Eastern Regional Power Committee

AGENDA

FOR

237th OCC MEETING

Venue: ERPC Secretariat, Kolkata

Date: 17.03.2026

Contents

EASTERN REGIONAL POWER COMMITTEE

AGENDA FOR 237TH OCC MEETING TO BE HELD ON 17.03.2026 (TUESDAY) AT 10:30 HRS

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 236th OCC Meeting held physically at ERPC Secretariat on 20th February 2026

The Minutes of 236th Operation Coordination Sub-Committee meeting held on 20.02.2026 was circulated vide letter dated 26.02.2026.

Members may confirm the minutes of 236th OCC meeting.

2. PART-B: ITEMS FOR DISCUSSION

2.1 Update on follow up agenda: ERPC

a) Bus split operationalization at NTPC Kahalgaon

As decided in **219th OCC** Meeting, a committee comprising of members from ERPC and ERLDC visited NTPC Kahalgaon on 17-10-2024 to assess the status of Bus splitting at 400kV level and way forward for operationalization of 400 KV Bus sectionalizer.
Following works need to be done to complete the installation of ICT 3 & 4:

1. Determination of underground cable conduit path for 400/132 kV ICT-3, 4 and 5 allocated for stage 2 supply.
2. Excavating the existing cable and relaying from Stage-1 132kV to New Stage-2 132kV switchyard, where ICT 3 & 4 will be connected.
3. Laying of additional 22.8 ckt. km control cable for STs.
4. Jumpering of ICTs in 132kV & 400kV level.
5. Bay equipment testing.

As per 55th TCC:

NTPC informed the forum that, as per the current progress of works, idle charging of ICT–3 and ICT–4 is expected to be completed by **December 2025**, and bus splitting at NTPC Kahalgaon is tentatively scheduled for completion by **April 2026**.

55th TCC Decision

TCC took serious note of the inordinate delay in implementation of the bus splitting operational scheme at NTPC Kahalgaon, which is critical for reduction of fault level at Kahalgaon.
TCC advised NTPC to:

- Share weekly progress reports with ERPC and ERLDC.
- Expedite the bus splitting works to ensure completion strictly as per the submitted timeline.

Deliberation in 236th OCC:

NTPC updated:

- ✓ First time charging of the new ICT will be done once final clearance from CEA is received.
- ✓ Thereafter, 132 kV cable laying work will completed on priority. Cable jointing kit is expected to be received by 15th March 2026.
- ✓ Completion is targeted by mid of April 2026.

WB SLDC requested for sharing the study report on Kahalgaon bus split.

236th OCC decision:

- OCC advised NTPC to expedite balance works by resolving persistent contractual issues.
- In view of continued operation of 400 kV bus in synchronized mode at NTPC Kahalgaon at high fault level, OCC expressed serious concern over the lack of desired progress and advised NTPC to strictly adhere to the submitted timeline. The urgency for operationalization of bus split at NTPC Kahalgaon in view of imminent Godda connectivity was emphasized.
- Further, NTPC was also advised to submit fortnightly progress report.
- NTPC may share the study report of Kahalgaon bus splitting with WB SLDC.

NTPC may update. Members may discuss.

b) Reconductoring of the lines of Chukha Transmission system under ERES-44 scheme

- ➢ Powergrid has been entrusted with the reconductoring work of various lines of Chukha Transmission system under ERES-44 scheme.
- ➢ The lines of Chukha Transmission System are more than 37 years old and are prone to outages. Further, reconductoring of some of the lines is critical for ensuring reliability of the supply in West Bengal system. Among the lines, reconductoring of 220 kV Malda-Gazole section(18 kM) is essential for operational flexibility of WB system and early completion of the reconductoring work on this section is critical for ensuring reliability of supply in Gazole and adjoining areas. It is worth mentioning that at present bus splitting is in operation at 220 kV Gazole S/s compromising the reliability of the supply.
- ➢ The inordinate delay in carrying out the reconductoring work of Chukha Transmission system would pose challenge to smooth & secure grid operation and reliable power supply to adjoining areas of West Bengal.

55th TCC Decision

- TCC critically noted the inordinate delay caused in carrying out the HTLS reconductoring of 220KV Malda–Gazole D/C which is very much essential to aid in operational flexibility WB.
- TCC also advised Powergrid to explore all the possibilities for diverting HTLS conductors from other projects on loan basis so that Reconductoring can be completed at the earliest and after LOA has been awarded the HTLS conductor may be returned to the concerned utility.
- TCC also opined that PowerGrid may take the help of WB for procurement of the required HTLS reconductor through a separate tender.

Deliberation in 55th ERPC meeting

Powegrid stated that LoA will be placed by Jan'26.

ERPC advised Powergrid to complete the reconductoring work before onset of coming summer.

As per 235th OCC Meeting

It was informed that the tender evaluation is still in progress and no firm date for placement of order was conveyed.

Powergrid may update. Members may discuss.

c) Intrastate Transmission Network Assessment & Mitigation – West Bengal

Modification of Existing SPS Scheme at Subhasgram (PG) with Undervoltage Logic

ERLDC Proposed modification of existing SPS at Subhasgram (PG) to include undervoltage logic with time delay to prevent voltage collapse. OCC advised SLDC, West Bengal, WBSEDCL and CESC to meet after puja to discuss the proposed modified SPS scheme at Subhasgram and share the outcome in next OCC.

236th OCC Meeting:

• CESC updated that load integration i.r.o the proposed SPS shall be done immediately after completion of state board exams in West Bengal. OCC advised CESC and Powergrid to coordinate and implement the SPS at Subhasgram (PG) mid of March 2026 positively.

Update:

Logic is yet to be implemented by CESC at their end.

CESC & SLDC WB may update.

d) Intrastate Transmission Network Assessment & Mitigation – DVC:

☐ **Restoration of Koderma ICT**

400/220KV, 315 MVA Koderma ICT-2 has been under outage since 02.06.2025 due to burnout. DVC has transported the 315 MVA regional spare ICT kept at Muzaffarpur as a replacement. At present, Koderma S/S is N-1 non-compliant due to the availability of only one ICT, which is also critically loaded especially during Solar hours. Further, the existing Koderma ICT-1 (in service) is experiencing DGA violations. Restoration of ICT-2 has therefore become critical to cater to the summer load requirements of the DVC system.

☐ **Implementation of SPS scheme for N-1 compliance of ICTs at Bokaro**

Currently, Bokaro 400/220KV, 2x 315MVA ICTs are experiencing N-1 non-compliant. One SPS was proposed to safeguard the cascade tripping inside DVC system. A joint study was conducted on 22nd October 2025. Where SPS proposal and logic was discussed. Matters have been deliberated in all OCC meetings since 231st OCC meeting. **This SPS needs to be implemented before Summer 2026 on priority basis.**

As per 236th OCC:

DVC informed:

- ✓ At Koderma TPS, ICT#1 has faced DGA violation and out of service for internal inspection.The damage ICT#2 is under process of replacement with the allocated ICT from Muzaffarpur(PG).
- ✓ In absence of both ICTs at KTPS, severe undervoltage is experienced such that voltage at 132 kV Barhi & Koderma dips below 110 kV at peak resulting in stressed loading of elements.
- ✓ Thus shifting of one 315 MVA ICT from Durgapur to Koderma TPS is proposed as an interim measure for improving voltage at 132 kV level, especially in the upcoming Summer months.
- ✓ Joint system study with ERLDC has already been conducted in this regard.
- ✓ SPS will also be made functional at DSTPS till the repaired ICT reaches site and put to service.

✓ At Bokaro, SPS will be implemented once the Koderma ICT gets charged after being shifted from DSTPS.

236th OCC decision:

- OCC consented to the proposed shifting of 315 MVA ICT from DSTPS to Koderma with implementation of SPS at DSTPS on interim basis.
- DVC was advised to expedite ICT commissioning at KTPS and subsequent implementation of SPS at Bokaro.

DVC may update. Members may discuss.

e) Intrastate Transmission Network Assessment & Mitigation-Odisha

Reference:

Implementation of the Under Voltage Load Shedding (UVLS) scheme in the Odisha system has been under review since the 231st, 232nd, 233rd, and 234th OCC Meetings held on 22.09.2025, 24.10.2025, 22.11.2025, and 23.12.2025 respectively.

The matter was also discussed in the recently concluded 55th TCC/ERPC meeting held on 16.12.2025 and 17.12.2025 at Kalimpong, West Bengal. As per deliberation in 55th TCC Meeting, **300MW load** has been identified and it will be operationalized before **Summer '26**.

The continued delay in implementation is posing increasing risks not only to the Odisha system but also to the Eastern Region as a whole during the forthcoming Summer-2026 period.

As per 236th OCC:

SLDC Odisha & OPTCL updated that the UVLS will be implemented with identified load quantum(400 MW) before 31st March 2026.

236th OCC Decision

It was advised that UVLS may be implemented as per submitted timeline.

Update:

One meeting was conducted to discuss the implementation plan of the UVLS scheme, where ERLDC, OPTCL, and SLDC Odisha were present. It was discussed & finalized that the UVLS scheme would be implemented in two stages belong to the Mendhasal / Pandiabilli fed area, utilizing the existing ADMS infrastructure, while ensuring the required load relief under under-voltage conditions. MoM of the meeting is attached as **Annexure 2.1.e**

SLDC Odisha and OPTCL may update. Members may discuss.

f) Status of DTL for Ind Barath TPP of JSWEUL

Due to delay in completion of DTL, presently Ind-Barath TPP is connected to ISTS through an interim arrangement viz. connection of one circuit of OPGC –Sundargarh 400 kV D/c ISTS line at suitable cross over point of JSWEUL –Sundargarh (Jharsuguda) 400 kV D/c line so as to form OPGC – IndBarath –Sundargarh 400 kV S/c line.

Deliberation in 54th TCC

☐ JSW informed that the original proposal of 4 towers has been modified to one having 12 towers due to objections from MCL. The revised proposal has been agreed upon by MCL and is

forwarded to Ministry of Coal for approval. Once approval will be granted, JSW has assured that the construction of the transmission line will be completed within 3 to 4 months. TCC Decision: TCC advised JSW for expediting the construction of the transmission line and has referred the matter to ERPC for information.

- ☐ Representative of JSWEUL stated that they are pursing with authorities of MCL & Ministry of Coal for approval of the revised proposal for diversion of the line with 12 new towers. Once approval will be granted, the construction of the transmission line will be completed within 3 to 4 months.
- ☐ Director(SLDC), Odisha stated that nowhere in the country such type of LILO arrangement exists where a line connecting to an existing thermal power plant have been LILOed for power evacuation of another thermal power plant of capacity 700 MW. He further stated that though with the help of ERLDC they are managing the real time grid operation, but continuation of this arrangement poses threat to grid security & grid operation. He submitted that till completion of the DTL, JSWEUL shall run only one unit of their plant for secure operation of the grid.
- ☐ MS, ERPC informed that the matter is being continuously monitored by CEA/MoP, and a meeting in this regard is scheduled shortly under chairmanship of Chairperson, CEA.
- ☐ ERPC advised JSWEUL to expedite the process for getting approval from MCL and completion of the line construction work with shortest possible time.

Central Electricity Authority (CEA) has approved continuation of the above interim arrangement for evacuation of power through LILO of the 400 kV OPGC–Sundargarh line at IBEUL with SPS, only up to 31.12.2025, as recorded in the Minutes of Meeting dated 15.07.2025.

234th OCC Decision

OCC opined that the existing interim arrangement of power evacuation from JSWEUL had been approved by CEA upto 31.12.2025 as per the last approval of extension from CEA dated 15.07.2025. Accordingly, JSWEUL was urged to take up the matter with CEA for further consideration.

JSWEUL may update. Members may discuss.

g) Restoration of 2nd ICT at Tenughat and upgrading 400 KV PVUNL- Tenughat line end termination at Tenughat:

Reference:

- ✓ Jharkhand is meeting a maximum demand of about 2,100 MW during Winter (December 2025 and January 2026). However, on several days, shortages in the range of 200-300 MW have been reported in Jharkhand despite commissioning of the Patratu 800 MW unit.
- ✓ These shortages are primarily attributed to frequent tripping of Tenughat units and thereby load restrictions in the Dumka/Gobindpur area due to inadequate transmission capacity. The constraints are mainly due to the availability of only a single ICT at Tenughat and loading restrictions on the 400 kV PVUNL–Tenughat line (earlier charged as 220KV Tenughat-Patratu) arising from non-availability of terminal equipment at Tenughat for power evacuation at 400 kV level. Additionally with Integration of 2nd Unit of PVUNL this loading will increase further and will aggravate the situation.

The following issues need to be addressed before Summer-2026:

h) Restoration of the second 400/220 kV, 315 MVA ICT at Tenughat.

i) Upgradation of the 400 kV PVUNL–Tenughat line-end terminations at the Tenughat end.

As per 236th OCC:

TVNL informed:

LV side of the ICT was charged on 14th Feb'26, but the HV side could not be charged due to synchronization issue. Considering the age of the ICT, it will be charged only upon thorough assessment of healthiness.

236th OCC Decision

OCC advised TVNL to expedite and put the ICT to service by 15th March 2026 positively.

JUSNL may update. Members may discuss.

j) Update on islanding schemes in ER.

Patna Islanding Scheme under PSDF

- In 54th TCC meeting held on 23.06.2025, BSPTCL had proposed to implement Patna Islanding Scheme through Internal Resource Fund.
- However, a meeting was held on 24th June 2025 under the chairmanship of the Hon'ble Minister of Power and Housing & Urban Affairs, wherein the matter of Islanding Patna city was discussed. In the meeting, it was decided that the State of Bihar would submit a proposal for funding the Islanding scheme by the Ministry of Power).
- In compliance to minutes of the meeting held on dt. 24.06.2025, Board of Directors, BSPTCL has approved for implementation of Patna Islanding Scheme through PSDF in 131st BOD meeting held on dt. 17.07.2025 vide its resolution no. 131-06.
- In line with the above, a proposal has been submitted for Implementation of Patna Islanding Scheme under PSDF to NLDC vide this office letter no. 549 dt. 18.07.2025 along with all the required documents in compliance to minutes of meeting held on dt. 24.06.2025.
- Further, Chief Engineer (Generation), CEA has requested the recommendation of ERPC for implementation of Patna Islanding Scheme through PSDF.

- In **55th CCM** meeting,
- The issue of Patna Islanding Scheme has been deliberated earlier in various forums. Though it was earlier decided by BSPTCL to implement Patna Islanding Scheme through Internal Resources but on subsequent development on the issue they have now approached the forum for approval for PSDF funding for the same.
- Committee referred the above agenda to upcoming 55th TCC & ERPC meetings for their consideration and further decision on the issue.

55th TCC deliberation:

ERPC Secretariat informed that BSPTCL has requested for appraisal report of the islanding scheme in A5 format of PSDF and the same has already been sent to them for onward submission to PSDF.

SLDC Bihar may update. Members may discuss.

IB Valley TPS Islanding Scheme

IB valley TPS Islanding scheme has also been put on hold for long time. The status regarding the same has been sought on urgent basis by Ministry of Power (Govt of India). 229th OCC Decision:

➢ OCC advised ERLDC to conduct the dynamic studies of the OPGC network at the earliest in association with SLDC Odisha and OPGC.

➢ OCC advised OPTCL to prepare the DPR after the completion of dynamic studies. ERLDC has done dynamic study of the proposed islanding scheme, and one online meeting was arranged on 19.08.25 to discuss about the study result, where SLDC Odisha, OPGC (IB Thermal) & OPTCL were present.

In 233rd OCC Meeting,

OPTCL updated that DPR i.r.o IB Valley TPS Islanding Scheme is not yet prepared and the proposed scheme is under review of Director, OPTCL.

➢ OCC took a serious note on slow progress in implementation of IB Valley TPS Islanding Scheme since this scheme has been pursued by ERPC since last five months.
➢ OCC advised OPTCL to highlight the importance of IB Valley TPS Islanding Scheme at the appropriate level and revert back within fortnight of December and the matter is referred to TCC for detailed deliberations.

Deliberation in 55th TCC meeting

Director(Op), OPTCL stated that they need a clarification regarding load quantum required for islanding operation and as per their assessment load of 140-160 MW can be arranged at Budhipadar end for islanding operation.

OPGC representative replied that minimum load of 150 MW is required for islanding operation with one unit of IB TPS.

55th TCC decision

- After deliberation, it was finalized that the scheme will be implemented with minimum load quantum of 140 MW at Budhipadar along with one unit of IB TPS generation.
- TCC pointed out the inordinate delay in implementing the scheme and opined that OPTCL & OPGC shall take necessary steps to implement the scheme within six months.

OPGC/SLDC Odisha may update. Members may discuss.

Conduct of Mock Drills

ERLDC may update on the mock drills conducted i.r.o existing islanding schemes.

k) Review of AUFLS in Eastern Region: SCADA Integration & Data Updation

- Based on the recommendation and decisions in 14th NPC meeting held on 05.02.24, 214th OCC meeting and special meeting on 10.07.2024, a load relief quantum of 6916MW was finalized for Eastern Region. UFR Feeders real time monitoring has been discussed in NPC as well as various fora of ERPC.
- Further, with new IEGC 2023 the same has been mandated as quoted below: IEGC 2023, Clause 13.d: "SLDC shall ensure that telemetered data of feeders (MW power flow in real time and circuit breaker status) on which UFR and df/dt relays are installed is available at its control centre. SLDC shall monitor the combined load in MW of these feeders at all times.
- SLDC shall share the above data with the respective RLDC in real time and submit a monthly exception report to the respective RPC. RLDC shall inform SLDCs as well as the concerned RPC on a quarterly basis, durations during the quarter when the combined load in MW of these feeders was below the level considered while designing the UFR scheme by the RPC. SLDC shall take corrective measures within a reasonable period and inform the respective RLDC and RPC, failing which suitable action may be initiated by the respective RPC."

Deliberations in 236th OCC meeting

SLDC Bihar updated that remaining load quantum in stages –III & IV will be integrated in AUFLS by end of March 2026.

SLDC Jharkhand apprised that remaining load quantum in Stage IV will be completed by March 2026.

SLDC Odisha informed:

- Around 95% of feeders are mapped and integrated in SCADA.
- Some feeders remain unmapped; mapping work is in progress.
- UF load-shedding quantum may exceed required levels during summer due to dynamic growth of load and changes in feeder configuration.
- Presence of industrial open-access consumers on some feeders complicates UF scheme calibration.

236th OCC decision

- Bihar and Jharkhand SLDCs were advised to implement the remaining quantum of AUFLS in the respective stages as per submitted timeline.
- SLDC Odisha was advised to map remaining UFR feeders in SCADA at the earliest.
- All the UFR feeders must be integrated in SCADA, thereby ensuring real time telemetry of MW data as well as CB status in line with IEGC 2023.

All SLDCs may update. Members may discuss.

2.2 Issues for follow-up: ERLDC

1.Fixation of timelines for Pending issues for ensuring reliable operation during Summer-2026:

Eastern region has already entered in the high demand period. The peak demand of the region touched **26,500 MW** on **09.03.2026**, which is the highest recorded so far in the current season. The daily energy

consumption of the Eastern Region also witnessed a sharp increase, reaching **565 MU** on 09.03.2026, compared to the **seasonal average** of around **515-520 MU,** marking the highest consumption so far this season. Considering this rising trend, further increase in demand is anticipated in the coming months.

Over the past few months, agendas have been regularly placed in OCC/TCC meetings regarding the essential requirements of various states for summer preparedness. Several measures for critical pockets were deliberated and agreed upon in different OCC meetings, with the understanding that all such measures would be completed before **Summer 2026**. **However, a few action points are still pending, and finalization of timelines for their completion is of utmost importance**.

The **list of pending issues is as follows:**

Sl No	Action points	Proposed Timeline	Present Status
1	Under voltage SPS at Subhasgram(PG) for reliable power supply in Kolkata- **Responsibilities: SLDC WB/CESC**	Mar-26	**Pending**
2	Under voltage SPS at Mendhashal for reliable power supply in Bhubabeswar **Responsibilities: OPTCL/SLDC Odisha**	Mar-26	**Pending**
3	SPS at Bokaro -DVC **Responsibilities: ERLDC/DVC**	Mar-26	**Pending**
4	SPS at PVUNL/Patratu **Responsibilities: JUSNL/PVUNL**	Before synchronization of unit 2 of PVUNL (2 x 800MW)	**Pending**
5	SPS for ACCP-II/JSPL **Responsibilities: SLDC Odisha/ OPTCL/JSPL**	Mar-26	**Pending**

ERLDC may explain. Member may discuss and utilities may update.

2.Appropriate bus arrangement at Dalkhola (PG) Sub-station.

- ☐ To ensure compliance with the (N–1) contingency criterion for the 220 kV Malda (PG)–Gajol D/C lines, the existing summer-season operating practice involves a split-bus arrangement at Gajol (WBSETCL) on both the 220 kV and 132 kV sides, and a split-bus arrangement on the 220 kV side at Dalkhola (PG).
- ☐ As per the present bus configuration, the 220 kV Purnea D/C and Gajol D/C lines are kept on one bus, whereas the 220 kV Kishanganj D/C and Dalkhola (WBSETCL) D/C lines are kept on another bus, in order to maintain the line loading of the Purnea and Kishanganj infeeds within the N–1 limit. During the previous summer season, the load at Gajol was around 70 MW, which was supplied through the Purnea (Old) feed, and the maximum load met at Purnea was around 380 MW.
- ☐ In view of the anticipated load growth in and around the Malda and Dinajpur districts, West Bengal SLDC informed that the expected load at Gajol during the ensuing summer season would be in the range of 150–155 MW. Further, in the event of upgradation of the concerned ICT to 200 MVA prior to the summer season, the load may increase up to 170 MW. Accordingly, West Bengal requested during the 235th OCC meeting to allow 170 MW load at Gajol, particularly the portion being fed from Purnea via Dalkhola.

As per 235th OCC:

WB SLDC apprised:

- During peak summer, loading of the ICTs may reach 160–170 MVA
- Power flow generally occurs from Malda → Gajol → Dalkhola → Purnea
- 220 kV Malda–Gajol section becomes heavily loaded under loop operation whose reconductoring is still pending.

OCC Decision

During the meeting, ERLDC was advised to conduct a load flow study so that an appropriate bus-splitting arrangement at Dalkhola (PG) could be finalized prior to the summer season.

Latest Update

- ☐ An online meeting was conducted by ERLDC on 09.03.2026 to discuss the matter along with the study results. Representatives from SLDC West Bengal, SLDC Bihar, and ERPC participated in the meeting. During the discussion, SLDC Bihar informed that the maximum load at Purnea (Old) is expected to reach approximately 450 MW this year summer. As line is HTLS, thermal loading limit of one circuit of the 220 kV Purnea–Purnea (Old) D/C line is about 600 MW.
- ☐ Considering the (N–1) contingency criterion along with a 20 MW safety margin, only 130 MW margin is available in this corridor. However, load up to 170 MW at Gajol may be permitted, depending upon the available margin in the corridor, particularly in view of the upcoming Assembly elections in West Bengal.
- ☐ In this regard, an SOP has been finalized to monitor and manage the load at Gajol depending upon the loading of the 220 kV Purnea–Purnea (Old) D/C line. SOP is attached as **Annexure 2.2.2.**

WB SLDC and ERLDC may explain.Member may discuss.

2.3 Scarcity of Gas-Based Generation due to War-Like Situation in the Middle East:ERLDC

- The escalating conflict in the Middle East has disrupted global natural gas supply chains which is likely to adversely impact gas availability power generation in India as of March 2026. Under normal circumstances, around **7–10 GW of gas-based generation** is available at the All-India level in the Summer and is typically utilized for providing **peaking as well as load ramping support particularly during non-solar hours**. However, due to the prevailing situation, this capacity may not be available during the upcoming summer period.
- Further, the **anticipated CEA thermal capacity addition during the current financial year (around 15 GW)**, which may further aggravate the generation availability scenario. Consequently, the dependency on other generation resources will increase to meet the rising demand.
- In the current year, **All-India maximum demand** has already crossed **245 GW (since January 2026)**, and it is anticipated that the **maximum demand** may reach around **270 GW** by **June 2026**. In view of the expected summer peak, it is essential that the entire generation fleet operates at **maximum available capability** to ensure grid reliability.
- Under the circumstances it is extremely crucial to monitor unit wise generation in real-time. For this purpose, a **Real Time Generation (RTG) Portal** was developed in 2023 under the aegis of NLDC/NRLDC. Since then, key operational data such as **Declared Capacity (DC), Schedule, Actual Generation, Unit Outage information, Market Sale, and Partial Outage details** are being monitored by NLDC/RLDCs/MoP on a regional basis including intra-state generators.

- In the Eastern Region, the RTG portal is already operational. States such as **Bihar, West Bengal, and DVC** are sharing the required data (except unit outage information, which is presently shared through telephone, and partial outage data) through **API integration from their SAMAST portals**. However, as **SAMAST implementation is yet to be completed in Odisha and Jharkhand**, these states are currently sharing the data manually.

In view of the above, the following points may be deliberated:

i) Ensuring data availability in the RTG Portal for real-time generation monitoring:

Bihar, West Bengal, and DVC are requested to continuously monitor the data flow to the RTG portal and ensure the healthiness of the API integration. Odisha and Jharkhand may indicate the **tentative timeline for API integration** and ensure the continuity of the current data-sharing mechanism until integration is completed.

ii) Status of expected thermal generation capacity addition in Eastern Region during the upcoming summer – expediting commissioning:

Sr. No.	Plant Name/Agency	Unit No	Capacity (MW)	Anticipated Trail Run Date as per CEA	Present Status
1	Sagardighi (WBPDCL)	5	660	Expt. Syn 30.06.2024 (As per WBPDCL website)	First synchronization in Sept 2025. Re-synchronization on 10.03.2026. Target COD: 31.03.2026
2	Patratu STPP (PVUNL)	2	800	Dec 2024	First synchronization expected in 2nd week of March 2026. Target COD: 30.04.2026
3	Buxer TPP (SJVN)	2	660	JULY 2024	First synchronization expected in 2nd week of April 2026. Target COD: 31.05.2026

ERLDC may explain. Members may discuss.

2.4 Total power failure at 400 kV PVUNL S/S due to Mal-operation of Bus-bar Protection at Patratu (JUSNL): ERLDC

- ☐ A total power failure event occurred on **20th December 2025** due to the operation of busbar protection at Patratu (New) Substation during the restoration of the 400 kV New Ranchi–Patratu-1 line, which had tripped earlier while Circuit-2 was under planned outage. Subsequently, it was found that the conductor had snapped between locations No. 27 and 28.
- ☐ The matter was discussed in the 154th PCCM held on 20.01.2026, wherein the JUSNL representative informed that M/s Siemens (OEM) visited the Patratu Substation during 20–22.01.2026. During the visit, several observations related to relay logic configuration were identified and rectified. However, a few issues remain pending due to the requirement of a shutdown. PCC advised the JUSNL representative to undertake the necessary rectification measures at the earliest and submit a compliance report to ERPC and ERLDC.
- ☐ Subsequently, during verification of CT injection testing in the B-phase of the 400 kV PVUNL-2 bay on 21.02.2026 at 12:54 hrs, the LBB protection operated and issued tripping commands to all circuit breakers associated with the Main-1 Bus element, along with the tie breakers of both New Ranchi PG (Bero) bays and both PVUNL bays. This resulted in the unintended tripping of tie bays, which is a matter of serious concern from a protection perspective. The incident indicates a significant lapse

in conducting current injection testing without proper isolation of the associated LBB relay/circuit, suggesting the absence of a well-defined Standard Operating Procedure (SOP) for such testing activities. Furthermore, the tripping of tie bays indicates that certain protection-related issues remained unresolved even after the relay logic rectification carried out by the OEM (M/s Siemens).

- ☐ ERLDC subsequently followed up with JUSNL vide emails dated 23.02.2026 and 02.03.2026, seeking updates on the resolution of the pending LBB/BB protection issues, the unintended tripping of tie CBs, and the expeditious restoration/activation of the busbar protection scheme, which has remained out of service since December 2025. However, the update from JUSNL is still awaited. Copies of the emails are attached as **Annexure 2.4**.
- ☐ Considering that PVUNL is expected to commission its second unit of 800 MW shortly, it is imperative to ensure the healthiness and reliability of all protection systems at the 400 kV Patratu Substation, so as to prevent any unintended protection operations that may jeopardize the power evacuation from PVUNL.

ERLDC may explain.JUSNL and PVUNL may update the present status, indicating the tentative completion time of the work and short term measures that can be taken, if any, to avoid any untoward tripping in the interim period.

2.5 Non-availability of 220 kV Bus-bar Protection and Single Bus Operation at Indravati HEP(OHPC-GRIDCO): ERLDC

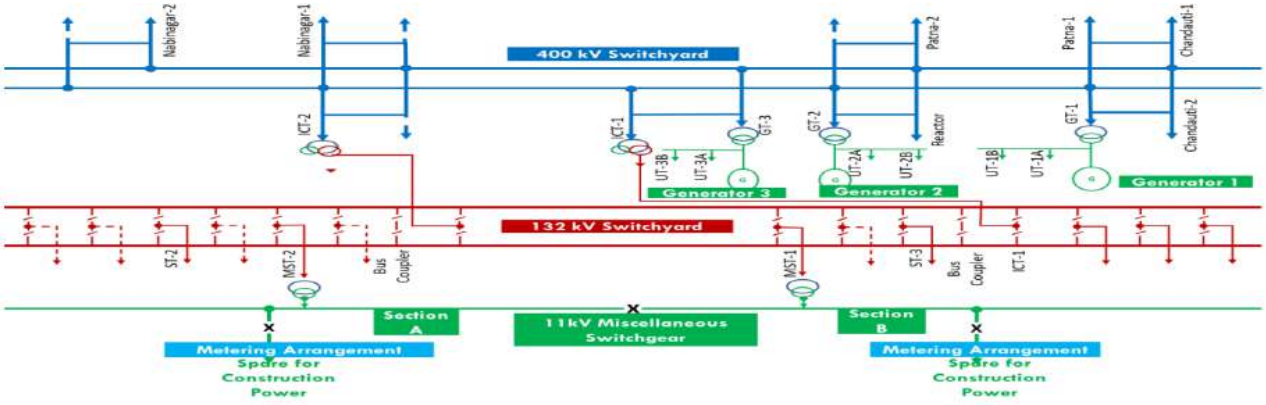
- There were two back-to-back grid incidents on 13th & 14th July 2025 at Indravati HEP due to bus bar protection operation when one bus was under outage. During deliberation of this event in 150th PCCM, held on 19.08.2025, wherein OHPC representative informed that the disturbance occurred due to mal-operation of old static type bus-bar protection relay. It was also informed that the process for procurement of numerical relays had been initiated.
- The same event was also referred to **230th OCC** meeting vide agenda point no 2.3 (Grid Disturbance at 400/220 kV Indravati HEP (OHPC) on 13th July 2025 at 23:30 Hrs and on 14th July 2025 at 11:22 Hrs) and OHPC was requested to provide details of bus-bar protection installed in their substations. Additionally, it was advised to replace them with Numerical relays at the earliest in case of static type relays.
- In the same meeting, OHPC apprised the forum that the existing static type of bus-bar protection relays would be replaced with numerical relays within four months. OCC advised OHPC to reduce the proposed timeline and expedite the replacement, considering the significant hydro generation loss during the high hydro season.
- ERLDC followed up on the progress of relay replacement Installation & commissioning of BB protection with numerical relay (as mandated under CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022) vide email dated 19.02.2026. Additionally, it was also suggested to distribute the feeders to both 220 kV Bus-1 and 2, as Indravati HEP have Double main and Transfer scheme to enable effective utilization of bus scheme and improve system reliability during bus fault condition. However, update is yet to be received from OHPC. Mail is attached as **Annexure 2.5**.
- **OCC may kindly issue directions to constitute a committee comprising concerned members from OHPC, SLDC OPTCL, ERPC Secretariat, ERLDC and protection expert from PGCIL, to follow up the progress of work every week and apprise ERPC the status every fortnight, for timely implementation of the final scheme.**

ERLDC may explain. OHPC may update. Members may discuss.

2.6 Installation of 2 new SEM meter for NPGCL construction power: NTPC

As per 53rd TCC:

NTPC submitted the metering scheme as given below:



- ✓ Existing Stage Actual Generation (AG) = ∑EXP + deemed drawl of State's beneficiary's at NTPC for new stage
- ✓ State Beneficiary's Actual drawl = ∑Beneficiary's existing drawl + deemed drawl at NTPC for news stage.
- ✓ (Beneficiary's share will remain un altered in the above process and there will

Bihar representative informed that they have agreed to the proposal of NTPC for drawal of construction power of NPGCL stage-II from commercialized units of Stage-I.

53rd TCC decision:

• TCC granted consent to the proposal of NTPC and thereby advised NTPC to proceed with the metering arrangement for drawl of construction power in consultation with ERLDC.

Present status

- NPGCL have already received 2 nos of SEM meter for construction power and these 2 nos meters are presently installed in the two feeders allocated to L&T and charged.
- Two more meters are required for another two feeders.
- Supply of 2 more SEM meters required for accounting of construction power at NPGCL construction power may be approved .

All relevant documents enclosed. **Annexure 2.6**.

NTPC may update. Members may discuss.

2.7 Shutdown proposal of Thermal generating units: ERPC

Shutdown Program of Farakka STPP: NTPC

- ✓ This has reference to final LGBR of Eastern Region for the year 2025-26, wherein Farakka St-I&2 **unit-3 (200 MW)** Annual & Capital Overhauling was scheduled from **01.03.2026 to 14.04.2026.**
- ✓ However, due to Forced outage of Unit-6 (Turbine vibration high), hence it has to be rescheduled after revival of Unit-6.(expected revival on 27.03.2026), FSTPS unit-3 OH is now proposed from 03.04.2026.
- ✓ It is therefore requested that overhauling of FSTPS Unit-3 may please be allowed from **03-04-2026** to **17.05.2026.**

Shutdown Program of Darlipalli TPP: NTPC

- ✓ It is informed that, as per the Generator Maintenance Schedule submitted by NTPC Darlipali for FY 2026–27, shutdown of Unit #1 (800 MW) has been proposed from **15th May 2026 to 28th June 2026** for carrying out **AOH** activities.
- ✓ However, as per the directives received from **CEA/MoP**, planned shutdown of thermal generating stations during the **peak summer months** is to be avoided, as the **regional as well as national power demand is expected to exceed the demand pattern of the previous year**. In this scenario, thermal generating units are expected to play a **critical role in meeting the peak demand, particularly during non-solar hours**.
- ✓ Accordingly, you are advised to **re-plan the outage of Unit #1 (800 MW) after the peak summer period, tentatively after July 2026**, in line with the above directives.

Other ER thermal generating utilities may also update on schedule of planned shutdown.

Members may discuss/update.

2.8 Reorientation / shifting of existing POWERGRID transmission lines to facilitate construction of the 220 kV D/C Teesta-VI – Rangpo Transmission Line: NHPC

Background

- ☐ NHPC Limited is implementing the Teesta-VI Hydroelectric Project in the State of Sikkim. For evacuation of power from the project, prior approval was obtained from the Central Electricity Authority (CEA) vide letter dated 06.09.2021 for the construction of a 220 kV D/C transmission line from Teesta-VI Power House to Rangpo Pooling Station of POWERGRID.
- ☐ Subsequently, an MoU was signed between NHPC Limited and POWERGRID for execution of the said transmission line, and the work is presently being carried out by POWERGRID under consultancy services with NHPC Limited.
- ☐ During the detailed survey for construction of the transmission line, it has been observed that the proposed 220 kV D/C Teesta-VI – Rangpo transmission line crosses the existing multi-circuit transmission towers of POWERGRID at Location AP-1/0 involving the following lines:

  - 220 kV D/C Rangpo – New Melli line
  - 132 kV Rangpo – Rangit line
  - 132 kV Rangpo – Gangtok Circuit #2

Due to the difficult hilly terrain and site constraints, the required electrical clearance for safe crossing of the transmission lines cannot be achieved in the existing configuration.

Accordingly, the above-mentioned existing transmission lines of POWERGRID need to be reoriented / shifted as per the attached technical scheme to ensure adequate electrical clearance and safe operation of all lines.

Regulatory Actions Taken

In order to proceed with the proposed modification of the existing transmission lines:

- NHPC vide letter dated 17.01.2026 has approached the Central Electricity Authority (CEA) seeking in-principle approval for shifting / reorientation of the existing transmission lines of POWERGRID. **Annexure 2.8**.
- Further, a request letter dated 28.02.2026 has also been submitted to the Eastern Regional Power Committee (ERPC) seeking approval for the proposed reorientation of the lines to facilitate construction of the Teesta-VI evacuation transmission corridor.

The proposed modification will enable safe construction and operation of the **220 kV D/C Teesta-VI – Rangpo Transmission Line**, which is critical for evacuation of power from the project.

3. Justification

The reorientation / shifting of the existing transmission lines is essential due to the following reasons:

1. The proposed Teesta-VI transmission line intersects existing POWERGRID lines at a location with **severe topographical constraints**.
2. Adequate **electrical clearances as per applicable standards cannot be achieved** in the present configuration.
3. Reorientation of the existing lines will ensure:
    - Safe electrical clearance between transmission lines
    - Compliance with statutory and technical requirements
    - Uninterrupted construction/ operation of the Teesta-VI evacuation system

Proposal

In view of the deliberations hereinbefore, it is proposed to **accord approval for reorientation/ shifting of the following POWERGRID transmission lines** to facilitate construction of the **220 kV D/C Teesta-VI – Rangpo Transmission Line**:

- 132 KV Rangpo - Rangit & 132 KV Rangpo - Gangtok Circuit #2 needs to be shifted to the Tower no. AP 2/0 of newly constructed 220KV Teesta-VI Transmission Line from existing Location 18 to Location 20 via AP 2/0.
- Shifting of 220 KV D/C Rangpo - New Melli Transmission Line from top cross arm to bottom cross arm at Location AP 1/0 of existing Transmission Line as mentioned above.
- 220 KV D/C Teesta-VI - Rangpo Transmission Line will terminate at gantry from Location AP 2/0 via Top Cross Arm of existing tower Location AP 1/0.

- At gantry point, termination of 220 KV Rangpo - New Melli Transmission Line will be shifted to bottom gantry and Teesta-VI Transmission line will be terminated at Top Gantry.

NHPC may explain. Members may discuss.

2.9 Requirement of RIO Safety Clearance for Charging of Transmission Lines After Partial Reconductoring: ERLDC

- In certain cases of reconductoring of transmission lines or stringing of new transmission lines, the partly reconductored or partly strung line may be needed to be charged intermittently to facilitate continued work on the other parallel circuit or remaining sections or to prevent theft of conductor. In such cases, obtaining RIO safety clearance prior to each intermediate charging may not be practically possible and lead to operational challenges, besides delay in completing the work, particularly when site inspection by RIO is required.
- Recently, in the case of the **400KV Talcher–Meramundali** line, the line had to be charged after partial reconductoring considering system exigency and operational requirements. However, obtaining RIO inspection clearance amid ongoing Holi festivals would have delayed restoration of this critical link. Accordingly, the line was charged based on an undertaking from the transmission licensee confirming compliance with all safety norms.
- It may be noted that **CEA Safety Regulations mandate that any modification in the system above 33 kV requires approval from Electrical Inspector. At the same time, provisions exist for certain emergency modifications, where charging is permitted based on an undertaking procedure approved by CEA, such as in cases of emergency replacement or upgradation of substation equipment (CT, PT, CVT, isolator, CB, LA, bushing, wave trap, etc.), where immediate inspection may not be feasible**.
- In cases of partial reconductoring of transmission lines, similar operational situations may arise frequently. For example, work may be carried out in phases by taking shutdown of alternate circuits on daily basis, where the partially reconductored circuit needs to be charged again to facilitate shutdown of the other circuit. In such scenarios, waiting for RIO inspection clearance each time may poses difficulties in completion of critical transmission works.
- In view of the above, the forum may deliberate and agree on the following:
- RIO safety clearance and necessary site inspection for the same should not be required prior to each charging of a partly reconductored or partly constructed line, if such charging (daily or intermittent) is required from system security or theft prevention point of view.
- A standardized procedure / standing clearance mechanism may be evolved for such cases, similar to the procedure adopted for emergency replacement of substation equipment, wherein charging may be permitted based on an undertaking by the transmission licensee confirming compliance with safety norms, while keeping RIO informed.
- The forum may agree to follow a uniform and practical approach for such situations in future decision taken be conveyed to the RIO.

ERLDC may explain. Members may discuss.

2.10 Data Collection for monitoring Pan-India Captive Generating Capacity: ERPC

In the meeting taken by **Secretary (Power**), Govt of India on **17.12.2025**, it was decided that the State Chief Electrical Inspectors (CEIs) / State Load Despatch Centres (SLDCs) shall act as the nodal agencies for collection of **Captive Generation** & **Open Access** data for their respective States.

It was further decided that the **Regional Power Committees (RPCs)** shall act as the nodal coordinating agencies for consolidation and compilation of the data at the regional level on **monthly basis**.

- Data is received from only Jharkhand and DVC.

Hence, all **SLDCs** are requested to send the data of the particular month by **10th** of the subsequent month as per the format shared via email.

Members may discuss.

2.11 Compliance of Advance Notice Requirement for Trial Run / Repeat Trial Run as per IEGC 2023:ERLDC

- As per Clause 21(2) of IEGC, 2023, the transmission licensee proposing its transmission system or any element thereof for trial run shall give a notice of not less than 7 days to the concerned RLDC, CTU, distribution licensees of the region and the owner of the inter-connecting system.
- Further, regarding repeat trial runs of transmission systems, Section 10.3.1 of SOR of IEGC 2023 clarifies that in case the transmission licensee fails to successfully complete the trial run, it shall follow the same procedure as applicable to generating stations.
- Additionally, as per Clause 21(1) of IEGC 2023, the generating company proposing its generating station or any unit thereof for trial run or repeat trial run shall also provide a minimum advance notice of 7 days to the concerned RLDC and beneficiaries. However, if the repeat trial run is undertaken within 48 hours of the failed trial run, a fresh notice shall not be required.
- It has been observed in some instances that fresh trial run notices are not being issued by the licensee before attempting another trial run even after expiry of the stipulated period of 48 hrs of the previous failed attempt leading to non-compliance of regulatory requirements besides operational difficulties.
- Accordingly, transmission licensees too must provide a minimum advance notice of 7 days for both trial runs and repeat trial runs, except when the repeat trial run is conducted within 48 hours of the failed trial run.
- The forum may note the above provisions and advise all concerned utilities to ensure strict compliance with the notice requirements specified in IEGC 2023 for trial run and repeat trial run of transmission elements as well as generating stations.

Members may note.

3. PART-C: ITEMS FOR INFORMATION

3.1. ER Grid performance during February 2026

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month February -2026 were as follows:

AVERAGE CONSUMPTION (MU)	MAXIMUM CONSUMPTION(MU)/ DATE	MAXIMUM DEMAND (MW)	MINIMUM DEMAND (MW)	SCHEDULE EXPORT	ACTUAL EXPORT
		DATE / TIME	DATE / TIME	(MU)	(MU)
507 MU	518.9 MU, 20.02.2026	25160 MW, 14.02.2026 at 18:24 Hrs.	16811 MW, 02.02.2026 at 03:23 Hrs.	4455	4471

ERLDC/ERPC may highlight the performance of the ER grid.

3.2. Reconductoring of 400kV Talcher-Meramundali D/C & Farakka- Kahalgaon D/C: ERLDC

- Reconductoring with HTLS conductors under ERES-43 is being executed by POWERGRID Odisha under the RTM route. Initially, it was suggested to complete the 400 kV Talcher–Meramundali Circuit-I (shorter line of 52km). However, at the request of the POWERGRID Odisha project, shutdown of the LILO portion of Circuit-II was availed from 21.11.2025 onwards due to non-availability of the required materials for Circuit-I.
- During the 234th OCC meeting held on 23.12.2025, POWERGRID Odisha informed that only 15 ckm out of 35 ckm had been completed in the LILO portion due to various ROW issues and delays in obtaining permissions for railway crossings. In the said meeting, POWERGRID was advised to return the LILO portion of Circuit-II and commence work on Circuit-I from the first week of January 2026 so that the valuable lean-demand period could be effectively utilized to complete reconductoring of at least one circuit before Summer-2026. Accordingly, shutdown of Circuit-I was availed on 06.01.2026, with a target completion by 15th February-2026.
- One Special online Meeting on Reconductoring of 400KV Talcher-Meramundali Ckt#1 was held on 12th February 2026, where ERPC, SRPC, ERLDC, SRLDC, NTPC, SLDC Odisha and POWERGRID were present. As updated in this meeting, 34km out of 52 km has been completed, with 5 km currently under progress. It was concluded that shutdown of 400 kV Talcher–Meramundali Ckt#1 be extended up to 28th February 2026.

236th OCC meeting:

- POWERGRID requested for extension of shutdown till 15th March'2026. However, due to disagreement from SRPC and SLDC Odisha, OCC opined that both the circuits have to be restored as per the earlier submitted timeline of 28th February.

Update:

- ✓ 42Ckm out of 51Ckm reconductoring work of ckt 1 was completed and line had to restored with this partial reconductoring on 03.03.2026 due to system constraint. Later on, POWERGRID requested

to avail shutdown of LILO (Angul bypass) portion of ckt 2 bypassing the LILO part upto 11th April'2026 to complete balance 20 Ckm (out of 35Ckm).

- ✓ In this regard, one meeting was convened on 06.03.26 involving SRPC, SRLDC, ERPC, ERLDC, SLDC Odisha. After detailed deliberation, the forum concluded that the shutdown request submitted by POWERGRID for bypassing the LILO section of the 400 kV Talcher–Meramundali line cannot be approved at present due to prevailing system security concerns and high SR demand. It was also decided that the said request will be reassessed after peak demand scenario of SR tentatively end of **April 2026** or **1st Week of March 2026.**

Members may note.

3.3. Reconductoring of 400KV Farakka-Kahalgaon D/C (Important for WB System): ERLDC

- ☐ HTLS reconductoring of 400 kV Farakka–Kahalgaon D/C under ERES-43 is being executed by POWERGRID ER-I/ER-II. Shutdown was availed from 02.12.2025 after initial delays due to material non-availabilities with an agreed completion date of February 2026.
- ☐ While discussing the progress of the lines during last OCC, it emerged that for Bay upgradation works both buses shutdown required at NTPC FSTPP and KHSTPP end. The required planning to be done to complete the shutdown before Summer 2026.

236th OCC Meeting:

- ☐ POWERGRID submitted that reconductoring in 71Ckm completed while 14Ckm were in progress and requested for extension of shutdown upto 1st week of March'26. OCC opined that extension in shutdown period for reconductoring of 400kV Farakka-Kahalgaon D/C may be allowed subject to real-time system conditions.

Update:

- ☐ It was decided in the meeting dated 26th Feb'26 that the Shutdown be extended up to 08.03.2026. Further, an update received from ER-1 POWRGRID via mail dated 09-03-2026 that 92kM out of 94kM has been completed.
- ☐ At KHSTPP end, upgradation work of FSTPP-I main bay (being done by KHSTPP) and line bay upgradation work (being done by POWERGRID) are also expected to be completed.
- ☐ At FSTPP end, line bay upgradation works are in progress and expected to be completed. Moreover, material supply for carrying out the jack bus reconductoring work has reached FSTPP. The jack bus reconductoring work will be taken up in last week of March and will be completed in 18 days as per plan shared by FSTPP.

Members may note.

3.4. Non-Submission of FRC data in stipulated time-frame: ERLDC

Adhering to IEGC clauses 30.8 and 30.10.(a) to 30.10.(q), generating stations within the Eastern region are required to submit essential data to ERLDC within two days of receiving a notification regarding a reportable frequency event. Additionally, according to clause 30.10.(n), all control areas within the eastern region must assess their frequency response characteristics and share the evaluation, along with high-resolution data, with the ERLDC. Therefore, timely submission of primary response data is crucial for compliance with the IEGC.

Hence all are again requested to follow the stipulated timeline and submit the data to ERLDC and also fill the google sheet below to include the email address where notifications of reportable events should be sent.

The latest data receipt status is given below: (as on **05.03.2026):**):

STATIONS		14.01.2026 13:38 hrs	14.01.2026 14:05 hrs	14.01.2026 14:09 hrs	30.01.2026 11:08 hrs	13.02.2026 12:14 hrs	22.02.2026 22:56 hrs	22.02.2026 23:00 hrs
FSTPP #STG 1 & 2	ISGS							
FSTPP # STG 3	ISGS							
KhSTPP #STG 1	ISGS							
KhSTPP #STG 2	ISGS							
TSTPP #STG 1	ISGS							
Barh stage-1	ISGS							
Barh stage-2	ISGS							
BRBCL	ISGS							
Darlipalli	ISGS							
North Karanpura	ISGS							
NPGC	ISGS							
TEESTA V	ISGS							
PVUNL	ISGS							
Dikchu	IPP							
IBEUL (JSW UTKAL)/INDBHARAT	IPP							
GMR	CPP							
MPL	CPP							
ADHUNIK	CPP							
JITPL	CPP							
TEESTA III	CPP							
Bihar	STATE							
Jharkhand	STATE							
DVC	STATE							
OPTCL	STATE							
WB	STATE							

Updated as on	05.03.2026
	Received
	Not Received
	Plant Out
	Data freeze at plant

Hence all are again requested to follow the stipulated timeline and submit the data to ERLDC and also fill in the google sheet below to include the email address where notifications of reportable events should be sent.

https://docs.google.com/spreadsheets/d/1slvAOmQIEQVlMn0LnB78eKMa2sz2QYICZ-sPEpeV_jk/edit?usp=sharing

236th OCC Decision: -

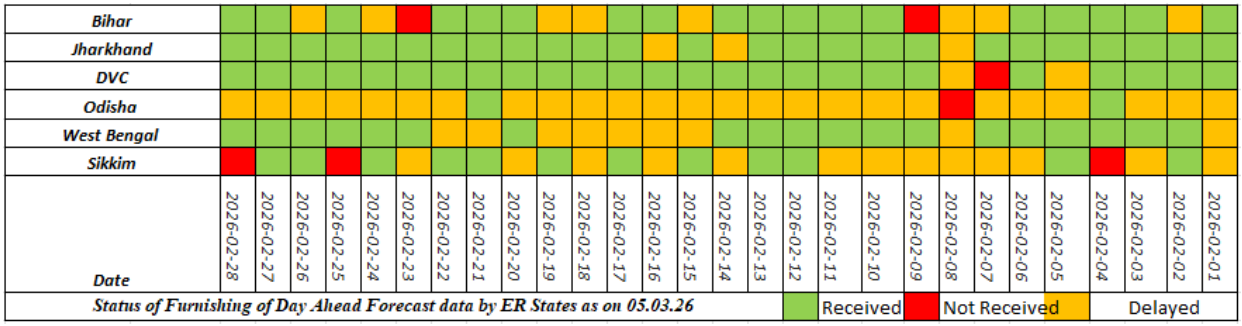
- All generators were advised to regularly share high resolution data against each reportable frequency event with ERLDC on time to facilitate accurate assessment of FRP for respective control areas.
- All generating utilities were also urged to update the google sheet (link mentioned above) with email address where notifications of reportable events will be shared.

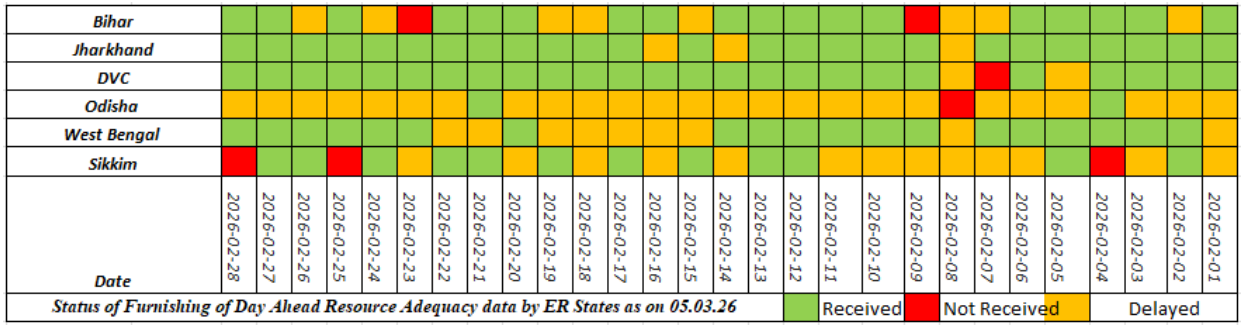
ERLDC may explain and all SLDCs may update. Members may discuss.

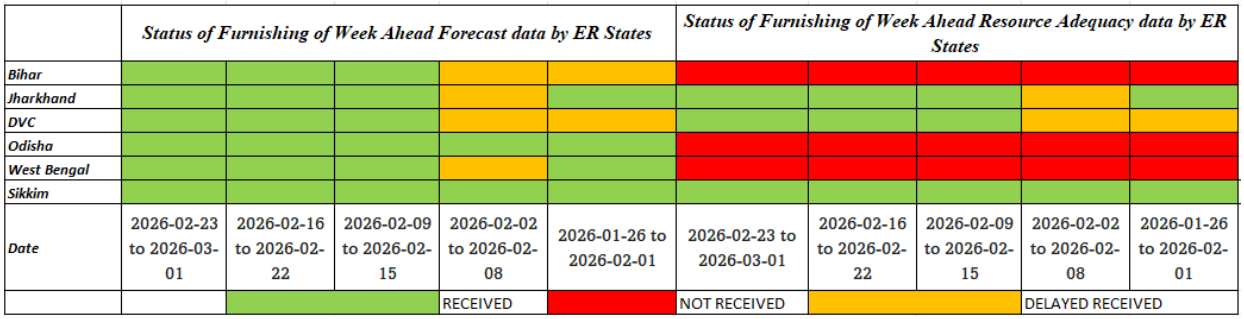
3.5. Regarding Non-Submission of Forecasting Data from States: ERLDC

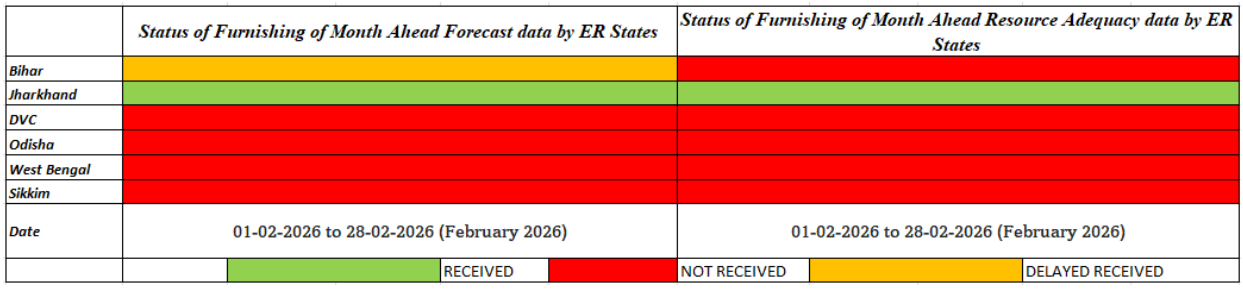
Clause 2 of **Regulation 31** of **IEGC 2023** has mandated all the SLDCs to timely submit the demand estimate data to the respective RLDC and RPC.

Current data submission status is given in the table below: Hence it is again requested to all the concerned for timely submission of demand estimation data to ERLDC. This collaboration is essential for effective planning and preparedness to meet the region's electricity demands efficiently and reliably. Latest Forecast and Resource Adequacy Data receipt status at ERLDC is shown below:









236th OCC Decision: -

- ✓ OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC in specified format as well as uploading of forecasting error on their respective websites.

- ✓ SLDCs who are submitting day ahead forecast was advised to also share the forecasting data for their respective control areas on weekly as well as monthly basis with ERLDC.
- ✓ All SLDCs were urged to regularly furnish resource adequacy data besides demand forecast.

ERLDC may explain and all SLDCs may update. Members may discuss.

4. PART-D: OPERATIONAL PLANNING

4.1. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on 05-03-2026)

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	MEJIA TPS	DVC	DVC	7	500	Capital Overhauling	26-Feb-2026
2	JSWEUL	ODISHA	JSWEUL	2	350	All ID fans tripped	05-Mar-2026
3	KHSTPP	BIHAR	NTPC	3	210	Boiler low point drain leakage	04-Mar-2026
4	TSTPP	ODISHA	NTPC	1	500	Feed water flow restriction	02-Mar-2026
5	NABINAGAR (BRBCL)	BIHAR	NTPC	2	250	Auxiliary Power Failure	28-Feb-2026
6	FSTPP	WEST BENGAL	NTPC	6	500	HP Turbine High Vibration.	26-Feb-2026
7	KHSTPP	BIHAR	NTPC	4	210	HEAVY GENERATOR HYDROGEN LEAKAGE	15-Feb-2026
8	MEJIA TPS	DVC	DVC	6	250	Boiler Tube Leakage	03-Mar-2026
9	MEJIA TPS	DVC	DVC	2	210	Stator earth fault	07-Jan-2026

All Generating stations are requested to update expected restoration time and reason outage to ERLDC/ERPC on weekly basis in case of any change at their end.

Major Generating stations Out on Reserve Shutdown due to low system demand:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
NA							

Hydro Unit Outage Report: -

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	RANGIT HPS	SIKKIM	NHPC	3	20	Capital Maintenance	10-Feb-2026
2	TASHIDING	SIKKIM	DANS	1 1	48.5 50	Annual Maintenance	06-Feb-2026
3	RENGALI HPS	ODISHA	OHPC	5 4	43.65 60	Annual Maintenance	12-Feb-2026
4	BURLA HPS/HIRAKUD I	ODISHA	OHPC	5	60		

5	BALIMELA HPS	ODISHA	OHPC			Annual Maintenance	19-Jan-2026
6	BALIMELA HPS	ODISHA	OHPC			Annual maintenance	25-Oct-2025
7	BALIMELA HPS	ODISHA	OHPC	6	60	Repair and maintenance work Initially unit was out due to Severe water leakage from turbine, later unit was taken under Repair and maintenance work from 00:00 hrs of 16.01.25	16-Jan-2025 06-Jan-2025
8	BALIMELA HPS	ODISHA	OHPC				
9	BALIMELA HPS	ODISHA	OHPC				
10	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
11	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
12	TEESTA HPS	SIKKIM	NHPC	2	170		04-Oct-2023
13	TEESTA HPS	SIKKIM	NHPC	3	170		04-Oct-2023
14	TEESTA STG III Hep	SIKKIM	TUL	1	200		04-Oct-2023
15	TEESTA STG III Hep	SIKKIM	TUL	2	200		04-Oct-2023
16	TEESTA STG III Hep	SIKKIM	TUL	3	200		04-Oct-2023
17	TEESTA STG III Hep	SIKKIM	TUL	4	200		04-Oct-2023
18	TEESTA STG III Hep	SIKKIM	TUL	5	200		04-Oct-2023
19	TEESTA STG III Hep	SIKKIM	TUL	6	200		04-Oct-2023
20	U. KOLAB	ODISHA	OHPC	2	80	Heavy Leakage in guide vane	22-Jan-2026
21	BURLA HPS/HIRAKUD I	ODISHA	OHPC	7	37.5	Abnormal sound from slip ring area	18-Sep-2025
22	SUBARNREKHA HPS	JHARKHAND	JUUNL	1	65	Damage in civil structure near	20-Mar-2025

						penstock blocking water flow.	
23	SUBARNREKHA HPS	JHARKHAND	JUUNL	2	65	Damage in civil structure near penstock blocking water flow.	20-Mar-2025

4.2. Long outage report of transmission Element (MORE THAN 01 WEEK) (As on 13.01.2026):

Transmission Element / ICT	Outage From	Reasons for Outage
220/132 KV 100 MVA ICT II AT LALMATIA	22-01-2019	220/132KV, 100MVA Transformer (NTPC side) is charged on 07.02.2024 from HV side on no load. Now, it is in idle charged condition
220KV-FSTPP-LALMATIA-I	21-04-2021	Two nos. of tower collapsed on 29.05.2024 near to Lalmatia GSS in the Loc. No. 246 & 247. 220KV S/C Farakka-Lalmatia Transmission Line is in anti-theft charging condition from Loc no 248 (Lalmatia end) to Loc no 33. Foundation, erection, and stringing progress from loc 1 to 32
132KV-BARHI-RAJGIR-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destringing of conductor of both circuits and Earth wire between tension tower no. 218-237 in same line. The lines from Barhi (DVC) will be terminated at Barachatti (BH) and new line to be constructed from Barachatti to Rajgir (BH)
132KV-NALANDA-BARHI(DVC)-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destringing of conductor of both circuits and Earth wire between tension tower no. 218-237 in same line. The lines from Barhi (DVC) will be terminated at Barachatti (BH) and new line to be constructed from Barachatti to Nalanda (BH)
400KV-RANGPO-TEESTA-V-1	04-10-2023	Tower near gantry of Teesta V HEP collapsed during GLOF event in Oct 2023 also leading to damage in powerhouse. Tower subsequently erected on 15.06.2024. Teesta V HEP GIS damaged due to hill sinking on 20.08.2024. Presently, GIS under restoration and generation expected by 31.03.2026.
400KV-RANGPO-TEESTA-V-2	04-10-2023	Tower near gantry of Teesta V HEP collapsed during GLOF event in Oct 2023 also leading to damage in powerhouse. Tower subsequently erected on 15.06.2024. Teesta V HEP GIS damaged due to hill sinking on 20.08.2024. Presently, GIS under restoration and generation expected by 31.03.2026.
132KV-CHANDIL-MANIQUI-1	05-06-2024	Power assistance withdrawn
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection

400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection. Current status: The failed transformer has reached the vendor, the repair scope has been finalized, the PR is created, and the PO is in the advanced stage of processing. The repair, transportation, installation, and commissioning are expected to take about six months, with the unit likely to be available by 30.06.2026. A spare 315 MVA ICT on loan from PGCIL is being explored, and their response is awaited.
132KV-PATRATU-PATRATU-1	16-11-2024	Taken out due to Rail-way diversion and height raising work between loc 11-12, the bottom conductor of Ckt#2 has been swapped with the middle phase conductor of Ckt#1 (which was under S/D since long). Currently Ckt-1 is anti-theft charged from DVC end. -As a long-term measure, DVC has sought two nos' of 132kV bays at newly constructed 400/220/132kV S/S of JUSNL at Patratu (JH) for termination of the lines.
400KV/220KV 315 MVA ICT 2 AT MEJIA-B	20-01-2025	315 MVA ICT-2 at MTPS-B got damaged while charging from 220kV GIS bay. New procurement of ICT has been taken up & installation of the same may complete by end of Mar'28.
400KV-DIKCHU-RANGPO-2	05-08-2025	Damaged insulator replacement work. While charging the line bus bar protection operated at Dikchu. Issue in GIS chamber of Y ph Isolator between line cb and bus 2, Powder formation inside isolator chamber, Revival Expected by December 25 as per availability of GE person. Presently negotiation in place for offer
400KV MAIN BUS - 2 AT DIKCHU	05-08-2025	Bus bar protection operated, Issue in GIS chamber of Y ph Isolator between Rango ckt 2 line cb and bus 2, Powder formation inside isolator chamber, Revival Expected by December 25 as per availability of GE person. Presently negotiation in place for offer
220KV-PATNA-KHAGAUL-1	24-09-2025	LBB relay operated during rectification of DC grounding defect by M/S KRR at GSS khagaul. Earlier w.e.f 02-08-2025 12:06 Hrs, Tower No. 63 has bent significantly on one side
220KV-DALTONGANJ-LATEHAR(JUSNL)-2	23-10-2025	To avoid overloading of 400/200 kV ICT-I at Latehar
400KV/220KV 315 MVA ICT 1 AT INDRAVATI HEP	25-10-2025	Due to oil leakage from Tan delta test tap of R phase 400 kV Bushing
220KV-BIDHANNAGAR-WARIA-1	29-10-2025	To control loading of 220 kV Waria-Mejia D/C (Anti-theft charged from Waria end.)
220KV-BIDHANNAGAR-WARIA-2	29-10-2025	Initially line was opened to control line loading. In between B-phase CT Blast at Bidhannagar end. Now Line is charged as anti-theft from Waria end to control loading of 220 kV Waria-Mejia D/C.

220KV-BALIMELA-UPPER SILERU-1	21-11-2025	Idle charged from U. Sileru end. Power drawl by Odisha halted due to non-concurrence by Andhra Pradesh.
400KV-FSTPP-KHSTPP-1	02-12-2025	Reconductoring works by HTLS Conductor.
132KV-MADHEPURA (BH)-SAHARSA-1	18-12-2025	To control the line loading. Line kept idle charged from Saharsa.
400KV/220KV 315 MVA ICT 1 AT JEYPORE	27-12-2025	For ICT-1 replacement works under ADD CAP-Erection of H-Frame Support, Top Header, Top Pipelines and Bottom Pipelines
HVDC 800KV ALIPURDUAR (PG) Pole 4	28-12-2025	For system requirement
HVDC 800KV ALIPURDUAR (PG) Pole 3	28-12-2025	For system requirement
400KV-MEERAMUNDALI-ANGUL-1	06-01-2026	Line was idle charged from Meramundali. Tripped on O/V.
132KV-BANKA (PG)-SULTANGANJ-2	05-02-2026	Reconductoring work in transmission line
220KV-RAJARHAT-NEW TOWN(AA-II)-2	08-02-2026	For cable swapping job with RAJARHAT-NEWTOWN IIC-2
132KV-PATRATU-PATRATU-2	09-02-2026	Power assistance withdrawn
132KV-KHSTPP-SABOUR-1	10-02-2026	For Reconductoring work in transmission line
400KV/220KV 315 MVA ICT 1 AT KODERMA	10-02-2026	DGA violation -rising actylene trend
400KV-JHARSUGUDA-RAIGARH-1	17-02-2026	Diversion of line from Tower No. 09 to Tower No. 12 & Tower No. 14 to Tower No. 18 due to Construction of Adani Railway line from Kirodimal Railway Station to Adani Power Plant near BadeBhandar, Raigrah
400KV-JHARSUGUDA-RAIGARH-3	17-02-2026	Diversion of line from Tower No. 09 to Tower No. 12 & Tower No. 14 to Tower No. 18 due to Construction of Adani Railway line from Kirodimal Railway Station to Adani Power Plant near BadeBhandar, Raigrah
220KV-PUSAULI(PG)-DURGAUTI-2	23-02-2026	Maintenance of TR line

Transmission licensees/ Utilities are requested to update expected restoration date & work progress regarding restoration regularly to ERPC/ERLDC on monthly basis by 5th of each month so that status of restoration can be reviewed in OCC. Utilities are also requested to update outage of any elements within their substation premises like isolator/breaker to ERPC/ERLDC regularly. (Reported as per Clause 5.2(e) of IEGC).

Members may note.

4.3. Commissioning of new units and transmission elements in Eastern Grid in the month of February -2026

The details of new units/transmission elements commissioned in the month of February -2026 based on the inputs received from beneficiaries:

NEW ELEMENTS COMMISSIONED DURING February, 2026

उत्पादन इकाइयाँ / GENERATING UNITS

क्र.सं. Sl. No.	स्थान Location / Pooling Station	मालिक/यूनिट का नाम OWNER/UNIT NAME	यूनिट संख्या/स्रोत Unit No/Source	संकलित क्षमता (मेगावाट) Capacity added (MW)	कुल/स्थापित क्षमता (मेगावाट) Total/Installed Capacity (MW)	दिनांक DATE	टिप्पणी Remarks
NIL							

आई.सी.टी/जी.टी/एस.टी / ICTs/ GTs / STs

क्र.सं. Sl. No.	एजेंसी/मालिक Agency/ Owner	उप-केन्द्र SUB-STATION	आईसीटी संख्या ICT NO	वोल्टेज (केवी) Voltage Level (kV)	क्षमता (एमवीए) CAPACITY (MVA)	दिनांक DATE	टिप्पणी Remarks
1	PGCIL	LAKHISARAI (PG)	ICT 5	400/220 kV	500	04-02-2026	
2	PGCIL	LAKHISARAI (PG)	ICT 4	400/220 kV	500	26-02-2026	
3	Tenughat Vidyut Nigam Ltd	TENUGHAT	ICT 1	400/220 kV	250	14-02-2026	

प्रेषण लाइन / TRANSMISSION LINES

क्र.सं. Sl. No.	एजेंसी/मालिक Agency/ Owner	लाइन का नाम LINE NAME	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks
1	BSPTCL	132KV-RAXAUL(NEW)-Prasauni (Nepal)-1	34.2	ACSR PANTHER	04-02-2026	34.2 km (26.8 km in India and 7.4km in Nepal)
2	BSPTCL	132KV-RAXAUL(NEW)-Prasauni (Nepal)-2	34.2	ACSR PANTHER	04-02-2026	34.2 km (26.8 km in India and 7.4km in Nepal)
3	PGCIL	400KV-BINAGURI-NORBUGANG-1	133.8	ACSR Twin Moose	02-02-2026	The actual line length measured

						using the OFL test kit for the Norbugang–Binaguri section is 133.8 km.

लिलो / प्रेषण लाइन की पुनर्व्यवस्था / LILO/RE-ARRANGEMENT OF TRANSMISSION LINES

क्र.सं. Sl. No.	एजेंसी/ मालिक Agency/ Owner	लाइन का नाम / लिलो पर Line Name/LILO at	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks
NIL						

बस/लाइन रिएक्टर / BUS/LINE REACTOR

क्र.सं. Sl. No.	एजेंसी/ मालिक Agency/ Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	रेटिंग (एमवीए आर) Rating (MVAr)	दिनांक DATE	टिप्पणी Remarks
1	WBSETCL	80MVAR 400KV B/R-1 AT JEERAT	JEERAT	80	09-02-2026	
2	PGCIL	63MVAR SWITCHABLE L/R OF 400KV-MALDA-PURNEA-I-1 AT MALDA	MALDA	63	26-02-2026	

एच.वी.डी.सी/ए.सी फिल्टर बैंक/फैक्ट्स डिवाइस संबद्ध प्रणाली / HVDC /AC Filter bank / FACTS DEVICE associated System

क्र.सं. Sl. No.	एजेंसी/ मालिक Agency/ Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						

बस - बे / BUS - BAYS

क्र.सं. Sl. No.	एजेंसी/ मालिक Agency/ Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks

1	PGCIL	400KV MAIN BAY OF 500 MVA ICT-05 AT LAKHISARAI (PG)	LAKHISARAI (PG)	400	04-02-2026	
2	PGCIL	400KV TIE BAY OF (ICT- 05 AND FUTURE) AT LAKHISARAI (PG)	LAKHISARAI (PG)	400	04-02-2026	
3	PGCIL	220KV MAIN BAY OF 500 MVA ICT 5 AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	05-02-2026	
4	PGCIL	220KV MAIN BUS-2 AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	05-02-2026	
5	PGCIL	220KV MAIN BUS-1 AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	05-02-2026	
6	PGCIL	220 KV BUS COUPLER BAY AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	05-02-2026	
7	PGCIL	220KV MAIN BAY OF HAVELI KHARAGPUR -I AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	26-02-2026	
8	PGCIL	220KV MAIN BAY OF HAVELI KHARAGPUR -II AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	26-02-2026	
9	PGCIL	400KV MAIN BAY OF 500 MVA ICT-04 AT LAKHISARAI (PG)	LAKHISARAI (PG)	400	26-02-2026	
10	PGCIL	400KV TIE BAY OF (500 MVA ICT-04 AND FUTURE) AT LAKHISARAI (PG)	LAKHISARAI (PG)	400	26-02-2026	
11	PGCIL	220KV MAIN BAY OF 500 MVA ICT 4 AT LAKHISARAI (PG)	LAKHISARAI (PG)	220	27-02-2026	
12	WBSETCL	400KV MAIN BAY OF 80 MVAR BUS REACTOR - 1 AT JEERAT	JEERAT	400	09-02-2026	
13	CESC	220KV MAIN BAY OF ICT-06 AT SUBHASGRAM(PG)	SUBHASGRAM (PG)	220	13-02-2026	
14	Tenughat Vidyut Nigam Ltd	220KV MAIN BAY OF 400KV/220KV 250 MVA ICT 1 AT TENUGHAT	TENUGHAT	220	14-02-2026	

Members may note.

4.4. UFR operation during the month of February 2026

Frequency profile for the month as follows:

MONTH	MAX (DATE/TIME)	MIN (DATE/TIME)	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
February 2026	50.36 (on 12-Feb-26 at 06:01 Hrs.)	49.62 (on 09-Feb-26 at 07:23 Hrs.)	5.0	79.4	15.6

Hence, no report of operation of UFR has been received from any of the constituents.

Members may note.

****

List of Addressee

Sl.No	Organization	Category	E-mail
1	ERPC	ERPC	mserpc-power@nic.in
2	ERPC		secomml.erpc@gov.in
3	ERPC		seop-erpc@gov.in
4	ERPC		erpc-protection@gov.in
5	ERPC		hoo-erpc@gov.in
6	DVC	Central GENCO	sanjay.sharma@dvc.gov.in
7	DVC		santosh.panda@dvc.gov.in
8	NTPC		jaiprakashverma@ntpc.co.in
9	NTPC Farakka		sumeetnarang@ntpc.co.in
10	NTPC		sraybarman@ntpc.co.in
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15	NTPC-Barh		abhishekmurari@ntpc.co.in
16	NTPC-TSTPS		suranjandas@ntpc.co.in
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20	POWERGRID ER-II		snayek@powergrid.in
21	POWERGRID ER-II		pmaity@powergrid.in
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23	Powergrid, Odisha Project		eswar@powergrid.in
24	Powergrid, Odisha Project		ajayasahu@powergrid.in
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28	ERLDC		bilash.achari@grid-india.in
29	ERLDC		manasdas@grid-india.in
30	ERLDC		rkpradhan@grid-india.in
31	GRIDCO	Others	ele.plsahoo@gridco.co.in
32	GRIDCO		ele.bpmohapatra@gridco.co.in
33	CHEMTROLS		anirudhya.saha@chemtrols.com
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35	CHEMTROLS		shivaji.dewanjee@chemtrols.com
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38	CESC		debarshi.de@rpsg.in
39	MPL		rautpv@tatapower.com
40	GMR, Odisha		swapnajit.panigrahi@gmrgroup.in
41	GMR, Odisha		diptikanta.panda@gmrgroup.in
42	JSW		biswanath.patel@jsw.in
43	JSW		mahendra.malik@jsw.in
44	APNRL		shiladityachatterjee@adhunikpower.co.in
45	APNRL		rajukumarsharma@gmail.com
46	APNRL		rahul.kumar@adhunikpower.co.in
47	MPL		jetir@tatapower.com.
48	HEL		archita.dutta@rpsg.in
49	JIPL		jiplscheduling@jindalgroup.com
50	INDIGRID	Pvt.TRANSCO	dinesh.laha@indigrid.com
51	WBSLDC		arnab.basu@wbsetcl.in
52	WBSLDC		utsab.aditya@gmail.com
53	WBSLDC		svkbanerjee@yahoo.com
54	WBSLDC		sanjibroy12235@gmail.com
55	WBSLDC		cecpwbsetcl@gmail.com
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59	SLDC, Ranchi, JUSNL		rimiltopno@gmail.com
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61	WBSETCL		sajalkbag74@gmail.com
62	WBSETCL		ce.wbsldc@gmail.com
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72	OHPC		dasakshaya26@gmail.com

Annexure 2.1.e

Record of Meeting – Discussion on Requirement and Implementation of UVLS Scheme on 18-02-2026

An online meeting was convened on 18.02.2026 at the request of OPTCL to discuss the implementation plan of the already approved UVLS scheme around the capital city of Odisha. Participants from ERLDC, OPTCL, and SLDC Odisha attended the meeting.

During the meeting, ED, ERLDC highlighted the requirement of **Under Voltage Load Shedding (UVLS)**, which had been deliberated and agreed upon in various OCC and TCC meetings**.** The need for UVLS was emphasized as a critical measure to safeguard the power system around the capital city of Odisha. It was noted that during the previous summer peak period, the area had experienced severe low-voltage conditions and a few near-miss events under different system contingencies.

OPTCL proposed to implement the UVLS scheme in two stages instead of implementing it in a single step. Accordingly, the following UVLS logic was agreed:

- When the voltage at Mendhasal falls below 370 kV for a duration of 5 seconds, 200 MW of load shall be tripped.
- Subsequently, the voltage shall be re-evaluated, and if the voltage remains below 375 kV for more than 3 seconds, an additional 150 MW of load shall be tripped.The detailed UVLS logic is enclosed as **Annexure-1.**

OPTCL informed that the scheme would utilize the existing ADMS-integrated feeder infrastructure to trigger the identified load groups through the under-voltage logic.

For faster implementation, it was agreed that the existing ADMS infrastructure may be utilized, subject to the following conditions:

- Once the under-voltage logic is asserted, the required quantum of load relief in stage wise shall be ensured without overlap with other ADMS logics.
- If any load group has already been shed through ADMS-based overdrawal or frequency-based logic, the same load group shall not receive an additional trip command under the UVLS logic, as this would not provide effective voltage relief.
- The UVLS logic shall ensure tripping of alternate load groups that are not already in a tripped condition under other ADMS logics.

It was further discussed and agreed that the load quantum integrated under ADMS for UVLS should belong to the Mendhasal / Pandiabilli fed area, so as to provide maximum voltage relief at the stressed location.

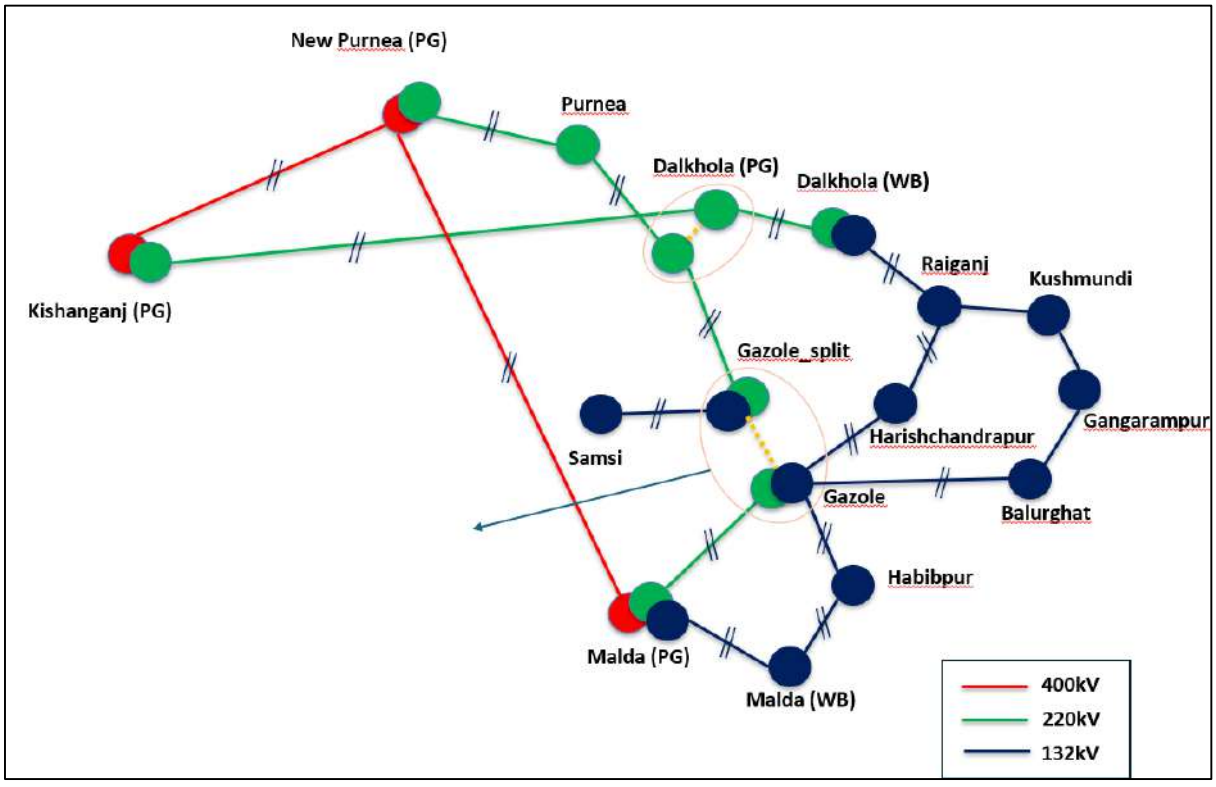
The Director, OPTCL assured that all the above aspects would be duly addressed during the detailed design stage and that the UVLS scheme would be implemented in two stages, utilizing the existing ADMS infrastructure, while ensuring the required load relief under under-voltage conditions.

Annexure 2.2.2.

Record Notes of Discussion for Shifting Gazole Load to Purnea Source

A proposal was received to shift approximately 170 MW of load of the SAMSI and Gazole areas to be supplied radially from the 220 kV New Purnea (PG) source via Dalkhola. In order to discuss the network arrangement and determine the allowable quantum of load that can be shifted to the Purnea source radially, an online meeting was held on 09.03.2025. Representatives from Bihar SLDC, WB SLDC, ERLDC, and ERPC attended the meeting.

During the discussion, the representative from ERLDC explained the existing network configuration in the area. It was highlighted that bus split arrangements are presently maintained at Dalkhola and Gazole in order to avoid N-1 violations of the Malda–Gazole and Kishanganj–Dalkhola transmission sections. Under this bus split arrangement, 220 kV New Purnea (PG) effectively becomes the only source feeding the Purnea area through the 220/132 kV ICTs, while the Gazole load is radially fed through one side of the split bus. Accordingly, any additional quantum of load proposed to be shifted to the Purnea source will be constrained by the N-1 loading limit of the 220 kV New Purnea PG – Purnea transmission line, since the entire load of Purnea (Bihar) along with the radially connected Gazole load will flow through this corridor.



It was further noted that the 220 kV New Purnea PG – Purnea line has already been reconductored with HTLS conductor and has a thermal limit of approximately 600 MW. Considering a 20 MW operational margin, it was agreed that the combined loading of Purnea (Bihar) load and the Gazole radial load should not exceed 580 MW in order to maintain system security under N-1 conditions. Bihar SLDC representatives informed that during the previous summer season the Purnea load had already reached around 400 MW, and for the upcoming summer the load is expected to increase to around 450 MW, primarily due to the installation of additional downstream ICTs and strengthening of the downstream network.

Based on the above projections, it was assessed that with an expected Purnea load of about 450 MW, the remaining available margin within the 580 MW N-1 limit would be around 130 MW. Accordingly, it was concluded that approximately 130 MW of Gazole load can be safely shifted to the Purnea source radially while maintaining N-1 reliability criteria. WB SLDC representatives observed that this calculation assumes simultaneous peak loading of both Purnea and Gazole, and in case the peak demand of Gazole does not coincide with the peak demand of Purnea, it may be possible to shift additional quantum of load subject to real-time system conditions.

After detailed deliberation, all participants mutually agreed that 130 MW of Gazole load can be radially supplied from the Purnea source considering the N-1 reliability limit of the 220 kV New Purnea PG – Purnea line. It was also agreed that an additional quantum of approximately 30–40 MW may be shifted subject to real-time system conditions, provided that the loading of the 220 kV New Purnea PG – Purnea line remains within the N-1 limit of 580 MW. In case the loading of the corridor approaches or exceeds the 580 MW limit, any additional load over and above the firm 130 MW of Gazole load shall be shifted to alternate sources to maintain system security.

Fw: Regarding MoM of Patratu 400/220 KV S/s for the event on dated 20.12.2025

Annexure 2.4.

ERLDC Protection2

Mon 02-03-2026 10:33

Sent Items

To:critljusnl@gmail.com <critljusnl@gmail.com>; sldcranchi@gmail.com <sldcranchi@gmail.com>;

Cc:MS ERPC (mserpc-power@nic.in) <mserpc-power@nic.in>; edoperationjusnl@gmail.com <edoperationjusnl@gmail.com>; cecritl.jusnl@rediffmail.com <cecritl.jusnl@rediffmail.com>; edsldcranchi@gmail.com <edsldcranchi@gmail.com>; Surajit Banerjee (सुरजीत बनर्जी) <surajit.banerjee@grid-india.in>; D Biswas (डी बिस्वास) <dbiswas@grid-india.in>; Manas Das (मानस दास) <manasdas@grid-india.in>; Bilash Achari (बिलाश आचारि) <bilash.achari@grid-india.in>; Gitesh Patel (गितेश पटेल) <giteshpatel@grid-india.in>; gmtzone5hzb@gmail.com <gmtzone5hzb@gmail.com>;

Sir/Madam,
No update has been received so far, which is a matter of concern from protection point of view. You are requested to kindly provide the details of the work carried out towards resolution of the issues highlighted in the trailing mail at the earliest.

It is also noted that the Busbar (BB) Protection at **Patratu New Substation** has been out of service since **December 2025**. Necessary action may be taken to expedite restoration of the BB protection system at the earliest, considering the reliability and security of the grid and to prevent further re-occurrence.
This is for your kind information and necessary action please.
Co-operation is requested.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary

पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
Contact No.:- 9748409928 / 9147016222
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: ERLDC Protection2
Sent: 23 February 2026 10:35
To: critljusnl@gmail.com; sldcranchi@gmail.com
Cc: edoperationjusnl@gmail.com; cecritl.jusnl@rediffmail.com; edsldcranchi@gmail.com; ERPC Protection Official ID; erpcprotection@gmail.com; Surajit Banerjee (सुरजीत बनर्जी); D Biswas (डी बिस्वास); Manas Das (मानस दास); Bilash Achari (बिलाश आचारि); Gitesh Patel (गितेश पटेल)
Subject: Fw: Regarding MoM of Patratu 400/220 KV S/s for the event on dated 20.12.2025

Sir,
Sub: **Un-intended Tripping of 400 kV Patratu New-PVUNL-1 and 400 kV Patratu New–New Ranchi-2 at 12:54 Hrs on 21.02.2026**

As you are aware that the 400 kV Patratu New–PVUNL-1, 400 kV Patratu New–New Ranchi-2 and Tie Bay of 400 kV Latehar-1 tripped at 12:54 Hrs on 21.02.2026. The incident is a matter of serious concern from an operational perspective.

Prior to the event, 400 kV Bus-1, 400 kV Patratu New–PVUNL-2 and 400 kV Patratu New–New Ranchi-1 were under shutdown for preventive maintenance and tree trimming.
The tripping has been reported to have occurred due to operation of **LBB protection** during CT primary injection in the B-phase CT of 400 kV Patratu–PVUNL Ckt-02 Main Bay at Patratu New.
The following observations have been noted:

1. Current injection was carried out in the B-phase CT of 400 kV New PVUNL-2 Main Bay without isolating the LBB (PU) relay.
2. The Tie CB of 400 kV New PVUNL-1 tripped on LBB operation at Patratu New.
3. The 400 kV New Ranchi-2 Tie Bay tripped from the Patratu New end.
4. The 400 kV Latehar-1 Tie Bay also tripped from the Patratu New end.

During operation of **LBB at the 400 kV PVUNL-2 Main Bay**, the Tie CBs mentioned at **Sl. No. 2, 3 and 4** should not have tripped.

In view of the above, you are requested to examine the reason for tripping of the Tie Bays and take necessary corrective action at the earliest to prevent re-occurrence.
A detailed report covering the findings and remedial measures taken may please be shared to ERLDC and ERPC
Matter may be treated as Most urgent.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary/DGM
पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
Contact No.:- 9748409928 / 9147016222
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: ERLDC Protection2
Sent: 23 January 2026 13:20
To: CRITL JUSNL
Cc: erpc-protection@gov.in; Surajit Banerjee (सुरजीत बनर्जी); D Biswas (डी बिस्वास); Manas Das (मानस दास); Bilash Achari (बिलाश आचारि); Gitesh Patel (गितेश पटेल); ERLDC Control Room
Subject: Re: Regarding MoM of Patratu 400/220 KV S/s for the event on dated 20.12.2025

Sir,
Thank you for the update regarding the soft logic corrections.
As discussed, the issues related to double earthing of CT star point at PVUNL-2 bay, CTR mismatch (2000/1) for PVUNL-1, PVUNL-2 and tie/Future bays connected to the BB Protection Relay and inadequate current sensing in the B-phase CT core of PVUNL-1 bay feeding 87 BBU-1 (*Other B-phase CT cores may also be reviewed to ascertain whether the issue pertains to the entire B-phase CT or is limited to the specific core used for the busbar protection*) may please be planned in advance, in coordination with all concerned stakeholders for smooth execution of activities.

After completion of all field works, it is requested to carry out the **busbar stability test** and submit the test report to ERPC and ERLDC for further enabling .
सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary/DGM
पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
Contact No.:- 9748409928 / 9147016222
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: CRITL JUSNL <critljusnl@gmail.com>
Sent: 23 January 2026 11:49:15
To: ERLDC Protection2; erpc-protection@gov.in; erldcprotection@gmail.com; erpcprotection@gmail.com
Cc: Bimal Swargiary (बिमल स्वर्गीयारी)
Subject: Regarding MoM of Patratu 400/220 KV S/s for the event on dated 20.12.2025

Dear Sir,

Please find the enclosed MoM of findings, rectification and other works for the event on dated 20.12.2025.
The remaining work will be tentatively rectified in 1st and 2nd week of February 2025 after due discussion with PVUNL.

Reply all | Delete Junk | •••

Annexure 2.5.

Fw: Request for Immediate Action-Operation of 220 kV Busbar Protection at Indravati HEP

ERLDC Protection2 Reply all

Thu 19-02-2026 17:31

To: sldcgridco@yahoo.com; sldc_orissa@sldcorissa.org.in; ohpc.co@gmail.com

Cc: sgmeluihd@gmail.com; ERPC Protection Official ID <erpc-protection@gov.in>; erpcprotection@gmail.com; Surajit Banerjee (सुरजीत बनर्जी); D Biswas (डी बिस्वास); Manas Das (मानस दास); Bilash Achari (बिलाश आचारि); Gitesh Patel (गितेश पटेल)

Sent Items

You forwarded this message on 19-02-2026 17:34

16-17 page OCCM relev...
1 MB

Show all 1 attachments (1 MB) Download

Sir,
This is a gentle reminder regarding the issues discussed in 230th OCCM held on 22.08.2025.

During the meeting, forum advised **OHPC** to reduce the proposed four-month timeline for replacement of the old static relays installed at Indravati HEP with numerical relays in line with the Grid Code requirements. Further, it was recommended that a third-party protection audit of all OHPC systems be conducted to comprehensively review protection settings, with the audit report to be submitted to **ERPC** and **ERLDC** for record.
However, no update has yet been received regarding commissioning status of **Bus Bar (BB) protection** and progress of the **third-party protection audit**, which is the concern.

Considering that 220 kV substations are configured with a double main bus scheme, it is once again requested to ensure proper segregation of feeders on both buses with associated BB relay protection. This will enable effective utilization of the double main bus arrangement and improve system reliability during bus fault conditions.

You are kindly requested to share confirmation regarding feeder segregation and BB relay installation from an operational perspective with ERLDC at the earliest.

Your cooperation is solicited for maintaining safe, secure and reliable grid operation.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary/DGM

पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
Contact No.:- 9748409928 / 9147016222
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: ERLDC Protection2
Sent: 25 July 2025 11:36
To: sldcgridco@yahoo.com; sldc_orissa@sldcorissa.org.in; ohpc.co@gmail.com
Cc: ERPC Protection Official ID; D Biswas (डी बिस्वास); Manas Das (मानस दास); ERLDC Control Room; Bilash Achari (बिलाश आचारी); Gitesh Patel (गितेश पटेल)
Subject: Re: Request for Immediate Action-Operation of 220 kV Busbar Protection at Indravati HEP

No update has been received so far regarding spurious BB operation, revival of the Bus coupler bay and installation of numerical type BB relay.
In view of ensuring safe, secure and reliable grid operation, it is very much essential that the elements are uniformly segregated in both buses with a fully functional protection system in place.
Therefore, it is requested to kindly provide the latest status on the resolution of the BB issues along with next plan of action.
Your cooperation in this matter is sincerely appreciated.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary
पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: ERLDC Protection2
Sent: 16 July 2025 15:25:29
To: sldcgridco@yahoo.com; sldc_orissa@sldcorissa.org.in; ohpc.co@gmail.com
Cc: ERPC Protection Official ID; D Biswas (डी बिस्वास); Manas Das (मानस दास); ERLDC Control Room; Bilash Achari (बिलाश आचारी)
Subject: Re: Request for Immediate Action-Operation of 220 kV Busbar Protection at Indravati HEP

सर/मैडम,
15 जुलाई 2025 को आयोजित पीसीसी बैठक में विचार-विमर्श के अनुसार, यह सूचित किया गया कि 220 केवी इंद्रावती एचईपी से जुड़ी सभी लाइनों के लिए जोन-IV समय विलंब को अस्थायी रूप से 250 मिलीसेकंड तक कम कर दिया गया है, बस बार सुरक्षा मुद्दों के सुधार के लिए लंबित है। इसे देखते हुए, अनुरोध है कि कृपया रिकॉर्ड और संदर्भ के लिए ईआरपीसी और ईआरएलडीसी को एक औपचारिक मेल भेजें।

इसके अलावा, यह देखते हुए कि इंद्रावती एचईपी पर 220 केवी बस व्यवस्था डबल मेन और ट्रांसफर बस योजना है, योजना का पूरी तरह से उपयोग करने और सिस्टम विश्वसनीयता सुनिश्चित करने के लिए बस बार सुरक्षा और बस कपलर बे की शीघ्र बहाली अत्यंत महत्वपूर्ण है।

बैठक के दौरान यह भी नोट किया गया कि 220 केवी इंद्रावती एचईपी पर वर्तमान में स्थापित बस बार सुरक्षा रिले स्थिर प्रकार की है, जिसमें डिस्टर्बेंस रिकॉर्डर (डीआर) और इवेंट लॉगर (ईएल) सुविधाओं का अभाव है। सीईए नियमों के अनुसार, सभी सुरक्षा रिले आईएस-61850 के अनुसार संचार प्रोटोकॉल के साथ संख्यात्मक प्रकार के होंगे।

उपरोक्त को ध्यान में रखते हुए यह अनुरोध किया जाता है कि:
बस बार सुरक्षा मुद्दे के समाधान में तेजी लाएं
जल्द से जल्द डबल बस संचालन बहाल करें और
डीआर/ईएल सुविधाओं और आईएस-61850 अनुपालन के साथ संख्यात्मक प्रकार बीबी सुरक्षा रिले में अपग्रेड करें।

सुरक्षित, संरक्षित और विश्वसनीय ग्रिड संचालन सुनिश्चित करने के लिए इस मामले में आपका सहयोग अत्यधिक सराहनीय है।

Sir/Madam,
As per deliberations in the PCC Meeting held on 15th July 2025, it was informed that the Zone-IV time delay for all lines connected to the 220 kV Indravati HEP has been temporarily reduced to 250 milliseconds, pending rectification

Further, considering that the 220 kV bus arrangement at Indravati HEP is Double Main and Transfer Bus Scheme, early restoration of the bus bar protection and the bus coupler bay is utmost important to fully utilize the scheme and ensure system reliability.

It was also noted during the meeting that the currently installed Bus Bar protection relay at the 220 kV Indravati HEP is of **static type**, lacking Disturbance Recorder (DR) and Event Logger (EL) facilities. As per CEA regulations, all protection relays shall be numerical type with communication protocols in accordance with IS-61850.

In view of the above it is requested to:

1. Expedite the resolution of the bus bar protection issue
2. Restore double bus operation at the earliest and
3. Upgrade to a numerical type BB protection relay with DR/EL features and IS-61850 compliance.

Your cooperation in this matter is highly appreciated for ensuring safe, secure and reliable grid operation.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary

पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

From: ERLDC Protection2
Sent: 14 July 2025 14:29:52
To: sldcgridco@yahoo.com; sldc_orissa@sldcorissa.org.in; ohpc.co@gmail.com
Cc: ERPC Protection Official ID; D Biswas (डी बिस्वास); Manas Das (मानस दास); ERLDC Control Room
Subject: Request for Immediate Action-Operation of 220 kV Busbar Protection at Indravati HEP

Sir/Madam,
As you are aware that at 23:30 Hrs on 13.07.2025, all elements connected to 220 kV Bus-I at Indravati HEP tripped due to the operation of busbar protection, resulting in a generation loss of approximately 500 MW, which is a matter of serious concern.

Further, on 14.07.2025 at 10:25 Hrs, the following elements tripped due to the operation of 220 kV Bus-II protection:

1. Indravati – Unit #4
2. 220 kV side CB of 400/220 kV, 315 MVA ICT-2
3. 400 kV side CB of 400/220 kV, 315 MVA ICT-1
4. 220 kV Indravati–Therubali Ckt-1
5. 220 kV Indravati–Therubali Ckt-3

Subsequently, at 11:22 Hrs on 14.07.2025, the following elements also tripped due to busbar-II protection operation:

1. Indravati – Unit #1
2. Indravati – Unit #2 (in standstill condition) – hand tripped
3. 220 kV Indravati–Therubali Ckt-2 – hand tripped
4. 220 kV Indravati–Jaypatna – hand tripped

voltage or current magnitudes. Therefore, the operation of the busbar protection appears to be **UNWANTED.**

Therefore, it is requested to carry out a thorough inspection of the busbar protection relay and its associated tripping circuitry, including up to the 96 relays, to identify the root cause and take immediate corrective action. *A copy of findings and remedial measures that has been taken may be shared to this end .*

Co-operation requested for maintaining safe, secure and reliable grid operation.

Note: FIR, DR and EL data may also be submitted as per grid code for needful.

सादर धन्यवाद / Thanks & Regards,
Bimal Swargiary

पू.क्षे.भा.प्रे.कें सुरक्षा समूह/ERLDC Protection Team
पू.क्षे.भा.प्रे.कें/Eastern Regional Load Despatch Centre
ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड
Grid Controller of India Ltd.

Annexure 2.6.

SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED

Estimate for installation of Meter&Metering unit work for giving 1500 kva HTS-1 connection to Nabinagar Super Thermal Power Stattion formly NPGC ,Ankorha , against request number 523515803731 Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad .

Slno	Name of particulars	Qty	Rate	unit	Amount
1	11kv/110v, 100/5 A ct&pt metering unit for consumer	1	36462	set	36462
2	HT trivector meter(-/5 A)	1	14107.05	no	14107.05
		Total cost of materials			50569.05
		contigengency ch @2%			1011.381
		Transportation ch @4%			2022.762
		T&P @2%			1011.381
		Labour cost 49898=56			~~42286.92~~
		~~Total cost~~			~~96901.494~~
		~~GST@18%~~			~~7611.6456~~
		Total			104513.1396

104513=0

General and technical report

Estimate for installation of Meter&Metering unit work for giving 1500 kva HTS-1 connection to Nabinagar Super Thermal Power Stattion formly NPGC ,Ankorha , against request number 523515803731 Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad . Total estimated cost is Rs. 104513.00/-

30/04/2025
JEE/ESS/NABINAGAR
Electric Supply Section, Nabinagar

Assistant Electrical Engineer
Electric Supply Sub Division
AEE/S/NABINAGAR
Nabinagar

CHECKED & VETTED
Manish
02/05/25
EEE/S/AURANGABAD
E.S.D. Aurangabad

AEE (Technical)
ESD, Aurangabad

Est. No. 10 / Date 02/05/25
Under Deposit Head Work
Technically Sanctioned For Rs. 104513/-
Chargable to the Party 49898/-
Chargable to the Company Rs. 0
Electrical Executive Engineer
Electric Supply Divisoon, Aurangabad
02/05/25

SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED

Estimate for installation of Meter & Metering unit work for giving **1500 kVA, HTS-1 NEW connection** to Nabinagar Super Thermal Power Stattion formly NPGC ,Ankorha , against request number **523516977350** under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad .

Slno	Name of particulars	Qty	Rate	unit	Amount
1	11 KV CT PT Combined Metering Unit 100/5 A	1	63130	Set	63130
2	11 KV SMART energy consumer meter with GPRS Modem & suitable for Net metering & TOD configurable with meter box PTR11 kv /110 v & CTR :-/5A	1	12319	No	12319
	Total cost of materials				75449
	contigency ch @2%				1508.98
	Transportation ch @4%				3017.96
	T&P @2%				1508.98
	Labour cost				42286.92
	Labour cost including 18 % GST				**49898.5656**
	Total cost				131383.486

CHECKED & VETTED
AO/E.S.D. Aurangabad
15/10/25

General and technical report

Estimate for installation of Meter&Metering unit work for giving **1500 KVA HTS-1 NEW connection** to Nabinagar Super Thermal Power Stattion formly NPGC ,Ankorha , against request number **523516977350** Nabinagar under electric supply section Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad . Total estimated cost is **Rs. 131384/-**

JEE/ESS/NABINAGAR
9/10/2025

AEE/S/NABINAGAR
9/10/25

Est. No.....56..... / Date....16/10/25
Under Deposit Head Work
Technically Sanctioned For Rs.131383/-
Chargable to the Party.....49899/-.....
Chargable to the Company Rs.....
Remarks
16/10/25
Electrical Executive Engineer
Electric Supply Divisoon, Aurangabad
16/10/25

SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED

Estimate for installation of Meter & Metering unit work for giving **1500 KVA HTS-1 NEW connection** to Nabinagar Super Thermal Power Station formly NPGC ,Ankorha , against request number **523517029803** Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad .

Slno	Name of particulars	Qty	Rate	unit	Amount
1	11 KV CT PT Combined Metering Unit 100/5 A	1	63130	Set	63130
2	11 KV SMART energy consumer meter with GPRS Modem & suitable for Net metering & TOD configurable with meter box PTR11 kv /110 v & CTR :-/5A	1	12319	No	12319

Total cost of materials	75449
contigengency ch @2%	1508.98
Transportation ch @4%	3017.96
T&P @2%	1508.98
Labour cost	42286.92
Labour cost including 18 % GST	**49898.5656**
Total cost	131383.486

CHECKED & VETTED
AO/E.S.D. Aurangabad

General and technical report

Estimate for installation of Meter&Metering unit work for giving **1500 KVA HTS-1,NEW connection** to Nabinagar Super Thermal Power Station formly NPGC ,Ankorha , against request number **523517029803** ,Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad . Total estimated cost is **Rs. 131384/-**

JEE/ESS/NABINAGAR

AEE/6/NABINAGAR

Est. No.....57..... Date.....16/10/25
Under Deposit Head Work
Technically Sanctioned For Rs.....131383/-
Chargable to the Party.....49899/-
Chargable to the Company Rs.....
Electrical Executive Engineer
Electric Supply Divisoon, Aurangabad
16/10/25

SOUTH BIHAR POWER DISTRIBUTION COMPANY LIMITED

Estimate for installation of Meter & Metering unit work for giving **1500 kVA, HTS-1 NEW connection** to Nabinagar Super Thermal Power Station formly NPGC ,Ankorha , against request number **523517029588** Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad .

Slno	Name of particulars	Qty	Rate	unit	Amount
1	11 KV CT PT Combined Metering Unit 100/5 A	1	63130	Set	63130
2	11 KV SMART energy consumer meter with GPRS Modem & suitable for Net metering & TOD configurable with meter box PTR11 kv /110 v & CTR :-/5A	1	12319	No	12319

Total cost of materials	75449
contigengency ch @2%	1508.98
Transportation ch @4%	3017.96
T&P @2%	1508.98
Labour cost	42286.92
Labour cost including 18 % GST	**49898.5656**
Total cost	131383.486

CHECKED & VETTED
AO/E.S.D. Aurangabad
13/10/25

General and technical report

Estimate for installation of Meter&Metering unit work for giving **1500 kVA, HTS-1 NEW connection** to Nabinagar Super Thermal Power Station formly NPGC ,Ankorha , against request number **523517029588** Nabinagar under electric supply section-Nabinagar,Subdivision-Nabinagar,Division-Aurangabad, Circle-Aurangabad . Total estimated cost is **Rs. 131384/--**

JEE/ESS/NABINAGAR
9/10/2025

AEE/S/NABINAGAR
9/10/25

Est. No. 58 Dt. No. 16/10/25
Under Deposit Head Work
Technically Sanctioned For Rs. 131383/-
Chargable to the Party 49899/-
Chargable to the Company Rs. -
16/10/25
Electrical Executive Engineer
Electric Supply Divisoon, Aurangabad
16/10/25

सहायक विद्युत अभियंता, विद्युत आपूर्ति अवर प्रमण्डल, नबीनगर

पत्रांक– 170 वि0आ0 अ0प्र0नबीनगर दिनांक– 8/4/25

सेवा में,

विद्युत कार्यपालक अभियंता,
विद्युत आपूर्ति प्रमण्डल, औरंगाबाद।

विषय – **New Service Connection HTS-1,1500 KVA का Feasibility Report समर्पित करने के संबंध में।**

प्रसंग– **1. इस कार्यालय का पत्रांक– 439, दिनांक– 19.09.2024**
2 NTPC का पत्रांक– 0370/NTPC/NSTPS/EED/SBPDCL/CP/01, दिनांक– 02.09.2024
3. महाप्रबंधक (राजस्व), साउथ बिहार पावर डिस्ट्रीब्यूशन कम्पनी लिमिटेड का पत्रांक– 893, दिनांक– 27.02.2025

महाशय,

उपरोक्त विषय के संबंध में सादर सूचित करते हुए कहना है कि आवेदक R.S. Saluja Nabinagar Super Thermal power Station, New Service Connection HTS-1,1500 KVA Request no-523515803731 का Feasibility Report भवदीय कार्यालय को समर्पित किया जा रहा है।

उक्त विद्युत संबंध प्रदान करने में विद्युत आपूर्ति अवर प्रमण्डल, नबीनगर अन्तर्गत किसी भी विद्युत शक्ति उपकेन्द्र की क्षमता प्रभावित नहीं होगी।

अतः तकनीकी दृष्टिकोण से विद्युत संबंध प्रदान किया जा सकता है।

यह भवदीय को सादर सूचनार्थ समर्पित।

विश्वासभाजन

8/4/25

सहायक विद्युत अभियंता,
विद्युत आपूर्ति अवर प्रमण्डल,
नबीनगर।

—:कार्यालयः—

सहायक विद्युत अभियंता, विद्युत आपूर्ति अवर प्रमंडल, नवीनगर।

पत्रांक :- 498 /

दिनांक 3/10/25 /

सेवा में,

विद्युत कार्यपालक अभियंता
विद्युत आपूर्ति प्रमंडल, औरंगाबाद।

विषय :— **श्री मंजीत कुमार, उप महाप्रबंधक (EED), नवीनगर सुपर थर्मल पावर स्टेशन, एन0टी0पी0सी0, नवीनगर का Feasibility Report समर्पित करने के संबंध में।**

महाशय,

उपर्युक्त विषयक सादर सूचित करते हुए कहना है कि, श्री मंजीत कुमार, उप महाप्रबंधक (EED), नवीनगर सुपर थर्मल पावर स्टेशन, एन0टी0पी0सी0, नवीनगर द्वारा HTS-I श्रेणी अन्तर्गत 1500 के0भी0ए0 का तीन विद्युत संबंध हेतु ऑनलाईन आवेदन किया गया है। उक्त आवेदित आवेदन का अनुरोध संख्या क्रमशः 523516977350, 523517029588 एवं 523517029803 है। उक्त विद्युत संबंध में आवेदक द्वारा अपने आंतरिक उर्जा (NSTPS, NTPC) का उपयोग किया जाएगा, जिसके कारण किसी भी विद्युत शक्ति उपकेन्द्र की क्षमता प्रभावित नहीं होगी।

अतः तकनीकी दृष्टिकोण से उक्त विद्युत संबंध प्रदान किया जा सकता है।

विश्वासभाजन

सहायक विद्युत अभियंता
एम0आर0टी0 अवर प्रमंडल—1, औरंगाबाद।

सहायक विद्युत् अभियंता
विद्युत आपूर्ति अवर प्रमण्डल, नवीनगर।

एनटीपीसी NTPC
A Maharatna Company

एनटीपीसी लिमिटेड
(भारत सरकार का उद्यम)
NTPC Limited
(A Govt. of India Enterprise)

नबीनगर एसटीपीएस / Nabinagar STPS

Ref. No: 0370/NSTPS/EE/11kV/Conn-3

Date: 20.09.2025

To,
Electrical Executive Engineer (Aurangabad Division)
South Bihar Power Distribution Co. Ltd
Aurangabad-824101, Bihar

Subject: Three Nos New service connection **HTS-1,1500kVA** for Construction power supply in NSTPS Nabinagar for stage-II
Ref: 2nd application No: 523516977350, 3rd application no: 523517029588 & 4th application no: 523517029803 for 11kV HTS-I,1500kVA connection total of **4500kVA** at NSTPS, Nabinagar

Dear sir,

NTPC Ltd has plan to expand of its capacity by adding **2400MW** (3*800MW) at Nabinagar Super Thermal Power Station (NSTPS),Nabinagar which contains three units of 800MW capacity in stage-II. For this Construction power is required for upcoming construction activities and as per guideline State Discom has the right to supply the Construction Power.

Considering the above, we have applied for HTS-I ,1500kVA connection through online, containing **2nd application No: 523516977350**, **3rd application no: 523517029588 & 4th application no: 523517029803** total of 3*1500kVA (4500kVA) through this letter for construction activities for Stage-II expansion.

Therefore, we request you to kindly guide us and provide feasibility report & estimate for further process.

Considering above, it is requested to kindly arrange all necessary procedure on urgent basis for timely completion of Stage-II activity.

Your kind intervention in this matter shall be highly solicited.

20/9/25

Thank you,

Regards,

20/9/25

DGM(EED)
NSTPS, Nabinagar

MANAJEET KUMAR
DGM (EED)
NSTPS, NTPC Limited

एन एच पी सी लिमिटेड
(भारत सरकार का एक नवरत्न उद्यम)
NHPC Limited
(A Government of India Navratna Enterprise)

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तीस्ता-VI जलविद्युत परियोजना
बालूटार,सिंगताम,गंगटोक, सिक्किम-737134
दूरभाष/Tel: 03592-247221
TEESTA-VI HE PROJECT
Balutar,Singtam, Gangtok, Sikkim-737134
Email: enm-teesta6@nhpc.nic.in

No. NH/TSVI/E&M/GM(E)/EM-VIII/2025/997

Date: 17.01.2026

Annexure 2.8.

To, Cheif Engineer, PSPA-II Division
Central Electricity Authority
Sewa Bhawan, Rama Krishna Puram,
Sector-1, New Delhi-110066.

विषय: In principle approval for shifting of Powergrid's 220 KV D/C Rangpo - New Melli and 132 KV Rangpo - Rangit & 132 KV Rangpo - Gangtok Circuit #2 facilitating corridor towards construction of 220KV D/C Teesta – VI - Rangpo Transmission Line.

संदर्भ: 1) CEA Letter no. CEA-PS-12-15/20/2018-PSPA-II Division dated 06.09.2021.

महोदय/ Sir,

This has reference to the CEA Letter no. CEA-PS-12-15/20/2018-PSPA-II Division, dated 06.09.2021 (copy attached) vide which prior approval has been obtained for construction of 220 KV D/C Transmission Line from Teesta-VI Power House to Rangpo Pooling Station of Powergrid (PGCIL) which is being developed by NHPC Ltd. MOU has been signed between NHPC and Powergrid for the construction of said 220KV D/C Transmission line.

Accordingly, construction of the 220KV D/C Teesta-VI to Rangpo Tansmission line is being executed by the Powergrid under consultancy project of NHPC. This Transmission line is crossing over the multi circuit towers at Location AP1/0 of 220 KV D/C Rangpo New Melli and 132 KV Rangpo Rangit & 132 KV Rangpo Gangtok Circuit #2.

Detailed survey has been carried out for the ongoing construction of Transmision Line, due to hilly terrain the adequate clearance for Power Line crossing is not available. Hence in order achieve the proper electrical clearance of Power Line crossing shifting of the following existing transmission lines of Powergrid are required to be done (as per attached scheme):-

- 132 KV Rangpo Rangit & 132 KV Rangpo Gangtok Circuit #2 needs to be shifted to the Tower no. AP 2/0 of newly constructed 220KV Teesta-VI Transmission Line from existing Location 18 to Location 20 via AP 2/0.

- Shifting of 220 KV D/C Rangpo New Melli Transmission Line from top cross arm to bottom cross arm at Location AP 1/0 of existing Transmission Line as mentioned above.

- 220 KV D/C Teesta-VI Rangpo Transmission Line will terminated at gantry from Location AP 2/0 via Top Cross Arm of existing tower Location AP 1/0.

17/01/26
GM(E)

एनएचपीसी लिमिटेड
(भारत सरकार का एक नवरत्न उद्यम)
NHPC Limited
(A Government of India Navratna Enterprise)

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तीस्ता-VIजलविद्युत परियोजना
बालूटार,सिंगताम,गंगटोक, सिक्किम-737134
दूरभाष/Tel: 03592-247221
TEESTA-VI HE PROJECT
Balutar,Singtam, Gangtok, Sikkim-737134
Email: enm-teesta6@nhpc.nic.in

- At gantry point, termination of 220 KV Rangpo New Melli Transmission Line will be shifted to bottom gantry and Teesta-VI will be terminated at Top Gantry.

- Layout scheme for shifting of Transmission Lines, gantry terminal arrangement are enclosed herewith.

Therefore it is requested to kindly provide the In-principle approval for shifting of 220 KV D/C Rangpo New Melli and 132 KV Rangpo Rangit & 132 KV Rangpo Gangtok Circuit #2.

Thanking you.

भवदीय,

प्रदीप्त 27/01/26

(प्रदीप्त कुमार दास)
महाप्रबंधक (वि.)

Encl:- as above

Copy to:-

1. कार्यपालक निदेशक, परियोजना प्रमुख, तीस्ता -VI जलविद्युत परियोजना के सादर सूचनार्थ।
2. मुख्य महाप्रबंधक प्रभारी , पावरग्रिड पूर्व क्षेत्र-II के सादर सूचनार्थ।

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
सचिव कार्यालय
Office of Secretary

सेवा में/ To

General Manager (E)-II,
Teesta-VI HE Project,
Lanco Teesta Hydro Power Limited,
Balutar, Singtam,
East Sikkim-737134.

विषय/ Subject: Prior approval of the Government of India under Section 68(1) of Electricity Act, 2003 for construction of transmission line from Power House of Teesta-VI H.E.P (500 MW) to Rangpo Pooling Station of PGCIL- Regarding.

Reference: Lanco Teesta Hydro Power Limited (LTHPL)'s letter no. LTHPL/Teesta-VI/GM (E)-II/EM-VII/CEA/2021/58 dated 25.08.2021

महोदय/ Sir,

1. This has reference to LTHPL's letter dated 25.08.2021 seeking prior approval of Government of India under section 68 of the Electricity Act, 2003 for 220 kV D/C line with Twin moose conductor from Teesta-VI HEP to Rangpo Pooling station by LTHPL.
2. CTU has granted Connectivity to M/s Lanco Teesta Hydro Power Limited (LTHPL), subsidiary of NHPC Limited through Teesta VI HEP – Rangpo (POWERGRID) 220kV D/c dedicated line with twin moose conductor (conductor temp. 85°C) along with associated line bays at both ends.
3. The connectivity of Teesta-VI was also informed by CTU in 4th meeting of ERPC(TP) held on 23.07.2021.
4. Considering the above, CEA conveys prior approval of Government under Section 68 of Electricity Act, 2003 to Lanco Teesta Hydro Power Limited (LTHPL), for implementation of Teesta VI HEP – Rangpo (POWERGRID) 220kV D/c line with twin moose conductor.

5. This approval is subject to compliance of:
   (a) The requirement of the relevant provisions of the Electricity Act, 2003, as amended from time to time and the rules and regulations framed thereunder and
   (b) CEA's (Measures relating to Safety and Electricity Supply) Regulations, 2010, framed under the Electricity Act, 2003.
6. The approval is also subject to the following conditions:
   (i) The implementing agency will commence construction of the project within three years, unless this term is extended by Central Electricity Authority.
   (ii) Central Electricity Authority may withdraw the approval before the expiry of the period of three years after giving a one-month notice.

भवदीय/Yours faithfully,

06/9/24

(वी. के. मिश्रा /V. K. Mishra)

सचिव /Secretary

Copy to (for information):

1. Director (Trans), MoP, Shram Shakti Bhawan, New Delhi

Name of Client : POWER GRID CORPORATION OF INDIA LIMITED

Name of Exececuting Agency : BAJAJ ELECTRICALS LIMITED

Name of line : Construction Of 220 KV D/C (Twin MOOSE) Transmission Line From 500MW Teesta VI to Rangpo Pooling station Transmission Line.

LOA No. : 5002001956/TOWER/DOM/A00-CC CS-1/NOA-II/ER-2/300010; Dt: 30/03/2022

CHECK SURVEY TOWER SCHEDULE FROM GANTRY TO AP-19/0

As Per Revised Detail Survey

Sl. No.	Loc. No.	Type of Tower	Level on the CP	Angle of Deviation	Span Length (m)	Section Length (m)	Sum of ADJ Span	UTM/UTM (45N) Easting	UTM/UTM (45N) Northing
0	Gantry	EXT	361.927	00°00'00"		0	78.91	645852	3009207.21
					78.51				
1	AP-1	MD+0 EXT	389.641	4°00'46"LT		78.91	208.38	645773.00	3009207.43
					139.47				
2	AP-2	MD+9	476.677	14°22'14"LT		218.36	370.41	645643.93	3009158.31
					230.94				
3	AP-3	DD+9	530.348	38°32'27"LT		429.32	340.07	646434.79	3009127.30
					110.13				
4	AP-4	DC+9	504.885	23°10'12"LT		546.45	224.06	646370.21	3009026.98
					114.93				
5	AP-5	DD+6	609.341	01°18'22"LT		660.38	271.03	646751.58	3008913.62
					170				
6	AP-5A	DD+0	643.301	00°00'00"		830.38	323.26	646328.89	3008757.26
					156.26				
7	AP-6	DD+6	678.792	58°29'16"RT		986.64	281.77	646305.16	3008690.71
					115.51				
8	AP-7	DD+9	717.78	19°59'43"LT		1102.15	182.18	646199.08	3008547.97
					66.67				
9	AP-8	DD+15	725.110	38°29'20"LT		1160.82	239.84	646149.46	3008500.44
					173.17				
10	AP-9	DD+6	777.243	16°33'27"LT		1341.99	344.56	646120.37	3008312.7
					171.49				
11	AP-9A	DD+0	850.829	42°07'24"LT		1513.48	300.04	646140.9	3008153.25
					129.09				
12	AP-10	DD+3	868.666	12°29'23"LT		1642.53	365.77	646247.84	3008082.63
					236.73				
13	AP-11	DB+3	877.086	14°43'04"RT		1879.25	381.41	646461.25	3007980.41
					144.59				
14	AP-12	DD+9	848.501	6°54'33"RT		2023.94	418.62	646271.31	3007886.72
					273.93				
15	AP-13	DC+9	797.757	29°18'06"LT		2297.87	509.57	646777.41	3007706.06
					235.640				
16	AP-13A	DD+9	817.967	35°13'43"LT		2534.31	480.85	646851.06	3007483.24
					246.210				
17	AP-14	DD+6	723.806	58°16'33"LT		2781.72	440.07	647088.41	3007338.094
					191.86				
18	AP-15	DD+6	629.284	17°11'51"RT		2973.58	371.1	647232.08	3007411.47
					179.24				
19	AP-16	DD+6	571.593	57°38'06"RT		3152.82	632.91	647408.17	3007447.96
					473.67				
20	AP-17	DC+9	610.778	28°25'41"RT		3626.49	290.92	647737.84	3007107.88
					117.25				
21	AP-19	[illegible]	652.150	32°19'54"LT		3743.74	317.48	647768.39	3006994.73

As per Check Survey(Rev-01)

Sl No	Loc. No.	Type of Tower	Angle of Deviation	Span in Mtrs Length	Span in Mtrs C.lative	Sum of Adjacent Span	Wind Span	U/P/C	Reduced Level	Level Difference	Inclined length Length	Inclined length C.lative	Weight Span in Mtrs. HOT (Tension in Kgs =3014.12) Left	HOT Right	HOT Total	COLD (Tension in Kgs =4291.83) Left	COLD Right	COLD Total	GPS CO-ORDINATES E	GPS CO-ORDINATES N	Crossing Details	Remarks
0	Gantry	EXT	00°00'00"		0	72.02	36.01	0.0	361.772		0	0	0.00	-704.41	-704.41	0.00	-1019.81	-1019.81	646852	3009205	Rangpo S/S	
				79.015						-39.36	80										Boundary Wall & 11KV line(H.T-7.54)	
1	AP-1/0	MD+0 EXT	3°48'05"LT		80	208.41	104.20	0.0	389.466			80	704.02	-1002.45	-309.42	1099.42	-1542.73	-443.30	646771	3009205	Dead End	Existing M/C Tower
				158.704						-39.06	162										Ex.132kv D/C Line	
2	AP-2/0	MD+9	13°50'54"LT		208	377.29	173.64	0.0	478.326			291	1221.24	-159.18	1062.06	1711.52	-272.94	1438.58	646643	3009106		Due to weight span violation X-arms strengthening Required
				218.453						-38.99	222											
3	AP-3/0	DD+9	38°16'07"LT		427	317.51	168.75	-1.0	531.272			512	377.67	-230.61	147.06	491.43	-313.56	177.87	646435	3009127		
				110.016						-22.96	121											
4	AP-4/0	DC+9	20°56'02"LT		536	210.90	115.45	0.0	553.329			634	549.62	-614.47	-264.84	472.78	-896.72	-426.44	646375	3009026		Due to weight span violation X-arms strengthening Required
				113.65						-20.64	120										Unmetaled Road	
5	AP-5/0	DD+6	4°7'24"LT		650	270.73	135.37	0.0	609.463			754	728.06	-207.09	521.24	1012.90	-237.07	[illegible]	646251	3008911		Due to weight span violation X-arms strengthening Required
				170.454						-29.77	160										LT Line(H.T-6.5)	
6	AP-5A/0	DD+0	0°53'41"LT		817	320.25	161.52	0.0	643.332			914	363.86	-274.03	89.83	434.85	-425.12	56.41	646327	3008758		Due to weight span violation X-arms strengthening Required
				156.391						-37.62	171										11KV Line(H.T-7.7)	
7	AP-6/0	DD+6	58°17'27"RT		982	279.82	130.92	0.0	678.431			1090	440.42	-491.86	-51.44	591.61	-724.35	-132.74	646304	3008691		
				115.442						-41.34	121										Lt Line(H.T-6.32)& Unmetal Road	
8	AP-7/0	DD+9	20°27'21"LT		1098	182.67	91.33	0.0	717.027			1171	600.39	-550.35	54.92	837.70	-796.27	41.52	646172	3008549		Due to weight span violation X-arms strengthening Required
				69.224						-39.42	74										Lt Line(H.T-6.51) & Unmetal Road	
9	AP-8/0	DD+15	37°44'54"LT		1166	242.39	121.19	0.0	754.15			1245	619.58	-173.68	445.90	807.40	-223.58	583.51	646148	3008501		
				173.162						-56.96	178										3 Nos Lt Line(H.T-9.58, 8.41, 8.0) & Ext 132kv D/C Line(H.T-19.0) Earth Wire (H.T-24.100) Nala, Unmetal Road & 11KV Line(H.T-7.68)	
10	AP-9/0	DD+6	18°32'42"LT		1339	344.58	172.29	0.0	771.414			1421	246.94	-506.92	-260.09	457.14	-708.08	-300.94	646119	3008320		
				171.421						-47.34	184										Unmetaled Road	
11	AP-9A/0	DD+0	42°37'16"LT		1510	300.51	150.26	0.0	830.108			1606	678.34	-182.22	496.12	935.51	-276.80	658.70	646143	3008151		Due to weight span violation X-arms strengthening Required
				129.046						-21.19	131											
12	AP-10/0	DD+3	12°58'31"LT		1639	365.80	182.90	0.0	888.538			1736	311.31	66.92	378.23	415.90	45.14	461.04	646246	3008080		
				236.704						8.09	237											
13	AP-11/0	DB+3	14°41'29"RT		1876	381.35	190.67	0.0	876.73			1973	169.77	306.03	475.80	191.56	415.08	596.54	646461	3007978		
				144.541						22.48	146										2 Nos Lt Line(H.T-5.6, 6.532)	
14	AP-12/0	DD+9	0°27'18"RT		2021	418.61	209.31	0.0	848.054			2119	-191.39	417.07	225.68	-260.44	535.77	275.33	646570	3007884		11 KV LINE SHIFTING REQUIRED DUE TO FOUNDATION WORK
				273.867						31.02	279										11 KV Line(H.T-7.91)& Unmetal road	
15	AP-13/0	DC+9	29°40'22"LT		2295	509.62	254.81	0.0	797.336			2398	-143.10	-11.33	-154.43	-251.80	-61.07	-327.87	646775	3007704		
				235.637						-20.24	237										11 KV Line (H.T-8.22)& Lt Line(H.T-6.79)	
16	AP-13A/0	DD+9	35°15'45"LT		2530	480.86	241.93	0.0	817.473			2634	246.99	713.08	960.07	301.73	962.69	1264.42	646851	3007481		Due to weight span violation X-arms strengthening Required
				246.200						97.19	267											
17	AP-14/0	DD+6	58°14'46"LT		2774	439.56	219.99	0.0	723.379			2901	-463.88	835.84	371.96	-714.49	1149.44	434.95	647061	3007336		Due to weight span violation X-arms strengthening Required
				191.783						94.35	214											
18	AP-15/0	DD+6	10°42'44"RT		2970	371.05	185.52	0.0	628.927			3114	-644.09	574.45	-69.64	-937.66	729.91	-177.74	647231	3007409		Due to weight span violation X-arms strengthening Required
				179.265						57.78	168											
19	AP-16/0	DD+6	57°38'49"RT		3150	652.86	326.48	0.0	571.145			3303	-395.18	103.13	-292.05	-630.65	46.47	-584.18	647407	3007443		
				473.593						-42.11	476										Nala	
20	AP-17/0	DC+9	38°54'24"RT		3623	590.95	295.47	0.0	610.250			3779	370.56	-588.32	-217.76	427.23	-862.50	-435.27	647735	3007106		Due to weight span violation X-arms strengthening Required
				117.236						-50.41	126											
21	AP-19/0	DD+18	32°10'33"LT		3741	317.48	158.74	0	651.991			3905	703.57	83.36	788.93	979.76	76.26	1056.01	647768	3006992		Due to weight span violation X-arms strengthening Required

BAJAJ ELECTRICALS LIMITED PT PROJECT SIKKIM

14/10/22

शिबु मरान्डी / Shibu Marandi
मुख्य प्रबंधक (टी एल) / Chief Manager (TL)
रंगपो उपकेन्द्र / Rangpo S/S

18/10/2022

POWERGRID / Rangpo GIS S/S

Name of Client : POWER GRID CORPORATION OF INDIA LIMITED

Name of Exeecuting Agency : **BAJAJ ELECTRICALS LIMITED**

Name of line : Construction Of 220 KV D/C (Twin MOOSE) Transmission Line From 500MW Teesta VI to Rangpo Pooling station Transmission Line

LOA No : 5002061966/TOWER/DOM/A00-CC CS-1/NOA-3/ER-2/300010; Dt4- 30/03/2022

CHECK SURVEY TOWER SCHEDULE FROM GANTRY TO AP-19/0

As Per Revised Detail Survey

SL. No	Loc. No.	Type of Tower	Level on the CP	Angle of Deviation	Span Length (m)	Section Length (m)	Sum of ADJ Span	UTM/UPG (45N) Easting	UTM/UPG (45N) Northing
					200.20				
22	AP-13	DD+18	681.608	+65°18'11.7		3043.97	200.25	647916.01	3005859.32

Aa per Check Survey(Rev-01)

Sl No	Loc. No.	Type of Tower	Angle of Deviation	Span in Mtrs Length	Span in Mtrs C.lative	Sum of Adjacent Span	Wind Span	C P D	Reduced Level	Level Difference	Inclined length Length	Inclined length C.lative	Weight Span in Mtrs. HOT (Tension in Kgs =2014.12) Left	HOT Right	HOT Total	COLD (Tension in Kgs =4291.83) Left	COLD Right	COLD Total	GPS CO-ORDINATES X	GPS CO-ORDINATES Y	Crossing Details	Remarks
				200.22						-32.1	200										66 KV LINE (Earth Wire HT-6.107) LT LINE(LT-5.68), 38KM URBCTAL ROAD	
22	AP-19/0	DD+18	36°24'37.17		2041	200.22	100.11	0	650.121			4106	116.66	0.00	116.66	125.96	0.00	125.96	647914	3005857		

SL. NO	TYPE OF TOWER	EXTENTION +0	+3	+6	+9	+18	+25	TOTAL
	TOWER ABSTRUCT AS PER FIRST APPROVED DETAILSURVEY							
1	DD	0	0	1	0	0	0	1
2	DDS	0	0	0	0	0	0	0
3	DC	1	0	1	0	0	0	2
4	DCS	0	0	0	0	0	0	0
5	DD	1	0	3	3	2	0	11
6	DDS	0	1	2	0	1	0	4
5	MD	0	0	0	0	0	0	0
6	MDS	0	0	0	1	0	0	1
GRAND TOTAL								19

TOWER ABSTRUCT AS PER REVISED DETAILSURVEY

SL. NO	TYPE OF TOWER	EXTENTION +0	+3	+6	+9	+18	+25	TOTAL
1	DD	0	2	0	1	0	0	3
2	DBS	1	0	2	0	0	0	3
3	DC	0	0	0	1	0	0	1
4	DCS	0	0	0	3	0	0	3
5	DD	0	0	3	1	2	0	6
4.	DDS	1	0	1	1	1	0	4
5	MD	0	0	0	0	0	0	0
6	MDS	0	0	0	1	0	0	1
GRAND TOTAL								21

TOWER ABSTRUCT AS PER CHECK SURVEY(Rev-01)

SL. NO	TYPE OF TOWER	EXTENTION +0	+3	+6	+9	+18	+25	TOTAL
1	DB	0	2	0	1	0	0	3
2	DBS	1	0	2	0	0	0	3
3	DC	0	0	0	1	0	0	1
4	DCS	0	0	0	3	0	0	3
5	DD	0	0	3	1	2	0	6
4	DDS	1	0	1	1	1	0	4
5	MD	0	0	0	0	0	0	0
6	MDS	0	0	0	1	0	0	1
GRAND TOTAL								21

BAJAJ ELECTRICALS LIMITED			POWER GRID CORPORATION OF INDIA LIMITED		
SURVEYED & PREPARED BY	CHECKED BY	SUBMITTED BY	CHECKED BY	RECOMMENDED BY	APPROVED BY

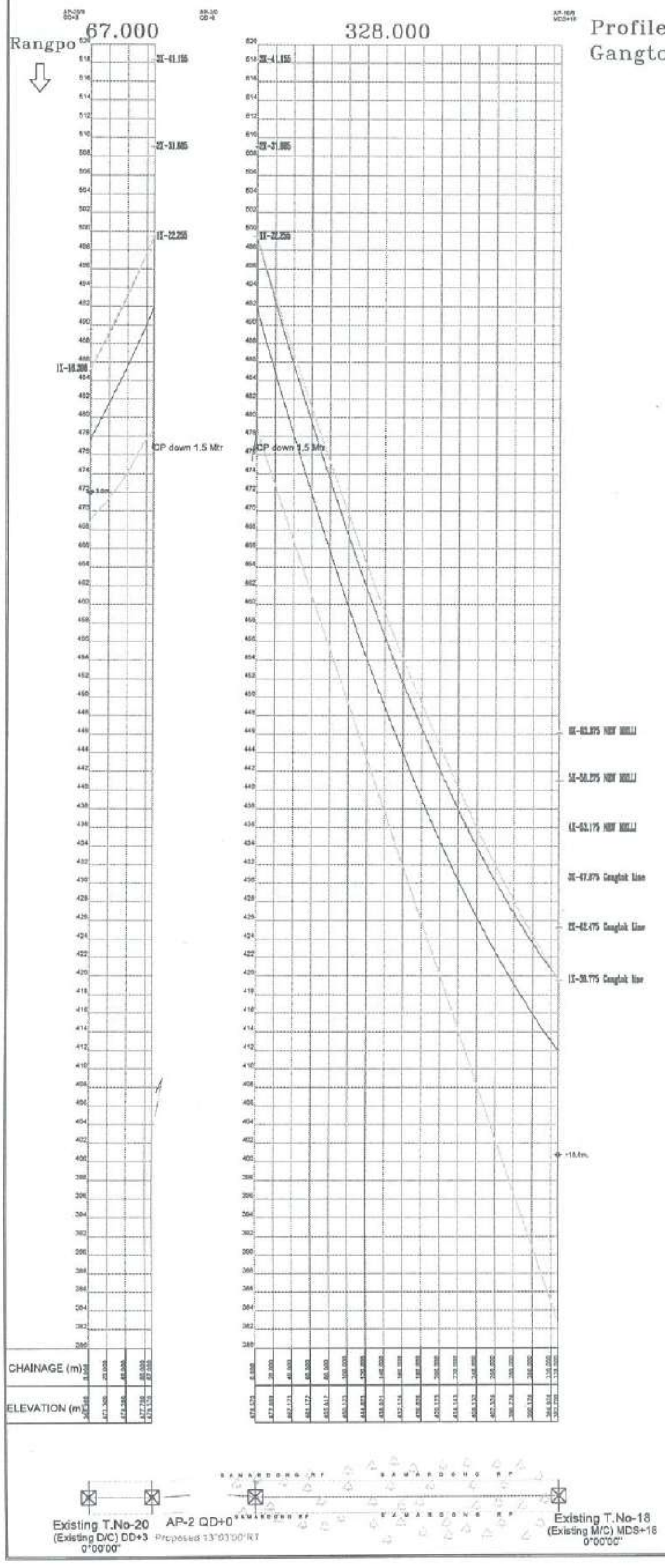
Stamp: BAJAJ ELECTRICALS LIMITED, PROJECT, SIKKIM

Signatures: Adarsh Mondal; 11/10/22; 18/10/2022

शिबु मारान्डी / Shibu Marandi
मुख्य प्रबंधक (टी एल) / Chief Manager (TL)
रंगपो उपकेन्द्र / Rangpo S/S

एन. के. बिस्वास / N. K. Biswas
POWERGRID
रंगपो जी.आइ.एस उपकेन्द्र / Rangpo GIS S/S

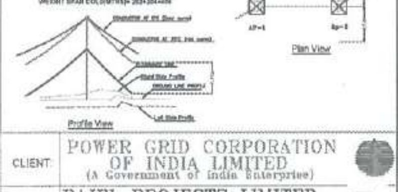
Profile for existing 132 KV D/C Rangpo to Gangtok TL Between AP18/0 to AP 20/0



WIRES PROPERTIES

	CONDUCTOR	GROUND WIRE
NAME	ACSR MOOSE	[illegible]
COPPER EQUIVALENT (mm²)	-	-
STRANDS IN ALUMINIUM (No./mm)	-	-
STRANDS IN STEEL (No./mm)	-	-
DIAMETER (mm)	31.77	[illegible]
SECTIONAL AREA (mm²)	[illegible]	[illegible]
UNIT WEIGHT (Kg/m)	[illegible]	[illegible]
MODULUS OF ELASTICITY (Kg/mm²)	[illegible]	[illegible]
COEFF. OF LINEAR EXPANSION (/Deg)	[illegible]	[illegible]
ULTIMATE STRENGTH (KG)	[illegible]	[illegible]

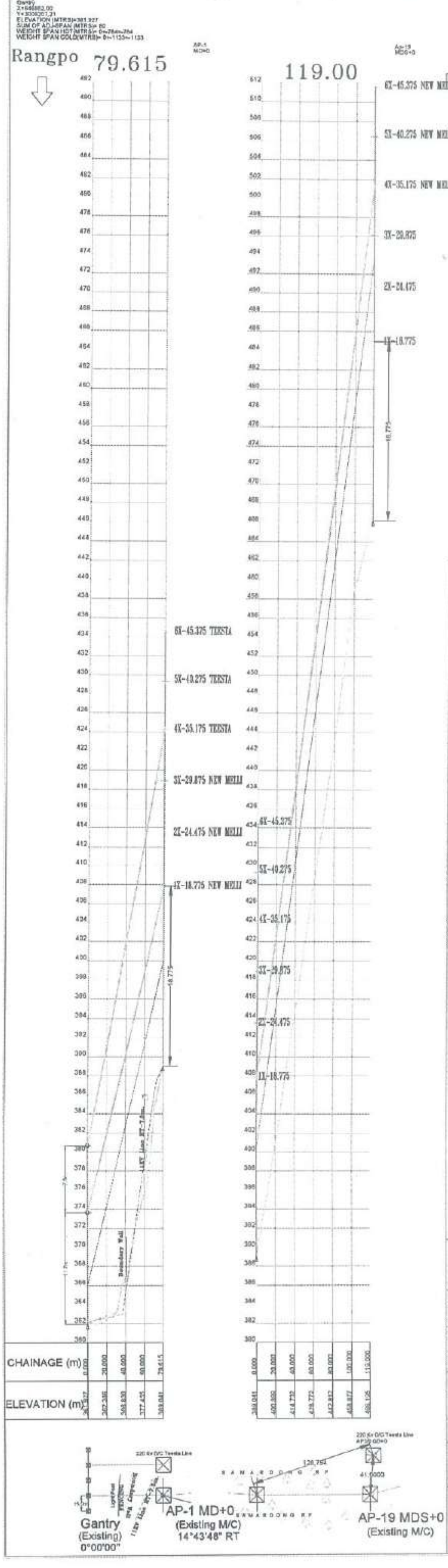
NOTE:
1. ALL DIMENSIONS ARE IN M.
2. ELECTRICAL CLEARENCE FOR RAILWAY CROSSING



CLIENT	POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)
[illegible] BY	BAJEL PROJECTS LIMITED RANGPO, SIKKIM-737132
PROJECT TITLE	[illegible]
DRAWING TITLE	Detail Survey Profile and Tower Spotting Drawing Section: 18/0 to AP-20/0 Existing 132 Kv D/C Rangpo to Gangtok Transmission Line
ORDER NO	LoA vide ref. No.-ER-II/Kol/CS4-2345/P-2404/1886 dated 01.07.2020.

SUBMITTED BY	DRAWN BY	CHECKED BY	SCALE VER- 1:000 HOR- 1:5,000 / DATE: 07-09-202[illegible]
CHECKED BY	RECOMMENDED BY	APPROVED BY	DRAWING NO / SHEET 1/1 / REV 00

Profile for existing 220 KV D/C Rangpo to New Melli TL Between Rangpo Gantry to AP 19/0

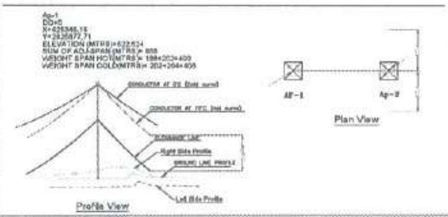


WIRES PROPERTIES

	CONDUCTOR	GROUND WIRE
NAME	ACSR MOOSE	[illegible]
COPPER EQUIVALENT (cm²)	-	-
STRANDS IN ALUMINIUM (No./m)	-	-
STRANDS IN STEEL (No./m)	-	-
DIAMETER (mm)	31.77	13.4
SECTIONAL AREA (mm²)	597	97.34
UNIT WEIGHT (Kg/m)	2.004	0.72
MODULUS OF ELASTICITY (Kg/mm²)	7036	19686
COEFF. OF LINEAR EXPANSION (/Deg)	0.0000193	0.0000115
ULTIMATE STRENGTH (Kg)	16438	6010

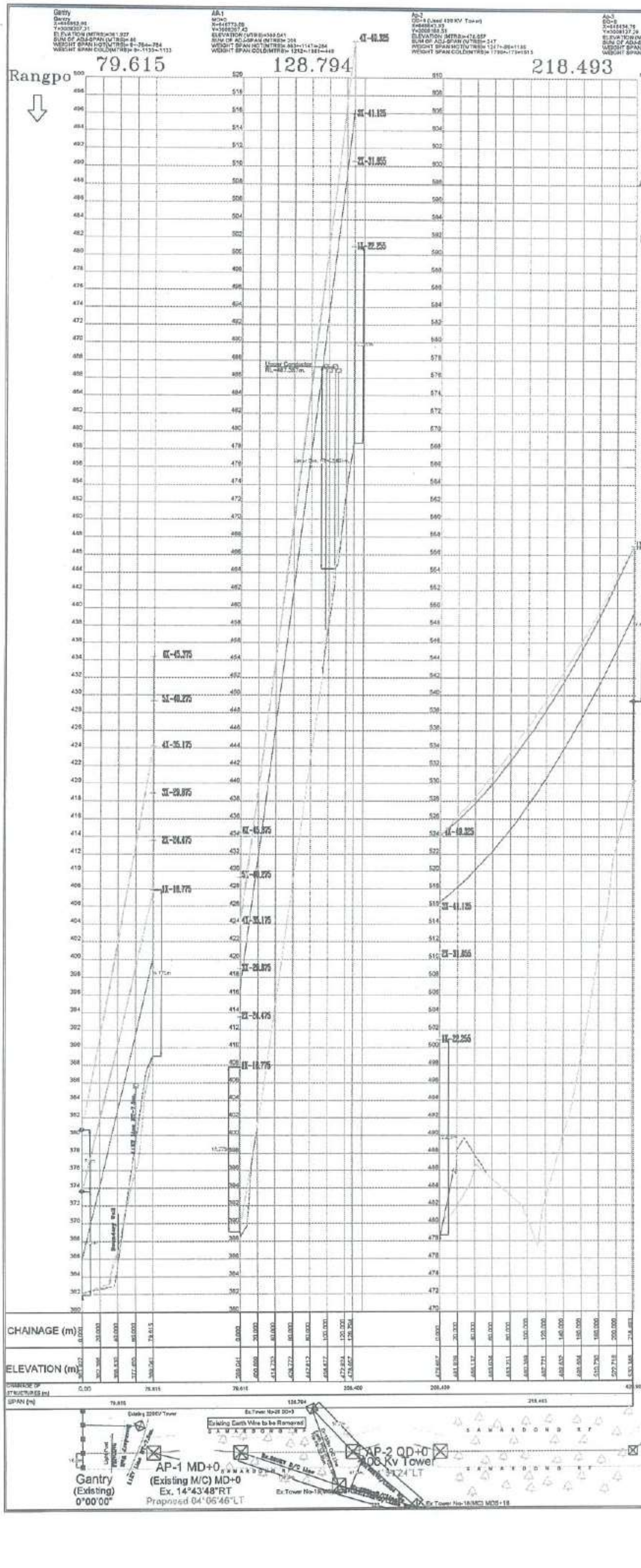
NOTE:

1. ALL DIMENSIONS ARE IN M.
2. ELECTRICAL CLARENCE FOR RAILWAY CROSSING
   - i) Prior approval of Railway Authority is to be obtained.
   - ii) Minimum clearance between lowest point of 220KV Line conductor & above rail level shall be as per following. Vertical Clearance for OHE other than high rise OHE: 16.48m. Vertical Clearance for high rise OHE*: 14.534m
   - * Applicable only for electrification of routes where double stack container having maximum height of [illegible]mm is plying.
   - iii) For electrified railways or railway proposed to be electrified, the clearance between the highest traction conductor & the crossing 220KV conductor shall not be less than 4.58m under max. sag condition.
   - iv) The crossing span shall be limited to 300 m or 80% of the normal span for which structure are designed, whichever is less.
   - v) The crossing shall normally be at right angle to the railway track.
   - vi) Crossing should be done with DD type tower. However, approval of railway crossing from railway authority has to be obtained in each case.
   - vii) The minimum horizontal distance measured at right angles from the center of nearest track to any part of a structure (all structures shall be rigid and well founded) carrying electrical conductors crossing a railways shall be equal to the height of the structure in meters above normal ground level plus 6 meters.
   - viii) No crossing shall be located over a booster transformer, traction switching station, traction sub station, overlap section or a track cabin location in an electrified area.
   - ix) Notwithstanding the above, Minimum clearance for railway crossings shall be as per Indian Railways Schedule of Dimensions (SD) Revised 2004 as amended from time to time.
3. MINIMUM CLEARANCE FOR POWER LINE CROSSING EACH OTHER
   - i) FOR 66KV : 4580MM
   - ii) FOR 132KV : 4580MM
   - iii) FOR 220KV : 4580MM
   - iv) FOR 400KV : 5490MM
   - v) FOR 765KV : 7940MM
   - [illegible] Power line crossing for all should be done only with DD with dead type of towers.
4. TELECOMMUNICATION LINE CROSSING
   The angle of crossing shall be as near to 90 deg as possible. However deviation to the extent of 30 deg may be permitted under exceptionally difficult situation. For a crossing angle below 60 deg. matter shall be referred to authorities. In the crossing span, power line support will be as near the telecommunication line as possible, to obtain increased vertical clearance between the wire.
5. The number of consecutive spans between the section points shall not exceed 15 spans or 5 KM in plain terrain and 10 spans or 3 km in hilly terrain. A section point shall comprise of tension point with DB/B or DC/C or DD/D type towers as applicable.
6. Minimum ground clearance required =7.47[illegible]mm (150mm is the allowance for stringing error).
7. For all National Highways crossing, tension tower DD shall be used and the crossing span is not to exceed 250 meter.
8. Way leave clearance : 18.0M either side from the CL of the tower.
9. Maximum span of adjacent spans for various angle of deviation are subject to the condition that minimum specified Live metal clearance & minimum ground clearance are available.
10. Maximum Deviation of line for Dead end tower (up to +6m LE) shall be 15 deg both side i.e. line side & sub station side (slack span side).



CLIENT:	POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)
SURVEYED BY:	BAJEL PROJECTS LIMITED RANGPO, SIKKIM-737132
PROJECT TITLE:	Construction Of 220 KV D/C (Twin MOOSE) Transmission Line From 500MW Teesta VI to Rangpo Pooling station Transmission Line.
DRAWING TITLE:	Detail Survey Profile and Tower Spotting Drawing Section: Rangpo Gantry to AP-19/0 Existing 220 Kv D/C Rangpo to New Melli Transmission Line
ORDER NO:	

SUBMITTED BY	DRAWN BY	CHECKED BY	SCALE VER- 1:200 HOR- 1:2,000 DATE: 09-01-2016
CHECKED BY	RECOMMENDED BY	APPROVED BY	DRAWING NO. SHEET / REV

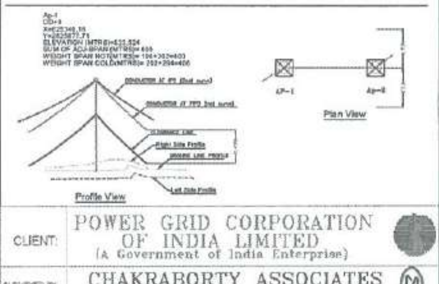


Revised Profile AS PER 400 KV QD TYPE TOWER

WIRES PROPERTIES

	CONDUCTOR	GROUND WIRE
NAME	ACSR MOOSE	[illegible]
COPPER EQUIVALENT (cm²)	-	-
STRANDS IN ALUMINIUM (No./mm)	-	-
STRANDS IN STEEL (No./mm)	-	-
DIAMETER (mm)	31.77	13.4
SECTIONAL AREA (mm²)	597	95.34
UNIT WEIGHT (Kg/m)	2.004	0.62
MODULUS OF ELASTICITY (Kg/mm²)	7034	12653
COEFF. OF LINEAR EXPANSION (/Deg)	0.0000193	0.0000115
ULTIMATE STRENGTH (Kg)	16438	9010

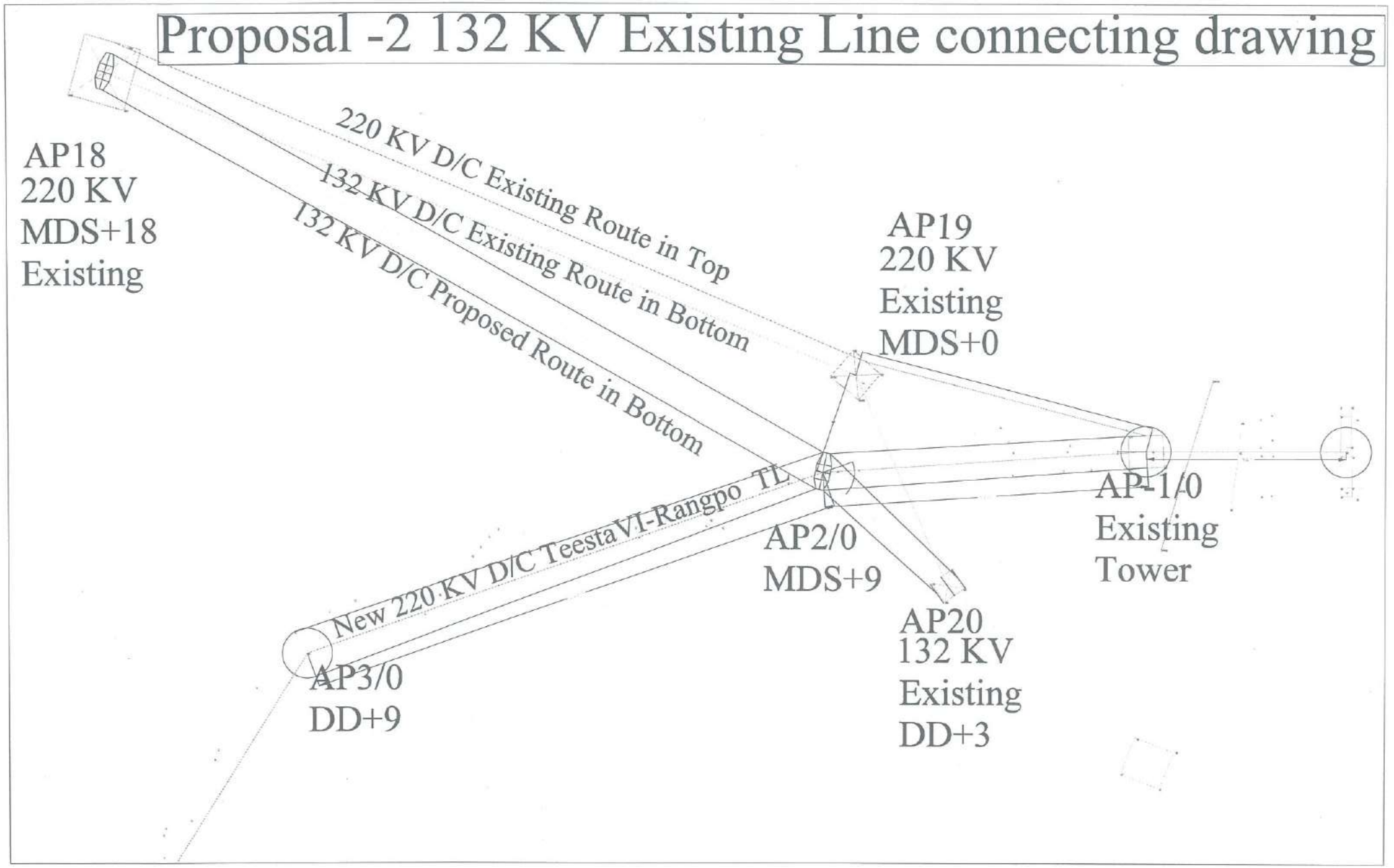
NOTE:
1. ALL DIMENSIONS ARE IN M.
2. ELECTRICAL CLARENCE FOR RAILWAY CROSSING
i) Prior approval of Railway Authority is to be obtained
ii) Minimum clearance between lowest point of 220KV Line conductor & above rail level shall be as per following
Vertical Clearance for OHE other than high rise OHE: 16.46m
Vertical Clearance for high rise OHE*: 14.524m



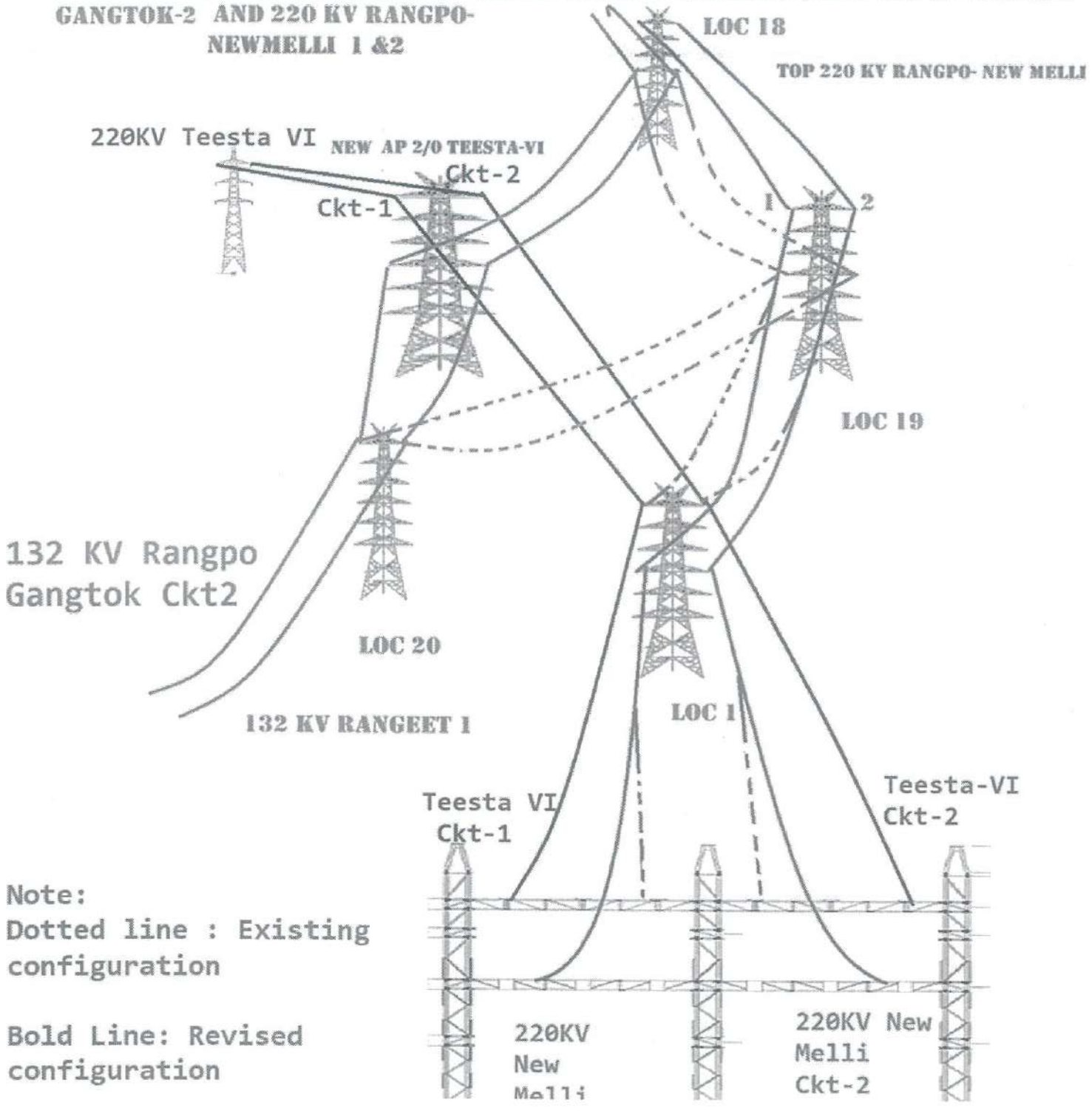
CLIENT:	POWER GRID CORPORATION OF INDIA LIMITED (A Government of India Enterprise)
SURVEYED BY	CHAKRABORTY ASSOCIATES THAKURPUKUR, KOLKATA-700063
PROJECT TITLE	Conduct survey for the transmission line from Teesta VI to Rangpo D/C SS. The scope includes route alignment and detail survey for the most techno-economical route as per POWERGRID TS
DRAWING TITLE	Detail Survey Profile and Tower Spotting Drawing Section: Rangpo Gantry to Ap-3
ORDER NO	LoA vide ref. No.-ER-II/Kol/CS/I-2345/P-2404/1886 dated 01.07.2020.

SUBMITTED BY	DRAWN BY	CHECKED BY	SCALE VER- 1:200 HOR- 1:2,000
			DATE: 07-09-2021
CHECKED BY	RECOMMENDED BY	APPROVED BY	DRAWING NO
			SHEET 1/1 REV 03

Proposal -2 132 KV Existing Line connecting drawing

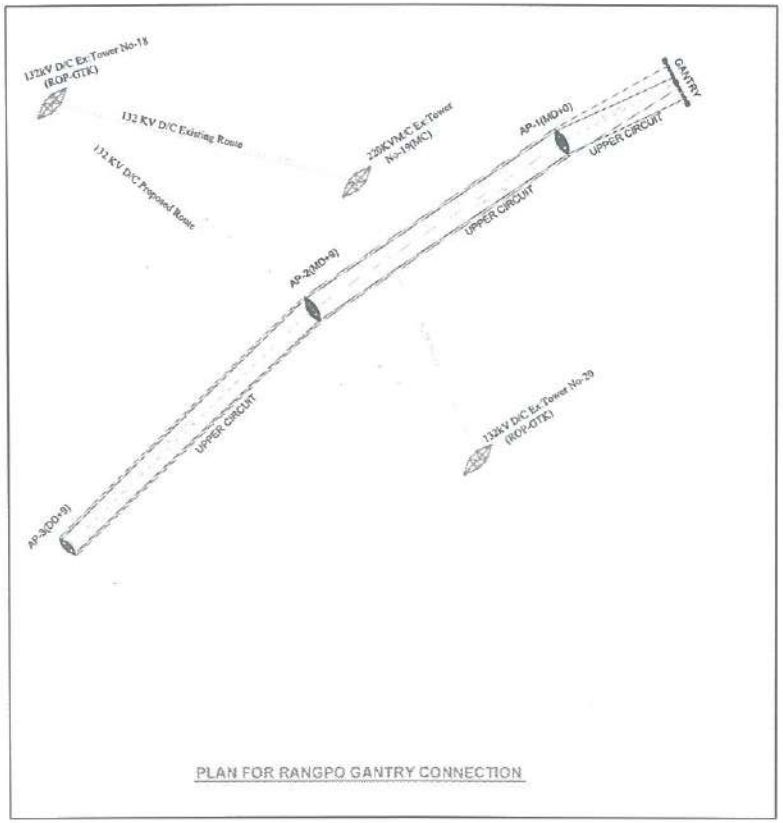


ARRANGEMENT OF DIVERSION OF 132 KV RANGPO RANGEET-1 AND 132 KV RANGPO GANGTOK-2 AND 220 KV RANGPO-NEWMELLI 1 &2

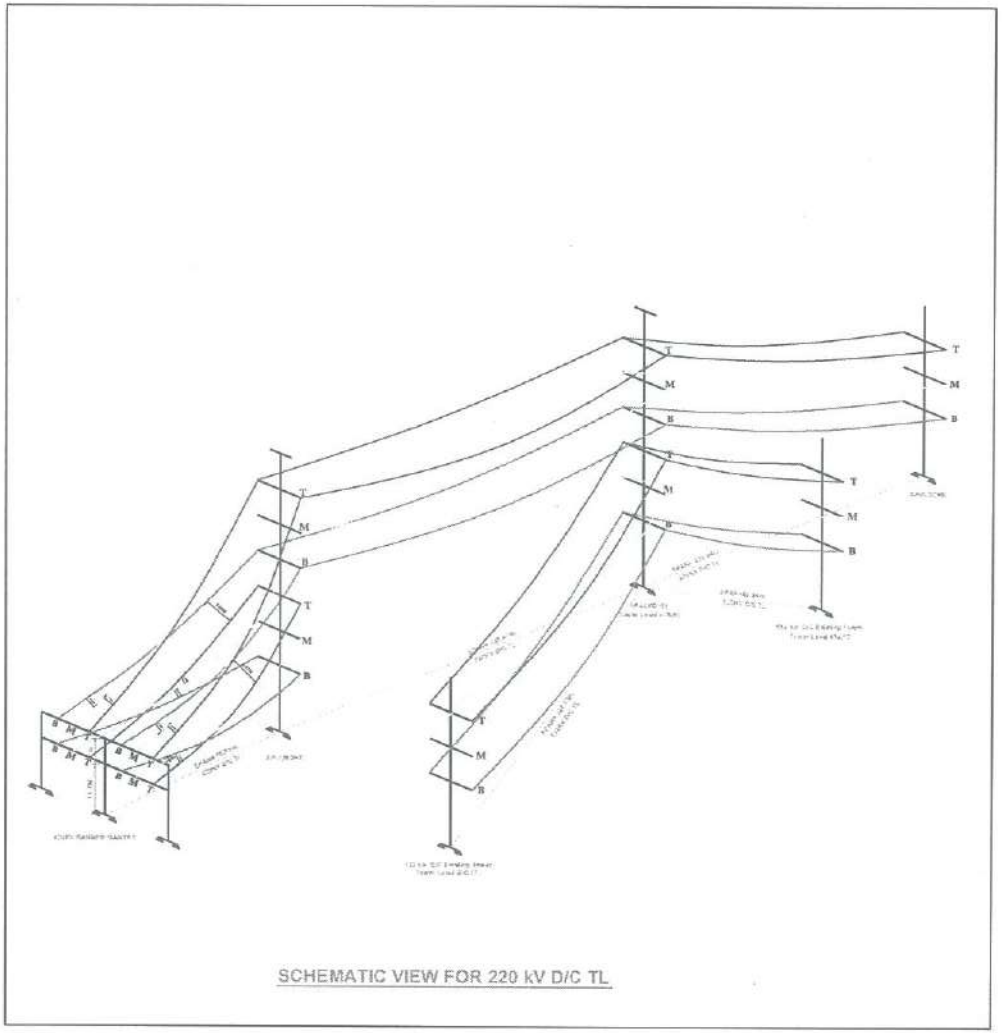


Note:
Dotted line : Existing configuration

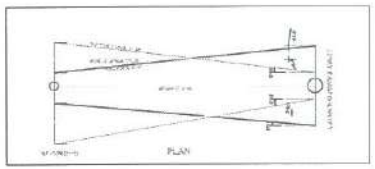
Bold Line: Revised configuration



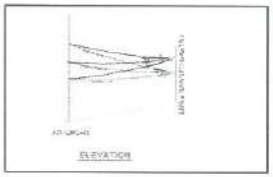
PLAN FOR RANGPO GANTRY CONNECTION



SCHEMATIC VIEW FOR 220 kV D/C TL



PLAN



ELEVATION

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE STATED.
2. PHASE CLEARANCE IS MEASURED BASED ON THE BOTTOM,MIDDLE CONDUCTOR TOP CONDUCTOR BEING CONSIDERED IN HOT CONDITION

REV	DATE	DESCRIPTION
0	29.05.2023	ISSUE FOR APPROVAL

CONTRACTOR	BAJAJ ELECTRICALS LIMITED
CLIENT	POWER GRID CORPORATION OF INDIA LIMITED
PROJECT	Conduct survey for the transmission line from Teesta VI to Rangpo GIS SS. The scope includes route alignment and detail survey for the most techno-economical route as per POWERGRID TS
TITLE	GANTRY CONNECTION ARRANGMENT DRAWING FOR 220KV D/C TL FROM RANGPO GANTRY TO AP-3

DRAWN	AK	DATE	29.05.2023
DESIGN	AK	SIZE	A2
CHECKED	RS	SHEET No.	1 OF 1
		REVISION	0