भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
उत्तरपूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee
एन ई आर पी सी कॉम्प्लेक्स,डोंग पारमाओ, लापालाङ, शिलॉन्ग-७९३००६, मेघालय

Ph. No: 0364 - 2534077
Fax No: 0364 -2534040
Website: www.nerpc.gov.in

No. NERPC/TCC & NERPC/2025-26/2935-65 Date: 4th Nov, 2025

सेवा में / To,

As per NERPC members List.

विषय: 30 वीं टीसीसी और 30 वीं एनईआर पावर समिति की बैठकों के लिए सूचना / Agenda for the 30th TCC & 30th NER Power Committee Meetings – Reg.

महोदय/महोदया,

Please find attached here with the agenda for 30th TCC and 30th NERPC Meetings. The meetings are scheduled to be held as per details given below:

Date	Meeting	Venue	Time
13th November, 2025 (Thursday)	30th TCC	Hotel Taj Dal View, Kralsangri, Brein, Srinagar, Jammu & Kashmir	10:30 Hrs
14th November, 2025 (Friday)	30th NERPC	Hotel Taj Dal View, Kralsangri, Brein, Srinagar, Jammu & Kashmir	10:30 Hrs

The meetings will be hosted by **NHPC**. The nodal officers for the meetings are as given below:

Name & Designation	Contact No.	Email
Sh. Dharmendra Kumar, DGM (Electrical)	9560891615	dharmendrakumar@nhpc.nic.in
Sh. Vijaya Kumar, DGM (Electrical)	9818696821	vijayk@nhpc.nic.in

Kindly make it convenience to attend the meeting for fruitful deliberation.

भवदीय/Yours faithfully,

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

NERPC Members List:

1. Hon'ble Dy. Chief Minister & In-charge of Power, Govt. of Arunachal Pradesh, Itanagar - 791 111
2. Hon'ble Power Minister, Govt. of Assam, Dispur-781006
3. Hon'ble Minister of Power, Govt. of Manipur, Imphal – 795 001
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, Haryana - 121 003
25. Director (Finance), NTPC Ltd. NTPC Bhawan, Scope Complex, Institutional Area, Lodhi Road
26. Managing Director, OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019
27. Managing Director, NETC, 3rd Floor, DMRC Building, Dwarka Sector-21, New Delhi-77
28. Director (Operation), POWERGRID, Saudamini, Plot No. 2, Sector-29, Haryana – 122 001
29. CEO, NVVNL, Core 5, 3rd Floor, Scope Complex, 7 Institutional Area, Lodhi Road, Delhi – 03
30. Chairman & Managing Director, PTC, NBCC Tower, 15 Bhikaji Cama, Place, New Delhi – 110066
31. COO, CTUIL, Plot No.2, sector-29, Gurgaon, Haryana – 122001
32. ED, NLDC, B/9, Qutub Institutional Area, Katwaria Sarai, New Delhi – 16
33. ED, NERLDC, Dongtieh-Lower Nongrah, Lapalang, Shillong- 793006
34. CEO, MUML, DLF Cyber Park,Udyog Vihar Phase 3 Rd,Sector 20, Gurugram, Haryana-122008

Copy to:

PS to Chairman, NERPC and Hon'ble Minister of Power, Govt. of Meghalaya, Shillong – 793001

किशोर जगतापु
04/XI

सदस्य सचिव /Member Secretary

TCC Members -Copy for kind information

1. Director (Transmission), MePTCL & Chairman TCC, Lumjingshai, S.R. Road, Shillong – 793 001
2. Director (Distribution), MePDCL, Lumjingshai, S.R. Road, Shillong – 793 001
3. Director (Generation), MePGCL, 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. Director (Tech.), NETC, 3rd Floor, DMRC Building, Dwarka Sector-21, New Delhi-77
9. GM (Transmission), TPTL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
10. Executive Director (O&M), NEEPCO Ltd., Lower New Colony, Shillong-793003.
11. Regional ED (East –II), NTPC, 3rd Floor, OLIC Bldg., Pl No- N.17/2, Nayapalli, Bhubaneswar-12
12. Executive Director, NERTS, PGCIL, Lapalang, Shillong - 793006
13. GGM/HoD (O&M), NHPC Ltd., Sector-33, Faridabad, Haryana-12103.
14. Executive Director (Marketing), PTC, NBCC Tower, 15 Bhikaji Cama, Place, New Delhi – 110066
15. Chief Engineer (GM), CEA, 6th Floor, Sewa Bhawan, R.K.Puram New Delhi-110066.
16. Engineer-in-Chief, P&E Dept., Govt. of Mizoram, Aizawl – 796 001
17. Engineer-in-Chief, Dept. of Power, Govt. of Nagaland, Kohima – 797 001.
18. Chief Engineer (TPMZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 1
19. Chief Engineer (WEZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 1
20. Chief Engineer (EEZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 1
21. Chief Engineer (Commercial) -cum- CEI, Deptt. of Power, Govt. of Arunachal Pradesh, Itanagar- 11
22. VP (Plant), OTPC, Palatana, P.O Udaipur, Gomati Dist., Tripura – 799105
23. GM (BD), NVVNL, Core 5, 3rd Floor, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-3
24. CGM, AEGCL, Bijuli Bhawan, Paltan Bazar, Guwahati – 781 001
25. CGM, APGCL, Bijuli Bhawan, Paltan Bazar, Guwahati – 781 001
26. CGM, APDCL, Bijuli Bhawan, Paltan Bazar, Guwahati – 781 001
27. CGM (LDC), SLDC Complex AEGCL, Kahelipara, Guwahati-781019.
28. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar-791111
29. Head of SLDC, Dept. of Power, Govt. of Manipur, Keishampat, Imphal-795001
30. Head of SLDC, MeECL, Lumjingshai, S.R. Road, Shillong-793001
31. Head of SLDC, P&E Dept., Govt. of Mizoram, Aizawl-796001
32. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur
33. Head of SLDC, TSECL, Agartala – 799001
34. ED, NLDC, Grid-India, B-9 (1st Floor), Qutab Institutional Area, Katwaria Sarai, New Delhi-16
35. Dy. COO, CTUIL, Plot No.2, Sector-29, Gurgaon, Haryana-122001
36. Executive Director, NERLDC, Grid-India (POSOCO), Lapalang, Shillong – 793006
37. Head & VP- Regulatory & Contracts, ENICL, Windsor Building, Kalina, Santacruz (East), Mumbai-400098
38. Head (O&M), MUML, DLF Cyber Park,Udyog Vihar Phase 3 Rd,Sector 20, Gurugram, Haryana-122008

Special Invitee(s):

1. Member (Power System), CEA, Sewa Bhavan, R. K. Puram, New Delhi – 110066
2. Member Secretary, ERPC, 14 – Golf Club Road, Tollygunge, Calcutta – 700 033
3. Member Secretary, NRPC, NRPC Complex, 18-A, S.J.S. Marg, Katwaria Sarai, New Delhi – 16
4. Member Secretary, WRPC, MIDC Area, Marol, Andheri (E), Mumbai – 400 093
5. Member Secretary, SRPC, 29 – R.C. Cross Road, Bangalore – 560 009
6. 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. COO, IndiGrid, Unit No. 101, Windsor, Off CST Road, Vidyanagari Marg, Kalina, Santacruz East, Mumbai 400 098

किशोर जगताप
04/XI

सदस्य सचिव /Member Secretary

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तरपूर्वी क्षेत्रीय विद्युत समिति

North Eastern Regional Power Committee

AGENDA

FOR

30TH TCC MEETING

(UNDER THE AEGIS OF NHPC)

Venue	:	**Hotel Taj Dal View, Srinagar**
Date (TCC)	:	**November 13th and 14th, 2025**

Contents

AGENDA FOR 30TH TCC MEETING TO BE HELD ON 13th NOVEMBER 2025 AT 10:30 HRS

1. MEETING SCHEDULE, CONFIRMATION OF MINUTES & ATR

1.1. Meeting Schedule

SN	Meeting	Date	Time	Venue
1	TCC	13.11.2025	10:30 Hrs	Hotel Taj Dal View, Srinagar
2	NERPC	14.11.2025	10:30 Hrs	Hotel Taj Dal View, Srinagar

1.2. Confirmation of the minutes of 29th NERPC Meeting

The minutes of the 29th TCC & 29th North Eastern Regional Power Committee (NER Power Committee) meetings held on 17th and 18th July 2025 respectively in Guwahati were circulated vide letter no. NERPC/TCC & NERPC/2025-26/1512-1591 dated 31st July 2025.

Subsequently, based on comments from CTU, a corrigendum was issued for the agenda item no. 3.6 of 29th TCC and NERPC meetings vide letter no. NERPC/TCC & NERPC/2025-26/1944-1978 dtd. 29-08-2025 and circulated to all constituents.

No comments were received from constituents.

TCC and NER Power Committee may confirm the minutes of above meetings along with the corrigendum.

1.3. Action Taken Report on decisions taken in 29th TCC/NERPC Meetings

Action taken report on decisions taken in 29th TCC & NERPC Meeting is enclosed (**Annexure-1.3**) for kind information.

1.4. Arrangement of Agenda of 29th TCC Meeting

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

2. PART-A: ITEMS FOR DISCUSSION

2.1. INCLUSION OF SIKKIM IN NER REGION" & "AS CONSTITUENT MEMBER OF NORTH EASTERN REGIONAL POWER COMMITTEE - NERPC secretariat

Background

Sikkim is a member of North Eastern Council (NEC)/DoNER and all the development activities funded in Sikkim are being shared with NER States. NER members felt that if development activities are being shared by NER States, NER has the right to share the power projects being developed in Sikkim.

Geographically, culturally, etc., Sikkim is very much the part of NER. The challenges faced by Sikkim is similar to that of NER states like RoW, vegetation issues, landslides etc. and devising solution for these challenges will be easier if Sikkim is part of NERPC.

Electrically NER is already connected to ER (via 400kV Bongaion- Siliguri Tx line, 220kV Salakati-Alipurduar Tx line) and NR (via through Agra-Alipurduar-BNC HVDC 800kV). It is not so difficult that Sikkim cannot be connected with NER with some additional steps at Siliguri or Alipurduar.

Power allocation from Sikkim projects is in the purview of Ministry of Power. Power can be reallocated by MoP to NER States.

During the 4th NERPC Meetings held on 20th & 21st August, 2007 following Resolution was adopted "To approach Ministry of Power, Govt. of India for allocation of share from Power Projects of Sikkim to NE States because Sikkim is a constituent state of NEC and all the development fund allocated to NEC is being shared by Sikkim also with all other NE States. Resource of Sikkim now becomes part of NER Resource".

During the 9th NERPC meetings held on 12th August, 2010 Chairman, NERPC & Hon'ble Power Minister, Govt. of Meghalaya in his inaugural speech once

again stressed that Sikkim being a constituent member of North Eastern Council (NEC) and funds are earmarked for power development in Sikkim and therefore NER States should also have a share from these projects being set up in Sikkim. Chairman, NERPC vide letter dated 28.10.2011 has written letters to Union Minister of Power, Govt. of India, Hon'ble Chief Minister & Power Minister, Govt. of Sikkim requesting them to re-consider the issue of inclusion Sikkim as member of NERPC.

During the 13th TCC/NERPC meetings held during 9th & 10th July, 2012 at Faridabad, Members strongly opined that Sikkim should be included as member of NERPC. A Resolution was also adopted and sent to Hon'ble Union Power Minister, Govt. of India.

Ministry of Power, vide their Resolution dated 25.05.2005 and subsequent amendments has established Sikkim as a constituent member of Eastern Regional Power Committee (ERPC). All the developmental activities in Sikkim State are taking place with financial assistance through North-Eastern Council (NEC)/ Ministry of Development of North Eastern Region (DoNER), including States of NE Region. The benefit of all developmental activities is being utilized by the States in Eastern Region. We, therefore, humbly submit to kindly consider inclusion of State of Sikkim as constituent member of North Eastern Regional Power Committee and to make necessary amendment of the relevant provisions in the resolution dated 25.05.2005 published in the Gazette of India.

Meanwhile, Ministry of Power, Govt. of India vide letter dated 31.10.2018 has desired to get a comments/feedbacks on "whether Sikkim can be included in North Eastern Region in place of Eastern Region, where it is currently included". NERPC had sent comments for inclusion of Sikkim in NERPC vide letter no. NERPC/OP/Committee/2019/1890 dated January 22, 2019 (copy enclosed).

In 9th RPC (12th August, 2010), members strongly opined that Sikkim should become a member of NERPC due to
the factual points:

1. Sikkim is a member of North Eastern Council (NEC)/DoNER and all the development activities funded in Sikkim are being shared with NER States. NER members felt that if development activities are being shared by NER States, NER has the right to share the power projects being developed in Sikkim.
2. Electrically can be easily made from NER to Sikkim with some additional steps.
3. If NER is being connected to ER, it is not so difficult that Sikkim cannot be connected with NER. Any disturbance can be emanated from anywhere not particularly Sikkim.
4. Geographically, culturally, etc., Sikkim is very much the part of NER.
5. Power allocation from Sikkim projects is in the purview of Ministry of Power. Power can be allotted by MoP

Although all the development activities in Sikkim State are taking place with financial assistance through North-Eastern Council (NEC)/DoNER, the benefits from development in the State are being availed by Eastern Regional States only. Many hydro projects are existing or are under execution in the Sikkim State. However, the State of Sikkim is presently a constituent member of Eastern Regional Power Committee. We, therefore, once again request Ministry of Power for kindly considering inclusion of Sikkim State as constituent member of North-Eastern Regional Power Committee and for amendment of the relevant provisions in the resolution dated 29.11.2005 and Ministry of Power Resolution F. No:23/21/2021-R&R dated 03.12.2021 published in the Gazette of India, so that the States of North Eastern Region are able to fully derive benefits from major hydro projects developed in the State of Sikkim.

Hence NERPC forum strongly urged to consider for inclusion of the state of Sikkim as constituent member of NERPC so that share of Power from generation projects in the state of Sikkim is allocated to NE States because Sikkim is a constituent state of NEC and all the development fund allocated to NEC is being shared by Sikkim along with other NE States.

With this background, a resolution to be sent to Hon'ble Union Power Minister, MoP to intervene into the matter so that Sikkim being in NE Region can be granted full membership of NERPC by amending the relevant clause of NERPC.

The matter was deliberated in the 29th TCC NERPC meetings in which it was agreed in-principle for inclusion of Sikkim in NERPC. Also, it was decided in the meetings to form a sub-committee to study the operational, technical and commercial issues arising on inclusion of Sikkim as NERPC member and submit its report to NERPC Secretariat within two Months.

Subsequently the sub-committee was constituted vide letter NERPC/MS/2025-26/2137-2143 dtd 10.09.2025 and meetings were held as per requirement. During the deliberations, the sub-committee noted that inclusion of Sikkim in NER will have following advantages and disadvantages to NER-

Advantages

1. NER states will get access to cheap hydro power coming up in Sikkim and vice a; versa
2. Geographically, culturally, etc., Sikkim is very much the part of NER. The challenges faced by Sikkim is similar to that of NER states like RoW, vegetation issues, landslides etc. and devising solution for these challenges will be easier if Sikkim is part of NERPC.

Disadvantages

1. Making a direct electrical (transmission line and associated infra)connection between Sikkim and NER will incur around 1200 to 1500 crore (as per CTU) which will pose a very heavy burden on DICs.

2. Calculation of ATC will be separately done for Sikkim, which may lead to sub-optimal scheduling of Power.
3. The inclusion of an electrically isolated Sikkim, can distort the Area Control Error (ACE) calculation for the NER control area, which may weaken the AGC response and lead to suboptimal system performance.
4. Sikkim SLDCs as well as ISGS and ISTS elements in Sikkim have to be integrated with the NERLDC which will involve making communication path available, upgradation of SCADA at NERLDC, configuration changes at SLDC, ISGS and ISTS etc. All these works involve modifications in existing IT infrastructure and will incur significant financial burden and may face compatibility issues.
5. All the FTC related, protection coordination and approval related and shutdown related matters may face significant delays as additional coordination with ERLDC, ERPC and other states of ER will be involved. It will be significant challenge to minimize those delays.
6. Regional component in ISTS charges will increase for the NER states as well as Sikkim after inclusion of Sikkim in NERPC.
7. Sikkim will have to be considered as a separate bid area for all collective transactions
8. Scheduling of ISGS located in Sikkim, for which there are no beneficiary in NER, will be a challenging task for NERLDC as they will have to be dependent on ERLDC for coordination. Also, several software systems — such as the Web-Based Energy Scheduling (WBES) Software, SCADA dashboards at RLDCs and NLDC, NOAR software, REC registry and Power Exchange Bid Area configurations etc. — would require modification in the event of Sikkim's inclusion into the North Eastern Region (NER) Grid.
9. Currently Meters available throughout Sikkim are under AMR which are directly reporting to the AMR Application and Database Server present at ERLDC. Currently NERLDC has no AMR system available and hence SEM data of ISGS/IPPs and Substations present within Sikkim control area

would have to be gathered from ERLDC which would complicate coordination.

10. Further assets of Powergrid in Sikkim are administered by ER-II, so if these assets are to be included in NER administrative and technical changes have to be made in Powergrid which will be a significant challenge for Powergrid.

After detailed deliberations in the meeting the sub-committee has finalized the report which is hereby placed for deliberation of the TCC.

TCC may deliberate.

2.2. Workforce Adequacy at Load Despatch Centres and review of Workforce guidelines of Ministry of Power for manpower position in SLDCs - NERPC secretariat

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

Workforce Staffing Norms, as per Workforce Adequacy Guidelines for Load Dispatch Centers (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	1
Subtotal – MO		**9**	**4**
Logistics			
8	logistics _Operation technology	8	3
9	IT logistics	6	3
10	Communication logistics	2	2
Subtotal – Logistics		**16**	**8**
REMC			
11	REMC Logistics	2	1
Cyber Security			
12	Cyber Security	**13**	**10**
Support Functions			
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**

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

Sl. No	SLDC	System Operation	Market Operation	Logistics	REMC	Cyber Security	Support Functions(Contract Services, HR & Admin, F&A)	Total
1	Arunachal Pradesh	There is no specific segregation of manpower in respective Department. Total 7 executives are there which includes 3 Top management post. The remaining 4 executives are handling any of the above mentioned areas on rotational basis.**						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

**As on 01/01/2024*

The issue was deliberated in 29th TCC & NERPC meetings, wherein MS NERPC informed that NERPC has sent a resolution to MoP for delinking of the manpower issue with the PSDF funding and phased wise manner of recruiting

manpower as mandated by the guideline. NERLDC highlighted that the sanctioned strength SLDCs are not even filled in the states. Meghalaya raised the issues that the manpower requirement as mentioned in the guideline is too high for the state considering the generating and transmission infrastructure present in the state and requested for a review of the same, if possible. Other NER states echoed the concern of Meghalaya. However, NERLDC stated that considering the amount of work involved under CERC regulations like RE integration, reserve estimation, load forecasting cyber security etc, the manpower mandated as per the guidelines is essential.

Considering the discussion of 29th TCC/RPC, the forum may deliberate upon the concern of NER states and whether there is a need to review the guideline of MoP on the workforce adequacy as far as NER region is concerned.

TCC may deliberate.

2.3. 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 SCADAEMS Project for SLDC-Assam State ends on 11th November 2024, and for SLDC-Meghalaya 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 Centres of the North Eastern Region (NER), for each of the seven NER states, were submitted to PSDF Committee for approval on 16th August 2024.

Following multiple discussions in the 86th, 87th, 88th, and 89th TESG meetings, and based on TESG's direction, NERLDC prepared a cost estimate for the upgradation of SCADA/EMS proposals for the states of NER. This estimate was based on the latest Letter of Award (LoA) available, which was for SLDC Tamil Nadu.

NERLDC submitted these cost estimates via email on May 2, 2025, applying a 30% cost escalation on the SCADA/EMS project cost of SLDC, Tamil Nadu. These estimates were subsequently discussed in the 90th Meeting of the TESG of PSDF, held on May 2, 2025.

As per minutes of 90th meeting released on 28th May 2025, TESG sought following directions on SCADA Proposals of NER states from Appraisal Committee of PSDF:

i. Direction on the 30% escalation considered on the LoA costs of SCADA/EMS project of SLDC, Tamil Nadu.
ii. Direction on mandatory spares which are considered in the range of 7.51% to 8.51% for these proposals.

In the 29th NERPC Meeting held on 18th July 2025, Member (GO&D), CEA, apprised the forum that the matter has been referred by monitoring committee to form a joint committee, comprising of Member (GO&D) CEA, CMD, Grid India and JS(FA), MoP.

The meeting of the joint committee (Member (GO&D) CEA, CMD Grid-India, JS(FA) MoP) has been convened and the matter was deliberated in TESG committee and TESG committee has approved and recommended for Monitoring committee.

TCC may deliberate

2.4. Establishment of Security Operation centre (SOC) at SLDCs for ensuring cyber security readiness of the states – NERPC secretariat

As stated in clause 3(j) of The Information Technology (Information Security Practices and Procedures for Protected System) Rules, 2018, "an organization having protected systems shall establish a Cyber Security Operation Centre (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 analysing the logs on regular basis. The records of unauthorized access, unusual and malicious activity, if any, shall be documented."

It is to be noted that Cyber security has become a major concern over the past few years as threats to the OT/IT infrastructure of various enterprises has increased significantly 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.

Also, as decided in the meeting held under the chairmanship of Secretary (Power) on 'Review of Cyber Security in Power Sector' held on 21.03.2025 The SOC proposals that are submitted under the PSDF-funded scheme should be revised to include indigenous SOC, NOC solutions and a 5-year Annual Maintenance Contract (AMC).

Further, CSIRT-Power has finalised a Model BOQ for PSDF funding of Indigenous SOC (including Indigenous NOC) Projects at SLDCs which has already been circulated to the states.

In light of the above decisions and guidelines, it is requested to the state SLDCs to prepare the DPR for the SOC with integrated NOC and submit to the PSDF committee at the earliest.

The matter was deliberated in 29th TCC and NERPC meetings wherein all the states were urged to prepare DPR accordingly and send the DPR to PSDF Secretariat at the earliest. Subsequently Model DPR has been circulated by NERPC Secretariat to NER States.

States may update and TCC may deliberate

2.5. 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 centers 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 construction of Back up SLDC as per 29th TCC meeting	Status Change with Respect to previous (29th) TCC-RPC Meeting
1	Arunachal Pradesh	Land identified at Niglok substation. Proposal has been submitted to government of Arunachal Pradesh for budget provision of this year	The proposal for Construction of Back Up SLDC has not been included in the Budget Estimate for 2025–26, as confirmation of PSDF funding for the Part A of the SCADA Project has not yet been received. If

			the PSDF funding is approved by November 2025, the same will be incorporated in the Revised Estimate.
2	Assam	Assam updated that Land identified in Samaguri and DPR has been submitted with a budget of around 8.5 Cr. to Govt. of Assam for approval of funds	Assam informed that land has been identified in Samaguri, and a Detailed Project Report (DPR) with an estimated cost of around ₹8.5 crore has been submitted to the Government of Assam for fund approval. The Power Department had raised certain queries, which have been duly addressed by AEGCL. The Department will review the responses, and upon satisfaction, will forward the proposal to the Standing Finance Committee of the Government of Assam, chaired by the Chief Secretary (Power).
3	Manipur	Location identified at 400kV Thoubal SS. Space required for accommodating UPS and Battery.	Location identified at 400 kV Thoubal SS. Tender floated for UPS and Battery room.
4	Meghalaya	Tendering under process. Space identified at Mawphlang SS.	Same Status
5	Mizoram	Budget amount approved; expenditure	Budget amount approved; expenditure sanction pending.

		sanction expected by next month.	
6	Nagaland	Space ready at New Kohima S/S (New Secretariat	Same Status
7	Tripura	The proposal for modification of the existing building at S M Nagar Grid S/S (Tripura) has been submitted for approval of BOD which is expected shortly	The proposal for the modification of the existing building at S. M. Nagar Grid Substation (Tripura) was submitted for the approval of the Board of Directors (BOD). However, the Board has requested TPTL to resubmit the proposal after addressing certain queries raised during their review.

NERLDC requests all state to provide the periodic updates and show 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.

States may update and TCC may deliberate.

2.6. Directions and Suggestions Issued by Hon'ble CERC Vide Order Dated 05.10.2025 in Suo Motu Petition No. 9/SM/2024

The Hon'ble Commission had issued Order in Suo Motu Petition No, 9/SM/2024 on 05.10.2025 in the matter of "Planning for safe, secure, and reliable integrated operation of the power system during critical periods arising on account of seasonal variations wherein the electricity demand increases rapidly by undertaking specific measures to mitigate the risks on the power system under clause (h) of sub-section (1) of Section 79 of the Electricity Act, 2003 and the Regulation 31 of the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2023."

The directions and suggestions are as follows:

(a) Adequacy of Workforce in SLDCs

- Ensure the availability of adequate number of manpower as per their current sanctioned strength
- Deliberate on actions required to augment manpower as per MoP's Workforce Adequacy Guidelines.
- Identify gaps in key functional areas such as market operation, IT, communication, and cyber-security.
- Consider formulation of a dedicated HR Management and Development Policy aimed at structuring the movement of officers in specialized functions without disrupting operations and ensuring smooth staffing, structured job rotation, minimum tenure and continuous skill development of personnel.
- Measures to ensure financial autonomy to SLDCs through a separate tariff determination of SLDC Fees & Charges by SERCs
- Possibility of establishing a separate cadre system for SLDCs may also be explored

(b) Training and Certification of SLDC staff

- Ensure that adequate workforce is trained and certified annually to enhance operational competence.
- Discuss mechanisms to retain trained staff within SLDCs and introduce incentives for certified personnel under SLDC Fee & Charges.
- Review proposal for structured capacity-building programs to be organized by RLDCs in collaboration with NLDC.

(c) Alignment of State Grid Code with the Indian Electricity Grid Code (IEGC-2023)

- Review existing provisions of the State Grid Code and state SERCs may align their respective State Grid Code with the 2023 Grid Code of CERC.

(d) Backing down of intra-state thermal generating units

- States' generators to hold interactive sessions with ISGS (e.g.NTPC) to address operational issues.
- Enable backing down of thermal units to 55% MTL to free additional down reserves.
- Develop part-load compensation mechanisms and explore two-shift operations considering high RE integration.

(e) Enablement of AGC in Intra-State Generating Stations

- SLDCs to encourage generators to enable Automatic Generation Control (AGC).
- SERCs to provide suitable incentives in line with CERC regulations.
- Benefits:
  - (a) Generators earn revenue from AGC operations.
  - (b) States can maintain reserves within their boundaries.
- Until enablement of AGC provisions in the State, state generators can participate in Central SRAS.

(f) Maintaining Adequate Reserves

- From 1st April 2026, NLDC will begin maintaining reserves on a state-wise basis; however, this could prove costly for states, as NLDC may need to maintain reserves in costlier gas-based plants.
- States are urged to maintain their own reserves. States are required to meet the expected demand as well as keep the necessary reserve.
- It was directed to review the quantum of reserves allocated to North-Eastern Region states. Therefore, committee has been formed within GRID-INDIA to review the quantum of reserves allocated to the NER states.

(g) Two Shift Operation of thermal generating stations

- States should also work towards enabling two-shift operation of intra-state thermal generating stations to ensure better flexibility and grid reliability

(h) Cybersecurity preparedness

- Cybersecurity is critical due to increasing digitization and cyber threats in the power sector.
- State SLDCs currently lack adequate manpower in cybersecurity.
- States should deploy sufficient staff and ensure mandatory cybersecurity training to strengthen grid resilience.

(i) Implementation of the SAMAST (Scheduling, Accounting, Metering, and Settlement of Transactions) Scheme

- Review current status of SAMAST (Scheduling, Accounting, Metering and Settlement of Transactions in Electricity) implementation.
- Identify pending activities for full automation of scheduling, accounting, and settlement processes.

The Order is enclosed as **Annexure-IV** for kind perusal, deliberation, and necessary action by the forum.

TCC may deliberate.

2.7. Communication Audit for the systems installed at ISTS/SLDC stations of NE Region-NERPC

As per Clause 10 of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017 – "The RPC Secretariat shall conduct a performance audit of communication system annually as per the procedure finalized in the forum of the concerned RPC. Based on the audit report, RPC Secretariat shall issue necessary instructions to all stakeholders to comply with the audit requirements within the time stipulated by the RPC Secretariat."

The Communication Audit Committee of North Eastern Region vide NERPC letter dated 30.07.2024(Annexure-B 2.1) has been formed based on the provision of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017.

The matter was deliberated in various communication meetings (NETest) and also **an audit observation has raised by Indian Audit and Accounts Department regarding the Communications audit of NER Stations vide requisition no.44 dated 09.04.24**.

In 31st NETeST meeting, NERPC apprised the forum that the communication audit in respect of Kahilipara substation was carried out for the PGCIL owned equipments on 01.04.2025. The observations of the communication audit has been shared as an audit report. NERPC further requested AEGCL to submit the requisite information for AEGCL owned equipments in Kahilipara substation so that communication audit can be carried out for the same.

In 32nd NETest meeting, it was emphasized that the communication audit for the critical sub-stations of NER to be carried out in time bound manner and advised the respective utilities to submit the required information in the prescribed format to enable scheduling of audits.

Sl No.	**State/Utility**	**Name of sub station**
1	Arunachal Pradesh	SLDC Arunachal Pradesh, Chimpu
2	Assam	Kahilipara and Sarusajai
3	Nagaland	SLDC Nagaland
4	Meghalaya	NEHU and SLDC Meghalaya
5	Manipur	SLDC Manipur
6	Tripura	SM Nagar (Tripura)
7	Mizoram	SLDC Mizoram
8	PGCIL	Nirjuli, Aizawl, Dimapr, Imphal and Misa
9	Indigrid	SM Nagar
10	NHPC	Loktak
11	NEEPCO	Kathalguri

The above utilities were requested to furnish the required data in the

prescribed format by the end of September 2025. However, no responses were received.

Subsequently, a reminder letter dated 06.10.2025 was issued by the NERPC Secretariat, requesting submission of the requisite information for communication audit of critical substations by **15th October 2025**, with a copy to NERLDC to facilitate scheduling of audits in compliance with CERC regulations. However, no information has been received from the concerned utilities to date.

Respective utilities may respond.

TCC may deliberate.

2.8. Latest expected tariff details of Subansiri Lower Hydro Electric Project – Tripura

It is understood that the Subansiri Lower Hydro Electric Project (2000 MW) being developed by NHPC in Arunachal Pradesh is at an advanced stage of commissioning where the commissioning of the first two (2) units were initially expected in August 2022. However, the actual commissioning of the project appears to be delayed considerably and expected very soon.

In view of the time gap between the originally declared and the expected commissioning dates, it is anticipated that there may be revisions in the project cost and tariff structure. TSECL has already communicated this concern to NHPC, with a copy endorsed to NERPC and NERLDC, seeking clarification on the matter in the month of June, 2022.

Accordingly, it is requested that NHPC may kindly intimate the latest expected tariff details for the Subansiri Lower HEP so that TSECL can review and assess the tariff implications prior to according its concurrence and before the commissioning of the project.

NHPC may update.

2.9. Proposal to connect the Banderdewa Sub-Station (2x31.5 MVA, 132/33 kV) to the 132 kV S/C Gohpur–Nirjuli Transmission Line (GITL) through 132 kV LILO transmission line - Ar. Pradesh

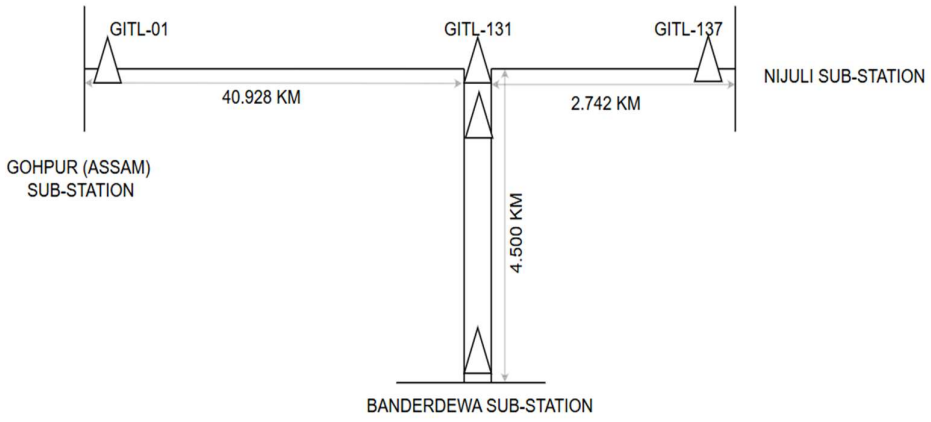
The **3-Phase, 2 x 31.5 MVA, 132/33 kV Banderdewa Sub-station**, constructed under the Comprehensive Scheme for Strengthening of Transmission & Distribution System in Arunachal Pradesh & Sikkim (CSST&DS-AP&S), is presently lying idle due to the non-availability of a power source required for its energization. This situation has arisen from the non-completion of the upstream 132 kV transmission line originally planned to connect the sub-station to its intended power source.

In recent years, with the establishment of multiple interconnections of the Gohpur (Assam) sub-station with other nearby sub-stations, the power source redundancy requirement at Gohpur has been adequately met. Consequently, the existing **132 kV Single Circuit Gohpur–Nirjuli Transmission Line (GITL)** has become **underutilized**, transmitting minimal power.

In view of the above, it is proposed to carry out a LILO (Line-In Line-Out) of the GITL at the 132/33 kV Banderdewa Sub-station to utilize the existing idle infrastructure and to ensure reliable power supply to the Banderdewa area.

Matter was discussed in 48th CMETS meeting and CTU has done some preliminary study.

SLD of the proposed LILO from 132 kV Gohpur-Itanagar Transmission Line (GITL) to 132/33 kV Banderduwa Sub-Station



CTU may Update.

2.10. Improvement of Switchyard Earthing System at the following Power Stations of MePGCL -MePGCL

i) Umiam Stage-I Power Station, MePGCl, Sumer (4 X 9 MW)

ii) Umiam Stage-II Power Station, MePGCl, UmSumer (2 X 18 MW)

iii) Umiam-Umtru Stage-IV Power Station, MePGCl, Nongkhylllem (2 X 30 MW)

iv) Myntdu Leshka Hydro Power Station, MePGCL, Suchen (3X 42 MW)

Explanatory Note:

The proposal envisages improvement of Switchyard Earthing System at different Power Station of MePGCL by construction of new earth pits and installation of connecting bars between the new earth pit and different elements etc with an ultimate aim to improve system stability as the revamping of the earthing system is felt extremely necessary to minimise the damage of critical terminal equipments like Current transformers. Circuit breakers, Lightning Arrestors etc along with safeguarding the equipments such as SCADA, RTU and other communication systems as the Power Stations of MePGCL are located in high lightning prone areas and

improvement in the earthing system is envisaged for enhancing system stability by reducing the failure rate of such critical equipments and components.

This proposal was placed during the 28th TCC meeting at Guwahati wherein it was referred to the Sub Committee meeting for subsequent discussions/deliberations etc.

In the 224th OCC meeting, it was appraised that this proposal does not fall under the purview of PSDF Guidelines. However, it is again requested by MePGCL to consider this proposal under clause 5.1 (c) "installation of standard and special protection schemes" which seems to be as per the revised guidelines of PSDF received on 12th March-2024 and in line with the objective of PSDF towards bringing in the **improvement and reliability of Indian Power System.** In this regard, it is also to be mentioned that similar proposal has been approved under PSDF for our transmission utility which is MePTCL and the LOA was accordingly placed by MePTCL on 20th December-2018.

Tentative Cost – Rs 3.00 Crore approx.

Due to lack of fund constraint and considering the importance of the proposal with regards to improving the system stability and strengthening of the basic protection scheme, MePGCL is requesting this forum to reconsider recommending the funding of this project from PSDF.

TCC may deliberate.

2.11. Implementation of Digital Tele-Protection Coupler (DTPC) in all 132kV Feeders of MSPCL -MSPCL

To improve reliability, speed, and coordination of protection and auto-reclose schemes, implementation of Digital Tele-Protection Coupler (DTPC) across all 132kV feeders has become a necessity. The DTPC will integrate with IEC 61850-based numerical relays or Substation Automation Systems (SAS).

thereby ensuring fast, secure, and reliable exchange of protection and auto-reclose commands between substations. These systems facilitate carrier-aided protection schemes (such as permissive tripping and blocking) and voice/data communication between substations Implementing DTPC will enable fast transmission of trip/transfer trip/blocking signals, reducing fault clearing time and improving system stability, enhance Auto-Reclose (A/R) Operation as DTPC ensures synchronous and dependable auto-reclose coordination between line ends by providing high-speed, fail-safe communication of breaker status and reclose commands. This minimizes the risk of unsuccessful or out-of-sync reclosures and enhances system stability after transient faults.

In recent years, Optical Ground Wire (OPGW) networks are being laid and commissioned in almost all of the 132 kV transmission lines of MSPCL, providing a robust and high-bandwidth communication backbone. This existing OPGW infrastructure can be effectively utilized for easy and practical implementation of DTPC systems, without major additional investment in communication media.

As per Guidelines on Availability Of Communication Systems prepared in Compliance To Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017, January 2024, Clause No. 3.1 ***As per Regulation 5 (i) of the CERC (Communication System for inter-State transmission of Electricity), Regulations, 2017,*** "***These regulations shall apply to the communication infrastructure to be used for data communication and tele -protection for the power system at National, Regional and inter-State level and shall also include the power system at the State level till appropriate regulation on Communication is framed by the respective State Electricity Regulatory Commissions***." MSPCL requests NERPC's endorsement and support for implementing Digital Tele-Protection Couplers (DTPC) in all 132kV feeders across Manipur. This will strengthen

protection coordination, auto-reclose performance, and overall reliability of the State Transmission Network, aligning with the modernization goals of the North Eastern Regional Power System.

Deliberation Required:

- Approval in principle from NERPC/TCC for statewide DTPC implementation.
- Recommendation for funding support under PSDF or other Central schemes
- Coordination with CTUIL/CTU and neighboring utilities for interoperability and standardization of DTPC protocols and A/R communication logic.

TCC may deliberate.

2.12. Vulnerable tower locations in various transmission lines due to earth cutting/ road development by NHIDCL - Powergrid

Brief:

The ongoing NHIDCL road widening project (NH-37) in Manipur & Assam has impacted above transmission lines critically. Despite several correspondences, NHIDCL has not adhered to the Standard Operating Procedures (SOPs) prescribed by the Ministry of Power and earth cutting/road development is being continued by NHIDCL without permission of POWERGRID. Similar issue was also discussed in 28th TCC & NERPC meeting. Details of vulnerable tower locations are as under:

a) 132 kV Loktak-Jiribam S/C transmission line

- Tower location Nos. 18, 76, 85, 89, 129, 130, 133 (7 Nos.)
- Location No. 82 was damaged on 08.08.2025 due to landslide caused by earth cutting and subsequently collapsed and line became out of service. Same was restored subsequently on 05.09.2025 by carrying out direct stringing between location no. 81 & 83 and doing huge benching work on war footing basis.

- Joint meeting with Commissioner Power (Govt of Manipur), NHIDCL, MSPCL carried on by POWERGRID on 06.08.25, where it was advised by Commissioner (power), Manipur for joint survey for all vulnerable locations. Joint survey done from 11.08.25 to 14.08.25 and report signed on 03.09.25.

b) 400 kV Silchar Imphal D/C transmission line

- Tower location Nos. 201, 231, 293, 306, 335, 423 (6 Nos.)
- Joint meeting with Commissioner Power (Govt of Manipur), NHIDCL, MSPCL was carried out by POWERGRID on 06.08.25 and Commissioner (Power), Manipur advised for joint survey for all vulnerable locations. Joint survey done from 11.08.25 to 14.08.25 and report signed on 03.09.25.
- 3 nos vulnerable locations (Loc-293,335 & 423) not agreed by NHIDCL even though distance from tower leg to cutting edge/landslide is only 5-6 mtr.

c) 132 kV Haflong-Jiribam S/C transmission line

- Tower location No. 256 has become vulnerable
- Diversion proposed between tower locations 237-246 and 253-259 (as per joint visit with NHIDCL)
- Cost estimate submitted to NHIDCL in the year of 2023.

Proposal

- Estimated cost of rectification / diversion of transmission lines is approx. Rs. 50 Cr.
- If timely action is not taken, the potential failure of these lines could lead to severe power disruptions across Manipur & Assam and accident may occur.
- NERPC's urgent intervention is requested to take up the matter with NHIDCL to halt excavation work/road development work near tower locations without permission of POWERGRID.
- In the meantime, POWERGRID is going ahead with rectification/ diversion based on criticality of tower locations in the interest of safety

of transmission lines. Further, the matter of recovery of expenditure incurred for the diversion of critical towers is currently being pursued with M/s NHIDCL.

TCC may deliberate.

2.13. Violation of ground clearance on various tower locations due to road development project by NHIDCL-- Powergrid

The Violation of ground clearance noticed due to road development project by NHIDCL for the following PowerGrid Transmission Lines.

a) 400 kV Silchar – Melriat D/C transmission line (Charged at 132 kV)

- Ground clearance violation locations are 43-52, 65-68, 70-72, 122-125.

b) 400 kV Silchar-Imphal D/C transmission line

- Ground clearance violation locations are 49-59, 64-67, 192-193.

- These violations pose a serious safety hazard, increasing the risk of potential accidents involving personnel and the public. If timely action is not taken, it may lead to significant threat & hazard to both human life and material assets.
- NERPC's urgent intervention is requested to take up the matter with NHIDCL to halt road development work near tower locations without permission of POWERGRID.

In the meantime, POWERGRID is going ahead with rectification/ diversion based on criticality of tower locations in the interest of safety of transmission lines. Further, the matter of recovery of expenditure incurred for the diversion of critical towers is currently being pursued with M/s NHIDCL.

PowerGrid may elaborate.

TCC may deliberate.

2.14. Disaster Preparedness of Transmission Infrastructure: Procurement of 20sets (300 Towers) of Emergency Restoration System under Make in India

The Ministry of Power (MOP), through its letter No. 34/7/2025-TRANSMISSION dated 11.05.2025 (Enclosed as **annexure 2.14a**), has inter-alia directed POWERGRID to place an order for 20 sets comprising 300 towers of Emergency Restoration System (ERS). This directive follows a high-level meeting chaired by the Secretary (Power) on 10.05.2025, where the decision was finalized.

Subsequently, MOP vide letter ref. No. 34/7/2025-TRANSMISSION (MoP) dated 19.08.2025 (Enclosed as **annexure 2.14b**), has conveyed in-principle approval for procurement of 20 sets (300 towers) ERS under Public Procurement (Preference to Make in India) through Regulated Tariff Mechanism (RTM) to POWERGRID.

POWRGRID is to carry out procurement of 20 sets of ERS towers (300 towers) through emergency procurement process to meet potential requirement in the states. The proposed ERS shall be kept and maintained at suitable locations to meet the requirement of stake holders during contingencies, and the ERS shall be treated as spares under a common pool.

As per preliminary estimation, total expenditure towards said procurement is expected as approximately Rs 440 Cr. **Out of 20 sets of ERS (300 towers) suitable for 400kV Transmission Lines being procured, 4 sets of ERS towers (60 towers) shall be kept in North Eastern Region, against which a preliminary expenditure of Rs 88 Cr is expected.**

In view of the above, POWERGRID has planned to procure the proposed ERS and subsequently, approach CERC through tariff petition for cost recovery of the expenditure in accordance with the CERC Tariff regulations, 2024.

PowerGrid may elaborate.

TCC may deliberate.

2.15. URTDSM Phase-II Project (ISTS Portion) – Implementation through RTM route

Background of URTDSM Phase-II project:

1. The WAMS system installed under URTDSM Phase-I project comprises of 1400+ PMUs and 32 Control centers. This project was implemented with 70% of the project cost as PSDF grant and 30% was through POWERGRID Equity (RTM for 30% portion and no tariff for 70% grant portion).

2. The URTDSM Phase-I project is proving its significance and usefulness to the Grid Operators for wide area monitoring of the Grid and Event Analysis. Further, the expanding Indian Power Grid with increased penetration of renewable energy sources and Govt of India's plan to achieve 500GW RE power by 2030, needs Smart Grid tools to proactively monitor, manage, and operate the Grid.

3. The URTDSM Phase-I Control centres at SLDCs, RLDCs and NLDCs (32 No's) are nearing their Operational life and are becoming technically obsolete. Hence to keep the WAMS URTDSM Control centres functional, the URTDSM Phase-II project which includes replacement of existing control centres, is to be implemented on priority. URTDSM Phase-II project also envisages advanced WAMS analytics for Oscillation monitoring, Disturbance analysis, inertia monitoring, measurement of RE generator(inverter) response, which shall enhance the Grid observability for efficient and safe operation of the Grid.

4. Previous Deliberations for Approval of URTDSM Phase-II Project:

S No	NPC/RPC Meeting	Date of Meeting	Meeting Outcome	**Actions taken by POWERGRID**

i.	13th NPC Meeting	05.07.2023	"The DPR of URTDSM project phase-II in accordance with the recommendation of the committee may be prepared by the PowerGrid within three months. PSDF funding for URTDSM project phase-II may also be sought subsequently. RPCs were requested to provide full cooperation in reparation of DPR"	POWERGRID Prepared DPR for URTDSM Phase-II Project, which included 4000PMUs (new) and 34 control centres proposed with funding pattern of 70% PSDF grant and 30% POWERGRID equity in line with Phase-I. DPR with an estimate of Rs.3922 Crores, was submitted to NPC/CEA on 11.03.2024.
ii.	14th NPC Meeting	03.02.2024	"PGCIL may revise the scope of DPR in line with above suggestions ((d) to (h)) and submit the DPR by March 2024"	POWERGRID presented Various options for optimization and discussed with GRID-INDIA. These Options were presented to NPC on 30.05.2024 for further deliberations.
iii.	Email from NPC reg PSDF	18.04.2024	"In accordance with the decision of the 22nd Monitoring Committee meeting, funding for the DPR regarding URTDSM project Phase II will not be provided through PSDF as of now. **POWERGRID is hereby requested to**	Hence, POWERGRID proposed to implement the URTDSM Phase-II Project on RTM basis (70% debt and 30% equity) and approached the Constituents in all the five RPCs for concurrence of the RTM proposal.

			explore alternative funding sources for URTDSM project Phase II".	
iv.	Various RPC meetings		SLDCs of all Regions have expressed in- principle technical acceptance for implementation of the URTDSM Phase-II Project, but the RTM proposal was not concurred by States due to funding constraints	The initial DPR prepared by POWERGRID was based on the sub- committee recommended philosophy of PMU placement. However, CEA was preparing a revised PMU placement philosophy to bring clarity in various regulation/ guideline / recommendation. The new guidelines for unified philosophy of PMU placement in Indian Grid were published in March 2025, which will supersede all existing guidelines and sub-committee report etc.
v.	15th NPC Meeting	14.11.2024	"PowerGrid is to submit the revised proposal in consultation with Grid India, only for the existing network after segregating the PMUs and control centers under ISTS and STUs system. The proposal may also be revised to optimized	Accordingly, POWERGRID prepared DPR for URTDSM Phase-II ISTS portion (upgradation of control centres at NLDCs, RLDCs and installation of new PMUs for Central Sector stations as per latest CEA guidelines) at an estimated cost of Rs. 1124Crores.

			number of control centers and PMUs at ISTS & STUs system separately. The revised proposal for ISTS portion may be put up to the NCT for further consideration".	Phase-II project for ISTS portion comprises of control centres (7 nos.) of NLDC and RLDCs and PMUs at central sector stations (1070 nos.) Tentative cost and BOQ for STUs portion (Control centers of SLDCs across India and new PMUs for State sector substations) is also prepared by POWERGRID for further deliberations in NPC at a cost of Rs. **2550 Crores** for **26** SLDCs' portion and 1210 PMUs. The same has been discussed in 16th NPC.
vi.	16th NPC	04.07.2025	"URTDSM project phase-II proposal may be put up in RPC forum for further discussion" "The mode of implementation of the URTDSM project phase-II may be put up in upcoming NCT meeting for deliberation and approval"	Accordingly, POWERGRID is taking up the URTDSM Phase-II ISTS proposal for discussion in RPC Meetings.
xi.	29th NERPC	17-18th July 2025	Forum noted that the matter needs to be discussed in detail and	The No of State Sector PMUs for each SLDC of NER is as given below.

			referred it to sub- committee for further deliberation	

The number of State Sector PMUs for each SLDC of NER is as given below:

Name of the SLDC	**No of State Sector/ Pvt. Utility PMUs**	**Installed in scheme**
Assam	10	URTDSM Ph-I
Nagaland	2 (Pvt)	KMTL (Pvt)
Manipur	0	
Meghalaya	1 (Pilot)	Pilot
Tripura	12 (Pvt)	IndiGrid

In view of the above PMU quantities, POWERGRID proposes the following strategy for State Sector portion of NER Region under URTDSM Phase- II Project:

i. No dedicated PDCs (Control Centre setup) will be required under URTDSM Phase-II for SLDCs of NER. All State Sector PMUs in NER shall be reported to the PDC at NERLDC. For all States of NER where State Sector PMUs are present, only remote consoles with firewall and LAN switch will be supplied at each SLDC premises, cost of which will be around **Rs.2 Crores** per SLDC & the same is NOT included in the present proposal.

ii. The PMU quantity proposed under the ISTS portion for NER is as per revised CEA guidelines only. It is enclosed at **Annexure** herewith.

POWERGRID Proposal for URTDSM Phase-II ISTS Portion:

Keeping in view of the above factors, "*it is proposed to take up URTDSM Phase-II Project (for ISTS portion) on pan India basis, on cost sharing mechanism*

(100% RTM route with 70:30 Debt Equity ratio) to be implemented by POWERGRID".

URTDSM Phase-II ISTS proposal is approved by SRPC and WRPC (Minutes awaited). Agenda has been put up in 81st NRPC scheduled on 30th Oct 2025. Upon Approval in all RPCs, POWERGRID will put up the proposal in NCT for final approval.

Members may kindly deliberate.

2.16. Non-compliance of instructions of NERPC forum by SLDC Tripura regarding First Time Charging (FTC) of elements under NERPSIP-NERLDC

Background:

As per the Minutes of the Special Review Meeting on implementation of NERPSIP/Comprehensive Scheme held on 2nd May 2025, it was informed that out of 151 elements, 107 elements under NERPSIP–Tripura had already been commissioned.

In the 189th OCC Meeting of NERPC (held on 19th April 2022), it was decided that FTC documents must be submitted to NERLDC prior to commissioning of any element under NERPSIP.

However, despite commissioning 107 elements, no FTC documents have been submitted by SLDC Tripura to NERLDC, leading to mismatch between SCADA databases of NERLDC and SLDC Tripura.

Recent Developments:

As per the CEA Monthly Progress Report on Central Funded Schemes (July 2025),

- 27 out of 30 projects at the 132 kV level in Tripura have been fully charged, and 1 project partially charged, comprising 13 transmission line projects and 14 substation projects.

- These elements have been charged without prior intimation to NERPC/NERLDC and without submission of FTC documents, thereby violating the agreed FTC procedure.

Instances of non-compliance include:

- LILO of 132 kV PK Bari–Ambassa line at Manu (charged in September 2024)
- 132/33 kV Manu Substation (charged in July 2025)
- 132 kV SM Nagar (ISTS) – SM Nagar (TSECL) line reconductoring (HTLS) and subsequent charging (September 2025)

All these elements were commissioned without adherence to the FTC procedure decided in the 189th OCCM and the provisions of IEGC 2023.

Reference Communication:

NERLDC, vide its letter Ref: NERLDC/Office of CGM(IC)/Sep'25/8223 dated 03.09.2025 (**Attached as Annexure**), has again highlighted the issue of non-compliance and requested SLDC Tripura and TPTL to take immediate corrective action.

The letter specifically instructs as follows:

a) Submit immediately FTC documents for all commissioned elements of NERPSIP–Tripura to NERLDC.
b) Align commissioning activities strictly in line with the decisions of the 189th OCCM of NERPC, IEGC procedures, and NLDC formats.
c) Submit protection settings of all commissioned elements to NERPC for approval and ensure proper coordination.
d) Strengthen communication and telemetry systems to eliminate database mismatches between SLDC Tripura and NERLDC.

The matter has been advised to be treated as urgent, considering the operational discrepancies, database non-uniformity, and potential risks to grid reliability arising from such non-compliance.

NERLDC requests the following for Discussion:

- To deliberate on continued non-compliance by SLDC Tripura and TPTL with respect to submission of FTC documents under NERPSIP/deemed ISTS projects.
- To review the actions taken by SLDC Tripura in response to NERLDC letter dated 03.09.2025.
- To discuss and decide on the way forward for ensuring strict adherence to the FTC procedure as per IEGC 2023 and directions of NERPC/OCC forums.
- To finalize a timeline for submission of all pending FTC documents and synchronization of SCADA databases between SLDC Tripura and NERLDC.

MS, NERPC already wrote letter to CMD, TSECL to look into the matter and the compliance the procedure, IEGC 2023 and CEA/CERC regulations.

2.17. Persistent Over-Drawl by Tripura during Low-Frequency Conditions on 08th & 09th September 2025 -NERLDC

It has been observed that Tripura is persistently over-drawing from the grid, despite repeated directions issued by NERLDC and discussions in various forums. Tripura has continued to overdraw even during periods of low grid frequency. Notably, on 08.09.2025 at 19:14 hrs (49.43 Hz) and 09.09.2025 at 18:56 hrs (49.41 Hz), Tripura did not curtail its drawal, posing serious concerns for secure grid operation.

Analysis for the period month of September 2025 **(Annexure-I & II)** indicates that Tripura overdrew for 66% of the time, with over-drawal exceeding 40 MW for 4% of the time (approx. 28 hours). Despite advisories issued during the 226th OCCM and 230th OCCM, this situation persists, including during emergency grid conditions.

Further, it has been observed that Tripura is heavily dependent on the Real-Time Market (RTM) to meet its demand requirements. As per the analysis for September 2025 **(Annexure–III),** Tripura procured power through RTM for approximately 63% of the time. The quantum of RTM purchase reached up to 118 MW, which is significant in relation to Tripura's overall demand. Such a high level of dependence on RTM indicates the need for improved demand-supply planning to ensure reliable and secure grid operation.

Provision of the IEGC 2023 state the following:

Regulation 49(3)(c) (SCHEDULING AND DESPATCH CODE): In case of contingencies such as critical loading of lines, transformers, abnormal voltages or threat to system security, the following steps as considered necessary, may be taken by RLDC:

(i) Issue directions to concerned entities to adhere to the schedules

(v) Direct the SLDCs or other regional entities to increase or decrease their drawl or injection by revising their schedules and such directions shall be immediately acted upon

In view of the above, SLDC Tripura is requested to strictly adhere to the scheduled drawl and comply with the instructions issued by NERLDC for ensuring safe, secure, and stable grid operation.

TCC may deliberate.

2.18. Expediting construction of residential buildings at various EHV sub-stations developed under NERPSIP Tranche-I. – DoP Nagaland

Under the ongoing NERPSIP Tranche-I project, the housing requirement in all the new EHV sub-stations was discussed and finalized with the Senior officials of POWERGRID during March 2021 which has been duly approved as under:

Sl.	Name of Substation	Housing Requirement
1	132/33kV Substation at New Secretariat Complex Kohima/ Nagaland University	1. One B1 block at the substation premises. 2. One B1 block at existing 132/33kV substation at Old Minister Hill Kohima. 3. One C block at existing 132/33kV Old Minister Hill Kohima. 4. One B2 block at Electrical Colony Kohima. 5. Two B1 blocks at New Kohima 220kV substation.
	132/33kV substation at Pfutsero.	1. One B1 & B2 blocks at Substation premises.
3	132/33kV substation at Zunheboto	1. One B1 & B2 blocks at Substation premises. 2. One B3 block at Electrical Colony Zunheboto town.
4	132/33kV substation at Longnak	1. One B1 & B2 blocks at Substation premises. 2. One B3 block SDO electrical colony at Longnak
5	132/33kV Substation at Longleng	1. One B1 & B2 blocks at Substation premises.

In this regard, the Department has handed over all required lands along with all necessary NoCs etc. to POWERGRID. Preliminary survey has also been carried out jointly by the Department and POWERGRID. The housing requirement was finalized & approved during 2021, however, even after a

lapse of almost 4 years, nothing has been done on the ground. The matter has been deliberated during the 26th TCC & 26th NERPC meeting, wherein NERPSIP representative had assured to expedite construction of residential buildings at various EHV sub-stations developed under NERPSIP Tranche-I. Regrettably, till date, no progress has been made at the site.

In view of the above, the matter is requested to be taken up in the agenda for thorough deliberation with the POWERGRID during the 30th TCC/NERPC meeting.

TCC may deliberate

2.19. Creation of "Training head" under NERPC Establishment Fund for training purpose for the constituents

NERPC has proposed the creation of a dedicated **"Training Head"** under the NERPC Establishment Fund to facilitate training programs for constituent organizations. The objective is to enhance technical and managerial capabilities of engineers and officers through training in key areas such as **system operation, protection, cyber security, and commercial aspects** of the power sector, thereby improving overall knowledge and skill levels.

During the **29th TCC/NERPC Meeting**, the forum **agreed** to the creation of this "Training Head" for **capacity building and domestic training** initiatives and recommended the same to NERPC for concurrence.

NERPC beneficiaries will nominate its representatives for the identified trainings.

Members may kindly deliberate.

2.20. Accessing WBES outside of SLDCs -Tripura

WBES is not being exercised out of SLDC. For smooth functioning of the system as well as commercial viability of the Discom, it is utmost necessary to exercise out of office also. The matter was also discussed in the last OCC meeting. NERPC/NERLDC is requested kindly to look into the matter on top most priority.

NERLDC may update. Members may discuss.

3. PART-B: ITEMS FOR APPROVAL

3.1. DPR for Implementation of Digital Substation Control Protection & Substation Automation at LTPS, NRPP & KLHEP System of APGCL

Implementation of Digital Substation Control Protection & Substation Automation at LTPS, NRPP & KLHEP System of APGCL. APGCL has submitted the DPR for Implementation of Digital Substation Control Protection & Substation Automation at LTPS, NRPP & KLHEP System of APGCL. This scheme will yield a reduction in operating costs and an increase in reliability, flexibility of the power system and further integration of protection & control events to accelerate response to problems. The DPR was placed before 29th TCC & RPC for approval, wherein the forum referred to sub-committee for further deliberation. Subsequently the matter was placed in 228th OCC meeting held on 25th July 2025 wherein the forum agreed in principle for the same for implementation under PSDF.

Deliberation of the 228th OCCM on the matter-

"*APGCL representative informed that the estimated cost of the project is 23.8 Cr. After deliberation, the forum observed that the scheme is eligible for funding under the extant of PSDF guidelines. The forum in principle agreed for the same for implementation under PSDF funding. The forum advised APGCL to send the DPR to PSDF secretariat after getting approval from ensuing RPC meeting.*"

The DPR is placed herewith for approval of the TCC NERPC forum.

Placed for approval of TCC

3.2. Installation of OPGW on the existing ISTS lines in NER region - CTUIL

The agenda for installation of OPGW on the existing lines of ISTS has been discussed in the 32nd NETeST meeting held on 29.08.2025. The tentative

length of OPGW proposed in the agenda is approx. 16,555 kms for Pan-India. The tentative length of OPGW proposed in NER Region is approx. 290 kms.

In the 32nd NETeST meeting, the forum in principle agreed for the OPGW scheme for NER region.

Deliberations were also held in the 32nd NETeST regarding OPGW status on 220kV Kathalguri-Mariani (AEGCL) line in NER.
Further, confirmation of non existence of OPGW on the 220kV Kathalguri-Mariani (AEGCL) line was received from POWERGRID vide mail 06.10.2025.
Accordingly, scheme for laying of OPGW on existing ISTS lines where in OPGW isn't present is being prepared on Pan-India basis and for NER the scheme is mentioned below:

S. No.	Items	Details
1.	Scope of the scheme	a) Supply and installation of OPGW (48F) on 400kV P K Bari (Indigrid) - Silchar (POWERGRID) line (approx. 127km, line owned by POWERGRID). b) Supply and installation of OPGW (48F) on 220kV Kathalguri (NEEPCO)-Mariani (AEGCL) line (approx. 163 km, line owned by POWERGRID) c) Supply and installation of required FOTE STM-16 and optical interfaces for the commissioning of above mentioned fiber optic links as per **Appendix-I.**
2.	Depiction of the scheme	As per **Appendix II** and **III**.
3.	Objective / Justification	In the present scenario of increased RE penetration, frequent system expansion and strengthening, many of the existing lines are proposed for LILO frequently during transmission

		planning. However, it has been observed many times during planning/execution of these LILO systems that main line is not having OPGW, which leads to issues such as compromising on the alternate path/ redundancy/ protection. Further, installation of OPGW on the existing lines being LILOed leads to time mismatch. Accordingly, NCT advised CTUIL to prepare a comprehensive scheme for installation of OPGW on all those transmission lines of 110kV and above which don't have OPGW on pan-India basis. In NER region, it has been found that below mentioned ISTS lines don't have OPGW. a)400kV P K Bari-Silchar line. b)400kV Binaguri (PG) – Alipurduar -Bongaigaon (PG) line c)220kV Kathalguri-Mariani (AEGCL) line This agenda was further discussed in 8th NER CPM meeting held on 28.07.2025 wherein members agreed for laying the OPGW in NER region for the ISTS lines not having OPGW. Further, POWERGRID confirmed that the 400kV P K Bari-Silchar line doesn't have OPGW. Indigrid confirmed that 400kV Binaguri(PG)-Bongaigaon(PG) doesn't have OPGW. However, this line is LILOed at Alipurduar S/s (PG). Further, Alipurduar–Bongaigaon line is planned to be bypassed at Bongaigaon S/s under NERES-XXV Part-A scheme and to be integrated with upcoming Bornagar-Bongaigaon line (upto Bypass point) with 24F OPGW to form Bornagar- Alipurduar line.

		Accordingly, proposal for OPGW laying on Binaguri-Alipurdwar-Bongaigaon (upto bypass point) excluding LILO portion shall be taken up in ER region. Since this line is an Inter-Regional line OPGW laying on the line shall also be deliberated in the ERPC meetings as suggested in the 32nd NETeST meeting. POWERGRID has confirmed that the 220kV Kathalguri-Mariani (AEGCL) line doesn't have OPGW. Relevant email correspondence with POWERGRID and Indigrid is attached as **Annexure A.** In view of above, this scheme for OPGW laying in NER has been prepared for below mentioned lines: a)400kV P K Bari-Silchar line. b)220kV Kathalguri-Mariani(AEGCL) line.
4.	Estimated Cost	17.81 Cr.
5.	Implementation time frame	Thirty (30) months from date of allocation. (taking into consideration the hilly terrain of NER region)
6.	Implementation agency	To be implemented by POWERGRID in RTM mode.

7.	Deliberations	This agenda has been discussed in 16th NPC dtd 04.07.2025(MoM attached as **Annexure B**). NPC suggested that the proposal for installation of OPGW on the existing lines of ISTS may be put in upcoming RPCs/NCT meeting for deliberation. STU may also put up the scheme for OPGW on existing lines in respective RPCs. Accordingly, the agenda was discussed in 8th NER CPM dtd. 28.07.2025 (MoM attached as **Annexure C**). Further, this agenda was discussed in the 32nd NETeST meeting held on 29.08.2025, in the meeting it was deliberated that the forum advised CTU regarding the OPGW implementation, the details regarding the mode of implementation and financial estimates for above ISTS lines shall be worked out and shared with NERPC. Further suggested to obtain confirmation from the ER Region for the portion of 400 kV Binaguri–Alipurduar line.

In view of above, the scheme for OPGW laying on existing ISTS lines which aren't having OPGW in NER region as per scope mentioned in S.no. 1 is put up for kind review of NERPC and this shall be put up for NCT approval after RPC review.

Placed for approval of TCC.

3.3. Installation of DTPC for Protection Scheme and Replacement of Control & Relay Panels for R&M of EHV Sub-Stations in Nagaland.

DoP Nagaland informed that the power infrastructure in Nagaland has been undergoing a significant transformation and development to meet the growing

energy demand, ensure grid reliability and modernizing outdated systems over the last few years. As part of this transformation, several new Extra High Voltage (EHV) substations are being constructed or planned out across the state to cater the increasing electricity demand and integration of power from renewable and central sector projects.

While infrastructure expansion is underway, the protection and control systems at many substations still remain outdated. Most of the existing EHV substations in the state were commissioned decades back and still use outdated protection, Control and Relay (CR) Panels and rely on Power Line Carrier Communication (PLCC) systems for communication which has in turn become inadequate to meet the requirements of a modern, fast-responding and resilient transmission system. At present, the existing PLCC is used only for basic Speech + Data functions thereby hindering execution of fast and coordinated protection schemes across its network. Furthermore, the absence of remote monitoring and diagnostic capabilities with the existing infrastructure also limits visibility at the State Load Dispatch Centre (SLDC). The North Eastern Regional Power Committee (NERPC) & North Eastern Regional Load Dispatch Centre (NERLDC) have also placed high priority on strengthening protection and telemetry schemes for ensuring full integration of all EHV substations into the regional protection and communication network.

In recent years, the Optical Ground Wire (OPGW) network and communication Systems has been implemented under NEFO and NERPSIP schemes covering several transmission lines and Sub-Stations in Nagaland. The remaining Transmission lines and sub-stations have also been covered under the scheme “Implementation of OPGW and Reliable Communication Scheme in Nagaland” sanctioned by PSDF. Leveraging the OPGW infrastructure, the adoption of **Digital Tele-Protection Couplers (DTPCs)** will greatly enhance protection performance and system reliability by enabling end-to-end tele protection over a secure and fast communication channel. Also, taking into consideration the rugged geography of Nagaland where accessibility to remote sub-stations remains a challenge and monsoon disrupts power lines

frequently and with the increasing number of substations, DTPC-based protection scheme compatible both to OPGW and PLCC(as back up) shall ensure robust grid performance and protection.

The existing Control and Relay Panels in most of the existing EHV sub-stations in Nagaland have been in service for a very long time and become technically obsolete and is not compatible to integrate with SAS/SCADA Systems for future requirement. As most of the EHV sub-stations will soon be covered with OPGW connectivity and communication network, the upgradation to Automated Control and Relay Panels have become essential. The modernization of control room through automated Control and Relay panels will enable real-time monitoring, rapid fault detection and isolation and remote operational capabilities thereby ensuring better system stability and strengthening network reliability.

The project has been recommended during the 59th & 64th PCC Sub-Committee meeting of NERPC on account of System Stability.

The proposal "Installation of DTPC for Protection Scheme and Replacement of Control & Relay Panels for R&M of EHV Sub-Stations in Nagaland" consists of following scope of works:

a) Installation of DTPCs at 132kV and 66kV sub-stations for end-to-end tele protection compatible both to OPGW and PLCC (as back up) across Nagaland.
b) Replacement of existing 132kV, 66kV and 33kV Control & Relay Panels by new Control & Relay Panels with Automation System.

The project has been conceptualized and proposed with the following **Goals & Objectives:**

i. Implementation of Autoreclose and carrier aided protection in the lines.
ii. Facilitate accurate and fast isolation of faults through DTPCs thereby reducing risk of blackouts, widespread outages and safeguarding EHV transmission infrastructure.
iii. The superior selectivity and sensitivity offered by DTPCs will ensure rapid and precise exchange of protection signals between remote ends,

significantly reducing fault clearing times and minimizing system downtime thereby improving overall system reliability.

iv. Modernize and strengthen the sub-station and transmission line performance in Nagaland by replacing outdated panels and protection devices in compliance with the existing national grid codes and standardized protection practices.

v. Upgradation of the Control Relay Panels with automation system at 132kV, 66kV and 33kV sub-stations shall enable real-time monitoring and remote operation thereby ensuring better system control and fault response times.

In view of the above considerations, the objective to strengthen the protection and control infrastructure of EHV sub-stations and transmission lines in Nagaland through "Installation of DTPC for Protection Scheme and Replacement of Control & Relay Panels for R&M of EHV Sub-Stations in Nagaland" with an estimated cost of **Rs. 8084.96 lakh** is submitted for implementation under PSDF funding. The matter was placed before 29th TCC & RPC for approval, wherein the forum referred to sub-committee for further deliberation.

The matter was placed in 228th OCCM wherein, the forum observed that the scheme is eligible for funding under the extant of PSDF guidelines. The forum in principle agreed for the same for implementation under PSDF funding. The forum advised Nagaland to send the DPR to PSDF secretariat after getting approval from ensuing RPC meeting.

Placed for approval of TCC

3.4. Bus Strengthening of 132kV and 33kV system at 132/33/11kV Kohima Sub-station

DoP Nagaland informed that the 132/33/11 kV Kohima Sub-station plays a vital role in Nagaland's power transmission network, acting as a key node for delivering power to the state capital and surrounding districts, including Tseminyu, Wokha , Phek, Meluri and Kiphire. The 132/33/11kV Kohima

Sub-station is connected to the grid through the 132kV Karong-Kohima, 132kV Dimapur PG-Kohima, 132kV Zhadima-Kohima and 132kV Meluri-Kohima Lines. The sub-station is also linked to the Doyang HEP through the 132kV Doyang-Sanis-Wokha-Chiephobozou-Zhadima-Kohima line and Likimro HEP through the 132kV Likimro-Kiphire-Meluri-Kohima line. The sub-station is linked to two(2) inter-state elements through the 132kV Karong-Kohima and 132kV Dimapur PG-Kohima lines. The sub-station not only plays an important role in system stability and reliability of Nagaland but also for Northern Part of Manipur State. Presently, the sub-station caters power to the entire State Capital with an existing load of approximately 45.6 MW. Kohima, the capital city of Nagaland state, has been selected in the list of Smart City Initiative by Government of India. As such, numerous socio-economic infrastructural developments are underway. Therefore, the Sub-station is expected to experience a substantial increase in loading due to increased load demand and capacity addition of upcoming generation sources. Besides the existing Likimro HEP (24MW), upcoming generation sources includes the proposed Tizu Valley HEP (24 MW), Zungki HEP (24 MW), Lower Tizu HEP (42 MW), Ponglefo HEP(1 MW), Lower Likimro HEP (8.1 MW) thereby cumulatively contributing an additional 123.1 MW to the grid. Consequently, the projected future loading on the 132/33/11kV Kohima sub-station is estimated to be around 190 MW.

The Sub-station presently operates on a Single Bus Bar arrangement and hence, the sub-station is highly vulnerable to disruptions. Any system breakdown or fault on the Bus leads to complete outage causing entire blackout of the state Capital severely disrupting essential public services, administrative operations, government functions and also affects the reliability and stability of power to its adjoining districts. There have been many incidents in the past where a fault on the Bus has led to blackout of the entire capital and its adjoining areas. This particular issue has been taken on a serious note by North Eastern Regional Power Committee (NERPC) & North Eastern Regional Load Despatch Centre –Grid India (NERLDC) and subsequently discussed multiple times at NER-Power Co-ordination

Committee (NER-PCC) & Operation and Co-ordination Committee (NER-OCC) meetings. During 54th, 55th, 56th, 57th and 58th PCC Meetings NERPC has strongly recommended for Bus Strengthening of 132kV and 33kV at Kohima sub-station. However, due to funding issues and space constraint, the proposed strengthening / upgradation could not be implemented. Strengthening of existing 132kV and 33kV Bus Bar from Single to Double busbar system is therefore vital to enhance system reliability.

The sub-station is also constrained in terms of available land for expansion and the aging switchgear components necessitates the need for a major upgradation to accommodate the future demand, improve fault tolerance and support modernization of the grid. Due to the hilly terrain of the sub-station, the 132kV bays at the sub-station are constructed at three different elevation levels in a cascading arrangement. On 28th June 2019, the Executive Director, NERLDC on his visit to 132/33/11 kV Kohima Sub-station also remarked on the limited space and congestion within the sub-station, noting that any future expansion and modification or strengthening would be challenging under the existing AIS setup. In 2024, the Department engaged M/s Hitachi Energy India Limited for conducting system Study of 132/33/11kV Kohima Sub-station. During their site visit, the firm observed the existing cascading layout of the 132kV bays and the space constraint of the sub-station and suggested for conversion of the existing 132kV AIS substation to Hybrid-GIS substation. Conversion of existing AIS Bays to Hybrid GIS not only offers the benefit of space optimization for construction of Double Bus Bar arrangement but also has the advantage of compactness, reduced maintenance cost and high reliability, making it a viable solution due to constrained space installations. The 33kV Hybrid-GIS arrangement at Kohima Sub-station will also increase reliability of the 33 kV voltage network and ensure better protection coordination with the 11 kV and LT levels.

Considering the existing load, future load demand and integration of upcoming Hydro Power stations projects, the bus loading is expected to touch

about 190MW. This will require replacement of ACSR Single Panther Bus with ACSR Twin Moose Bus, as the present bus is not sufficient to handle the projected load growth.

Further, The 132/33/11kV Kohima sub-station was commissioned during the 1980s and has been a vital infrastructure for power distribution in the State capital and adjoining areas since then. Given it's age, the existing control panels have been in service for a very long time and with the advancement in control panel automation system through Substation Automation System (SAS), modernization of control room with modern SAS will enable real-time monitoring, fault isolation and remote operation by integration with SCADA system thereby ensuring better system control and fault response times.

The proposal "Bus Strengthening of 132kV and 33kV system at 132/33/11 kV Kohima Sub-station" consists of following scope of works:

a) Conversion of 132 kV & 33kV AIS Bays to Outdoor Hybrid Gas-Insulated Sub-station (GIS).

b) Strengthening of the Existing 132 kV & 33kV Busbar from Single to Double Busbar Configuration.

c) Replacement of 132 kV & 33kV Busbar Conductor from ACSR Panther to ACSR Twin Moose conductor for 132kV system and ACSR Moose conductor for 33kV system.

d) Replacement of existing 132kV and 33kV Control Panels with 132kV and 33kV Control Panel with Automation System.

e) Substation Automation System (SAS).

The project has been conceptualized and proposed with the following **goals & objectives:**

i. The proposed strengthening of 132kV & 33kV bus shall enhance reliability of power to the State capital and it's adjoining areas.

ii. The Double Bus Bar scheme shall provide system redundancy and enable parallel operation and maintenance at both 132kV and 33kV levels thereby ensuring uninterrupted power supply and also minimize outage during contingency and scheduled maintenance.

iii. Hybrid GIS will reduce operation and maintenance cost as compared to AIS.

iv. Improved system design, support higher short-circuit levels and ease of future addition of new elements.

v. Up-gradation of busbar conductors will enhance load carrying capacity for projected load growth and integration of upcoming generation sources.

vi. Integration of SAS and SCADA systems through modernization of the Control Room of the 132/33/11kV Kohima Sub-station shall enable real-time monitoring, fault isolation and remote operation thereby ensuring better system control and fault response times.

In view of the above considerations, with the objective to enhance capacity, reliability, and resilience of power supply across Kohima by modernizing and upgrading the 132/33/11 kV Kohima Sub-station through the implementation of Hybrid GIS, double busbar configuration, and automation systems the proposal for "Bus Strengthening of 132kV and 33kV system at 132/33 kV Kohima Sub-station" with an estimated cost of **Rs. 5956.60 lakh** is submitted for consideration of funding under PSDF

The matter was discussed in 29th TCC and RPC meeting wherein it was referred to sub-committee for detailed deliberation.

The matter was placed in 228th and 229th OCCM wherein_NERLDC informed that as per study, upgradation of Bus conductor is required keeping in view the future load flow through this substation. Further, NERLDC suggested that since the substation is critical one, serving the capital area, the bus scheme may be upgraded to Double Mian Bus scheme to improve reliability.

The OCC forum approved the upgradation of Bus conductor along with converting the Bus scheme to Double Main scheme and proposed for PSDF funding for the same.

Placed for approval of TCC

3.5. Roster for next TCC/NERPC Meeting -NERPC

As members of NERPC are aware that TCC & NERPC are being hosted by constituents on rotation basis. In this regard 31st, 32nd and 33rd meetings have been proposed as:

Sr. No.	Meeting	Hosted by
1.	31st TCC/NERPC Meeting	Mizoram
2.	32nd TCC/NERPC Meeting	Tripura
3.	33rd TCC/NERPC Meeting	OTPC
4.	34th TCC/NERPC Meeting	NVVN

For kind approval/information.

4. PART C: COMMERCIAL ISSUES

4.1. Long Pending Dues Payable by Manipur State Power Company Ltd. -Powergrid

Power Grid Corporation of India Limited (POWERGRID) has successfully implemented the Main SCADA EMS System for the SLDCs of Manipur under the project titled *"Expansion/Upgradation of SCADA/EMS System of SLDCs of North Eastern Region."* Additionally, POWERGRID has commissioned the State Sector Communication Links under the project *"Establishment of Fiber Optic Communication System under Wide Band Communication Expansion Plan in North Eastern Region."*

Following the receipt of approved tariff from the Hon'ble Central Electricity Regulatory Commission (CERC), POWERGRID commenced billing on MSPCL in accordance with the applicable tariff regulations and CERC orders for the aforementioned systems.

Despite continuous follow-ups by POWERGRID and repeated discussions in various Commercial Coordination Sub-Committee meetings—where even the forum urged MSPCL to settle the dues, however, no payment has been received from MSPCL. This has led to the accumulation of significant outstanding dues.

Status of Outstanding Dues Payable by MSPCL (as on 24.10.2025):

(All Figures in Rs.Cr.)

Name of the entity	**Total dues**	**Total dues > 45 days**	**Remarks**
MSPCL, Manipur	**14.91**	**14.4**	*Approx. 16 months receivables (outstanding Non POC arrear bills and*

			Surcharge of NON Poc bills pertaining to FY:2024-25 & FY:2025-26)

In view of the above, the accumulation of such substantial outstanding dues is adversely impacting POWERGRID's financial obligations and operations. It is once again requested that MSPCL urgently liquidate the long-pending dues against Non-POC bills, which are also subject to audit observations.

TCC may deliberate.

4.2. Inclusion of HPX in various NERPC forum as non-member Participants

Hindustan Power Exchange Ltd. (HPX) is one of the prominent entities in the Indian power market. It commenced operations in July 2022 after obtaining the requisite approval of the Central Electricity Regulatory Commission (CERC). Subsequently, HPX, vide its letter No. HPX/CEA dated 13th August 2025 (attached at Annexure 5.1.1), has requested the Chairperson, Central Electricity Authority (CEA), to allow HPX to participate in the Regional Power Committee (RPC)deliberations as a non-member participant. Considering that inputs from the power market can provide valuable insights and prove beneficial to all constituents of NERPC; Accordingly, it is proposed that Hindustan Power Exchange Ltd. may be included as a non-member participant in various NERPC forums.

As deliberated in the 56th CCM (deliberation enclosed at **Annexure 4.2**) where the forum agreed in principle for inclusion of HPX in NERPC forums as a non-member participant. Hence, the matter has been placed before the TCC forum for further deliberation.

TCC may deliberate.

4.3. Requirement of Additional Software module for Implementation of CERC Regulations and Smooth Processing of Commercial Accounts

With the recent amendments in regulations, certain provisions such as compensation due to part-load operation of generating stations, preparation of RTDA (Regional Transmission Deviation Account), and issuance of REA (Regional Energy Account) have necessitated modification or additional module in the existing commercial accounting software suite. These changes are essential to ensure accurate computation, smooth processing, and timely issue of commercial accounts in compliance with the revised framework.

In view of the scope and complexity of the amendments, the existing AMC support hours are insufficient to accommodate the additional development, testing, and validation efforts required. Enhancement of AMC support has therefore become necessary to incorporate the mandated changes in coordination with the software vendor. This will also ensure timely resolution of issues, continuity of operations, and avoidance of delays in commercial settlements.

Accordingly, it is proposed that additional Software or AMC support hours may be approved for implementation of the required changes and for strengthening the system to handle future amendments effectively.

As deliberated in the 56th CCM, the matter is to be placed before the TCC forum for approval.

Placed for approval of the TCC

4.4. Quarterly expenditure of Board Fund and Establishment Fund:

A. NERPC Board Fund Quarterly expenditure for Q1 and Q2 of FY 2025-26

Details of Expenditure from Board Fund from April 25 to September 25 (in thousands INR)				
Sl. No.	Head	Actual Expenditure from April 25 to June 25 (FY 2025-26)	Actual Expenditure from July 25 to September 25 (FY 2025-26)	Total Expenditure Upto September-2025
1	Meetings	736.187	2856.591	3592.778
2	Outsourcing salary/wages	258.249	257.394	515.643
3	DTE	0	0	0
4	Internet	12.39	135.897	148.287
5	Conveyance+Honoratium	10	15	25
6	Misc. (New Vehicle and Guest house rent)	54.48	3863.756	3918.236
	Total	**1071.306**	**7128.638**	**8199.944**

B. NERPC Establishment Fund Quarterly expenditure for Q1 and Q2 of FY2025-26

Details of Expenditure from Establishment Fund from April 25 to September 25 (in thousands INR)					
Sl. No.	Head	Proposed Budget Estimates 2025-26) in thousands INR	Actual Expenditure from April 25 to June 25 (FY 2025-26)	Actual Expenditure from July 25 to September 25 (FY 2025-26)	Total Expenditure Upto September-2025
1	Medical	1000.000	93.308	27.151	120.459
2	Domestic Travelling Allowances	2500.000	1067.403	1,124.11	2191.514
3	Fuels and Lubricants	500.000	109.126	93.326	202.452
4	Printing Publication	0.000	0.000	0.000	0.000
5	Advertising and Publicity	0.000	0.000	0.000	0.000
6	Professinal Services	10.000	0.000	0.000	0.000
7	Office Expenditure	16000.000	2807.903	3,317.39	6125.292

8	Minor Work	6000.000	88.500	3,920.57	4009.074
Total		**26010.000**	**4166.240**	**8482.551**	**12648.791**

This is for information.

4.5. NERPC Board Fund Contribution status for FY 2024-25 reg.

All the beneficiaries of NERPC have paid their dues for NERPC Board Fund Contribution FY 2024-25.

This is for information.

4.6. The status of payment of Establishment Fund for FY 2024-25:

A. Regular Members:

All the beneficiaries of NERPC Except following beneficiaries have paid their dues for NERPC Establishment Fund Contribution FY 2024-25.

F.Y 2024-25					
	Constituents	**Status of Payment**		**Constituents**	**Status of Payment**
1	APGCL	Due	4	TPTL	Due
2	MePGCL	Due	5	TPGCL	Due
3	MSPCL	Due	6	MSPDCL	Due

B. Non-Member Participants:

All the Non-Member beneficiaries of NERPC have paid their dues for NERPC Establishment Fund Contribution FY 2024-25.

Constituents may update the status of payment

4.7. NERPC Board Fund Contribution status for FY 2025-26 reg.

A. Regular Members:

All the beneficiaries of NERPC Except following beneficiaries have paid their dues for NERPC Establishment Fund Contribution FY 2025-26.

F.Y 2025-26					
	Constituents	**Status of Payment**		**Constituents**	**Status of Payment**
1	Manipur/MSPDCL	DUE	2	Mizoram	DUE

B. Non-Member Participants:

All the Non-Member beneficiaries of NERPC have paid their dues for NERPC Bund Fund Contribution FY 2025-26.

This is for information

4.8. The status of payment of Establishment Fund for FY 2025-26:

A. Regular Members:

All the beneficiaries of NERPC Except following beneficiaries have paid their dues for NERPC Establishment Fund Contribution FY 2024-25.

F.Y 2025-26					
	Constituents	**Status of Payment**		**Constituents**	**Status of Payment**
1	APGCL	DUE	4	AEGCL	DUE
2	MSPDCL	DUE	5	NVVN	DUE
3	MSPDCL	DUE	6	TPTL	DUE
			7	TPGCL	DUE

B. Non-Member Participants:

All the Non-Member beneficiaries of NERPC Except following have paid their dues for NERPC Establishment Fund Contribution FY 2025-26.

Constituents	Status of Payment
NER-II TL(Indigrid)	DUE

Constituents may update the status of payment

4.9. The status of audit of Establishment Fund and Board Fund for FY 2023-24 and 2024-25

The NERPC Secretariat currently maintains two separate funds:

1. NERPC Secretariat Establishment Fund, and
2. NERPC Board Fund.

In line with the approval granted during the 26th TCC/NERPC meeting, the NERPC Secretariat engaged consultancy services with expertise in finance and accounting to assist in the management of these funds. As a result, an audit was successfully completed by a **Chartered Accountant (CA**) for the following periods:

- NERPC Board Fund was audited for the period 1st April 2024 to 31st March 2025 and audit report is enclosed at **Annexure 4.9a**
- NERPC Secretariat Establishment Fund was audited for the period 1st October 2023 to 30th March 2025 and audit report is enclosed at **Annexure 4.9b**

As per Standard Operating Procedure (SOP) for Budget and expenditure of RPCs approved by Chairman CEA and NERPC CBR-2024, Internal Audit for Establishment fund needs to carried out by the Director level officer. Internal Audit for Establishment fund by Director Level officer was carried out up to March-2025 (Audit Report is enclosed at **Annexure 4.9c**).

Further, in 26th TCC/NERPC it was decided that to facilitate an external audit of the above-mentioned funds, the NERPC Secretariat proposes that constituent members to nominate officers to form the audit committee.

Subsequently, Shri Navajyoti Gogoi, DGM (Tech), Commercial, NEEPCO. Shri M. Kharkongor, AAO, MeECL,Shri Rahul Kabra, Officer, Finance and Account, PowerGrid has conducted the external audit on 6th and 7th October-2025 (Audit Report is enclosed at **Annexure 4.9d**).

Summary of major observation received from the various audit team After the Audit NERPC Secretariats and status of that observation is as follow.

Sr. No.	Fund	Audit Observation	Audit by	Current Status
1	Board Fund	Non-Deduction of GST/TDS of vendor as per GST Act section-51	CA Firm	Under Implementation
2	Establishment Fund	Non-Deduction of GST/TDS of vendor as per GST Act section-51	CA Firm	Under Implementation
3	Establishment Fund	There is no provision of Casual leave for contractual employee at NERPC.	Internal Audit	Under Implementation
4	Establishment Fund	DG set running hours record not maintained.	Internal Audit	Implemented (Log Register Opened in September-2025)
5	Establishment Fund	Entry of A/C bank charge not made in establishment fund expenditure register	Internal Audit	Under Implementation
6	Establishment Fund	Details of vendors such as vendor address, vendor name, bill no.	Internal Audit	Noted for future and now it is being complied.

		bill date not entered in Assets register		
7	Establishment Fund	Tour program approved after the tour is completed	Internal Audit	Noted for future and now it is being complied.
8	Board Fund	Budget estimate and utilization files along with papers need to be maintained	External Audit	Under Implementation
9	Board Fund	Maintain all receipt and Expenditure records in cashbook register.	External Audit	Under Implementation
10	Board Fund	Maintain all receipt and Expenditure records in Excel.	External Audit	Under Implementation
11	Board Fund	All original documents such as vouchers, bills, receipts need to maintain in folder.	External Audit	Noted for future and now it is being complied.
12	Establishment Fund	Budget estimate and utilization files along with papers need to be maintained	External Audit	Under Implementation
13	Establishment Fund	Maintain all receipt and Expenditure records in cashbook register.	External Audit	Under Implementation
14	Establishment Fund	Maintain all receipt and Expenditure records in Excel.	External Audit	Under Implementation

15	Establishment Fund	All original documents such as vouchers, bills, receipts need to maintain in folder.	External Audit	Noted for future and now it is being complied.

This is for information.

4.10. Approval for procuring service for deployment of 13 no. of outsource staff and 09 nos. Security Staff for NERPC Secretariat

The North Eastern Regional Power Committee (NERPC) Secretariat was established under Parliamentary Resolution No. 23/1/2004-R&R and its subsequent amendments to facilitate power sector–related activities in the North Eastern Region. As per CEA Order No. CEA-SY-13-30/1/2023-Adm. (Coord.) dated 29/01/2024, the revised non-CPES officials sanctioned strength of the NERPC Secretariat is 12, out of which 4 posts are presently vacant.

To ensure continuity of work and to discharge essential functions in the absence of regular staff, NERPC has been engaging outsourced personnel. At present, 9 outsourced staff of various skill sets are deployed. Further, to ensure the safety and security of the property, employees, visitors, and all physical assets within the office NERPC secretariats has deployed total 8 no. of Security guard vide order Contract and same will expire on 30/11/2025.

An internal committee has been formed vide Office order no. NERPC/Order/2025/1818-1820 dated 19/08/2025 to assesses the present requirement of Office outsourced staff and security personal. Following was recommended by the committee.

1. The committee has assessed the present manpower requirement and recommends that a fresh contract may be finalized for providing 13 nos. of outsource staff based on the requirement of the office.

2. The committee has assessed the present Security Staff requirement and recommends that a fresh contract may be finalized for providing 09 nos. of Security staff based on the requirement of the office

The monthly recurring expenditure for providing 13 nos. of outsource staff is estimated around ₹ 4 lakhs, which will be met from the NERPC Establishment Fund.

The monthly recurring expenditure for providing 9 nos. of security staff is estimated around ₹ 3.75 lakhs, which will be met from the NERPC Establishment Fund.

In line with the prescribed procurement procedure, service for deployment of 13 no. of outsources staff and 09 nos. Security Staff for NERPC Secretariat would be procure through the Government e-Marketplace (GeM) portal

TCC may Deliberate.

5. PART D: ITEMS FOR INFORMATION/UPDATE

5.1 Strengthening of 220 kV BTPS–Agia DC Line by AEGCL

The current Total Transfer Capability (TTC) of the North Eastern Region (NER) is being restricted due to high loading on the following transmission lines under the N-1 contingency condition of the 400 kV Bongaigaon–Azara line:

- 220 kV Balipara–Sonabil DC
- 220 kV BTPS–Agia DC

Considering future scenario, with the anticipated commissioning of 400 kV substations at Rangia, Sonapur, and Khumtai, as well as 220 kV substations at Agamoni, Sankardev Nagar, and Bihpuria, system studies suggest that the 220 kV Balipara–Sonabil DC and the 220 kV BTPS–Agia DC will continue to remain major constraints in enhancing the import TTC of the NER.

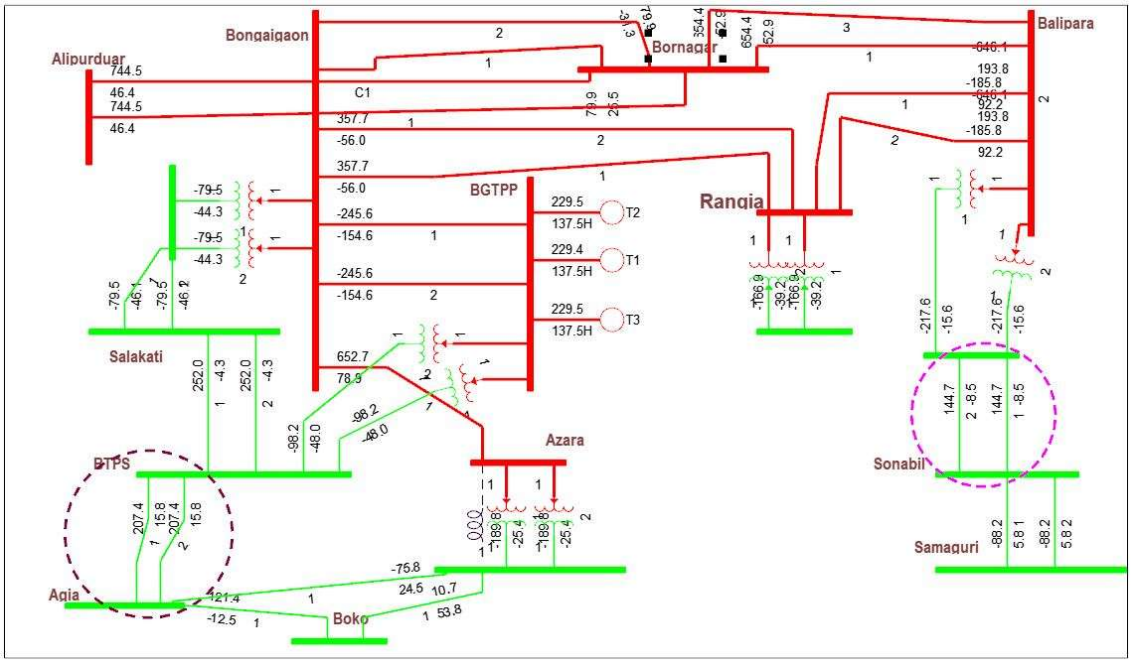


Figure-1.: Future scenarios (2029-30) of NER power system

While the strengthening of the 220 kV Balipara–Sonabil D/c line has already been approved in the C-METS forum, the strengthening of the 220 kV BTPS–

Agia D/c line, under the scope of AEGCL. As per the deliberations of the 228th OCC meeting dated 25.07.2025, AEGCL informed that study has been done and waiting for fund approval andwork to start next year

In light of the above and considering both present and future system constraints, AEGCL is kindly requested to expedite the reconductoring of the 220 kV BTPS–Agia DC at the earliest to ensure reliable and secure operation of the NER power system.

AEGCL may update

5.2 Early commissioning of second Ckt of 132kV Loktak – Ningthoukhong and restoration of 132 kV Jiribam-Rengpang line

The 132 kV Loktak–Ningthoukhong transmission line is facing multiple interruptions over the past few months. As communicated by SLDC Manipur, the primary cause of these interruptions has been jumper snapping due to high loading. Consequently, SLDC Manipur has advised restricting the loading on the 132 kV Loktak–Ningthoukhong line to below 55 MW. Details of Tripping of 132kV Loktak – Ningthoukhong line is given below:

SL No	Element Name	Outage Date	Outage Time	Revival Date	Revival Time	Indication Details (End1)	Indication Details (End2)
1	132KV-Loktak-Ningthoukhong-1	25/Sep/2025	05:31	25/Sep/2025	14:20	No tripping	Earth fault
2	132KV-Loktak-Ningthoukhong-1	21/Sep/2025	12:38	21/Sep/2025	13:16	Z-1,4.9KM, OC, RY Ph	Z-1.OC.EF,A B Ph, 5.108KM

3	132KV-Loktak-Ningthoukhong-1	13/Aug/2025	08:44	13/Aug/2025	12:34	Earth fault	Details awaited
4	132KV-Loktak-Ningthoukhong-1	11/Aug/2025	17:38	12/Aug/2025	12:37	D/P,Z-1,7.1 kM	Yph,Eph,2.7 kM
5	132KV-Loktak-Ningthoukhong-1	27/Jul/2025	02:04	28/Jul/2025	15:43	No tripping	Earth fault
6	132KV-Loktak-Ningthoukhong-1	06/Jul/2025	19:28	07/Jul/2025	15:58	B phase, Z-1, 7.5 km	B phase, Z-1, 2.7 km
7	132KV-Loktak-Ningthoukhong-1	20/Jun/2025	03:52	20/Jun/2025	05:12	Z3, O/C, A-B ph, 42.25 kM	Z4, 21.30 kM, E/F
8	132KV-Loktak-Ningthoukhong-1	09/Jun/2025	13:34	09/Jun/2025	15:20	Zone 2, 11.85km, B Phase, EF/OC	Zone 4,Phase ABC, OC

The loading of the 132 kV Loktak – Ningthoukhong line can managed by backing down generation from the Loktak HEP to 70 MW (around 35 MW generation backdown), which is one of the most economical sources of power in the NER. However, curtailing this clean and cheap hydro power is not a sustainable solution, as it would undermine the optimal utilization of valuable national hydro resources.

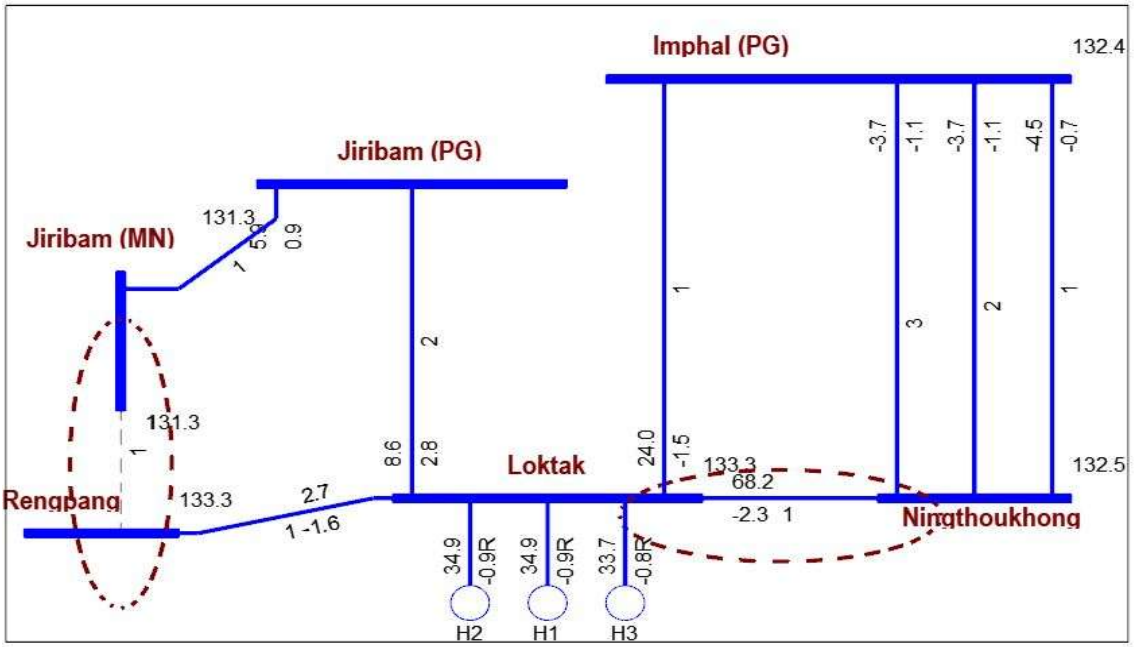


Figure-2.: Evacuation path of Loktak HEP

To address this critical issue, the following measures were recommended during the 231st Operation Coordination Committee (OCC) Meeting:

1. Early commissioning of the second circuit of the 132 kV Loktak – Ningthoukhong line.
2. Revival of the 132 kV Jiribam – Rengpang transmission line.
3. Strengthening of jumpers of 132 kV Loktak – Ningthoukhong transmission line

In light of the above, SLDC Manipur is requested to kindly provide the present status of:

- Commissioning of the second circuit of the 132 kV Loktak–Ningthoukhong line, and
- Restoration of the 132 kV Jiribam–Rengpang transmission line.
- Strengthening of jumpers of 132 kV Loktak – Ningthoukhong transmission line

An update in this regard will help in taking further necessary actions to ensure reliable and secure operation of the grid.

Manipur may Update

5.3 Early commissioning of 2nd circuit of 220 kV Mariani (PG)–Mariani (AS) Line

On 19th August 2025, 220 kV Mariani (PG) – Mariani (AS) Transmission Line recorded a loading of 233 MW. The said line continued to remain loaded above 200 MW throughout the peak demand period on 20th August 2025. Due to this persistent overloading, a hotspot developed at the 220 kV bay at Mariani (AS), ultimately necessitating emergency shutdown of the line on 19th, 20th, 21st and 22nd August 2025. It was further observed that lower generation within Upper Assam (NTPS, LRPP and NRPP plants) contributed significantly to the excessive loading of the said transmission line

The repeated emergency shutdown of the 220 kV Mariani (PG)–Mariani (AS) line has not only compromised the reliability of the Upper Assam system under N-1 contingency conditions, but has also resulted in increased loading of the 220 kV Balipara–Sonabil DC line, thereby adversely affecting the reliability of power supply to the capital city of Assam.

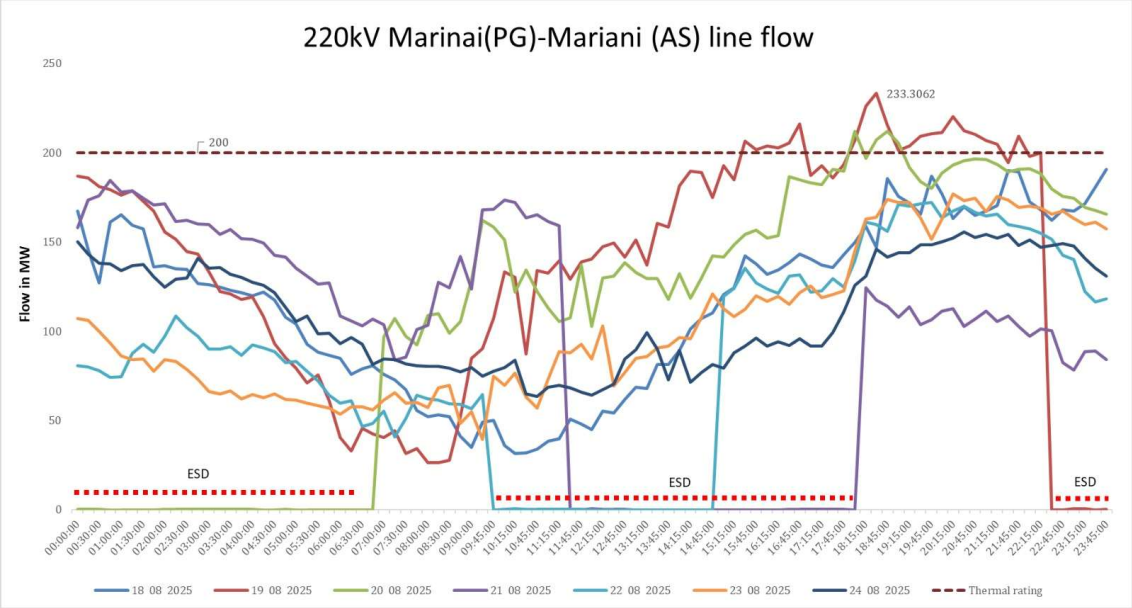


Figure-3: Power flow through 220 kV Mariani (PG) – Mariani (AS) line

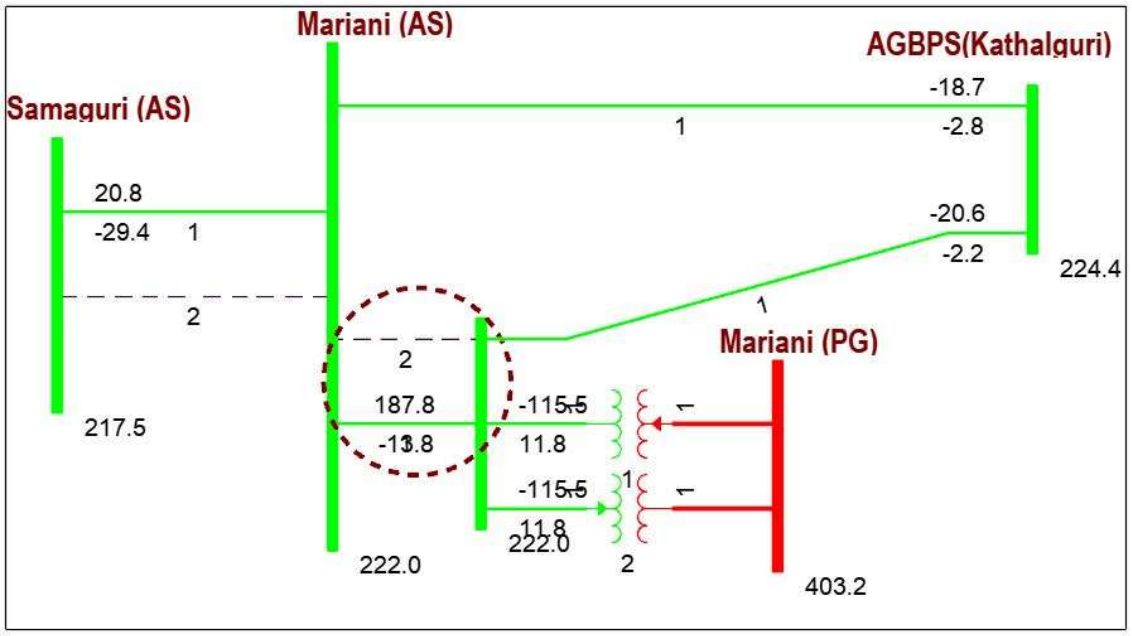


Figure-4: Connectivity of 400/220 KV Mariani (PG) with Upper Assam system

With the availability of the 400 kV Mariani (PG) system, additional power import into Upper Assam is expected during high demand scenarios or low generation within Upper Assam system. Therefore, strengthening of the 220

kV Mariani corridor has become imperative to ensure a reliable and secure power supply to the Assam power system.

In view of the above, and to keep Assam system secure and reliable, following measures are required to be taken on urgent basis:

1. Early commissioning of the second circuit of the 220 kV Mariani (PG) – Mariani (AS) Transmission Line by AEGCL.
2. Bay upgradation of 220 kV Mariani (PG) – Mariani (AS) Transmission Line at Mariani (AS) –Shall be done by PGCIL

As per deliberation of 230th OCC meeting dated 19.09.2025, AEGCL informed, regarding the second circuit of 220kV Mariani (PG)-Mariani (AS) line, that survey has been done and some modifications are required to be done in the LILO portion. Also, PowerGrid assured to upgrade the bay equipment's at Marinai(AS) end shortly.

AEGCL and Powergrid is requested to update the Present status.

5.4 Early commissioning of 400/220 kV Rangia substation and the associated transmission infrastructure

The loading on 220 kV Rangia-BTPS D/C is not N-1 compliant for most of the time during peak demand period. Tripping of any one circuit of 220 kV Rangia-BTPS D/C would lead to grid disturbance in these areas. Since August 2025, four grid disturbances have occurred in the Rangia area, resulting in an load loss in the tune of 160-250 MW. The details of these disturbances are provided below:

Sl No	Areas	Event Date & Time	Restoration Date & Time	Load Loss in MW

1	Rangia(old), Kamalpur, Sipajhar & Tangla areas of Assam & Motonga & and radially connected substations at Bhutan system	05-08-2025 15:40	05-08-2025 16:20	160
2	Rangia(new),Rangia(old), Amingaon, Kamalpur, Sipajhar,Tangla, Nalbari and Nathkuchi areas of Assam	12-08-2025 21:25	12-08-2025 22:22	250
3	Rangia(new),Rangia(old), Nalbari, Nathkuchi, part load of Bornagar, part load Shishugram, Sipajhar, Tangla, Amingaon, Kamalpur and Hajo areas of Assam	13-09-2025 02:19	13-09-2025 02:38	170
4	Rangia(new), Rangia(old), Nalbari, Nathkuchi, part load of Bornagar, part load Shishugram, Tangla, Amingaon, Kamalpur & Hajo areas of Assam and radially connected substations at Bhutan system	14-10-2025 13:01	14-10-2025 13:21	191

Apart from that, Rangia and Bongaigaon area of Assam Power system are facing severe low voltage issues.

To address these challenges, early commissioning of the approved 400/220 kV Rangia Substation and its associated transmission infrastructure is crucial. As per the deliberations of the 29th NERPC Meeting, Assam informed the forum that the 400 kV Rangia Substation is expected to be commissioned by July 2026.

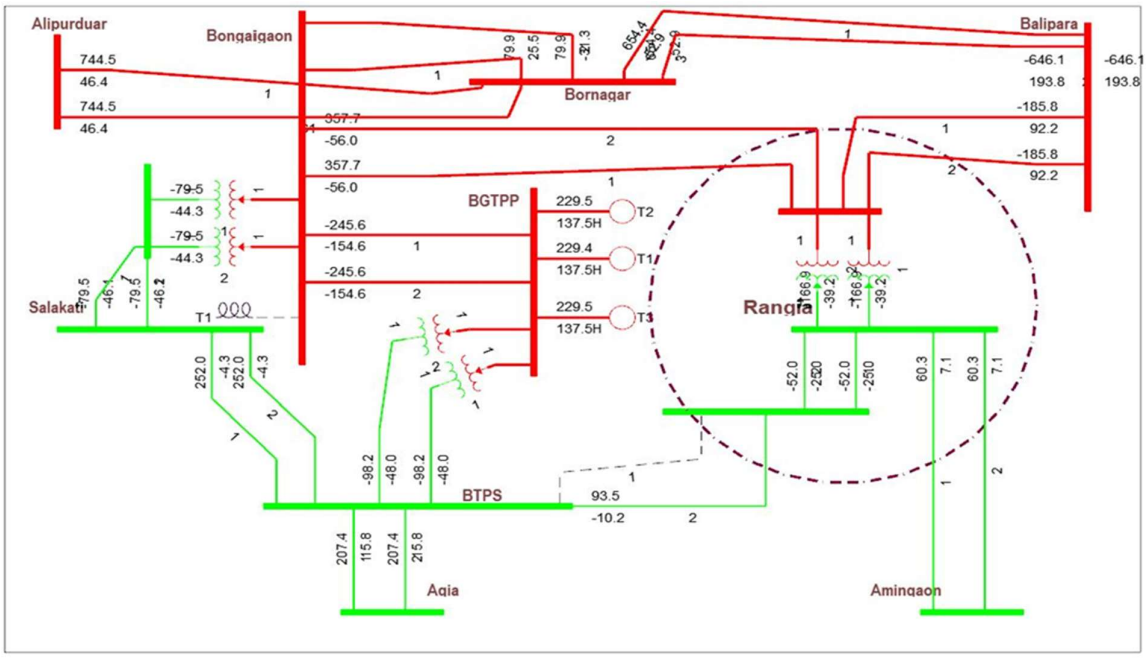


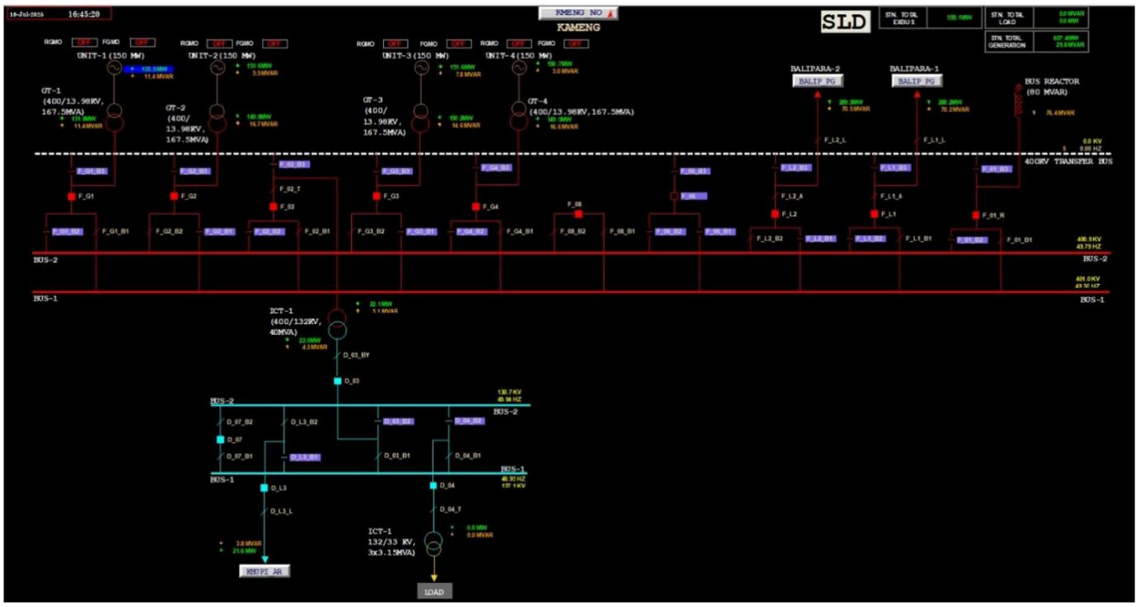
Figure-5.: Future scenarios (2029-30) of Assam power system

AEGCL is requested to expedite the commissioning of the 400/220 kV Rangia Substation and the associated transmission infrastructure well in advance of the peak summer of 2026, in order to enhance grid reliability and voltage stability in the Rangia and Bongaigaon areas of the Assam power system.

AEGCL may update the status.

5.5 Commissioning of 400 kV Transfer Bus at Kameng HEP -NERLDC

400 kV substation at Kameng has been in operation since March 2019. As per the approved scheme, the 400 kV bus configuration follows a Double Main and Transfer Bus arrangement. However, it is observed that since its inception, the 400 kV Transfer Bus at Kameng HEP has not been commissioned, even after more than six years of the commissioning of the 400/132 kV substation. The absence of the Transfer Bus is adversely impacting grid reliability, particularly during maintenance activities, and poses operational challenges.



As per deliberation of 228th OCC meeting dated 25.07.2025, NEEPCO informed that the transfer Bus has not been operational since the CoD of the station due to disagreement with the OEM (BHEL) on the design related matter. He added that BHEL has recently agreed on the design as proposed by NEEPCO and the work will start shortly. Further he informed that the work will tentatively be completed by March'26.

NEEPCO is requested to provide the current status for commissioning 400 kV Transfer Bus at Kameng HEP.

NEEPCO may update.

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

6.1 Restringing of Kiphire-Meluri-Kohima 132 kV S/c line with conductor of existing ampacity along with upgradation of requisite bay equipment.

The 132kV Kiphire-Meluri-Kohima S/C Transmission line which was commissioned in the year 1996 with a line length of approximately 121 km serves as the primary source for providing power supply to the Districts of Phek, Meluri and Kiphire. This transmission line

feeds the 132/33kV, 12.5MVA Meluri Sub-station and the 132/66/33kV, 3x10MVA Kiphire Sub-station and also acts as the main source of power evacuation for the state owned 24MW Likimro Hydro Electric project. Power generated from the 24MW Likimro HEP is integrated into the Kohima Load Center, which functions as a critical transmission corridor in supplying power to several districts including the State Capital.

After nearly three decades of service, this transmission line has significantly aged and degraded. The physical condition of the conductors, insulators and jumpers has significantly deteriorated over time resulting in frequent faults caused by snapping of conductors, breakage of jumpers and failure of porcelain disc insulators. These faults has led to multiple outages and grid disturbances thereby affecting the power availability and stability to Phek, Meluri and Kiphire Districts and also affects the power evacuation from Likimro HEP.

Given the importance of this line for power evacuation from Likimro HEP and supply to the critical Load Center of Kohima, any prolonged fault can significantly impact the state's power system. Due to the lengthy transmission line (121 km) passing through dense forests of hilly and remote terrains of the State, in the event of a prolonged fault, the only available alternative supply route for these Districts is the 66kV Tuensang-

Kiphire line which is inadequate and unreliable given its limited capacity and poor line availability. The line is expected to experience a substantial increase in loading due to increased load demand and capacity addition of the upcoming generation sources which includes the proposed Tizu Valley HEP (24 MW), Zungki HEP (24 MW), Lower Tizu HEP (42 MW), Lower Likimro HEP (8.1 MW) in addition to the existing Likimro HEP (24MW) and Ponglefo (1 MW) thereby cumulatively contributing 123.1 MW to the grid.

Hence, the proposed restringing and strengthening of the Kiphire-Meluri-Kohima 132 kV S/c line with conductor of existing ampacity is imperative for maintaining system reliability and ensuring stable power supply across several regions of the State.

The proposal "Restringing of Kiphire-Meluri-Kohima 132 kV S/c line with conductor of existing ampacity along with upgradation of requisite bay equipment (121km)" consists of following scope of works:

c) Restringing of Kiphire-Meluri-Kohima 132 kV S/c line with conductor of existing ampacity.

d) Upgradation of Requisite Bay equipment at 132/33kV Kohima, Meluri and Kiphire sub-station.

The project has been conceptualized and proposed with the following **goals & objectives:**

vi. Restringing of the Transmission Line will improve Grid reliability by reducing the frequency and duration of line faults.

vii. Reliable power evacuation path for the State owned 24MW Likimro Hydro Electric Project thereby supporting a safe and reliable integration of the energy source into the Grid.

viii. Stable power supply to Phek, Meluri and Kiphire Districts of Nagaland.

ix. Upgradation of bay equipment and restringing of conductors will enable reduction of technical faults, better operational efficiency and safety across the transmission line.

x. The proposal shall contribute toward achieving the mandates of the CEA Grid Standards and the CEA (Measures relating to Safety and Electric Supply) Regulations through infrastructure renewal.

Department of Power, Government of Nagaland has submitted the proposal to the NERPC during September 2025.

In view of the above considerations, with the objective to enhance transmission reliability, minimize downtime, support the uninterrupted evacuation of hydro power from Likimro HEP and ensure stable power supply to Phek, Meluri and Kiphire Districts of Nagaland, NERPC may kindly approve the project to enable the State to avail PSDF funding for construction of the project.

6.2 Restringing of Kiphire-Tuensang-Mokokchung 132 kV S/c line with ACSR Panther conductor along with upgradation of requisite bay equipment.

The 132kV transmission line from Kiphire-Tuensang-Mokokchung forms a critical part of the intra state transmission network. The said transmission line connects the 132/66 kV Sub-station at Kiphire and 132/66 kV Sub-station at Mokokchung via Tuensang and is presently charged at 66 kV voltage level. The sub-station at Kiphire is connected to the 24 MW State owned Likimro Hydro Electric Project as well as to the Kohima Load Centre which caters power supply to the state capital Kohima and its surrounding districts. Additionally, the 132 kV transmission line is connected to the Mokokchung Load Center which caters power supply to the districts of Mokokchung, Zunheboto, Tuensang, Longleng, Mon, Shamator and Noklak.

The 132 kV transmission line was constructed in the 1990s using single ACSR Wolf conductor with a total length of 110 ckm. Due to aging infrastructure, the existing transmission system is prone to frequent breakdowns, voltage instability and poor power quality. The conductors, jumpers and its associated equipment has deteriorated which has often led to breakdown resulting in grid disturbances. Requirement for enhancement of this transmission line capacity has been a long felt need. Restringing of the 132 kV S/C line with ACSR Panther conductor along with upgradation of requisite bay equipment has been proposed under Transmission Plan 2035. The line is expected to experience a substantial increase in loading due to increased load demand and capacity addition of the upcoming generation sources which includes the proposed Tizu Valley HEP (24 MW), Zungki HEP (24 MW), Lower Tizu HEP (42 MW), Lower Likimro HEP (8.1 MW) in addition to the existing Likimro HEP (24MW) and Ponglefo (1 MW) thereby cumulatively contributing 123.1 MW to the grid. Replacement of ACSR Wolf conductor with ACSR Panther is required as the present conductor is not capable to handle the projected load growth. Restringing of the said transmission line is vital to enhance system reliability, reduce transmission losses, provide redundancy to the existing network and enhance load carrying capacity for evacuation of power generated from the existing and the proposed Hydro projects.

Upon completion of the Project, the existing 132 kV transmission line, which is currently charged at 66 kV voltage will be permanently converted to a 132 kV system thereby phasing out the 66kV system. The 132 kV end equipment at Kiphire and Mokokchung has already been upgraded, while the 66/33 kV Tuensang Substation is being upgraded to a 132/33 kV GIS Sub-station under North Eastern Regional Power System Improvement Project (NERPSIP). This will enable the State to have a complete 132 kV Transmission line loop connecting Kiphire-Kohima-Dimapur and Kiphire-Tuensang-Mokokchung-DHEP-Dimapur Transmission lines enhancing connectivity to the North-East Grid.

The proposal consists of the following scope of works:

i) Restringing of Kiphire-Tuensang-Mokokchung 132 kV S/C line (charged at 66kV voltage level) with ACSR Panther conductor.
ii) Upgradation of the 132 kV bay equipment at 132/66 kV Kiphire Substation, 132/33 kV Tuensang Sub-station and 132/66 kV Mokokchung Sub-station.

The project has been conceptualized and proposed with the following goals and objectives:

i) The proposed restringing of 132 kV transmission line from Kiphire to Mokokchung via Tuensang aims to create a robust intra state transmission corridor that would enhance power reliability, reduce transmission losses and provide redundancy to the existing network.

ii) Up-gradation of the transmission lines will enhance load carrying capacity for the projected load growth and evacuation of power generated from the existing and the proposed Hydro projects.

iii) Restringing of 132 kV Transmission lines with ACSR Panther conductor shall enhance reliability and quality of power supply to Kiphire, Tuensang and surrounding regions.

Department of Power, Government of Nagaland has submitted the proposal to the NERPC during September 2025.

In view of the above, with the aim to enhance transmission efficiency, reliability and load carrying capacity, NERPC may kindly approve the project to enable the State to avail PSDF funding for construction of the project.

6.3 Restringing of Kohima-Wokha-Doyang HEP 132 kV S/c line with conductor of existing ampacity along with upgradation of requisite bay equipment.

The 132kV Kohima-Wokha-Doyang HEP 132 kV Single Circuit (S/C) Transmission line, commissioned in the year 1988 is one of the oldest transmission lines in Nagaland with a line length of approximately 91 km. The said transmission line connects 220/132/33kV Zhadima Sub-station, 132/33kV Nagaland University Sub-station, 132/33kV Chiephobozou Sub-station, 132/33kV Wokha Sub-station and 132/33kV Sanis Sub-station thus providing power supply to the districts of Tseminyu and Wokha as well as parts of Kohima District. This transmission line is also one of the major evacuation corridor for Doyang Hydro Electric project (HEP). Power generated from Doyang HEP is integrated into the Kohima Load Center via this transmission line which is a critical transmission hub in supplying power to several districts including the State Capital.

The physical condition of the conductors, insulators and jumpers of this transmission line has deteriorated due to age, weather and mechanical fatigue as it has been in service for more than 35 years. Frequent line faults and maintenance issues caused due to snapping of conductors, breakage of jumpers and failure of porcelain disc insulators has resulted in unwarranted outages and grid disturbances severely affecting the reliability of power supply to multiple districts. During outage of this line, Kohima Load Center is unable to draw power generated from Doyang HEP which affects the reliability of the Grid especially during contingency or high load conditions. This places additional stress on the alternate supply routes of Kohima Load Center (132kV Karong-Kohima line and 132kV Dimapur (PG)-Kohima line) leading to reduced redundancy and risk of supply interruptions during peak demand or fault conditions feeding the State Capital and adjoining districts.

Therefore, the proposal for restringing and strengthening of the Kohima-Wokha-Doyang HEP 132 kV S/C line with conductor of existing ampacity has become essential for maintaining system reliability and ensuring stable power supply across several regions of the State.

The proposal "Restringing of Kohima-Wokha-Doyang HEP 132 kV S/C line with conductor of existing ampacity along with upgradation of requisite bay equipment (91km)" consists of following scope of works:

e) Restringing of Kohima-Wokha-Doyang HEP 132 kV S/c line with conductor of existing ampacity.

f) Upgradation of Requisite Bay equipment at 132/33kV Kohima, Wokha and Doyang HEP sub-stations.

The project has been conceptualized and proposed with the following **goals & objectives:**

xi. Restringing of the transmission line will improve grid reliability by reducing the frequency and duration of line faults.

xii. Providing a reliable power evacuation path from Doyang HEP to Kohima Load Center to minimize overloading on 132kV Karong-Kohima line and 132kV Dimapur(PG)-Kohima line and ensuring N-1 contingency.

xiii. Stable power supply to Tseminyu and Wokha Districts and parts of Kohima District which are heavily dependent on this transmission line.

xiv. Upgradation of Bay equipment and restringing of conductors will enable reduction of technical faults, better operational efficiency and safety across the transmission line.

xv. The proposal shall contribute toward achieving the mandates of the CEA Grid Standards and the CEA (Measures relating to Safety and Electric Supply) Regulations through infrastructure renewal.

Department of Power, Government of Nagaland has submitted the proposal to the NERPC during September 2025.

In view of the above considerations, with the objective to enhance transmission reliability, provide reliable power evacuation from Doyang HEP to Kohima Load Center and ensure stable power supply to Tseminyu, Wokha and Kohima Districts of Nagaland, NERPC may kindly approve the project to enable the State to avail PSDF funding for construction of the project.