सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में)
(भारत सरकार का उद्यम)
CENTRAL TRANSMISSION UTILITY OF INDIA LTD.
(A wholly owned subsidiary of Power Grid Corporation of India Limited)
(A Government of India Enterprise)

संदर्भ/Ref: CTU/E/00/54thCMETS-ER

दिनांक/Date: 15-04-2026

वितरण सूची के अनुसार/ As per distribution list

विषय/Subject: पूर्वी क्षेत्र में पारेषण योजनाओं के विकास के लिए 54वीं परामर्श बैठक की कार्यावली (सीएमईटीएस-ईआर) / Agenda for 54th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER)

महोदय /महोदया /Sir /Ma'am,

आईएसटीएस योजना और ओपन एक्सेस आवेदन प्रसंस्करण के लिए पूर्वी क्षेत्र में पारेषण योजनाओं के विकास के लिए **54वीं** परामर्श बैठक (सीएमईटीएस-ईआर) वीडियो कॉन्फ्रेंसिंग के माध्यम से नीचे दिए गए विवरण के अनुसार आयोजित होने वाली है:

The **54th** Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) for ISTS planning and open access applications processing is scheduled to be held through video conferencing as per details below:

विषय/Topic	: 54th CMETS-ER
दिनांक/Date & समय/Time	: 27th April 2026 at 11:00 am
दिन/Day	: सोमवार/ Monday
बैठक लिंक/ Meeting Link	: MS-Teams (in email)

इस संबंध में बैठक की कार्यावली अलग से प्रसारित की जाएगी, जो सीटीयू वेबसाइट (*www.ctuil.in >> ISTS Planning & Coordination >> Consultation Meetings for ISTS >> ER*) पर भी उपलब्ध होगी। कृपया उपरोक्त लिंक के माध्यम से बैठक में शामिल होने और रिटर्न मेल के माध्यम से इस संबंध में भागीदार होने की पुष्टि करें।

In this regard, the agenda of the meeting shall be circulated separately and the same will also be available on CTU website (*www.ctuil.in >> ISTS Planning & Coordination >> Consultation Meetings for ISTS >> ER*). It is requested to join the meeting through the above link and send confirmation of participation in this regard through return mail.

धन्यवाद/Thanking you,

भवदीय / Yours faithfully,

राजेश कुमार

(राजेश कुमार) / (Rajesh Kumar)
वरिष्ठ महाप्रबंधक (टीपी-I)/ Sr. General Manager (TP-I)

A. वितरण सूची के अनुसार/ Distribution List:

1. **Chief Engineer, PSP&A-II** Central Electricity Authority Sewa Bhawan, R.K.Puram New Delhi-110066	2. **Member Secretary** Eastern Regional Power Committee 14, Golf Club Road, Tollygunge Kolkata-700033
3. **Director (SO)** Grid Controller of India Limited 9th Floor, IFCI Towers, 61, Nehru Place, New Delhi-110016	4. **Executive Director** Eastern Regional Load Despatch Centre 14, Golf Club Road, Jubilee Park, Golf Gardens, Tollygunge, Kolkata, West Bengal - 700095
5. **CMD** Bihar State Power Transmission Company Ltd. (BSPTCL) Vidyut Bhavan, 4th floor, Bailey Road Patna - 800021	6. **Principal Chief Engineer cum Secretary** Power Department Government of Sikkim Gangtok, Sikkim
7. **CMD** Jharkhand Urja Sancharan Nigam Limited (JUSNL) Engineering Building, HEC, Dhurwa Ranchi -834004	8. **Managing Director** West Bengal State Electricity Transmission Company Ltd. (WBSETCL) Vidyut Bhavan, 8th Floor, A-Block Salt Lake City, Kolkata-700091
9. **CMD** Odisha Power Transmission Corporation Ltd. Bhoinagar Post Office, Jan path Bhubaneshwar-751022	10. **CMD** Damodar Valley Corporation DVC Towers, VIP Road Kolkata-700054

B. विशेष आमंत्रित /Special invitee:

1. **Director (Projects)** Power Grid Corporation of India Ltd. "Saudamini", Plot No. 2, Sec-29, Gurugram, Haryana-122001	

C. आवेदक /Applicants:

1. **Sh. Sanjay Nagrare** Director Ocior Energy Gopalpur One Private Limited 26/36, Basement, East Patel Nagar, New Delhi, 110008 sanjay.nagrare@ocior.in Abhishek.gupta@ocior.in	2. **Sh. Rajesh Sodhi** Head Secretarial ACME Cleantech Solutions Private Limited Plot No. 152, Sector-44, Gurugram, Haryana 122002, India rajesh.sodhi@acme.in yogesh@acme.in
3. **Sh. Kura Ravi Kumar** Addl General Manager Project Engineering Electrical NTPC Ltd. NTPC Bhawan Kavadiguda Road, Musheerabad, Bansilalpet, Hyderabad, Secunderabad, Telangana 500080 kuraravikumar@ntpc.co.in abhishekkhanna@ntpc.co.in	4. **Sh. Rakesh** Senior Manager, Commercial Patratu Vidyut Utpadan Nigam Limited PVUNL, Patratu Jharkhand rakeshkumar07@ntpc.co.in halderprasenjit@ntpc.co.in

Agenda for 54th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER)

1. Confirmation of minutes of the 53rd CMETS-ER

1.1. The minutes of the 53rd CMETS-ER held on 27-03-2026 were issued vide letter dated 13-04-2026. As no comment has been received, the minutes may be confirmed as circulated.

A. Connectivity and GNA application(s) related matters in ER.

The following applications for grant of Connectivity/GNA/GNA$_{RE}$ have been received in the month of March 2026 in Eastern Region:

2. GNA applications under GNA Regulations, 2022

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA	End date of GNA
1	2200003400 (Revised)	Patratu Vidyut Utpadan Nigam Limited (PVUNL)	Injecting entity connected to Intra State	27-02-2026	400 kV level at Katia, Patratu (JUSNL) S/s	360 (Within: 120 Outside:240)	01-03-2026	01-03-2051

- Applicant i.e. PVUNL [as an eligible entity under Regulation 17.1 (vi)] has applied for GNA as an injecting entity connected to Intra State transmission system for 360MW (Within Region: 120MW & Outside Region: 240MW) with start and end date as 01-03-2026 and 01-03-2051 respectively in Jharkhand.
- Applicant has submitted No Objection Certificate (NOC) dated 20-06-2025 of Jharkhand STU viz. JUSNL for 360MW (15% of 2400MW i.e. 3x800MW) with **Start date of NOC**: Date of COD of first unit and **End date of NOC**: 25 years from the COD of last unit. Further, applicant has mentioned the date of start of commercial operation of Unit#1 of Patratu STPP Phase-1 (3x800MW) as 05-11-2025. Furthermore, vide email dated 07-04-2026 regarding Units#2 & 3 (including last unit), it has been mentioned by the applicant that the said units are yet to be commissioned. Thus, 25 years from last unit shall be falling after 01-03-2051. Therefore, end date shall be considered at 01-03-2051. **JUSNL may confirm the details of NoC.**
- Present GNA granted to JUSNL is 1590MW. As per Grid-India's latest report, the TTC for 01-07-2026 is 2089MW and the ATC is 2043MW. Moreover, the instant application is for injection into ISTS from STU network. Thus, from the present granted GNA to JUSNL and ATC limits, it is observed that sufficient margin is available in ISTS-STU (JUSNL) periphery for the exchange of 360MW GNA from Jharkhand to ISTS network.

- PVUNL is connected to Ranchi (New) 400kV through PVUNL – Katia – Ranchi (New) 400kV line. Ranchi (New) is connected to ISTS grid through various 400kV & 765kV high capacity lines. No constraints are envisaged in ISTS-STU periphery and inter-regional corridors for exchange of 360MW from Jharkhand to ISTS network.
- The start date of GNA is mentioned as 01-03-2026 in the application, which has already passed. Accordingly, considering Regulation 22.2 (b-ii) and taking into account the Clause 5 (ix) (f) of the extant Procedure, the start date shall be 30 days from date of issuance of final intimation.

  5 (ix) (f) Date from which the Connectivity is sought Applicant shall only submit a singular date as the start date of Connectivity and such date shall be subsequent to the date of the application; Provided that the start date submitted in the application shall not by itself entitle the applicant for grant of Connectivity from such a date; Provided further that in case the start date sought by the entity has passed at the time of grant of connectivity and connectivity is proposed to be granted with existing transmission system, CTU shall grant connectivity with a start date of 30 days from date of issuance of final intimation. The Connectivity grantee shall be obligated to complete post-grant compliances including signing of Cat-1 Agreement at least 7 days prior to the start date stipulated by CTU in the final intimation.
- Applicant is required to furnish applicable Conn-BGs at the earliest and thereafter upon issuance of final grant, sign Connectivity Agreement Cat-1 as per timeline stipulated above along with furnishing one-time GNA charges.
- As per Regulation 22.2 (b-ii) read with Regulation 8, the applicant shall be liable to submit Conn-BG1 of ₹ 50 Lakh and Conn-BG3 at ₹ 2 Lakh/MW. Further, as per Regulation 22.2 (d), the applicant shall also be liable to furnish one-time GNA charge of ₹ 1 Lakh/MW for the quantum of GNA one month prior to the start date of GNA.
- In view of the above, it is proposed to grant 360MW GNA (Within Region: 120MW & Outside Region: 240MW) to PVUNL as an injecting entity connected to intra state system through existing ISTS (no augmentation required).
- Matter may be deliberated.

3. Connectivity applications under GNA Regulations, 2022

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Connectivity sought from
1	2200003012 (Revised Application)	NTPC Limited	Generating station(s), including REGS(s), without ESS	09-01-2026	Darlipalli Stage-I generation switchyard	400	31-07-2029

- Applicant i.e. NTPC Limited [as an eligible entity under Regulation 4.1] has applied for ISTS connectivity as Generating station(s), including REGS(s), without ESS for 400MW with start date as 31-07-2029 for its NTPC Darlipalli STPP Stage-II (1x800MW) generation project in Odisha. NTPC has also informed that the commissioning schedule of the plant is 30-11-2029. The Stage-II is proposed as dual connected unit (ISTS as well as intra-state).
- Presently, the total GNA of Darlipalli Stage-I generation project (2x800MW) is 1600MW [1498MW deemed GNA under 18.1 and 102MW under Regulation 37.6(1)]. NTPC has requested that Darlipalli STPP Stage-II project may be connected with existing Stage-I switchyard for ISTS Connectivity. Darlipalli Stage-I is connected to ISTS through Darlipalli – Sundargarh (POWERGRID) 765kV D/c line.
- NTPC with instant application has sought 400MW ISTS connectivity and has mentioned that for other 400MW Intra-state (OPTCL) connectivity has already been applied by NTPC Ltd. to OPTCL.
- OPTCL vide email dated 20-03-2026 has informed that the evacuation of the intra-state share is proposed through the 765kV Darlipalli – Kolabira transmission corridor and the same shall be implemented by OPTCL. Further evacuation system comprises of 765/400kV Kolabira (OPTCL) S/s, 765/400kV Duburi S/s along with Sundargarh-B (POWERGRID) – Kolabira 765kV D/c line and Kolabira – Duburi 765kV D/c line to be implemented under Intra-State scheme of OPTCL with expected commissioning schedule of 2029-30.
- Regulation 5.6 of GNA Regulations inter alia provide that "*An Applicant may apply for grant of Connectivity at (i) a terminal bay of an ISTS sub-station already allocated to another entity which has been intimated in-principle or final grant of Connectivity under Regulation 4 of these regulations or (ii) switchyard of a generating station having Connectivity to ISTS [application under Regulation 4.1 (e)], or (iii) a terminal bay of an ISTS sub-station already allocated to an entity covered under Regulation 17.1(iii) of these regulations, with an agreement duly signed between the Applicant and the said entity for sharing the terminal bay, switchyard, and dedicated transmission lines, as the case may be*…"
- ISTS Connectivity at switchyard of a generating station having Connectivity to ISTS is applicable to application under Regulation 4.1 (e) viz. *"REGS or standalone ESS with an installed capacity of 5 MW and above applying for grant of Connectivity to ISTS through the electrical system of a generating station already having Connectivity to ISTS"*. In the instant case, applicant has requested Connectivity of Stage-II at its Stage-I generation switchyard. Accordingly, the matter regarding Connectivity of Stage-II to Stage-I needs review. Moreover Stage-II is planned as dual connected whereas Stage-I is ISTS connected, accordingly, connection of both phases shall also result in connection of Stage-I to intra-state system.
- In the 53rd CMETS-ER, NTPC mentioned that with coming into effect of 3rd amendment of GNA Regulations, above change has occurred in Regulation 5.6. They further mentioned that they shall also parallelly take up the matter with CERC. Accordingly, it was agreed that matter should be deliberated in the forthcoming CMETS-ER meeting upon clarity on providing Connectivity of Stage-II at Stage-I and detailed studies are also required in view of Stage-II becoming dual connected.

- It is understood that applicant vide letter 06-04-2026 has taken up the matter with CERC requesting clarification.
- In view of the above, either application can be taken up for processing after clarifications from CERC or alternatively in order to comply with Regulatory requirements it is proposed that ISTS Connectivity to instant application (Stage-II) may be granted through a separate DTL without connection to Stage-I. **Applicant may confirm so that necessary studies can be carried out.**

4. GNA applications under GNA Regulations, 2022 received in previous months

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA_{RE}	End date of GNA_{RE}
1	2200003016	ACME Cleantech Solutions Private Limited (ACSPL)	Bulk consumer (including Green Hydrogen/Green Ammonia) seeking to connect to ISTS directly	09-01-2026	400 kV level at **Gopalpur** (ISTS)	2000 (Within: 0 Outside:2000)	31-08-2029	31-08-2054
2	2200003030	OCIOR Energy Gopalpur One Private Limited (OEGOPL)	Bulk consumer (including Green Hydrogen/Green Ammonia) seeking to connect to ISTS directly	17-01-2026	220 kV level at **Gopalpur** (ISTS)	200 (Within: 0 Outside:200)	31-03-2029	31-03-2054
3	2200003064	ACME Cleantech Solutions Private Limited (ACSPL)	Bulk consumer (including Green Hydrogen/Green Ammonia) seeking to connect to ISTS directly	23-01-2026	400 kV level at **Paradeep** (ISTS)	1300 (Within: 0 Outside:1300)	31-08-2029	31-08-2054
4	2200003065	ACME Cleantech Solutions Private Limited (ACSPL)	Bulk consumer (including Green Hydrogen/Green Ammonia) seeking to connect to ISTS directly	23-01-2026	400 kV level at **Paradeep** (ISTS)	3000 (Within: 0 Outside:3000)	31-08-2028	31-08-2053

- The above applications [as an eligible entity under Regulation 17.1 (iii)] were received in January 2026 for grant of GNA_{RE} as a Bulk consumer (including Green Hydrogen/Green Ammonia) seeking to connect to ISTS directly at 765/400kV Gopalpur (ISTS) and 765/400kV Paradeep (ISTS) S/s in Odisha as detailed above. These applications are in conformity to the prevailing GNA Regulations, 2022.
- Gopalpur ISTS substation has been planned with 2x1500MVA, 765/400kV ICTs under the ERES-XXXIX transmission schemes. The project is presently under execution with expected COD of Dec 2028 (SCOD: 31-12-2027). Presently, M/s Avaada Greenh2 Pvt Ltd. has

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA_{RE}	End date of GNA_{RE}

been granted 700MW of GNARE at 400kV level of Gopalpur substation. Accordingly, considering N-1 contingency criteria, the available transmission margin at the 765/400 kV transformation level with 2x1500 MVA ICTs is 800 MW. Further, OPTCL has mentioned that they have anticipated a load of about 960MW at Gopalpur (OPTCL) S/s.

- Paradeep ISTS substation has been planned with 2x1500MVA, 765/400kV ICTs under the ERES-XXXIV transmission schemes. The project is presently under execution with expected COD of Dec 2027 (SCOD: 06-11-2026). Presently, M/s ReNew E-Fuels Private Limited (REFPL) has been granted 750MW of GNARE at 400kV level of Paradeep (ISTS) substation. Accordingly, considering N-1 contingency criteria, the available transmission margin at the 765/400 kV transformation level with 2x1500 MVA ICTs is 750 MW. Now, M/s ACME Cleantech Solutions Private Limited (ACSPL) has applied for 4300MW (3000MW+1300MW) GNARE and requested to grant GNARE at 400kV level of Paradeep substation. Further, OPTCL has mentioned that they have anticipated a load of about 1100MW at Paradeep (OPTCL) S/s.
- At the para 11 of the recent CERC order dated 13-02-2026 in petition no. 73/TL/2025, the commission has directed the following:

  "*We direct that the entities covered under Regulation 17.1(iii) shall deposit cost of Rs. 16lacs/MW for the GNA/ GNARE quantum for such entities covered under Regulation 17.1(iii),* ***who have been granted GNA/GNARE (or who shall be granted GNA/GNA_{RE}) at such substation Navinal: 4500 MW, Kandla: 3000 MW, Kakinada GH: 3000 MW, Tuticorin GH: 3000 MW, Pendurthi GH: 4500 MW, Paradeep: 1500 MW, Gopalpur: 1500 MW.*** *The CTUIL is directed to raise the bill @16 lac/MW to the GNA/GNARE grantees within 15 days of this Order. The entities are directed to deposit the intimated amount, within 30 days of intimation, in terms of the earlier Order dated 18.12.2025. In the event of failure, the GNA/ GNARE grants to such entities shall be cancelled, and available BGs shall be treated as per the extant GNA Regulations. CTUIL shall keep this amount in a separate account under an appropriate deposit scheme.*"
- Subject applications were discussed in the joint study meeting held on 16-04-2026, wherein CTU had presented the detailed studies. Highlights of the meeting are as under:

  - **Gopalpur: 2200MW**

    - GNA_{RE} of M/s ACSPL (application no. 2200003016) can be planned at the 765kV level of Gopalpur substation w.e.f. 31-08-2029 through ACSPL - Gopalpur 765kV D/c Dedicated transmission line (DTL). Considering a single large load of about 2GW M/s ACSPL may plan suitable reactive compensation like **STATCOM** in order to comply with CEA technical standards. As per Regulation 12.5 of GNA Regulations, 2022, the dedicated line to connect such an entity to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained either by the entity itself or by a Licensee at the cost of such entity.

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA_{RE}	End date of GNA_{RE}

- M/s OCIOR Energy Gopalpur One Private Limited (OEGOPL) has applied for 200MW GNA_{RE} and requested to grant the same at 220kV level of Gopalpur substation. However, considering margin available at the 765/400kV ICTs and overall system optimization, it is proposed to grant 200MW GNA_{RE} of M/s OEGOPL (for application no. 2200003030) at 400kV level of Gopalpur substation w.e.f. 31-03-2029 with OEGOPL - Gopalpur 400kV D/c Dedicated transmission line (DTL). As per Regulation 12.5 of GNA Regulations, 2022, the dedicated line to connect such an entity to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained either by the entity itself or by a Licensee at the cost of such entity.

Paradeep: 4300MW

- Taking into account techno-economic consideration and the applied quantum, connection of M/s ACSPL is suggested at 765kV level either through (i) Medinipur – ACSPL 765kV D/c line & Paradeep – ACSPL 765kV D/c line or (ii) Angul – ACSPL 765kV D/c line & Paradeep – ACSPL 765kV D/c line
  - **Case-1:** Medinipur – ACSPL & Paradeep – ACSPL 765kV D/c line
  - **Case-2:** Angul – ACSPL & Paradeep – ACSPL 765kV D/c line
- The studies were carried out for 2030-31 timeframe and results are tabulated below:

All figures (in MW/ckt)

Case 1	SC-2	Sc-4	Sc-5	Sc-8
Medinipur - ACSPL 765kV D/c	898	668	808	1910
Paradeep - ACSPL 765kV D/c	1253	1483	1343	241
Jamshepur - Medinipur 765kV D/c	1332	1541	1367	740
Case 2	**SC-2**	**Sc-4**	**Sc-5**	**Sc-8**
Anugul B - ACSPL 765kV D/c	1978	2042	1896	1612
Paradeep- ACSPL 765kV D/c	172	108	254	241
Jamshepur - Medinipur 765kV D/c	899	1209	971	204

- Additionally, in the detailed studies, it was observed that low voltage situation arises in multiple buses including Paradeep and Gopalpur substations due to cumulative addition of about 6.5GW load. Accordingly, the applicants were requested to provide the reactive power consumption pattern through the day along with the load pattern throughout the day.

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA_{RE}	End date of GNA_{RE}

- As per Regulation 12.5 of GNA Regulations, 2022, the dedicated line to connect such an entity to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained either by the entity itself or by a Licensee at the cost of such entity. Further, considering a single large load of about 4.3GW at Paradeep, M/s ACSPL may plan suitable reactive compensation like **STATCOM** in order to comply with CEA technical standards.
- Furthermore, the applicants shall be liable for additional cost or commercial implications, as may be applicable in terms of Regulation 12.5 read with Regulation 17.1 (iii) of CERC GNA Regulations, 2022; applicable CERC Orders whether in transmission licence petition(s) or otherwise and decisions of competent authorities for approval of ISTS Schemes including the Ministry of Power, NCT etc. In case of noncompliance of such directions, Conn BG-1 and Conn BG-3 submitted by the applicant shall be encashed.
- Applicants apprised about the Hon'ble APTEL's order regarding stay on operation of the CERC order dated 13-02-2026 in Petition No. 73/TL/2025 with respect to the applicants.
- It was noted that studies may be carried out for identification of augmentation required for grant of GNA_{RE} to M/s ACSPL and M/s OEGOPL. However, the grant shall be accorded only after the receipt of order by Hon'ble APTEL in appeals filed by the applicants against the CERC order dated 13-02-2026 in Petition No. 73/TL/2025.
- Based on the deliberation in the joint study meeting following was agreed:
  - M/s ACSPL shall share the hourly load profile (including active and reactive power requirement) throughout a day at applicant's facility.
  - Applicants to provide copy of APTEL's order mentioned in the meeting.
  - Confirmation from M/s ACSPL and M/s OEGOPL on the voltage level at which the bulk consumer seeks to connect at ISTS.
  - Details on the installation of suitable reactive compensation device(s) at applicant facility to comply with various CEA's Regulation and Standards.

- In view of above, CTU vide email dated 16-04-2026 and reminder dated 20-04-2026 had requested applicants to provide necessary inputs as decided in the joint study meeting. M/s OEGOPL has provided part details vide email dated 20-04-2026. However, inputs from M/s ACSPL are still awaited.
- After receipt of requested inputs, the studies would be revisited considering the request of applicant for connection to ISTS .
- **M/s ACSPL and M/s OEGOPL may update.**

B. ISTS expansion schemes in ER

5. Reconductoring of Subhasgram (WBSETCL) – Subhasgram (POWERGRID) 220 kV circuits I & II by HTLS conductor: Agenda by WBSETCL

5.1. WBSETCL vide email dated 13-03-2026 shared the agenda note regarding proposal for reconductoring of Subhasgram (WBSETCL) - Subhasgram (PGCIL) 220 kV circuits I & II by HTLS conductor and mentioned the following:

- *Subhasgram (WBSETCL) 220 KV substation has D/C connectivity at 220 KV by Twin Moose conductor with Subhasgram (PGCIL) 400 KV substation. The substation itself is loaded through 2 X 160 MVA transformers. Subhasgram (WBSETCL) substation further feeds the loads of Laxmikantapur 220 KV substations, Kasba 220 KV substations and Baruipur 220 KV substations.*
- *The loading of each ckt between Subhasgram (WBSETCL) - Subhasgram (PGCIL) as recorded in 2025 was 1371 Amp. In summer of 2026, it is expected to be 1500 Amp approximately. It could further increase beyond the line capacity limits in 2027. The loading on the circuits will also increase in case breakdown of any of the generation units of CESC. Earlier during energisation of 500MVA, 400 KV/220 KV, 7th ICT, one of the 220 KV bays for Baruipur 220KV substation was shifted to Subhasgram (WBSETCL) from Subhasgram (PGCIL) . The loading of this Baruipur 220 KV bay has already burdened the abovementioned circuits.*
- *As such, as a short term measure it is proposed to replace the conductors of both 220 KV circuits I and II of Subhasgram (WBSETCL) - Subhasgram (PGCIL) by HTLS conductor (Twin Drake or equivalent) along with replacement of other equipments like CT , breaker , isolator by equipments of matching capacity at both ends, wherever required, to cater increased load in near future.*

5.2. Grid-India in its quarterly report has mentioned that Subhasgram (WBSETCL) - Subhasgram (PGCIL) 220 kV D/c (Twin Moose) line is not N-1 compliant.

5.3. CTU vide email dated 06-03-2026 requested to share details related to Subhasgram (WBSETCL) - Subhasgram (PGCIL) 220 kV D/c line. Accordingly, WBSETCL vide email dated 20-03-2026 has provided below mentioned inputs:

Sl. No.	Line	Line length (km)	Date of CoD	Existing Conductor	Thermal rating per ckt (in A)	From end line bay equipment rating		To end line bay equipment rating		Feasible rating of HTLS per ckt for recond. (in A)	Remarks, if any.
1.	Subhasgram (WBSETCL) - Subhasgram (PGCIL) 220kV line (Ckt-I)	0.6	02.09.2009	Twin ACSR Moose	1600A	Owner: **WBSETCL Subhasgram end**		Owner: **POWERGRID Subhasgram end**		2400A (Twin HTLS)	1.Information of PGCIL end is obtained verbally from their site employee. 2.Replacement of
						CT:	1600/1-1-1-2-2A	CT:	1600/1-1-1-1-1A		
						WT:	NA	WT:	NA		

Sl. No.	Line	Line length (km)	Date of CoD	Existing Conductor	Thermal rating per ckt (in A)	From end line bay equipment rating		To end line bay equipment rating		Feasible rating of HTLS per ckt for recond. (in A)	Remarks, if any.
						CB:	1550(Nominal) /3150(Max)A	CB:	1600A		equipments to match the necessary rating , wherever required, would be taken up after getting the clearance/approval.
						Isolator:	89A-2500A 89B-1600A 89L-1600A 89C-1600A	Isolator:	1600A		
2.	Subhasgram (WBSETCL) - Subhasgram (PGCIL) 220kV line (Ckt-II)	0.6	02.09.2009	Twin ACSR Moose	1600A	Owner: **WBSETCL Subhasgram end**		Owner: **POWERGRID Subhasgram end**		2400A (Twin HTLS)	1.Information of PGCIL end is obtained verbally from their site employee. 2.Replacement of equipments to match the necessary rating , wherever required, would be taken up after getting the clearance/approval.
						CT:	1600/1-1-1-2-2A	CT:	1600/1-1-1-1-1A		
						WT:	NA	WT:	NA		
						CB:	1550(Nominal) /3150(Max)A	CB:	1600A		
						Isolator:	89A-2500A 89B-1600A 89L-2500A 89C-1600A	Isolator:	1600A		

5.4. CTU vide email dated 23-03-2026 and reminders thereafter have requested POWERGRID to confirm the above details. However, the details are yet to be confirmed. **May be updated.**

5.5. Matter may be deliberated.

6. Permanent installation of 500MVA ICT-7 at Subhasgram S/s and consequently termination of Baruipur 220kV TL-II & installation of 125 MVAr Bus Reactor in new bays

6.1. Matters regarding the permanent installation of 7th ICT, the scheme regarding implementation of a new 400kV bay for reinstallation of bus reactor, and a new 220kV line bay for termination of Subhasgram-Baruipur ckt-II line were deliberated in the earlier CMETS-ER meetings. In the 48th CMETS-ER meeting it was decided that as implementation of new 400kV bay for reinstallation of bus reactor and 220kV line bay for termination of Subhasgram-Baruipur ckt-II line are contingent upon decision of CEA to have cumulative transformation capacity of 2760MVA at Subhasgram (POWERGRID) S/s i.e. keeping the 7th ICT as permanently installed. Accordingly, after approval of CEA on transformation capacity matter, the scheme regarding implementation of a new 400kV bay for reinstallation of bus reactor and a new 220kV line bay for termination of Subhasgram-Baruipur ckt-II line shall be taken up in the CMETS-ER.

6.2. Thereafter, 2 nos. of meeting dated 04-12-2025 & 06-04-2026 were convened by CEA under the chairmanship of Member (Power Systems), CEA with ERPC, CTU, Grid-India, POWERGRID & WBSETCL. Based on the deliberations in the said meetings, following have been decided:

(i) The 7th ICT shall be retained as a permanent arrangement at the Subhasgram substation under special relaxation from limits defined in the planning criteria. This relaxation shall not become a precedence.

(ii) WBSETCL shall ensure that intra-state projects are taken up in a timely manner so that such a situation does not arise again. (overloading on the existing transmission assets)

(iii) CTUIL to take up the matter of requirement of additional 220 kV bay (for termination of Subhasgram-Baruipur 220 kV ckt-II) and 400 kV bay (for reinstallation of bus reactor) at the Subhasgram S/s.

6.3. In regard to point no. (iii), POWERGRID vide email dated 11-11-2025 had provided following inputs:

- *Space is available for re-installation of vacated 420kV, 125 MVAR Bus Reactor (in 400kV future bay #419)*
- *Space is available for new 220kV bay namely bay #217 (adjacent to Bay-216 connected to 220 kV side of ICT-7)*

6.4. In view of the above, WBSETCL vide email dated 10-04-2026 was requested to confirm whether 220kV line bay for termination of ckt-2 of Subhasgram – Baraipur 220kV D/c line in proposed bay no 217 shall be implemented by WBSETCL under intra state or they want the same to be implemented under ISTS. WBSETCL vide email dated 22-04-2026 has mentioned that bay may be implemented under ISTS.

6.5. In view of the above, following scope of works is proposed to be taken up under ISTS scheme namely, "ERES-53: Bays at Subhasgram" with completion time of 18 months from date of allocation:

Sl. No.	Description of Transmission Element	Scope of work (Type of Substation/Conductor capacity/km/no. of bays etc.)
1.	Implementation of 1 no. 220kV line bay at Subhasgram (POWERGRID) 400/220kV S/s	• 220kV line bay [bay no. 217]: 1 no. (for termination of circuit-2 of Subhasgram – Baraipur 220kV D/c line of WBSETCL: line termination shall be under the scope of WBSETCL)
2.	Re-installation of existing 420kV, 1x125 MVAr bus reactor *[released due to interim installation of 6th 400/220kV ICT]* already stationed at Subhasgram (POWERGRID) S/s	• 400kV line bay [bay no. 419]: 1 no. (for re-installation of existing 420kV, 1x125 MVAr bus reactor already stationed at Subhasgram S/s)

Note:

(a) 220kV line bay (bay no. 217) shall be implemented under this ISTS scheme, however, line termination (circuit-2 of Subhasgram – Baraipur 220kV D/c line of WBSETCL) shall be under the scope of WBSETCL.

(b) 420kV, 1x125MVAr bus reactor at Subhasgram S/s was taken out of service for interim installation of 6th 400/220kV ICT. With permanent installation of the 6th ICT, the same bus reactor already stationed at Subhasgram S/s is to be re-installed under this ISTS scheme in new 400kV bay (bay no. 419).

6.6. Matter may be deliberated.

7. Status of downstream 220kV or 132kV network by STUs from the various commissioned and under-construction ISTS substations in ER

7.1. Numbers of ISTS sub-stations have been commissioned and some are under construction for which the downstream system is being implemented by the STUs. Based on the information provided by the states, updated information on planned/under-construction downstream system is given at **Annexure-I**.

7.2. STUs may update the status of the downstream system given at **Annexure-I** prior to the meeting for further deliberations in the meeting, if any.

8. Status of 400kV substations being implemented by STUs/entities in ER to be connected through ISTS

8.1. Various 400kV substations have been approved in the intra-state strengthening schemes in ER having interconnection with ISTS grid involving LILO of ISTS lines or direct connection to ISTS substations. Status of such intra-sate substations as per available information is given at **Annexure-II**.

8.2. STUs may update the status of the transmission system given at **Annexure-II** prior to the meeting for further deliberations in the meeting, if any.

9. Status of space allocated at various ISTS substations to STUs for implementation of line bays under intra state system) for their intra state lines

9.1. Space at various ISTS substations have been allocated to STUs for creation of line bays for termination of their new intra-state. List of such ISTS substations as per available information is given at **Annexure-III**.

9.2. STUs may update the status of the bays given at **Annexure-III** prior to the meeting for further deliberations in the meeting, if any.

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Annexure-I

Status of Downstream Transmission Network in ER

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unutilised bays	Status of ISTS	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
1.	Chaibasa	Jharkhand	400/220kV, 2x315MVA	220	2	Existing bay	Chaibasa (POWERGRID) – Jadugoda (JUSNL) 220kV D/c	31st Jan 2025	Mar 2027
2.	Daltonganj	Jharkhand	400/220/132kV, 2x315MVA+ 2x160MVA	132	2	Existing bay	Daltonganj (POWERGRID) – Chatarpur 132kV D/c	22-10-2019	April 2026
3.	Dhanbad	Jharkhand	400/220kV, 2x500MVA	220	4	Existing bay	LILO of 1st circuit of 220kV Dumka – Govindpur D/c line at Dhanbad (23km)	17-05-2023	Connectivity agreement with CTUIL is under progress. (Application Id – 2200002583)
							Dhanbad – Baliyapur 220kV D/c line	07-11-2023	Nov 2026
4.	Malda	West Bengal	400/220kV 2x500MVA + 220/132kV, 3x160MVA	132	2 no. new 132kV GIS line bays	132kV upgradation in GIS ongoing. 4 out of 7 bays completed. Balance 3 to be completed by end of Dec 23	Malda (POWERGRID) – Manikchak (WBSETCL) 132kV D/c line	15-02-2023	Line works completed and charged at no-load on 17-08-2024. Date of Commissioning of Manikchak 132kV Substation is 19-11-2024. Connectivity agreement with CTUIL is under progress. (Application Id – 2200003014)
5.	Maithon	West Bengal	400/220kV 3x500MVA	220	2	2 No. of 220kV line bays are under ISTS Scope SCoD: 31-12-2028	Dendua (WBSETCL) – Maithon (POWERGRID) 220kV D/c HTLS line	-	2030-31 (As per resource adequacy plan of West Bengal)
6.	Sitamarhi (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2	Existing bay	LILO of Benipatti - Pupri 132kV S/c at Sitamarhi (New)	Awarded	Expected by May 2026 due to RoW issue.

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unutilised bays	Status of ISTS	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
7.	Saharsa (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2-ISTS (addln.4 by state)	Existing bay	LILO of 3 no. of 132 kV intra-state lines (viz. LILO of Saharsa (BSPTCL) – Banmankhi (BSPTCL) 132kV S/c, Saharsa (BSPTCL) – Udakishunganj (BSPTCL) 132kV S/c, one circuit of Madhepura (BSPTCL) – Sonebarsa (BSPTCL) 132kV D/c lines) at 400/220/132 kV Saharsa (New) (PMTL) ISTS S/s along with construction of 4 nos. of 132 kV line bays at Saharsa (New) (PMTL) S/s	Awarded	Bays charged on 07.12.2024. Connectivity agreement with CTUIL is under progress. (Application Id – 2200002100)
8.	Banka	Bihar	400/220/132kV, 2x500MVA + 2x200 & 1x315MVA	220	2	Oct 2024	Banka (POWERGRID) – Goradih (Sabour New) 220kV D/c line (around 45km) along with 2 nos. 220kV GIS line bays at Goradih (Sabour New) S/s/	**Line:** 03-03-2023. **Bays:** 05-03-2024	**Line**: Line charged on 30.10.2024 (Ckt-I) & 05.11.2024 (Ckt-II) **Bays**: May 2026
9.	Lakhisarai	Bihar	400/220kV, 2x500MVA	220	2	May 2025	Lakhisarai (POWERGRID) – Haveli Kharagpur 220kV D/c line along with 2 no. 220kV line bays at Haveli Kharagpur	05-03-2024	April 2026

Annexure-II

Status of 765kV, 400kV & 220kV substations being implemented by STUs/entities in ER to be connected to ISTS.

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
A	**Bihar (to be implemented by BSPTCL)**			
I	**Chappra (New)**	400/220/132kV, 2x500MVA + 2x200MVA	21-06-2024 (land acquisition acquired)	07-02-2027
a)	LILO of 400 kV Barh (NTPC) – Motihari (DMTCL) D/C (Quad) transmission line at Chappra	400kV 2xD/c	Dec-23	Feb 2027
B	**Odisha (to be implemented by OPTCL)** #			
I	**Gopalpur GIS**	400/220kV, 2x500MVA	LoA Issued.	Dec 2027
a)	Pandiabili (POWERGRID) – Gopalpur 400kV D/c (AAAC Twin Moose) line	400kV D/c	Kept on hold	-
II	**Therubali**	400kV switching station along with 420kV, 1x125MVAr bus reactor	Survey completed. Land schedule is under preparation. Tender will be floated by Mar 2026.	24 Months from award
a)	Gopalpur – Therubali – Jeypore (POWERGRID) 400kV D/c line	400kV D/c	To be taken after tendering of Therubali S/s.	24 Months from award
III	**Bhadrak**	400/220kV, 2x500MVA	Location shifted to Ramakrushunapur near Bhadrak. Land identification & survey completed.	24 Months after award
a)	LILO of Baripada – New Duburi and Baripada – Pandiabili 400kV line sections at Bhadrak	400kV D/c	Earlier tender of Bhadrak was cancelled due to high cost. LoA shall be issued by Jan'26.	24 Months after award
IV	**Paradeep**	400/220kV, 2x500MVA	Dec 2022	June 2026
a)	Paradeep – New Duburi 400kV D/c line (136 km)	400kV D/c	Line work delayed due to RoW issues.	Dec 2026
V	**Joda New / Basudevpur**	400/220kV, 3x500MVA	Govt. of Odisha has decided that the scheme shall be implemented by OPTCL and not under TBCB. Tender floated, yet to be awarded.	24 Months after award
a)	LILO of Rourkela (POWERGRID) – Talcher (NTPC) 400kV D/c line at Joda New / Basudevpur	400kV D/c	Govt. of Odisha has decided that the scheme shall be implemented by OPTCL and not under TBCB. Taken up along with Joda New / Basudevpur S/s.	24 Months after award
VI	**Duburi**	765/400kV 2x1500MVA	-	OPTCL may update
a)	LILO of both circuits of Angul – Paradeep 765kV D/c line at Duburi	765kV 2xD/c	-	OPTCL may update

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
VII	**Kolabira**	765/400kV, 2x1500MVA	Land is identified.	24 Months after award
a)	Sundargarh-B (POWERGRID) – Kolabira 765kV D/c line	765kV D/c	Survey work order in process. Re-locating the new land site.	24 Months after award
b)	Kolabira – Duburi-765kV 765kV D/c line	765kV D/c	Survey work order in process	24 Months after award
VIII	**Tarkera**	400/220kV 2x500MVA	Upgradation of existing 220/132kV Tarkera S/s	24 Months after award
a)	LILO of both circuits of Sundargarh-A – Rourkela 400kV D/c line (ckt. no. 1 and 3) at Tarkera S/s	400kV D/c	-	24 Months after award
C	**Jharkhand (to be implemented by JUSNL)**			
I	**Chandil (New)**	400/220kV, 2x500MVA	Awarded in Jan 2024	July 2027
a)	PVUNL – Chandil 400kV D/c (Quad) line (130km) (80MVAr sw. line reactor at Chandil end)	400kV D/c (Quad)	20-07-2023	Dec 2026
b)	Chandil – Chaibasa (POWERGRID) 400kV D/c (Quad) line (50km)	400kV D/c (Quad)	20-07-2023	June 2026
c)	Chandil – Dhanbad (ISTS) 400kV D/c (Quad) line (130km)	400kV D/c (Quad)	20-07-2023	June 2026
II	**Extn. at Chaibasa (ISTS) S/s**	2 no. 400kV line bays at Chaibasa (ISTS) S/s for termination of Chandil – Chaibasa (ISTS) 400kV D/c (Quad) line	JUSNL mentioned that they initially focused on award of lines first. Now, bay works would be taken up. CTU highlighted that as line works have already been awarded in July 2023 with 24 months completion schedule, associated line bay works at Chaibasa and Dhanbad ISTS substations may also be taken up expeditiously to avoid mismatch in line and bay implementation. **Bay space along with bay no. have already been indicated in the 28th CMETS-ER held 23-02-2024. JUSNL agreed to expeditiously take up implementation of terminal bays at Chaibasa and Dhanbad ISTS substations. Cost estimate prepared and looking for funding.**	
III	**Extn. at Dhanbad (ISTS) S/s**	2 no. 400kV line bays at Dhanbad (ISTS) S/s for termination of Chandil – Dhanbad (ISTS) 400kV D/c (Quad) line		
IV	**Koderma**	400/220/132/33kV, 2x500MVA + 2x200MVA + 2x80MVA	July 2024	July 2026 (24 months from the award date)
a)	PVUNL – Koderma 400kV D/c (Quad) line (133km) (80MVAr sw. line reactor at Koderma end)	400kV D/c (Quad)	20-07-2023	July 2026
V	**Latehar**			
a)	Patratu – Latehar 400kV D/c line	400kV D/c	Forest Stage-I clearance is awaited.	**Not updated.**

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
b)	Latehar – Chandwa (POWERGRID) 400kV D/c line	400kV D/c	Work in Progress. However, progress is slow.	Completed and commissioned on 14-12-2024. **(Connectivity agreement is not signed yet)**
D	**West Bengal**			
(to be implemented by WBSETCL)				
I	**Laxmikantpur (Upgradation of existing 220/132kV to 400kV level)**	400/132kV, 2x315MVA		Mar 2028
a)	LILO of one circuit of Jeerat (New) – Subhasgram 400kV D/c (Quad) line at New Laxmikantpur *(Interim arrangement: LILO of Haldia – Subhasgram 400kV D/c line at Laxmikantpur)*	400kV D/c		Mar 2028
E	**DVC (to be implemented by DVC)**			
I	**Gola-B**	400/220/132kV 2x500MVA + 2x200MVA	DVC has decided for implementation of the projects concerned utilizing own resources instead of TBCB mode. LILO augmentation of 400kV Ranchi–RTPS D/c Line (at Gola-B) is already sanctioned by CEA. However, after sincere consideration based on necessary Load flow analysis, it has been decided to construct Ramkanali-B as 220/132kV Substation with future provision for creation of LILO of RTPS–DSTPS 400kV D/c line at Ramkanali-B. The same is endorsed by CEA. Land identification work is under progress.	December 2028
a)	LILO of both circuits of Ranchi – RTPS 400kV D/c line at Gola-B	400kV D/c		
II	**Ramkanali-B**	400/220/132kV 2x500MVA + 3x200MVA (3rd ICT to be installed progressively with load growth)		
a)	LILO of both circuits of RTPS – DSTPS 400kV D/c line at Ramkanali-B	400kV D/c		

#*Status as recorded in 52nd CMETS-ER.*

Annexure-III

Space allocated at various ISTS substations to STUs for implementation of line bays under intra state system for their intra state lines

Sl. No.	Substation/ Location	Space for	Date of award of line and bays	Completion Schedule	Agreed in CMETS-ER
1.	Maithon (POWERGRID)	2 No. 220kV lines bays for implementation of Maithon (POWERGRID) – Asansol 220kV D/c line	Line bays to be constructed by PGCIL as a deposit work of WBSETCL on consultancy basis. The agreement between WBSETCL & PGCIL has been executed on 18-07-23. LOA by PGCIL for 2 nos 220KV Fdr bays at Maithon SS placed in Nov'23. LOA for 220 KV D/C line & 2 nos 220KV Fdr bays at Asansol 220KV SS has been placed by WBSETCL on 13.03.2024.	Mar 2026	7th
2.	Sitamarhi (New) (PMTL)	2 no. line bays for termination of Sitamarhi (New) (PMTL) – Sheohar (BSPTCL) 132kV D/c line	Awarded	Oct 2026	24th
3.	Chandauti (New) (PMTL)	2 no. line bays for termination of Chandauti (New) (PMTL) – Sherghati (BSPTCL) 132kV D/c line	Retendered and yet to be awarded	Jun 2027	24th
4.	Angul (POWERGRID)	2 no. line bays for termination of Angul (POWERGRID) – Khuntuni 765kV D/c line	Land Identified	2027-28	30th