.

### **Deliberation of the NERPC:**

NERPC forum noted as above and requested all the concerned utilities to clear their outstanding dues at the earliest.

### 5. PART D: ITEMS FOR INFORMATION/UPDATE

### 5.1 Construction of 132kV Monarchak- Surjamaninagar transmission line: NEEPCO

The proposed evacuation system from 101 MW TGBPS to Suryamaninagar is yet to be commissioned. Due to poor existing evacuation system, frequent tripping of both the Units have been experienced by NEEPCO over the years. Though the matter has time and again been discussed in several Operation Coordination Committee Meetings of NERPC, M/s TSECL has still not indicated the proposed commissioning date.

Due to frequent tripping of existing lines and subsequent tripping of Units, NEEPCO has already observed major damages in the critical components of machines which in turn will reduce the expected life of the Units of TGBPS.

In view of the TSECL may please be requested to complete the construction work of the said line at the earliest.

In 26<sup>th</sup> TCC Meeting, Tripura representative informed that there is a right-of-way (RoW) issue, which has been brought to the attention of the state government. A survey has been conducted, and the amount involved is quite substantial. The state government has accepted the proposal. The work can only proceed once the funds are released. The total line length is 44 km, with 2 foundations, 8 towers to be erected, and 19 km of stringing remaining.

The timeline for completion is December 2024.

In 27<sup>th</sup> TCC Meeting, Tripura representative informed the forum that the tentative timeline for completing the evacuation system from 101 MW TGBPS to Suryamaninagar is now March 2025. He further mentioned that RoW issue has already been resolved by Govt of Tripura by providing the compensation.

### **Deliberation of the TCC:**

TSECL updated that the expected completion date has now been extended to May 2025.

The forum advised TSECL to expedite the remaining work to ensure timely commissioning of the evacuation system and avoid further operational and financial losses to NEEPCO.

### Deliberation of the NERPC:

NERPC forum noted as above.

## 5.2 Construction of 2nd transmission line to Tuirial power station of NEEPCO - NEEPCO

NEEPCO is facing problem in operating 2x30 MW power station with only one power evacuation line i.e. 132 KV single Circuit Bawklang (Kolasib) - Tuirial line. The matter has been discussed with Power and Electricity Dept. Govt of Mizoram on various occasions in the past and the Govt. of Mizoram has agreed to construct the same. However, NEEPCO has observed that till date no progress on ground has been made for construction of the second circuit. It may please be noted that a generating station which is based on reservoir operation cannot operate for long with a single evacuation transmission line and is also not fulfilling the N minus 1 condition. There should be redundancy in power evacuation system as per the Grid code.

It may please be noted that NEEPCO has sufficient numbers of line bays in its switch yard for smooth evacuation as per requirement.

It has been observed that during rainy season, in the event of the lone line outage, load throw off of the Units takes place and the reservoir may spill over for non-availability of power evacuation, which is an avoidable national loss.

NEEPCO requests through this forum for early construction of the 2nd evacuation transmission line for Tuirial HPS by Mizoram for safe and smooth operation of the Tuirial Hydro Electric power station.

In 26<sup>th</sup> TCC Meeting, Mizoram representative informed that an amount of INR 28 crore has been allocated for the project by the State Govt. Upon the release of government funds, the project is expected to be completed within two years(May'2026).

NEEPCO representative requested Mizoram to expedite for early execution of this transmission line being crucial for evacuation of Turial power generation.

NERPC to monitor the progress of the project in sub-committee meetings.

In the 27th TCC meeting of NERPC, held on 7th November, 2024 at Guwahati, the DOP, Govt. of Mizoram updated that the allocation of Rs. 28 Crore has been received from Govt. of Mizoram for which expenditure sanction is being sought.

Request for kind appraisal of present status of construction of the same.

Mizoram may update.

### **Deliberation of the TCC:**

Mizoram apprised the forum that the work is in progress and it is expected to be completed by May'2026.

The forum advised Mizoram that efforts should be made to complete the project by December 2025, and NERPC will continue monitoring the progress in sub-committee meetings.

### **Deliberation of the NERPC:**

NERPC forum noted as above.

5.3 Non-Compliance of N-1 criteria of 132 kV Tinsukia-Ledo-Rupai – Chapakhowa-Roing-Pasighat-Along-Basar-Daporijo-Ziro-Panyor HEP link: NERLDC

132 kV Tinsukia-Ledo-Rupai link is having very old conductor, the link is not able to sustain more than 60 MW load for longer period, thus grid disturbance might occur on tripping of link from the farthest end i.e. 132 kV Tinsukia-Ledo line or 132 kV Tinsukia – Rupai line or 132 kV Panyor HEP-Ziro line.

#### Long term Solution:

Reconductoring of 132 kV Tinsukia-Rupai line, 132 kV Tinsukia-Ledo line and 132kV Ledo-Rupai line with high ampacity conductor.

In 222<sup>nd</sup> OCC meeting, SLDC Assam apprised the forum that the revised DPR has been submitted to PSDF.

Members may discuss.

### **Deliberation of the TCC:**

SLDC Assam informed that the revised DPR for reconductoring the 132 kV Tinsukia-Rupai line, 132 kV Tinsukia-Ledo line, and 132 kV Ledo-Rupai line with high ampacity conductors has been submitted to PSDF.

PSDF has requested for submission of three quotations for fund finalization before proceeding with further approval.

The forum took note of the development and requested to expedited the timely implementation of the reconductoring project.

### **Deliberation of the NERPC:**

NERPC forum noted as above.

### 5.4 N-1-1 Reliability of Upper Assam Power System: NERLDC

The Upper Assam System is vulnerable under N-1-1 contingency. Considering the worst scenario like continuous shutdown or Force Outage of 220 kV Samaguri-Mariani (AS) line or 220 kV AGBPP-New Mariani (PG) line, the flow gate of the Upper Assam System is vulnerable under N-1-1 contingency.

#### Long term Solution:

- 1. Commissioning of 2<sup>nd</sup> ckt of 220 kV Mariani-Mariani (PG) line: Approved by CEA
- 2. Early Commissioning of 220 kV Samaguri Mariani 1(Latest Status: Kaziranga Forest Clearance pending)

In 222<sup>nd</sup> OCC meeting, SLDC Assam apprised the forum that:

1. Commissioning of 2nd ckt of 220 kV Mariani-Mariani(PG) line is in planning stage.

2. Early Commissioning of 220 kV Samaguri – Mariani 1 line; the funding issue is still not resolved.

### **Deliberation of the TCC:**

SLDC Assam informed that the commissioning of the 2<sup>nd</sup> circuit of the 220 kV Mariani-Mariani (PG) line is still in the planning stage, and funding is yet to be finalized.

The early commissioning of the 220 kV Samaguri-Mariani 1 line remains unresolved due to funding constraints, and Kaziranga Forest Clearance is still pending.

The forum reiterated that the 220 kV Mariani-Mariani (PG) line is included in CEA's 2032 transmission planning, emphasizing its criticality for strengthening the reliability of the Upper Assam system.

The forum advised that funding for both lines should be expedited and recommended that the matter be taken up at the appropriate level for resolution.

### **Deliberation of the NERPC:**

NERPC forum noted as above.

5.5 Installation of balance meters and replacement of forty-nine (49) numbers of -/1A meters with -/5A meters: Genus/Manipur

This has reference to the above-mentioned LOA received from NERPC for Supply, Installation, Testing and Commissioning of 0.2S class ABT type energy meters and Automated Meter Reading(AMR) solutions as per SAMAST guidelines at various substations of state utilities in the North Eastern States of Manipur, Mizoram, Tripura, Nagaland and Arunachal Pradesh and your letter as mentioned above.

We are pleased to inform you that despite the prevailing law and order situation in Manipur, we are on track to complete the installation of 25 ABT meters in the coming week.

Regarding the balance 49 Nos of ABT meters, we would again like to reiterate that we have commenced manufacturing the meters subsequent to completing surveys of all designated substations and obtaining formal approvals. Each metering point was meticulously detailed in the approved survey, specifying meter ratings (-/1A or -/5A). Furthermore, we have already offered the meters for inspection and dispatched them promptly upon successful inspections and receipt of dispatch approvals.

Changing the meters at this juncture would entail significant financial implications for us, as the manufactured meters strictly adhere to the specifications outlined in the LOA and are not suitable for deployment in other projects. This concern was also deliberated upon at various NeTEsT and OCC meetings in the presence of MS, NERPC.

We request your prompt action towards taking over of the 49 Nos of -/1A meters so that we may proceed towards project closure. Your cooperation is crucial for the timely and successful completion of the project

We look forward to your support for the timely and successful completion of the project.

In 30<sup>th</sup> NETeST Meeting, the matter could not be discussed as representative of Manipur was absent during the deliberation. The forum decided to refer the matter for further deliberation in upcoming NERPC meeting.

### **Deliberation of the TCC:**

It was noted by TCC forum that only Manipur State has left with go live of SAMAST project.

Manipur informed that the issue arose due to discrepancies in the survey process, which did not properly account for the required meter specifications.

It was stated that a letter has been sent to PwC and Genus for tripartite meeting to address and resolve the issue.

The forum took note of the developments and advised Manipur to resolve the issue amicably in timebound manner and provide an update to NERPC.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 5.6 Under Recovery of fuel cost of NEEPCO Gas Stations due to frequent change in schedule: NEEPCO/OTPC

The Ramp rate of gas stations is 3 % /Min which translates to 131 MW /Block for Assam Gas based station (AGBPS) and similarly 60 MW / Block for Agartala Gas Based Power Station (AgGBPS). Due to the implementation of TRAS, both the Gas Based Power Stations are directed to increase or decrease the schedule to the tune of 50-100 MW /block for AGBPS and 25 to 35 MW in case of AgGBPS, very frequently, during the course of the day. Further, it has been noted that during the Solar hours, the schedule given by the RLDC is even less than the technical minimum. It may please be noted that the stations get gas from M/s Oil India Limited for AGBPS and M/s GAIL for AgGBPS which are directly connected to isolated gas fields. The gas sellers (Oil India Limited/GAIL) cannot increase the gas quantity at the desired technical parameters for the generating stations when there is a need to increase the generation. At the same time reduction of generation as per the schedule is also not possible at the rate asked for, as decrease in gas consumption creates gas flare up issues at the gas well sites. Due to these constraints, Gas based generating stations mainly in NER cannot synchronize their generation in tune to the demand of RLDC. This leads to huge financial impact on the Generating stations causing under recovery of fuel cost due to the stringent extant DSM Regulations. As per the DSM Regulation only 10 % of deviation from the schedule is allowed. The fuel cost under recovery of NEEPCO gas stations are as follows upto the 3rd Qtr of the Financial year 2025: -

AGBPS: Rs. 71 cr, AgGBPS: Rs 21 cr.

- 1. The possible solution of the issue is to maintain a constant schedule (at least up to the Technical Minimum)
- 2. In case of ramp up and down, the change in schedule may be restricted to 1% per minute considering the isolated gas grid of NER.

Therefore, the proposal is placed for deliberation and approval in the house under the aegis and guidance of NERPC. Further it is requested that NERPC may kindly take-up the issue with Hon'ble CERC for necessary redressal and amendment.

In 54th CCM, CGM(Comml.), NEEPCO highlighted the ramp up issue of NEEPCO Gas plant due to TRAS up and down schedule. Further he informed the forum that stations get gas from M/s Oil India Limited for AGBPS and M/s GAIL for AgGBPS which are directly connected to isolated gas fields. The gas sellers (Oil India Limited/GAIL) cannot increase the gas quantity at the desired technical parameters for the generating stations when there is a need to increase the generation. At the same time reduction of generation as per the schedule is also not possible at the rate asked for, as decrease in gas consumption creates gas flare up issues at the gas well sites. Due to these constraints, Gas based generating stations mainly in NER cannot synchronize their generation in tune to the demand of RLDC. This leads to huge financial impact on the Generating stations causing under recovery of fuel cost due to the stringent extant DSM Regulations. As per the DSM Regulation only 10 % of deviation from the schedule is allowed. Further he requested forum in case of ramp up and down, the change in schedule may be restricted to 1% per minute considering the isolated gas grid of NER and also requested NERPC may kindly take-up the issue with Hon'ble CERC for necessary redressal and amendment.

After detailed deliberation forum opined that NERPC will take up this matter in the meeting with Member (Technical), CERC which is scheduled on 24<sup>th</sup> Feb'25 at NERLDC conference hall, Guwahati. *Forum also decided that all the* 



beneficiaries to provide the schedule at least technical Minimum level and scheduling to be done as per the IEGC (1st amendment).

Further MS, NERPC requested NEEPCO and OTPC representatives to attend the meeting on 24<sup>th</sup> Feb'25 at NERLDC conference hall, Guwahati. He also informed the forum that this matter can also be taken up in the next RPC meeting.

#### **Deliberation of the TCC:**

NERLDC informed that the 1<sup>st</sup> amendment of IEGC has been implemented from 18th February 2025. It was noted that if the Technical Minimum schedule is provided by 14:30 hrs on D-1 day, it cannot be modified on the D-day as per the new IEGC amendment.

MS, NERPC informed that the issue regarding ramping constraints and scheduling limitations would be discussed with Member (Technical), CERC in the meeting scheduled on 24<sup>th</sup> February 2025 as additional agenda.

All states are requested to provide schedules up to the Technical Minimum level to ensure stable operation of gas-based stations. Forum also opined that NEEPCO, OTPC can approach CERC for necessary redressal as short term measure.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 5.7 Overloading of 132 kV Loktak - Ningthoukhong line in Manipur Power System: NERLDC

The generation from Loktak HEP is evacuated through the following transmission lines in the Manipur power system:

- 1. 132 kV Loktak Ningthoukhong line
- 2. 132 kV Loktak Imphal (PG) line
- 3. 132 kV Loktak Jiribam (PG) line
- 4. 132 kV Loktak Rengpang (MA) Jiribam (MA) Jiribam (PG) lines

However, the 132 kV Rengpang (MA) - Jiribam (MA) line has been under long outage since 18:18 Hrs of 17-11-2023.

Considering the current scenario, studies suggest tripping of 132 kV Loktak–Jiribam (PG) or 132 kV Loktak–Imphal (PG) line would result in high loading in 132 kV Loktak–Ningthoukhong line:

#### Long-Term Measures:

- 1. Reconductoring of the 132 kV Loktak Ningthoukhong line
- 2. Commissioning of the second circuit of the 132 kV Loktak Ningthoukhong (Ckt II).

In 222<sup>nd</sup> OCC, Manipur apprised the forum that the 132 kV Rengpang(MA)-Jiribam(MA) line is under outage due to law & order situation in the state and ongoing tower shifting works due to developments in NH-37 (Imphal-Jiribam) by NHIDCL.

Regarding the 2nd circuit of 132 kV Loktak-Ningthoukhong line, Manipur apprised the forum that negotiations are under way to resolve RoW issues. NERLDC informed the forum that re-conductoring of the 132 kV Loktak-Ningthoukhong line will be possible only after the 2nd circuit comes to service. Member Secretary, NERPC advised that reconductoring of 132 kV Loktak-Ningthoukhong line may be referred to CMETS and DPR in this regard to be submitted to PSDF committee after approval of NERPC. PGCIL submitted that CT replacement is required in 132 kV Loktak-Jiribam line at Loktak end by NHPC to avoid underutilization of the line. The forum advised NHPC to carry out the CT replacement works on priority at the earliest. NHPC apprised the forum that procurement of new CTs is under progress.

#### **Deliberation of the TCC:**

Manipur informed that negotiations are ongoing regarding Right of Way (RoW) issues, but the matter is yet to be resolved.



CTU informed that reconductoring of the 132 kV Loktak – Jiribam line has already been completed, while reconductoring of the 132 kV Loktak – Imphal line is expected to be completed by 25<sup>th</sup> March 2025.

The forum reiterated that replacement of CTs at the Loktak end of the 132 kV Loktak – Jiribam line by NHPC is essential for the full utilization of the line.

The forum also stressed upon the early restoration of 132 kV Rengpang (MA) - Jiribam (MA) line.

The forum advised PGCIL to assist NHPC in replacing the CTs and to explore the availability of spare CTs, including from outside the region if required. Meanwhile NHPC will do necessary process of tendering to procure and replace the CT.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

### 5.8 Responsibility of Users for compliance monitoring as per IEGC: NERLDC

As per clause no. 56.2.(a) & (c) of IEGC 2023, all users, CTU, STUs, NLDC, RLDCs, RPCs and SLDCs, power exchanges, QCAs, SNAs shall conduct annual self-audits to review compliance of these regulations and submit the reports by 31st July of every year to the concerned RLDC or SLDC, as the case may be".

The same was also discussed in various OCC meetings; however, details are yet to be received. Hence, all the users are requested to submit the self-audit report & compliance as per **Annexure 5.8** at the earliest.

Members may update.

#### **Deliberation of the TCC:**

All the users are requested to submit the self-audit report & compliance as per **Annexure 5.1** at the earliest.

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 5.9 Overloading of critical transmission lines in Tripura power system: NERLDC

Overloading of transmission lines in Tripura power system has become a cause of serious concern and a threat to grid security and reliability. In particular, 132 kV SM Nagar (ISTS) - SM Nagar line and 132 kV PK Bari (ISTS) - PK Bari line is getting critically loaded and experiencing significant over loading for prolong period of time causing vulnerability in the Tripura power system. In addition to that due to low generation from Monarchak, AgTCCP, Rokhia and Baramura, 132 kV SM Nagar (ISTS) - SM Nagar line get prematurely loaded before approaching the peak hours. After deliberation in various OCC meetings, It was recorded that an SPS may be devised as a short term measure till re-conductoring of 132 kV SM Nagar(ISTS) - SM Nagar line, 132 kV PK Bari - PK Bari (ISTS) line, 132 kV SM Nagar-Budjungnagar line and 132 kV PK Bari - Ambassa line with HTLS conductor. SPS logic is already devised and is under implementation by Tripura.

The above agenda was deliberated in 27<sup>th</sup> TCC meeting and Tripura representative informed the forum that DPR has been submitted to the state government for funding of reconductoring of six lines, including the critically loaded 132 kV SM Nagar (ISTS) - SM Nagar line and 132 kV PK Bari (ISTS) - PK Bari line.

#### **Deliberation of the TCC:**

TCC noted the update and requested Tripura to expedite the matter.

#### **Deliberation of the NERPC:**

NERPC forum noted.

## 5.10 Early commissioning of 80 MVAR Bus Reactor at Byrnihat: NERLDC

It has been observed that during off peak Hrs there is a High voltage on 400 kV Byrnihat Substation, which has necessitated the early commissioning of 80 MVAR Bus Reactor. The issue has been discussed in 188<sup>th</sup> OCCM dtd 16<sup>th</sup>



march 2022 and since then it was discussed in subsequent OCCM. it is crucial to emphasize the urgency of completing the replacement of the Bus Reactor. The reactor is out of service since December 2014.

In the latest 215<sup>th</sup> OCC meeting, MePTCL informed that Pre-commissioning tests going on and the element might be commissioned by June'24. It has also been observed that the commissioning date has been extended in the latest 219<sup>th</sup> OCC meeting, MePTCL informed that the Bus Reactor had been installed at site, but relay system was still pending. The work will be completed shortly.

In 220<sup>th</sup> OCC meeting, Meghalaya intimated the forum that the 80 MVAR Bus Reactor at Byrnihat shall be operational by first week of December-2024 tentatively.

#### **Deliberation of the TCC:**

Meghalaya intimated the forum that the 80 MVAR Bus Reactor at Byrnihat shall be operational by Jan/February 2025.

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

#### 5.11 Implementation/Review of Islanding Schemes of NER: NERPC

As per Clause 10 of the Central Electricity Authority (Grid Standards), Regulations, 2010: "Islanding Schemes- (1) The Regional Power Committees shall prepare Islanding schemes for separation of systems with a view to save healthy system from total collapse in case of grid disturbance. (2) The Entities shall ensure proper implementation of the Islanding Schemes". In this regard the Islanding schemes which are being planned/have been implemented in NER are mentioned below, along with the updates from 218th OCCM.

#### A. Guwahati Islanding Scheme

Assam updated that modified DPR has been sent to PSDF.

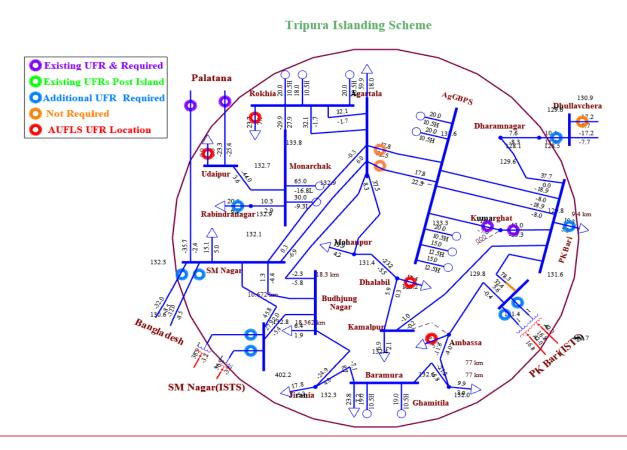
#### B. <u>Tripura/Agartala Islanding Scheme</u>

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#### NORTH EASTERN REGIONAL POWER COMMITTEE

NERLDC informed forum that required format was shared with Tripura.

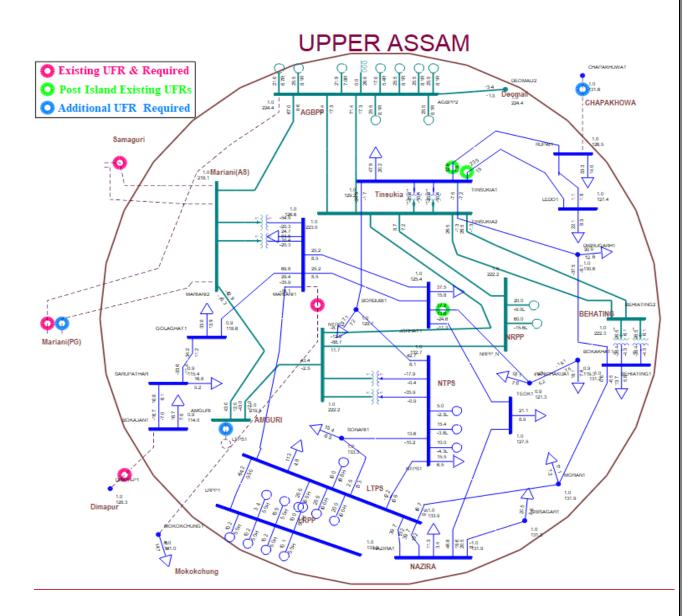
NERLDC have also apprised forum that generation data form Tripura along with load data yet to be received from Tripura. Forum requested Tripura to provide all the required data at earliest.



#### C. <u>Upper Assam Islanding Scheme</u>

Assam informed forum that NTPS was a very old power station and they did not have the data as required for updation for islanding scheme. For LTPS, regarding change in frequency settings, communication has been done with BHEL and we are awaiting response from their end. For LRPP, Stage I frequency setting is alarm and Stage II frequency setting is Trip. Forum asked NEEPCO and AEGCL to make the necessary changes and update their settings in consultation with their respective OEMs.

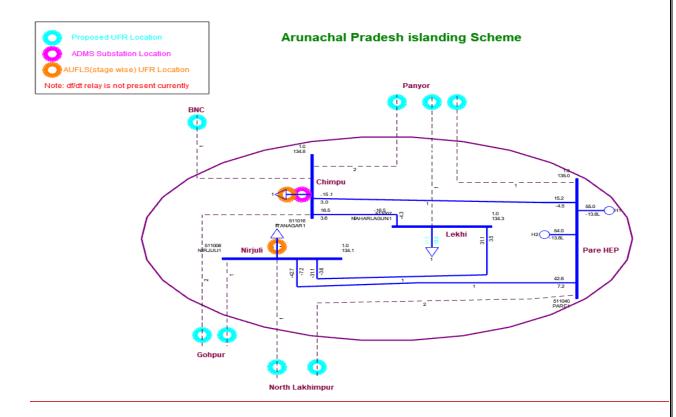




#### D. <u>Itanagar Islanding Scheme</u>

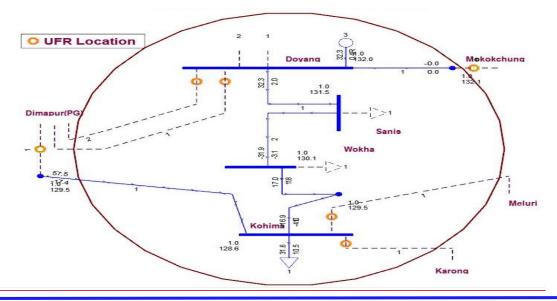
Arunachal Pradesh informed that the required load data had been submitted to NERLDC.





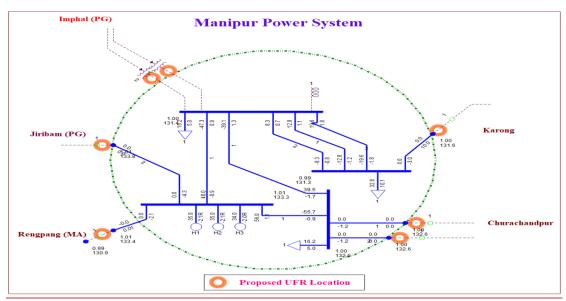
#### E. Kohima Islanding scheme

DoP Nagaland updated that the DPR preparation was underway, as they have not received budgetary offer from vendor. MS, NERPC urged DoP Nagaland to take the budgetary offer from a vendor at the earliest so that the same may be got approved in the upcoming RPC meeting.



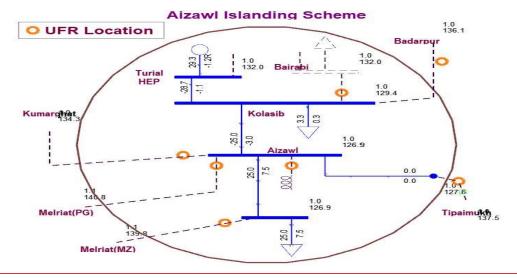
#### F. Imphal Islanding scheme

Manipur informed forum that due to law-and-order situation AUFLS mapping was pending from sub-station's end and assured to provide the required data shortly. NERLDC stated that data from NHPC was yet to be received. NHPC stated that they would provide required data shortly.



#### G. Aizawl Islanding scheme

Mizoram informed that the required load data had been provided to NERLDC. The forum stated that a special meeting would be held shortly to finalize the scheme.



#### H. Meghalaya/Shillong Islanding Scheme

NERLDC requested Meghalaya utilities to provide the load and generation data at the earliest as format for data had already been shared with Meghalaya.

MS, NERPC has urged all the stakeholder to expedite the process so that this Islanding Scheme can be approved in next RPC meeting. Schematic diagram is under process.

The following deliberations followed in 220th OCCM:

#### Tripura/Agartala Islanding Scheme:

NERLDC apprised the forum that all the data has been received from Tripura. Dynamic study has been completed and Load-Generation study is under way.

#### **Upper Assam Islanding Scheme:**

NERLDC apprised the forum that dynamic study as well as Load-Generation study has been completed. However, NEEPCO is required to submit the UFR settings for 2 nos. of units of AGBPP. NEEPCO agreed to submit the information at the earliest. Assam may prepare the DPR post submission of data by NEEPCO.

#### **Itanagar Islanding Scheme:**

NERLDC apprised the forum that all necessary study has been completed. Arunachal Pradesh may prepare the DPR for Itanagar Islanding Scheme.

Kohima Islanding Scheme:

NERLDC apprised the forum that dynamic data has not been received from Doyang completely. As such dynamic study is pending. NEEPCO agreed to share the data at the earliest to NERLDC.

#### Imphal Islanding Scheme:

NERLDC apprised the forum that data from NHPC Loktak has been received. Manipur has identified the 33 kV feeders but are yet to share load-generation data for the identified feeders. Dynamic study is going on.

Aizawl Islanding Scheme:

NERLDC apprised the forum that dynamic data has not been received from Turial. NEEPCO agreed to share the data at the earliest. Mizoram also intimated the forum that exploration for a change in feeders is under way as per priority. Load-generation data for such feeders shall have to be shared with NERLDC.

#### Shillong Islanding Scheme:

Meghalaya apprised the forum that the old machine at Umium stage III is being replaced with a new machine. As such, NERLDC requested Meghalaya to share dynamic data for Umium Stage I, Stage II and Stage IV and also for New Umtru.

#### **Deliberation of the TCC:**

TCC noted the update and it will be discussed in subcommittee meeting.

#### **Deliberation of the NERPC:**

NERPC forum noted.

## 5.12 Status of Commissioning of Lower Subhansiri HEP (8x250 MW)-NERPC

In the 25<sup>th</sup> NERPC Meeting held on 9<sup>th</sup> December 2023, Director (Technical), NHPC intimated the forum that unit 1 and 2 were scheduled to be commissioned in February'24 and March'24 respectively. However, due to geological events the commissioning schedules may likely be postponed by three to four months. He however stated that all the units of the project (8x250 MW) will be positively commissioned by May 2025.

In this regard, NHPC is requested to update the status of commissioning of Lower Subhansiri HEP.

In 26<sup>th</sup> TCC Meeting, NHPC representative informed that there was a massive landslide in October'2023. Post that incident an Expert Committee was constituted in Nov'2023 by Ministry of Power, Govt. of India to investigate the matter. The recommendations of the Expert Committee are being complied with.

NHPC representative informed that 3 units will be commissioned by March'2025 and the rest 5 units by May'2026.

PGCIL representative raised the concern of high reactive power generated by idle charged Lower Subhansiri HEP-BNC lines 1 & 2 and requested for commissioning of Bus Reactor at Lower Subhasiri at the earliest.

NHPC may update.

#### **Deliberation of the TCC:**

NHPC representative informed that 3 units will be commissioned by March'2025.

TCC noted the update.

#### **Deliberation of the NERPC:**

NHPC representative informed that 3 units of Lower Subansiri HE project shall be commissioned by May 2025 and balance units shall be commissioned by May 2026. NHPC is in touch with NERLDC for compliance of Regulations related to FTC and Trial Run Operation of units.

It has also been confirmed that one Bus reactor (80 MVAR) shall be commissioned and charged by March 2025.

NERPC forum noted as above.

#### 5.13 Issue Pertaining to NERPSIP-Nagaland: POWERGRID

66/33kV Tuensang SS of DOPN is being upgraded to 132/33kV level under NERPSIP as an additional scope and the same is targeted for completion by March 2025. The existing lines connected to Tuensang from 132/66kV Mokokchung and 132/66kV Kiphire is presently charged at 66kV. DoP Nagaland may ensure that the associated system at Mokokchung and Khiphire for Tuensang is upgraded to 132kV level in commensuration with Tuensang upgradation for its gainful utilization.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

#### 5.14 Issue Pertaining to NERPSIP-Tripura: POWERGRID

1. 132/33 kV Gokulnagar S/S under NERPSIP Tripura shall be connected by LILO of 132 kV Surajmaninagar- Rokhia line. Construction works for the LILO portion under NERPSIP has been completed and construction of 132 kV Surajmaninagar- Rokhia line is being done by TSECL. Construction works by TSECL needs to be expedited for energization of the system under NERPSIP. In case of further delays with regards to completion of the line, TSECL may take over the Goluknagar substation along with the completed LILO portion.

POWERGRID has already commissioned the following 33/11kV substations in Tripura under NERPSIP:

- 1) 33/11kV Nidaya SS
- 2) 33/11kV Garjee SS
- 3) 33/11kV Muhuripur SS
- 4) 33/11kV Barpathari SS
- 5) 33/11kV Sekerkote SS
- 6) 33/11kV Dalak SS
- 7) 33/11kV Champak Nagar SS
- 8) 33/11kV Chailengta SS
- 9) 33/11kV Durgachowmuhani SS
- 10) 33/11kV Mungiakami SS
- 2. However, due to non-deployment of O&M staff by TSECL/TPTL the substations are presently non-operational. TSECL/TPTL have been requested for deployment of O&M staff. Still manpower is yet to be deployed at these substations for fruitful utilization. TSECL/TPTL is requested to deploy their manpower at the earliest for operation of the substation as well as for safeguard of the same.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

## 5.15 Handing over of assets commissioned under NERPSIP: POWERGRID

All state utilities are requested to Take Over the assets which are already energized or under operation. Due to contractual obligations with executing agencies, handing over procedures may be prioritised for commissioned assets under NERPSIP.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

## 5.16 Letter from CEA regarding Charging of Electric Supply lines without having obtained PTCC approval: NERLDC

As per section 80 of "Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023" specifies as follows:

"Protection against electromagnetic interference. – The owner of every electric supply line of voltage level 11 kV or above shall obtain the clearance of Power Telecommunication Co-ordination Committee to ensure the safety of the personnel and telecommunication line as per the requirement of section 160 of the Act."

In view of the above all transmission utilities (including STUs) are requested to furnish PTCC approval for transmission lines before first time energization and integration.

Letter dated 17.10.2024 from CEA is attached for your kind information and necessary action please. (Annex-5.5)

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In the 221st OCC meeting of NERPC forum advised all the FTC issuing authorities (RLDC, SLDCs and Discoms/NERPC) to be aware about the required PTCC approval before first time charging of elements. The forum opined that the matter shall also be taken up in upcoming CCM/RPC for information to Discoms.

In 54<sup>th</sup> CCM, CC Forum advised all the FTC issuing authorities (RLDC, SLDCs and Discoms/NERPC) to get the requisite PTCC approval before first time charging of elements. The forum opined that the matter shall also be taken up in upcoming RPC for information to Discoms.

MS, NERPC informed the forum that CEA Power System Communication Development Division is dealing with PTCC approval.

The details of PCD Division as follow:

Chief Engineer: Shri S K Maharana, PCD Division CEA, Sewa Bhawan R K

Puram, New Delhi:110066

Email id: cepcd.cea@gov.in

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

#### 5.17 Extension of AMC of VoIP system of NER: NERLDC

The AMC (Annual Maintenance Contract) for the VoIP system deployed in NER is valid only until July 2025. As per discussions held in various forums, a new VoIP system is currently in the approval stage and is expected to take 2-3 years for deployment.

The VoIP system is a critical component of day-to-day grid operations, and its maintenance is essential to ensure seamless functionality. At present, the VoIP system is being managed by ULDC-POWERGRID.

The forum is requested to deliberate on the matter and propose a feasible solution to extend the AMC for the existing VoIP system until the new system is fully deployed in NER.

In 30<sup>th</sup> NETeST Meeting, the forum agreed that extension of AMC shall be offered for another two years.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

## 5.18 Implementation of Remote Access System (RAS) and Automatic Fault Analysis System (AFAS)-NERPC

Implementation of the Remote Access System (RAS) and Automatic Fault Analysis System (AFAS) is critical for enhancing grid reliability, ensuring quick fault detection, and improving operational efficiency.

#### **Need for Implementation:**

- Enhanced Grid Security: The Remote Access System (RAS) provides operators real-time access to grid data and control systems remotely, ensuring faster decision-making in emergencies and minimizing operational delays.
- 2. **Automatic Fault Detection**: The Automatic Fault Analysis System (AFAS) enables instant fault detection, isolation, and analysis, helping reduce downtime and improving the overall response time during grid failures or malfunctions.
- 3. **Operational Efficiency**: By implementing both systems, NERPC can streamline grid monitoring and troubleshooting processes, reducing manual intervention and preventing prolonged outages, thus ensuring uninterrupted power supply to beneficiaries.

4. **Compliance with Modern Standards**: These systems are aligned with modern grid management practices, helping NER states comply with extant standards for grid operation and fault management.

Implementing RAS and AFAS will not only ensure a more secure and reliable power system but also enhance the resilience of the NER grid against potential disturbances. In 70th PCC Meeting of NERPC, the forum noted the importance of the RAS and AFAS and requested the utilities to deliberate internally and consider implementing the same in their system. MS NERPC stated that PSDF funding may be considered for RAS and AFAS implementation in NER and the matter may be further discussed in upcoming RPC meeting.

In 27<sup>th</sup> TCC Meeting, Member Secretary, NERPC, highlighted the importance of setting up the Remote Access System (RAS) and Automatic Fault Analysis System (AFAS) to improve grid reliability, speed up fault detection, and make operations more efficient. He mentioned that this topic was previously discussed in the 70<sup>th</sup> PCC Meeting, where it was agreed that these systems are valuable for improving grid management and that utilities should consider implementing them.

Further, Powergrid was advised to share the technical specifications and details for RAS and AFAS with all the NER states. This will help the states prepare their Detailed Project Reports (DPRs) for the project. By providing this information, each state can plan how best to implement these systems according to its own needs.

It was also agreed that funding for the RAS and AFAS projects would be sought from PSDF.

In 27<sup>th</sup> NERPC Meeting, After detail deliberation, NERPC forum in principle agreed for Remote Access System (RAS) and Automatic Fault Analysis System (AFAS) in NER State Transmission system to improve grid reliability and quick fault detection and analysis. Powergrid(NERTS) will provide technical specifications to aid NER states in preparing their DPRs. NER State will seek PSDF funding for the project.

Technical Specifications have been received from Powergrid. NERPC will circulate the same to states in order to facilitate them to make DPRs.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

#### 5.19 Agenda on Resource Adequacy: NERPC

- Ministry of Power had notified Electricity (Amendment) Rules in December, 2022. As per Rule 16 of the Electricity (Amendment) Rules, Ministry of Power has to issue guidelines for assessment of resource adequacy during the generation planning stage and operational planning stage. Accordingly, the Resource Adequacy guidelines have been notified by the Ministry of Power in June 2023.
- Distribution Utility need to carry out LTDRAP (Long term Distribution Licensee Resource Adequacy Plan) to meet the utility peak and energy requirement reliably. CEA will guide & hand hold the states in data collection, power system modelling and analysis of result for carrying out state specific resource adequacy studies in order to prepare the respective LT-DRAP within stipulated time frame.
- During the Review, Planning & Monitoring Meeting held on 11th April 2023 under the chairmanship of the Honorable Minister of Power & NRE, Central Electricity Authority was instructed to handhold the States and help them to prepare Resource Adequacy plan for them.
- Accordingly, state-resource adequacy studies for all the States of the North-Eastern Region have already been carried out, and respective reports have been shared with the states. But, in the absence of inputs from the states, except for Assam, the studies have been carried out based on the data available with CEA, NERLDC and NERPC.

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- To specifically assist the North Eastern Region in understanding the intricacies of resource adequacy studies, data preparation and to expedite the preparation of Resource Adequacy (RA) Study Plan for the period 2024-25 to 2034-35 for the NER States, the Central Electricity Authority, in collaboration with the North Eastern Regional Power Committee (NERPC), organized a workshop on Resource Adequacy Study on September 20th, 2024, in Guwahati, Assam. In the workshop, participants from Assam, Arunachal Pradesh and Meghalaya, in addition to NTPC and NEEPCO, were present.
- The success of the Resource Adequacy studies and the subsequent power procurement hinges on active state participation. The results of the completed states, various assumptions taken and methodology adopted while carrying out studies need to be discussed with state officials so that states can prepare their power procurement plan based on the studies.
- The LT-DRAP studies, being carried out for a period of 10 years on a rolling basis, require urgent revision. The states whose studies have been carried out till 2029-30 or 2031-32 need to be revised till 2034-35. To revise studies, the contracted capacity of states till March 2024, the Demand profile for the year 2023-24, year-wise demand estimation and planned capacity are required till 2034-35.
- As per the Resource Adequacy (RA) Guidelines, the Central Electricity Authority is entrusted to prepare a Long Term-National Resource Adequacy Plan (LT-NRAP) RA study for the period of 10 years (up to 2034-35) and to revise annually on a rolling basis. Therefore, year-wise demand estimation and planned capacity are required till 2034-35.

CEA may present and Members may discuss.

In 27th TCC, Director (IRP), CEA, gave a brief presentation highlighting the Ministry of Power's notification of Resource Adequacy guidelines to support long-term generation and operational planning. These guidelines, issued in June 2023, which emphasize the need for Distribution Utilities to prepare a

Long Term Distribution Licensee Resource Adequacy Plan (LT-DRAP) to meet peak and energy demands reliably as long term measure.

TCC forum advised all states to provide the necessary data to CEA to prepare the Long Term-National Resource Adequacy Plan (LT-NRAP).

To further facilitate this process, a special meeting/workshop on resource adequacy will be organized in Guwahati/Shillong, where all Discoms of NER states are advised to participate for fruitful discussions.

#### **Deliberation of the TCC:**

TCC noted the update.

#### **Deliberation of the NERPC:**

NERPC forum noted.

5.20 Random conduct of Training under Comprehensive Scheme for Strengthening of T&D system in Arunachal Pradesh & NERPSIP:
Arunachal Pradesh

Various trainings are being organised by the POWERGRID through National Power Training Institutes (NPTI) located across the country under the aegis of "Comprehensive Scheme for Strengthening of Transmission & Distribution System of Arunachal Pradesh & Sikkim" (CSST&D-AP&S) and "North Eastern Regional Power System Improvement Project" (NERPSIP) for Assam, Meghalaya, Manipur, Mizoram, Nagaland and Tripura. There had been training calls from NPTI Alappuzha, Faridabad and Guwahati etc. The calls sometimes come simultaneously or at very short intervals from each other; at times running almost concurrently. Such calls of trainings, thus, often becoming chaotic for the state to nominate sufficient officers as officers in large numbers are to be sent out of station at a time in short intervals.

Due to shortage of officers, it has become very difficult for the controlling officers in the Districts to let engineers go away from their all important maintenance of electricity supply to public and away from schemes which are under implementation. So far, almost all trainings were conducted in-house

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in NPTI premises located in far off places outside the state. Mechanism of travel plan has also been made cumbersome with the POWERGRID requiring arranging Air Tickets. Thus, for every training call of trainings it requires simultaneous engagement of at least three organisations, the Department, two or three NPTIs at a time or one after another and the POWERGRID. There is no designated officer of POWERGRID locally in the state who can really take decisions. Local enquiries usually require clarification from Corporate HQ of POWERGRID. The corporate Head Quarter is more often nonresponsive to calls or letters. This creates utter confusion and severe inconveniences. Such situation dissuades many officers for availing the training despite their willingness to join. This confusion gets multiplied when the training calls are received from more than one NPTIs.

Further, the frequency of the trainings does not remain same throughout the year. Beginning with least number of trainings in the 1st and 2nd quarters, it becomes more frequent in the 3rd and 4th quarters. Such conditions, if persist for long, may lead a situation, when the trainings conducted will be driven by completing the yearly target of the POWERGRID or the NPTls rather than being driven by the primary objectives of such trainings. On the other hand, even if the organisers do it for target achievements, it becomes very difficult for the department to send officers in sufficient numbers during these quarters as all engineers becomes engrossed in projects and schemes to be completed before the end of the Financial Year. Due to such circumstances, the state is not able to take the targeted benefit of the training programmes. The state of Arunachal Pradesh, therefore, is of the opinion that the suggestions made here below would be of great benefit of all in terms of optimum use of time, material, finance, and Human Resources. This would effectively let the benefit of institutionalised training to percolate to the grassroot level. Keeping those objectives in mind, the following are placed before the forum for support of all the constituent members of TCC/NERPC for a meaningful discussion and taka a suitable decision:

- सत्यमेव जयते
- 1. The onus of choosing NPTIs or any other Training Institutes should be left to the States and conduct customised trainings on state's requisition. POWERGRID, if required, may prescribe a panel of reputed institutes.
- 2. All trainings not involving hands-on or practical components should be conducted on-site at a venue as may be decided by the State. This mode of training will be cheaper, as the travel and other logistic incidental expenses of all the nominees all the way from various locations of various states of North Eastern Region (NER) to travel outside the region would be much lesser as compared to the expenses of the lesser numbers of faculties to come to NER states for imparting the on-site training. Moreover, this will not only save funds in travels as well man-days shortfall in O&M of the power systems.
- 3. Fund for all domestic trainings could be transferred to the states. This will help the state to take control of training initiatives which will be more effective and purposeful.
- 4. POWERGRID may continue to decide the syllabus, rates (Cost) of training and a panel of training institutes.
- 5. As both the Schemes, NERPSIP (for Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Tripura) and CSST&DS-AP&S (Only for Arunachal and Sikkim) are differently funded for different states, training should be segregated and not combined. This will help monitor the progress of training initiatives and transparent to the states. Presently, if appears to be opaque to the beneficiary states who are the owners of the schemes.

#### **Deliberation of the TCC:**

The forum noted the above and advised Arunachal Pradeesh to resolve the issue bilaterally with Powergrid (Implementing Agency).

#### Deliberation of the NERPC:

NERPC forum noted as above.

## 5.21 Ensuring Availability of quantum of Secondary Reserve and Tertiary Reserve at each state: NERLDC

As per CERC (Ancillary Services) Regulation, 2022 and Detailed Procedure for Assessment of Quantum of Secondary & Tertiary Reserve Capacity, along with Information Exchange and Timelines", NLDC has assessed the quantum of secondary and tertiary reserve on year-ahead basis for FY 2025-26, to be maintained at inter-state and intra-state levels. Accordingly, quantum of secondary and tertiary up and down reserves to be maintained at ISGS and intra-state level have been estimated as per format RAS-4 and attached in Annexure-1

The estimation has been carried out based on the Area Control Error (ACE) of the state control areas. The estimated quantum of secondary and tertiary reserve for All India and NER is tabulated below:

Type of Reserve	All India Up Reserve Requirement (MW)	NER Up Reserve Requirement (MW)	All India Down Reserve Requirement (MW)	NER Down Reserve Requirement (MW)
Secondary	11630	353	12926	457
Reserve				
Tertiary	17310	437	18606	541
Reserve				
Total	28940	790	31532	998

### The quantum of Up Reserve Requirement for NER states is tabulated below:

	Secondary Reserve Requireme nt within ISGS (MW)	Secondary Reserve Requireme nt within intra-state (MW)	Tertiary Reserve Requireme nt within ISGS (MW)	Tertiary Reserve Requireme nt within intra-state (MW)	Total Reserv e
Arunach	31	4	31	8	74
al					
Pradesh					
Assam	107	14	107	39	268
Manipur	27	0	27	0	54
Meghala	17	43	17	68	146
ya					
Mizoram	20	10	20	25	75

Nagaland	14	1	14	5	34
Tripura	45	20	45	30	140

### The quantum of Down Reserve Requirement for NER states is tabulated below:

	Secondary Reserve Requireme nt within ISGS (MW)	Secondary Reserve Requireme nt within intra-state (MW)	Tertiary Reserve Requireme nt within ISGS (MW)	Tertiary Reserve Requireme nt within intra-state (MW)	Total Reserv e
Arunach	49	7	49	11	115
al					
Pradesh					
Assam	180	24	180	49	432
Manipur	38	0	38	0	75
Meghala	14	36	14	61	126
ya					
Mizoram	23	12	23	27	85
Nagaland	20	2	20	6	48
Tripura	37	16	37	27	117

Regulation 30(11)(q) of the IEGC 2023 requires each State control area to ensure the availability of the quantum of secondary reserve as published by NLDC. Similarly, Regulation 30(12)(d) requires the availability of the quantum of tertiary reserve at each state.

These reserve requirements are applicable for FY2025-26, and are to be adhered to by the respective state control areas.

#### **Deliberation of the TCC:**

NERLDC representative apprised the forum that as per Regulation 30(11)(q) of the IEGC 2023 requires each State control area to maintain specific quantum of secondary and tertiary up and down reserves at ISGS and intrastate.

Forum requested the states to keep the reserves as per regulation, however by considering the high amount of Reserve calculated for NER States, it will

be taken up for further discussions with Member(technical), CERC on 24<sup>th</sup> February'2025 meeting.

#### **Deliberation of the NERPC:**

NERPC forum noted.

5.22 Presentation on the Energy Access Explorer during the 28th TCC Meeting: NERPC

#### **Deliberation of the TCC:**

WRI representative presented briefly about WRI and also on the Energy Access Explorer for NER States. The presentation is attached herewith for benefit of NER State.

The forum advised WRI to participate in the Discom Sub-Committee Meeting for further knowledge sharing.

#### Deliberation of the NERPC:

NERPC forum noted as above.

#### 6. PART E: ITEMS IRECOMMENDED FOR REFERRAL TO SUB-COMMITTEE

# 6.1. Installation of Communication Network at Nongmahir Forebay by laying of OPGW on the existing transmission Towers and extension of the same to Concrete Gravity Dam by installation of OPGW on 12.5 mtrs Galvanized steel poles: MePGCL

The communication between Stage-Ill Power Station and Nongmahir forebay located in the upstream of Stage-III Power Station is critical to ensure efficient management of the generation of both the Stage-III and Stage -IV Power Stations for optimization of generation from both these stations. At present the process of communication between the Nongmahir forebay and State Load Dispatch Centre is through GSM mobile and this system of communication are severely prone to outages due to the remoteness of the location of the Nongmahir forebay and severe instances of complete breakdown in commwlication network has occurred which has resulted in inefficient management of water leading to loss of generation. This proposal envisages laying of OPGW and associated supporting equipment like Control Panel etc., at both Stage-III Power Station and Nongmahir forebay to ensure the placing of an efficient and reliable system of communication. Further, the system is proposed to be extended to concrete gravity dam at Zero Point by installation of OPGW on 12.5 mtrs Galvanized steel poles for ensuring effective communication between the two reservoirs and with Stage-III Power Station and the State Load Dispatch Centre.

#### Tentative cost -Rs. 10.00 Crores approx.

For kind information.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 6.2. Improvement of Switchyard Earthing System at the following Power Stations of MePGCL: MePGCL

- a) Umiam Stage-I Power Station, MePGCL, Sumer.
- b) Umiam Stage-II Power Station, MePGCL, Um sumer.
- c) Umiam Stage -IIJ Power Station, MePGCL, Nongkhyllem.
- d) Myntdu Leska Hydro Power Station, MePGCL, Suchen.

The proposal envisages improvement of Switchyard Earthing System at different Power Stations of MePGCL by construction of new earth pils and installation of connecting bars between the new earth pit and different elements etc., as the earthing system at Power Station needs immediate revamping to prevent damage of important power system components such as terminal equipment like CTs, PTs, Circuit Breakers etc., and for protection of electrical equipment like SCADA, RTU Panels, Protection Relays etc., which are critical for safe operation of the Power Stations under MePGCL is expected to improve the system performance by minimizing the risk of failure of critical components of Power System as all the Power Stations under MePGCL which are located in high lightning prone areas.

#### Tentative Cost - Rs. 2.00 Crores approx.

For kind information.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 6.3. Reconductoring and strengthening of 132kV s/c transmission line from 132/33kV Jiribam substation to 132/33 kV Rengpang substation: MSPCL

The 132/33kV Substation at Rengpang was constructed with 132kV LI-LO transmission line on the then existing 132kV Jiribam-Leimatak line. At present, power to the Rengpang substation is fed from the Leimatak side which is also a generating station under NHPC.

The extremely challenging terrain, frequent landslides and ever growing vegetations (especially bamboos) has left the other alternate source of supply i.e. 132kV Jiribam-Rengpang transmission line into disuse (outage since November 2023). The area being susceptible to the recent public unrest in Manipur, timely maintenance of the said line had also been impossible. Moreover due to long outage, theft of tower members and conductors of the said line (about 30% of the transmission line affected) has been reported.

Further, due to outage of 132kV Jiribam-Rengpang line, alternate source of Rengpang s/s is also affected and during with N-1 contingency of any other outgoing feeders of Loktak (NHPC) station, the generation often needs to be backed down to 70MW. Hence, it has become highly important to revive 132kV Jiribam-Rengpang line, for keeping the Rengpang system in loop with Jiribam (for reliability of the system).

Moreover, the induction of Indian Railways in the state demands 24x7 uninterrupted and reliable power supplies of Rengpang & Jiribam substations, thereby significantly increasing the importance of the lines. Considering the above facts and circumstances, the committee may kindly approve the reconductoring and strengthening of 132kV S/C transmission line from 132/33kV Jiribam substation to 132/33kV Rengpang substation (52.2Km).

TCC may kindly deliberate the request of MSPCL and approve the proposal for execution, in the interest of NER Grid security and smooth supply management of Manipur.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

#### 6.4. Upgradation of 132/33kV ICTs at Yurembam sub-station: MSPCL

At present, the main Imphal valley of Manipur is supplied from 3x31.5MVA transformers at YUREMBAM S/S. Maximum loading of approx. 63 MW is recorded during winter peak supplying to all the important feeders such as Secretariat, Raj Bhavan, CM Bungalow, RIMS, JNIMS, etc. With consideration of N-1 contingency of one ICT, the remaining ICTs capacity is unable to load the present demand; and Imphal being the nerve center of the Manipur state supply system, it has become necessary to upgrade the ICTs capacity at Yurembam to provide reliable power supply.

As per the 20<sup>th</sup> EPS report, the maximum demand of the state is estimated to be 448 MW with loading of Yurembam is estimated at 80-90 MW by FY 2031-32. In regard to the estimated loading/ Imphal area growing demand and also considering requirement of redundancy of the system, the capacity at 132/33kV Yurembam s/s is required to be upgraded from 3x31.5MVA to 3x50MVA to cater uninterrupted supply.

Considering the above facts and circumstances, the committee may kindly approve Upgradation of 132/33kV ICTs at YUREMBAM Sub-Station.

TCC may kindly deliberate the request of MSPCL and approve the proposal for execution, in the interest of the State reliable supply of Manipur.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 6.5. Approval for Preventive Shifting of Vulnerable Location No. 125 of 132KV Roing-Pasighat Transmission Line: POWERGRID

The Location no. 125 of 132KV Roing-Pasighat transmission line, is critically affected due to the river course change of the Siang River. During the walkover survey from Location No. 123 to 127 and it was observed that river Siang has significant impact on the surrounding infrastructure and environment. Additionally, the erosion has led to shifts in local habitats near the riverbank, disrupting the ecological balance in the area. The low-lying paddy fields in the vicinity are frequently flooded during the monsoon season, with water levels reaching ground level, exacerbating the challenges faced by local farmers. The unpredictable changes in the river's course further complicate efforts to stabilize the riverbank and protect the surrounding areas. The riverbank is now approximately 175 meters away from Tower No. 125, indicating a notable shift in the river's course. Over the past seven years, a total of 650 meters of riverbank erosion has been observed through Google imagery (copy enclosed as Annexure-I). Given the historical erosion patterns, it is anticipated that erosion may continue over the next few years, posing a serious threat to Towers No. 124 to 128. This potential risk requires immediate attention and mitigation measures to prevent damage to these stower locations. Hence, it is recommended for approval of preventive Pile shifting of 05 Nos. o locations from Loc no. 124 to 128.

Submitted for approval of preventive shifting of Location No. 124-128 of the 132KV Roing-Pasighat Line using Pile Foundation at an estimated cost of ₹20 Crs. Under ADD CAP to mitigate erosion-related risks.

For kind information.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 6.6. Resolution of Land Constraints for Shifting of Vulnerable Location No. 75 of 132KV Tezu-Namsai Line: POWERGRID

The 132KV Tezu-Namsai transmission line, specifically Location No. 75, was identified as a vulnerable location in 2020 due to course change of river Lohit. In response, boulder gabion wall protection was installed to safeguard the riverbank. However, it is anticipated that riverbank erosion may persist over the coming years, and in the event of a flash flood, the location could face a serious risk of tower collapse. To address this concern, a committee was constituted, and after conducting a site visit, it recommended relocating the tower to a nearby safe location. Despite multiple follow-ups, the district administration has denied permission for shifting, citing the development of the Parshuram Kund Master Plan Project. As an alternative, the administration has mandated shifting the transmission line beyond the Parshuram Kund boundary, which has been found to be geographically unfeasible. Furthermore, the district administration continues to deny the reconstruction of a new tower within the vicinity of their boundary. Given the criticality of this location, any delay in corrective action may lead to severe power disruptions in the region. Since no feasible alternative exists outside

the existing corridor, NERPC is requested to instruct and advise the district administration to approve the reconstruction of the new tower within the existing transmission corridor under their boundary. This will help prevent potential outages and ensure uninterrupted power supply. Additionally, administrative support is required to facilitate clearances for the new alignment at the earliest.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

## 6.7. URTDSM Phase-I: Augmentation of Cyber Security in URTDSM system: POWERGRID

The AMC of URTDSM phase 1 system is available till Jan 2027. The various Its systems are procured in 2015-16 and are already 10 years old and most items have reached technical obsolescence. The URTDSM phase-II project for replacement of these items is still under DPR stage and will take at least 3 years for implementation. Hence the URTDSM phase 1 system are to be kept functional and secure till Jan 2027 and beyond.

Also, CEA cyber security regulations require certain changes in the URTDSM phase 1 system architecture, which necessitates addition of few cyber security components. Also, the Auditors of cyber security have raised NCs for this deviation. The following are the three measures proposed to resolve these issues.

#### 1. Virtual patching for Servers with Windows 2012 R2 Operating system



- a. <u>Support from Microsoft for Windows2012 R2 Operating system has</u> <u>expired on 10th October-2023</u>:
- b. M/s GE informed that Win OS (Servers) upgrade is not feasible under current circumstances owing to following reasons:
  - i. Some of the current applications will not be supported on new operating systems as GE WAMS application Roadmap is heading for different application suite i.e. GridOS WAMS
  - ii. Associated applications of 3rd party tools will also not be supported on new operating systems.
- c. In view of above, a system upgrade on existing infra is not feasible in current set-up.

POWERGRID explored the following alternative of Virtual patching to ensure the security of existing Windows Server until Phase-II systems are in place:

- ➤ URTDSM WAMS System is being maintained air-gapped with perimeter protection at Firewall level and available updated Antivirus patches for system robustness and security.
- Additionally, at HIPS level, option for Virtual patching shall take care of the obsolete Windows Server 2012 OS. Virtual patching protects operating systems and third-party applications from known vulnerabilities and protects legacy systems and end-of-life software that no longer receive updates, ensuring ongoing security and helping organizations meet compliance requirements.
- ➤ POWERGRID discussed with the OEM M/s TrendMicro and obtained budgetary quote. The OEM quoted approximately Rs. 1.35 Crores for all 500+ Servers installed in URTDSM System pan India (approximately Rs 27,000/- per Sever for 3 years license support)
- > The solution is under PoC in one of the RLDCs.

Members to deliberate and concur the proposed solution of virtual patching to address the obsolete Windows Server 2012 OS issue.

Upon concurrence from the RPC, licenses from the OEM shall be procured on Cost sharing basis.

#### 2. PMU Data Streaming through Firewall:

- a. There is an observation in Cyber Security Audit to stream the data from PMU to PDC through a Firewall.
- b. Also, CEA Cyber Security guidelines 2021 stipulates creating of electronic security perimeter (ESP). This necessitates the requirement of streaming PMU data through firewalls at all control centres.
- c. The same requirement was not envisaged in the URTDSM Phase-1 system design, and so in the ongoing AMC contract also. Hence, M/s GE was asked to submit the techno-commercial offer for this service.
- d. Based on the discussions with SCADA Work Group meeting with RPCs, it was proposed to use the existing internal firewalls only (by configuring separate VLAN) for PMU data streaming instead of purchasing a new firewall. This solution needs procurement of an additional 2 LAN switches.
- e. Accordingly, based on the quotation given by GE, the cost of the solution for each Control centre is Rs. 15.35 Lakhs excluding GST (Services for configuring internal firewall and supply of 2 new LAN switches).

Members may deliberate and concur the above proposal to address the requirement of PMU data streaming through firewall.

#### 3. Retention of logs up to 6 months:

- a. There is an observation in Cyber Security Audit to retain security event logs for 6 months (180 days).
- b. CEA Cyber Security Guidelines 2021 stipulates System logs need to be maintained for at least 6 months.
- c. In URTDSM Phase-1 log retention was envisaged for only 1 month.
- d. In view of above, POWERGRID obtained the techno-commercial offer from M/s GE which proposed 6TB additional storage requirement at each LDC to meet the log retention for 6 months.

- e. The cost quoted by M/s GE for each LDC is Rs. 19.35 Lakhs excluding GST.
- f. Members may deliberate and concur the proposal to procure the additional storage for Syslogs.

g.

Members may deliberate and concur the above three proposals for immediate augmentation of the system considering the Cyber Security issues.

Upon concurrence of RPC for cost sharing of this solution, process for award of this work shall be initiated by POWERGRID.

#### Status of approval in RPCs:

POWERGRID took up the above three proposals for addressing the Cyber Security requirements for the existing URTDSM Phase-I system on Cost sharing basis in following RPCs/OCCs:

- a.  $52^{\rm nd}$  ERPC meeting held on 05.09.2024 &  $51^{\rm st}$  WRPC meeting held on 11.01.2025 The above proposals are accepted by ERPC & WRPC.
- b. Being deliberated in other RPCs.

For kind information.

#### **Deliberation of the TCC:**

The forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

TCC noted as above.

#### **Deliberation of the NERPC:**

NERPC forum noted as above.

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