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/00/24th CMETS-ER

दिनांक/Date: 20-10-2023

वितरण सूची के अनुसार/ As per distribution list

विषय/Subject: पूर्वी क्षेत्र में पारेषण योजनाओं के विकास के लिए 24वीं परामर्श बैठक की कार्यावली (सीएमईटीएस-ईआर) / Agenda for 24th 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 **24**वीं परामर्श बैठक (सीएमईटीएस-ईआर) वीडियो कॉन्फ्रेंसिंग के माध्यम से नीचे दिए गए विवरण के अनुसार आयोजित होने वाली है:

The **24th** 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	: 24th CMETS-ER
दिनांक/Date & समय/Time	: 31st October 2023 at 10:30am
दिन/Day	: मंगलवार/ Tuesday
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
20/10/2023

(राजेश कुमार) / (Rajesh Kumar)
वरिष्ठ महाप्रबंधक/ Sr. General Manager

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 Damodar Valley Corporation DVC Towers, VIP Road Kolkata-700054	**6. CMD** Odisha Power Transmission Corporation Ltd. (OPTCL) Bhoinagar Post Office, Jan path Bhubaneshwar-751022
7. CMD Bihar State Power Transmission Company Ltd. (BSPTCL) Vidyut Bhavan, 4th floor, Bailey Road Patna-800021	**8. CMD** Jharkhand Urja Sancharan Nigam Limited (JUSNL) Engineering Building, HEC, Dhurwa Ranchi -834004
9. Principal Chief Engineer cum Secretary Power Department Government of Sikkim Gangtok, Sikkim	**10. Managing Director** West Bengal State Electricity Transmission Company Ltd. (WBSETCL) Vidyut Bhavan, 8th Floor, A-Block Salt Lake City, Kolkata-700091

B. विशेष आमंत्रित /Special invitee:

1. Director (Projects) Power Grid Corporation of India Ltd. "Saudamini", Plot No. 2, Sec-29, Gurugram, Haryana-122001	**2. Sh. Kanuna Jaydhar** S.E. (Elect. Deptt) Elect. Deptt A&N Islands Email: seed.and@nic.in ae.planninged@gmail.com

C. आवेदक/Applicant:

1. Sh. Subrahmanya Shanbhogue Tantradi Executive Director Arcelormittal Nippon Steel India Limited Mr. T S Shanbhogue, 3-A, 3rd Floor, Fortune Tower Chandrasekharpur, Bhubaneswar - 751023 Ph. No.: 7381007267 Email: TS.shanbhogue@amns.in; bhabesh.mohanty@amns.in;	**2. Sh. Ajay Kumar** Chief Power Management Group Tata Steel Limited Works General Office, (W-183), Tata Steel Limited, Bistupur Jamshedpur, Jharkhand - 831001 Ph. No.: 9234511405 Email: ajay.kr@tatasteel.com; kush.kumar@tatasteel.com;
3. Sh. Angshuman Rudra Deputy General Manager Avaada Greenh2 Private Limited C-11 Sector 65, UP Ph. No.: 7835004673 Email: angshuman.rudra@avaada.com; vivek.jain@avaada.com	**4. Sh. Amit Griwan** Deputy General Manager Adhunik Power & Natural Resource Limited Landsome Tower, 5th Floor, 2/1A, Sarat Bose Road, Kolkata West Bengal – 700020 Ph. No.: 8585078447 Email: powertrading@adhunikpower.co.in; bhaveshsahu@adhunikpower.co.in;

5. Sh. Samrat Bhowmik Deputy General Manager Damodar Valley Corporation (for both DSTPS & RTPS) DVC Towers, Kolkata – 700054 Ph. No.: 9434242436 Email: samrat.bhowmik@dvc.gov.in; prasenjit.mandal@dvc.gov.in;	**6. Sh. Sandeep Vohra** AVP (Operations) PTC India Limited 2nd Floor, NBCC Tower 15, Bhikaji Cama Place, Delhi Ph. No.: 9871546492 Email: sandeep@ptcindia.com; hde@ptcindia.com;
7. Sh. Manoj Kumar Tanwar Sr. Vice President Sneha Kinetic Power Projects Private Limited 15th Floor, HT Media Building 18-20 KG Marg, New Delhi – 110001 Ph. No.: 9958355966 Email: connectivity.lta@greenkogroup.com; Manojkumar.t@greenkogroup.com;	**8. Sh. Abhilash Gour** Manager – BD&C DANS Energy Pvt Ltd B-1/E-24, Mohan Cooperative, Industrial Area, Mathura Road, New Delhi-110044 Email: abhilash.gour@dansenergy.com shishir.sharma@dansenergy.com
9. Sh. Pritpal Singh DGM Ind-Barath Energy (Utkal) Limited JSW Centre Bandra Kurla Complex Bandra East, Mumbai, Maharashtra Ph. No.: 9867381807 Email:pritpal.singh@jsw.in; abhay.yagnik@jsw.in;	

Agenda for 24th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER)

1. Confirmation of minutes of the previous meeting

1.1. The minutes of the 23rd CMETS-ER held on 25-09-2023 were issued vide letter dated 11-10-2023. As no comment has been received, the minutes may be confirmed as circulated.

1.2. In the GNA Regulations, 2022 with regard to entities at Regulation 17.1 (iii) viz. *"a distribution licensee or a Bulk consumer, seeking to connect to ISTS, directly, with a load of 50MW and above"* it is mentioned at Regulation 12.5 that, *"In case of an entity covered under Regulation 17.1(iii), the line to connect such an entity to the ISTS and necessary augmentation for providing connection to the ISTS, shall be constructed and maintained by a **licensee** at the cost of such entity."*. In the minutes of earlier issued CMETS-ER, it was inadvertently mentioned as *"ISTS licensee"*. The details are tabulated below:

a) The minutes of 19th CMETS-ER held on 30-05-2023 were issued vide letter dated 27-06-2023. In the said minutes, at para 2.4, the Transition case of M/s Vedanta Ltd. under Regulation 37.1 of GNA Regulations, 2022 was deliberated. As per the Regulation 12.5, the following modification is proposed in the minutes:

Mentioned in the minutes	Modification proposed
Transmission system for GNA under GNA Regulations, 2022: Vedanta – Sundargarh (Jharsuguda) 400kV D/c (Twin Moose) new transmission line along with associated line bays at both ends, which needs to be implemented by **an ISTS** licensee at cost of M/s Vedanta Ltd.	**Transmission system for GNA under GNA Regulations, 2022:** Vedanta – Sundargarh (Jharsuguda) 400kV D/c (Twin Moose) new transmission line along with associated line bays at both ends, which needs to be implemented by **a** licensee at cost of M/s Vedanta Ltd.
Last Bullet: …which needs to be implemented by **an ISTS** licensee at cost of M/s Vedanta Ltd. M/s Vedanta Ltd. to arrange implementation of the identified transmission system through **ISTS transmission** licensee on their own...	**Last bullet:** …which needs to be implemented by **a** licensee at cost of M/s Vedanta Ltd. M/s Vedanta Ltd. to arrange implementation of the identified transmission system through **a** licensee on their own...

b) The minutes of 20th CMETS-ER held on 28-06-2023 were issued vide letter dated 20-07-2023. In the said minutes, at para 2.2, the Transition case of M/s IPCL under Regulation 37.2 of GNA Regulations, 2022 was deliberated. As per the Regulation 12.5, the following modification is proposed in the minutes:

Mentioned in the minutes	Modification proposed
Bullet no.6 … needs to be implemented by **an ISTS** licensee at cost of M/s IPCL. M/s IPCL to arrange implementation of the identified transmission system through **ISTS transmission** licensee on their own…	**Bullet no.6** … needs to be implemented by **a** licensee at cost of M/s IPCL. M/s IPCL to arrange implementation of the identified transmission system through **a** licensee on their own…

Mentioned in the minutes	Modification proposed
Last bullet: …needs to be implemented by **an ISTS** licensee at cost of M/s IPCL. M/s IPCL to arrange implementation of the identified transmission system through **ISTS transmission** licensee on their own...	**Last bullet:** …needs to be implemented by **a** licensee at cost of M/s IPCL. M/s IPCL to arrange implementation of the identified transmission system through **a** licensee on their own…

1.3. In view of the above, it is proposed to issue corrigendum to the relevant portions of the minutes of the 19th CMETS-ER and 20th CMETS-ER as detailed above.

A. Application related matters in Eastern Region (ER)

2. New Application under GNA regulation, 2022

2.1. The following applications have been received in the month of September 2023 under GNA Regulations, 2022.

Connectivity Applications:

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Connectivity sought from
1	2200000223 (Revised Enhancement Application)	Adhunik Power & Natural Resources Limited (APNRL)	Generating station(s), including REGS(s), without ESS	11-09-2023	Ramchandrapur/ Jamshedpur S/s, and Bay no. 23 & 24	90	01-10-2023

- Applicant [as an eligible entity under Regulation 4.1 (a)] has applied for enhancement of the quantum of Connectivity by 90MW for its 2x270MW thermal generation plant in Padampur, Saraikela-Kharsawan, Jharkhand. The start date of Connectivity for additional quantum has been indicated as 01-10-2023.
- Presently, M/s APNRL is already connected to Jamshedpur (POWERGRID) S/s through DTL viz. APNRL – Jamshedpur 400kV D/c line. Deemed GNA granted to M/s APNRL under Regulation 18.1 is 450MW. The existing Jamshedpur (POWERGRID) substation is well connected to ISTS through 400kV lines and margin is available in the existing ISTS to facilitate additional 90MW power transfer. Accordingly, as per Regulation 8, the applicant is liable to submit Conn-BG1 of ₹ 50 Lakh and Conn-BG3 at ₹ 2 Lakh/MW.
- Applicant has requested the start date of Connectivity as 01-10-2023 which is already passed. Accordingly, applicant is requested to provide a reasonable start date of Connectivity keeping in view the timelines for submission of applicable Conn-BGs and signing of Connectivity Agreement.
- CERC vide order dated 22-09-2023 in the petition no. 11/SM/2023 i.r.o. Removal of difficulties (First Order) in giving effect to certain provisions of CERC GNA Regulations 2022, at para no. 77 provided as under:

"77. We observe that there may be some generating stations that have declared COD as on 1.10.2023, are connected to the grid, and were evacuating their power on a short term basis. In case such entities apply to CTUIL under relevant Regulations of transition, it may take some time for CTUIL to process their application. In such case, if they are not granted GNA by CTUIL before 1.10.2023, they shall not be able to get their power scheduled for such quantum under Grid Code 2023. We are of the considered view that such entities should apply for transition in advance, keeping in view the reasonable processing time that may be taken by CTUIL. However, to avoid any bottling up of power, till the time CTUIL processes their request of transition if they wish to schedule their power, ***they may deposit Conn-BG3 for Rs 2 lac/MW provisionally****. On receipt of such Conn-BG3, CTUIL shall issue* ***provisional permission*** *to such entities which shall be treated as deemed T-GNA, as provided under Regulation 37.6(1) of the GNA Regulations. Once CTUIL processes the application for GNA for such entities, it shall inform applicable Conn-BG to be submitted by such entities and Conn-BG3 already furnished shall be adjusted on furnishing of Conn-BG informed by CTU. In case such entity fails to deposit the Conn-BG informed by CTUIL within a specified time,* ***provisional GNA*** *granted to such entity shall be withdrawn and Conn-BG3 shall be encashed."*

- Upon receipt of requisite application and Conn-BG3 corresponding to 90MW, M/s APNRL was granted provisional GNA of 90MW for its generation project in Jharkhand vide CTU letter dated 29-09-2023 in terms of CERC order at para 77 in petition no. 11/SM/2023.
- In view of the above, it is proposed to grant 90MW additional Connectivity to M/s APNRL through existing ISTS (no augmentation required) at the existing 400kV Jamshedpur (POWERGRID) S/s for its 2x270MW thermal generation project in Jharkhand through existing DTL viz. APNRL – Jamshedpur 400kV D/c line, w.e.f. date agreed in the meeting.

GNA Applications:

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to Intra-State (requested)	Quantum (MW)	Start date of GNA	End date of GNA
1	2200000260 (Revised Application)	Tata Steel Limited	Drawee entity connected to intra-state transmission system	27-09-2023	New Duburi (OPTCL) 400/220kV Substation	68 GNA_{RE} *[Within:0 Outside:68]*	01-06-2025	31-05-2050

- Applicant [as an eligible entity under Regulation 17.1 (ii)] has applied for GNA_{RE} as drawee entity connected to intra-state transmission system for 68MW (Within Region: 0MW & Outside Region: 68MW) at 220kV level of 400/220kV New Duburi (OPTCL) S/s in Odisha with start and end date of GNA_{RE} as 01-06-2025 & 31-05-2050 respectively. Applicant vide letter dated 11-10-2023 (copy attached an **Annexure-IV**) has requested for **change in the start date of applied GNA_{RE} from 01-06-2025 to 01-10-2025** with no change in the end date**.**
- Applicant has submitted No Objection Certificate (NOC) dated 28-08-2023 of Odisha STU viz. OPTCL for 68MW with validity of 01-06-2025 to 31-05-2050. The said NOC has been issued with various conditions including commissioning of 3rd 400/220kV ICT at New Duburi. In this regard, applicant may note that they shall be responsible for compliance/fulfilment of NoC conditions prior to start date of GNA_{RE}. Effectiveness of GNA_{RE} in ISTS from start date cannot be restricted on account of non-compliance/non-fulfilment of NoC conditions by applicant.
- Presently, 400/220kV Duburi (OPTCL) S/s is connected to ISTS through LILO of one circuit of Pandiabili (POWERGRID) – Baripada (POWERGRID) 400kV D/c line and to OPTCL network through Duburi (OPTCL) – Meramundali (OPTCL) 400kV D/c line. Further, in the 17th CMETS-ER held on 29-

03-2023, it was noted that 765/400kV Duburi-765kV substation along with LILO of both circuits of Angul (POWERGRID) – Paradeep (ISTS) 765kV D/c line and New Duburi (OPTCL) – Duburi-765kV (OPTCL) 400kV D/c line, would be constructed by OPTCL under intra-state scheme. The same was agreed in the 50th TCC/ERPC meeting held on 10th and 11th Aug 2023. OPTCL informed in the 23rd CMETS-ER, the expected date of commissioning of Duburi-765kV S/s alongwith associated lines is June 2026. With the commissioning of 765kV intra state system, the reliability of power supply from ISTS to Duburi 400/220kV S/s would be substantially improved. Further, it has been observed that in the time-frame of requirement of instant GNA_{RE} margin is available in the ISTS-OPTCL periphery for drawl of this additional power into OPTCL network.

- In view of the above, it is proposed to grant GNA_{RE} of 68MW (Within Region: 0MW & Outside Region: 68MW) to M/s Tata Steel Limited as drawee entity connected to intra-state transmission system at 220kV level of 400/220kV Duburi (OPTCL) S/s with start and end date of GNA_{RE} as 01-10-2025 & 31-05-2050 respectively. Applicant shall be responsible for compliance/fulfilment of NoC conditions prior to start date of GNA_{RE}. Effectiveness of GNA_{RE} in ISTS from start date cannot be restricted on account of non-compliance/non-fulfilment of NoC conditions by the applicant.

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Generation in neighbouring country	Nearest ISTS S/s in India	Quantum (MW)	Start date of GNA	End date of GNA
2	2200000252 (Original Application)	PTC India Limited	Trading licensee engaged in cross border trade of electricity	13-09-2023	Nikachhu Hydro Power Project (2x59MW) (Tangsibji Hydro Energy Limited), Bhutan	400/220kV Alipurduar substation	115	01-01-2024	31-12-2049

- Applicant [as an eligible entity under Regulation 17.1 (iv)] has applied for GNA as "*Trading licensee engaged in cross border trade of electricity in terms of the Cross Border Regulations*" for 115MW for injection of power from Nikachhu Hydro Power Project (Tangsibji Hydro Energy Limited), Bhutan into the Indian Grid at 400/220kV Alipurduar (POWERGRID) substation in West Bengal with start and end date of GNA as 01-01-2024 & 31-12-2049 respectively.
- The GNA application is for cross-border trade of electricity between India and Bhutan. As per CERC (Cross Border Trade of Electricity) Regulations, 2019, approval of Designated Authority (DA) is required with regard to eligibility of Participating Entity. However, the applicant has submitted a letter dated 08-04-2021 from CEA, wherein inter alia following has been mentioned:

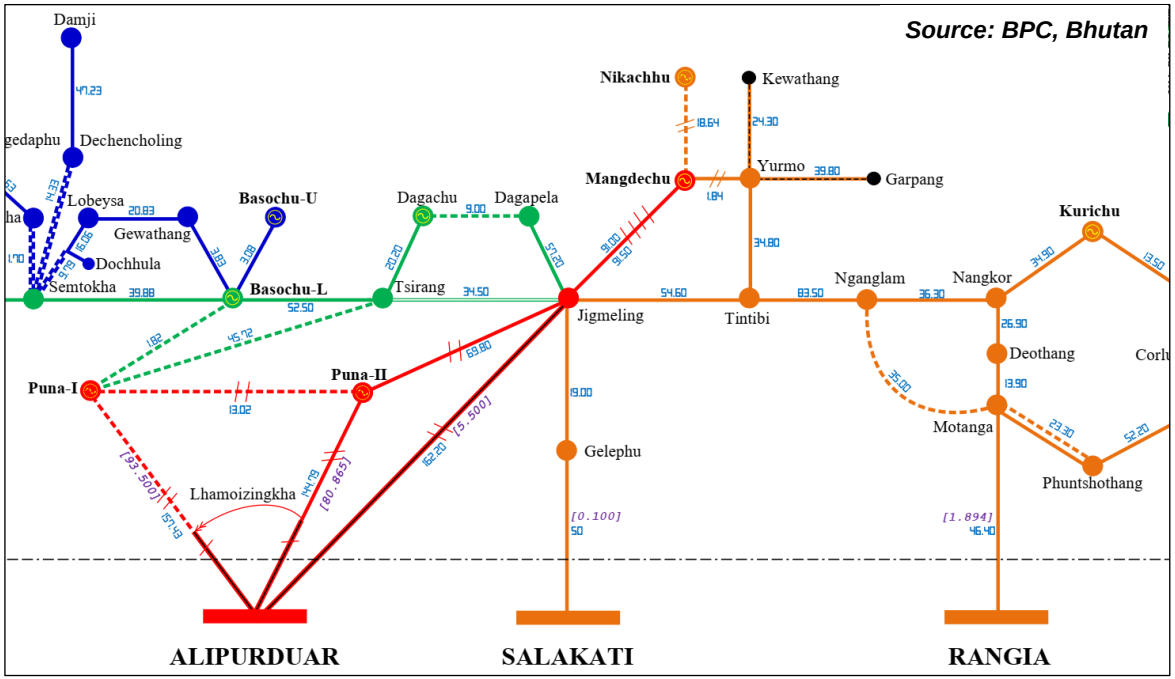
  "6. As the agreements for import of power to India (PPA between ThyE and PYC and PSA between PTC and APDCL) have been signed in year 2014, which is before the issuance of Guidelines for Import / Export (Cross Border) of Electricity-2018, the contract can be treated as deemed to have been done under provision 1.2 of these Guidelines.

  "7. Accordingly, in our opinion, approval of the DA for this transaction would not be required. However, it may be noted that other provisions of the Guidelines/DA Procedure-2021/CERC Regulations on CBTE-2019, like transmission charges, scheduling, metering, deviation settlement, grid operation related charges through SNA etc. would remain applicable."

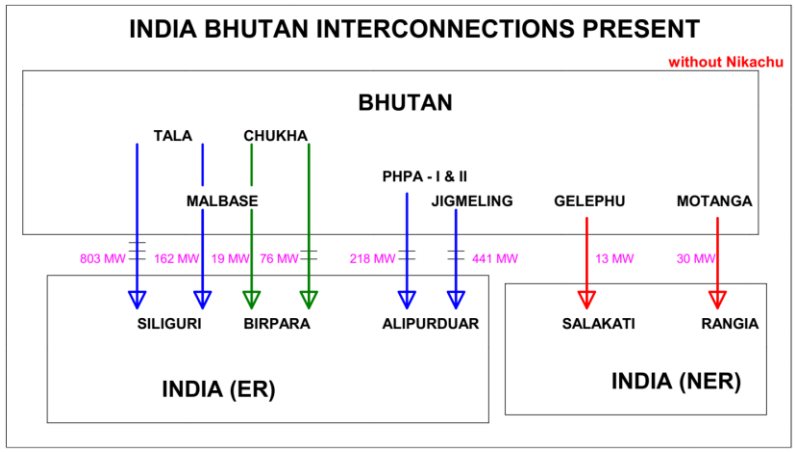
Further, it is to mention that CERC in its order no. 214/MP/2019 in the matter Tata Power Trading company Limited regarding import of power from Dagachu Hydro Power Corporation, Bhutan to India has held that if PPA has been entered into prior to notification of MoP Guidelines & CERC Cross Border Regulations, DA approval is not required in respect of each and every open access application.

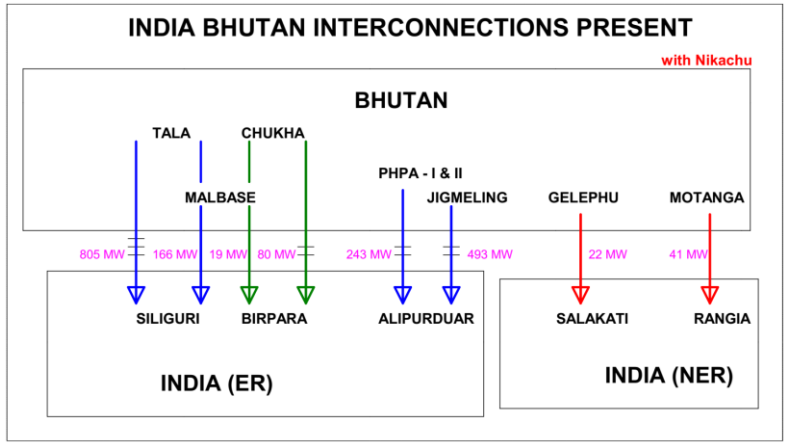
In view of the aforementioned letter of CEA and CERC order, it is considered that approval of DA for the instant case is not required. Accordingly, the application can be processed.

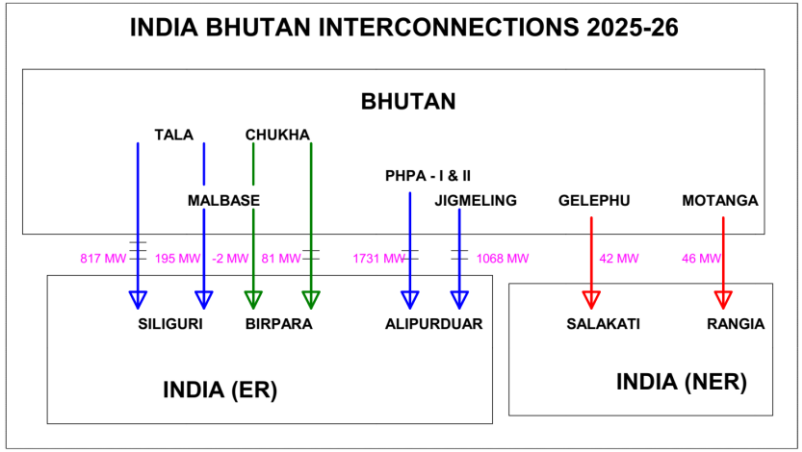
- Applicant in its application has mentioned that power generated from Nikachhu hydro power project is to be integrated with the existing Mangdechhu power plant in Bhutan which is about 18.6km far away. It may be noted that presently Mangdechu is connected to Jigmeling in Bhutan at 400kV level which is further connected to Alipurduar (POWERGRID) S/s in Indian grid through 2 nos. 400kV D/c (Quad) line (one direct and other via Punatsangchhu-II HEP). Further, at Mangdechhu, 132kV level, and at Jigmeling, 220kV & 132kV levels also exists. There are 132kV lines from Mandechhu and Jigmeling resulting in additional path for power evacuation towards other 132kV India-Bhutan interconnections. Accordingly, system studies have been carried out on latest PSSE files obtained from Grid-India, as requirement of GNA is from 01-01-2024. Further, system studies have also been carried out considering Punatsangchhu-I and Punatsangchhu-II also, as these projects were identified prior to Nikachhu's instant GNA application and system has already been implemented for power evacuation from Punatsangchhu-I and Punatsangchhu-II HEPs. It is understood that power from Punatsangchhu-I and Punatsangchhu-II HEPs shall be allocated to Indian beneficiaries by Ministry of Power, Govt. of India. As per latest CEA report (Sept 2023), Punatsangchhu-I and Punatsangchhu-II HEPs are expected by 2025-26 and Dec 2024 respectively.



- Observations of system study are as follows:
  - Presently, India imports about 2070MW of power from Tala, Chukha, Kurichu, and Mangdechhu HEPs in Bhutan, as per MoP allocation. Further, 2220MW shall also be injected into Indian grid from Punatsangchhu-I (1200MW) & Punatsangchhu-II (1020MW) HEPs, resulting in total of 4290MW.
  - Studies have been carried out on latest present time-frame file obtained from NLDC, Grid-India (considering Bhutan load of 550MW) and also with Punatsangchhu-I & Punatsangchhu-II HEPs (considering Bhutan load of 650MW).
  - In both the above cases, it has been observed that power flow on India-Bhutan cross-border interconnections and beyond the cross-border points in Indian grid is in order under normal as well as contingency cases. Thus, the **instant GNA can be granted on existing system.**







- As the instant GNA can be granted on existing system, as per Regulation 22.2 (c) (i) and Regulation 8, the applicant is liable to submit Conn-BG1 of ₹ 50 Lakh and Conn-BG3 at ₹ 2 Lakh/MW. Further, as per Regulation 22.2 (d), the applicant is also 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 GNA of 115MW to M/s PTC India Limited as Trading licensee engaged in cross border trade of electricity for injection of power into Indian grid from Nikachhu Hydro Power Project (2x59MW) (Tangsibji Hydro Energy Limited), Bhutan on existing system with start and end date of GNA as 01-01-2024 & 31-12-2049 respectively.

3. Application under GNA Regulations, 2022 received in the month of July 2023

3.1. In the 22nd and 23rd CMETS-ER held on 29-08-2023 & 25-09-2023 respectively, following GNA_{RE} application of M/s Avaada Greenh2 Private Limited (AG2PL) as Bulk Consumer was discussed.

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	2200000160 (Original Application)	Avaada Greenh2 Private Limited	Bulk Consumer seeking to connect to ISTS	17-07-2023	Gopalpur 765/400kV Substation	700 *[Within: 100 Outside:600]*	30-06-2026	30-06-2051

3.2. In the 23rd CMETS-ER, it was decided that a bilateral meeting would be held between OPTCL & M/s AG2PL, and OPTCL would provide minutes of the same. Upon receipt of the minutes, the subject application would be deliberated in the next CMETS-ER. **CTU is yet to receive any update on the matter.**

3.3. Applicant/OPTCL may update on the matter.

4. Application under GNA Regulations, 2022 received in the month of August 2023

4.1. In the 23rd CMETS-ER held on 25-09-2023, following GNA application of M/s ArcelorMittal Nippon Steel India Limited (AMNSIL) as Bulk Consumer was discussed:

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	2200000206 (Revised Application)	Arcelormittal Nippon Steel India Limited (ANSIL)	Bulk Consumer seeking to connect ISTS	17-08-2023	Paradeep 765/400kV Substation	432 *[Within: 432 Outside:0]*	01-01-2027	01-01-2052

4.2. In the 23rd CMETS-ER, it was decided that a bilateral meeting would be held between OPTCL & M/s ANSIL, and OPTCL would provide minutes of the same. Upon receipt of the minutes, the subject application would be deliberated in the next CMETS-ER. **CTU is yet to receive any update on the matter.**

4.3. Applicant/OPTCL may update on the matter.

5. Transition of "Connectivity/LTA/MTOA granted and applications received under Connectivity Regulations, 2009" to GNA Regulations, 2022 in line with provisions under Regulation 37 of GNA Regulations, 2022

5.1. **Transition under Regulations 37.6 (1)** viz. Only Connectivity exists (including part quantum not having LTA/MTOA) and the same is effective.

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
1a	DVC (Durgapur Steel Thermal Power Station)	1000	West Bengal	Generation (Thermal)	300	100	01-10-2023
1b	DVC (Raghunathpur Thermal Power Station)	1200	West Bengal	Generation (Thermal)	446.75 under 18.1 + 144.71 under 37.8(b)	116	01-10-2023
	• DSTPS (1000MW) is connected to ISTS grid through 400kV lines of POWERGRID and DVC. Out of 1000MW, 300MW LTA granted to/from M/s DSTPS was effective on firm basis, accordingly, deemed GNA of 300MW was provided under Regulation 18.1. The balance 700MW Connectivity quantum is not having LTA, out of which applicant vide application dated 28-09-2023 has requested for additional GNA of 100MW under Regulation 37.6(1) of GNA Regulations, 2022. • RTPS (1200MW) is connected to ISTS grid through 400kV lines / LILO portions of DVC (main line is owned by POWERGRID). Out of 1200MW, 446.75MW LTA granted to/from M/s RTPS was effective on firm basis, accordingly, deemed GNA of 446.75MW was provided under Regulation 18.1. Further, 144.71MW of MTOA was effective, accordingly, deemed GNA of 144.71MW was provided under Regulation 37.8(b) viz. [30MW North Central Railway till 30-11-2024; 30MW Indian Railway Gujarat (Western Railway) till 30-11-2024; 47.05MW Northern Railway till 01-12-2024; and 37.66MW North Western Railway till 07-12-2024]. The balance 753.25MW Connectivity quantum is not having LTA, out of which applicant vide application dated 28-09-2023 has requested for additional GNA of 116MW under Regulation 37.6(1) of GNA Regulations, 2022.						

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
	• Applicant has requested the start date of GNA as 01-10-2023 which is already passed. Accordingly, **applicant is requested to provide a reasonable revised start date** keeping in view the timelines for signing of Connectivity Agreement upon grant of additional GNA. • CERC vide order dated 22-09-2023 in the petition no. 11/SM/2023 i.r.o. Removal of difficulties (First Order) in giving effect to certain provisions of CERC GNA Regulations 2022, at para no. 76 provided as under: *"76. We observe that an entity which was connected to the grid, covered under Regulation 37.6(1) and injecting power on short term basis should not be bottled up for want of processing time by CTUIL. We are of the considered view that such an entity covered under Regulation 37.6(1) where CTUIL is not able to grant GNA before 1.10.2023, shall furnish the Conn-BG3 @ Rs.2 lakh/MW towards such additional GNA including entities covered under subclause (b) of Regulation 37.6(1). Post such **submission of Conn-BG3, CTUIL shall issue provisional GNA** to such entity post which such entity shall be eligible to get its power scheduled for the quantum of GNA sought for and for which Conn-BG3 has been furnished, subject to availability of transmission system, by treating such access as deemed T-GNA (for the quantum for which GNA is not made effective) and shall not be required to pay T-GNA charges. In case of entities covered under Regulation 37.6(1)(b), CTUIL shall intimate Conn-BG2 as per Regulation 8.3 of GNA Regulations, after which the Conn-BG3 already submitted by such entity shall be adjusted and Conn-BGs in accordance with Regulation 37.6(1) (b) shall need to be submitted by the entity. CTUIL is directed to process the grant of additional GNA within the maximum timeline of 6 months from the date of submission of Conn-BG3 @Rs.2 lakh/MW by such entity."* • CTUIL had received the requisite Conn-BG3 in regard to fulfilment of requirement under para 76 of CERC order in 11/SM/2023 dated 22-09-2023. Accordingly, provisional GNA of 100MW and 116MW was granted to DVC for their DSTPS and RTPS generation projects respectively vide letters dated 29-09-2023. • From system studies it has been observed that the existing ISTS including the immediate evacuation system of DSTPS comprising of 400kV lines emanating from DSTPS (without considering any drawl through 400/220kV ICTs at Durgapur, Raghunathpur, Koderma, Bokaro-A & Mejia-B switchyards) have margin for evacuation of this additional power to ISTS i.e. total 400MW [300MW deemed GNA + 100MW instant request]. • From system studies it has been observed that the existing ISTS including the immediate evacuation system of RTPS comprising of 400kV lines emanating from RTPS (without considering any drawl through 400/220kV ICTs at Durgapur, Raghunathpur, Koderma, Bokaro-A & Mejia-B switchyards) have margin for evacuation of this additional power to ISTS i.e. total 823.46MW [446.75MW deemed GNA under 18.1 + 144.71MW deemed GNA under 37.8 (b) + 116MW instant request]. • The Regulation 37.6 (1) (a) of the GNA Regulations states that *"(a) In case additional GNA as applied for under Regulation 17.2 can be granted on existing transmission system, the Nodal Agency shall grant such additional GNA on furnishing Conn-BG3 @ Rs.2 lakh/MW.*						

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
	Conn-BG3 shall be returned in five equal parts over the next five years starting from the year when such GNA becomes effective or in accordance with Regulation 16.2 of these regulations, whichever is later." • In the instant case, the additional GNA is proposed to be granted through "existing transmission system". Thus, in terms of Regulation 37.6 (1) (a), the applicant is liable to furnish Conn-BG3 @ Rs.2 lakh/MW. DVC has already submitted applicable Conn-BG3 of Rs 2Cr. on 29-09-2023. • In view of the above, it is proposed to grant following: (a) 100MW additional GNA to DVC for its DSTPS (2x500MW) generation project through existing ISTS (without augmentation) with the revised start date as agreed in the meeting. (b) 116MW additional GNA to DVC for its RTPS (2x600MW) generation project through existing ISTS (without augmentation) with the revised start date as agreed in the meeting. • Upon grant of additional GNA, DVC may note that they need to sign the requisite Connectivity Agreement in line with GNA Regulations, 2022 within stipulated timeline so as facilitate effectiveness of this additional GNA of 100MW.						
2	Sneha Kinetic Power Projects Private Limited (SKPPPL)	96	Sikkim	Generation (Hydro)	-	96	With immediate effect
	• M/s SKPPL vide letter dated 06-06-2023 had requested the formalities to be fulfilled for scheduling of 96MW power from its Dikchu HEP in Sikkim under GNA Regulations, 2022. In this regard a meeting was held on 26-06-2023, wherein following was decided: ➢ *96MW of power can be scheduled from Dikchu HEP (in Sikkim) of M/s SKPPPL under T-GNA in line with various provisions of the GNA Regulations, 2022. This arrangement shall strictly continue only till completion/commissioning of final intra-state connectivity system of Dikchu HEP by Govt. of Sikkim i.e. LILO of one circuit of Dikchu Pool – Singhik 220kV D/c line (operated at 132kV) at Dikchu HEP. Further, the ISTS transmission charges and deviation calculation for Dikchu HEP for T-GNA in ISTS shall be as per applicable Regulations of CERC.* • The above matter was informed/ratified in 21st CMETS-ER held on 28-07-2023. Accordingly, the decision was informed to CERC. CERC vide its order dated 22-09-2023 in petition no. 11/SM/2023 has provided directions at Issue. No. 19 regarding Treatment of Dikchu HEP (in Sikkim). The relevant portion is reproduced below: *"81. We observe that since Dikchu was granted Connectivity by CTU and is currently connected to ISTS. In case Dikchu wishes to schedule its power under ISTS, it needs to obtain GNA under Regulation 37.6(1) of the GNA Regulations. Since the connectivity of Dikchu*						

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
	may get changed to intra-State connectivity by December 2023 as per the status given by CTU, the treatment of the same needs to be spelt out. *82. In case GNA to Dikchu can be granted under Regulation 37.6 (1) of the GNA Regulations, it shall deposit Conn-BG3 @ Rs 2 lakh/MW. In case augmentation is required to grant GNA to Dikchu which requires processing time by CTUIL, the power for the project should not be bottled up and shall be scheduled under T-GNA as per our directions in Issue No. 18 of this Order, on submission of Conn-BG3 @ 2 lakh/MW. Conn-BG3 shall be returned in terms of Regulation 37.6 of the GNA Regulations. Since Dikchu is meant for power sale outside the State, it may retain its GNA even when it gets connected to the intra-state system in which case it becomes an entity under regulation 17.1(vi) of the GNA Regulations. In case Dikchu does not wish to continue with the GNA granted by CTU, on getting connected to an intra-State transmission system, it may seek a return of Conn-BG3 from CTU, in which case its GNA shall be cancelled."* • In line with the above CERC order, M/s SKPPPL applied for grant of 96MW GNA under Regulation 37.6 (1) of GNA Regulations, 2022. Also, M/s SKPPPL submitted the requisite Conn-BG3. Upon receipt of requisite application and Conn-BG3 corresponding to 96MW, M/s SKPPL was granted provisional GNA of 96MW for its generation project in Sikkim vide CTU letter dated 29-09-2023 in terms of CERC order in petition no. 11/SM/2023. • Presently, an interim ISTS connectivity of 96MW is granted to M/s SKPPPL as per Order dated 03-12-2014 in Petition No. 157/MP/2014, through LILO of one circuit of Teesta III HEP – Kishanganj 400kV D/c (Quad) line (subsequently LILOed at Rangpo S/s). The final arrangement in regard to connectivity system of Dikchu HEP was agreed in the 1st meeting ERPC-TP held on 14-02-2020, which is as below: (i) LILO of one circuit of Dikchu Pool – Singhik 220kV D/c (Twin Moose) line (to be initially operated at 132kV) – by Govt. of Sikkim (ii) LILO of one circuit of Teesta-III – Rangpo/Kishanganj 400kV D/c (Quad) line at Dikchu HEP would be disconnected from Dikchu HEP switchyard and original Teesta-III – Rangpo – Kishanganj 400kV D/c (Quad) line would be restored by generation developer upon commissioning of above LILO • With regard to element at (i) above, in the minutes of 21st CMETS-ER it was recorded that *"Power Dept., Sikkim vide email dated 21-08-2023 has informed that LILO of one circuit of Dikchu Pool – Singhik 220kV D/c line (operated at 132kV) at Dikchu HEP comprise of total 04 nos. of D/c towers including 01 composite tower for LILO arrangement. The tentative completion date is 29th Feb 2024."* **Power Dept., Govt. of Sikkim is requested to confirm the expected commissioning schedule.** • **M/s SKPPPL may provide their plan and timeline to restore the LILO mentioned at item (ii) above.** • With completion of the above scheme, Dikchu generation would be disconnected from ISTS and would be connected to STU system. No constraint is observed in evacuation of power in the ISTS network with the existing interim arrangement.						

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
	• Further, the Regulation 37.6 (1) (a) of the GNA Regulations states that *"(a) In case additional GNA as applied for under Regulation 17.2 can be granted on existing transmission system, the Nodal Agency shall grant such additional GNA on furnishing Conn-BG3 @ Rs.2 lakh/MW. Conn-BG3 shall be returned in five equal parts over the next five years starting from the year when such GNA becomes effective or in accordance with Regulation 16.2 of these regulations, whichever is later."* • In the instant case, the additional GNA is proposed to be granted through "existing transmission system". Thus, in terms of Regulation 37.6 (1) (a), the applicant is liable to furnish Conn-BG3 @ Rs.2 lakh/MW. M/s SKPPPL has already submitted applicable Conn-BG3 of Rs 1.92 Cr. on 29-09-2023. • The start date of GNA has been indicated as "with immediate effect". **Applicant is requested to provide a reasonable revised start date** keeping in view the timelines for signing of Connectivity Agreement upon grant of GNA. • In view of the above, it is proposed to grant 96MW GNA to M/s SKPPPL for its Dikchu HEP (2x48MW) through existing ISTS (without augmentation) with the revised start date as agreed in the meeting. • Upon grant of GNA under Regulation 37.6(1) (a), M/s SKPPPL may note that they need to sign the requisite Connectivity Agreement in line with GNA Regulations, 2022 within stipulated timeline so as facilitate effectiveness of this GNA of 96MW. • CERC in its order in petition no. 11/SM/2023 has mentioned that *"82. …Since Dikchu is meant for power sale outside the State, it may retain its GNA even when it gets connected to the intra-state system in which case it becomes an entity under regulation 17.1(vi) of the GNA Regulations. In case Dikchu does not wish to continue with the GNA granted by CTU, on getting connected to an intra-State transmission system, it may seek a return of Conn-BG3 from CTU, in which case its GNA shall be cancelled."* Accordingly, M/s SKPPL at suitable time and for requisite quantum apply for GNA as an eligible entity under Regulation 17.1 (vi) of GNA Regulations, 2022. If M/s SKPPL desires not to continue the instant 96MW GNA (through interim arrangement in ISTS), then on getting connected to an intra-state transmission system, it may seek return of submitted Conn-BG3 from CTU and 96MW GNA (instant GNA through interim arrangement in ISTS) shall be cancelled. **M/s SKPPPL may note this provision.**							
3	DANS Energy Pvt. Ltd. (DEPL): Jorethang	96	New Melli, Sikkim	Generation (Hydro)	86.4	9.6	27-10-2023
	• Jorethang HEP (96MW) is connected to ISTS grid through 220kV D/c DTL to New Melli (POWERGRID) switching station. Out of 96MW, 86.4MW LTA granted to/from M/s DEPL was effective on firm basis, accordingly, deemed GNA of 86.4MW was provided under Regulation 18.1. The balance 9.6MW Connectivity quantum is not having LTA, out of which applicant vide application dated 20-10-2023 has requested for additional GNA of 9.6MW under Regulation 37.6(1) of GNA Regulations, 2022. • From system studies it has been observed that the existing ISTS beyond New Melli (POWERGRID) S/s has margin for evacuation of this additional power to ISTS i.e. total 96MW [86.4MW deemed GNA + 9.6MW instant request]. In the instant case, the additional GNA is						

Sl. No.	Applicant	Installed Capacity (MW)	Location	Nature of entity	Deemed GNA	Quantum for transition under Reg. 37.6(1) (MW)	Start date of GNA under GNA Regulations (requested)
	proposed to be granted through "existing transmission system". Thus, in terms of Regulation 37.6 (1) (a), which states that *"(a) In case additional GNA as applied for under Regulation 17.2 can be granted on existing transmission system, the Nodal Agency shall grant such additional GNA on furnishing Conn-BG3 @ Rs.2 lakh/MW. Conn-BG3 shall be returned in five equal parts over the next five years starting from the year when such GNA becomes effective or in accordance with Regulation 16.2 of these regulations, whichever is later.",* the applicant is liable to furnish Conn-BG3 @ Rs.2 lakh/MW. • Applicant has requested the start date of GNA as 27-10-2023. The **applicant is requested to provide a reasonable revised start date** keeping in view the timelines for signing of Connectivity Agreement upon grant of additional GNA. • In view of the above, it is proposed to grant 9.6MW additional GNA to M/s DEPL for its Jorethang HEP (2x48MW) through existing ISTS (without augmentation) with the revised start date as agreed in the meeting. • Upon grant of GNA under Regulation 37.6(1) (a), M/s DEPL may note that they need to sign the requisite Connectivity Agreement in line with GNA Regulations, 2022 within stipulated timeline so as facilitate effectiveness of this additional GNA of 9.6MW.						

6. Interim connection of M/s Ind Barath Energy (Utkal) Limited (IBEUL) to ISTS till commissioning of its Dedicated Transmission Line (DTL)

6.1. The matter for grant of 350MW Connectivity to M/s Ind Barath Energy (Utkal) Limited (IBEUL) was discussed & agreed in the 19th CMETS-ER held on 30-05-2023. In the said meeting, M/s IBEUL informed that its existing Dedicated Transmission Line (DTL) viz. IBEUL – Sundargarh (Jharsuguda) (POWERGRID) 400kV (Twin Moose) line is heavily damaged and would require about 10-12 months to restore.

6.2. As decided in the 19th CMETS-ER, M/s IBEUL was granted final connectivity under GNA Regulations vide CTU intimation dated 15-09-2023 at 765/400kV Sundargarh (Jharsuguda) (POWERGRID) S/s through above DTL along with associated line bays at both ends (under the scope of IBEUL) w.e.f. 31-03-2024.

6.3. In the meeting held on 18-09-2023 under Chairperson, CEA, JSW was instructed to "… implement the SPS and to apply and complete the LILO arrangement within time frame and further, directed JSW to approach the ERPC/ERLDC for evacuation of power from Ind-Barath (Utkal) TPP through LILO arrangement till DTL is made ready."

6.4. Now, M/s IBEUL vide letter dated 11-10-2023 (enclosed at **Annexure-V**) has mentioned that as directed in the above mentioned meeting of CEA, they approached ERPC/ERLDC. They have mentioned that as they are an ISTS Connectivity grantee, they have been advised to approach CTUIL for interim connectivity. It has been further mentioned in the letter that

"During the CEA's meeting on 29th September '23, it was discussed that interim connectivity could be granted through both circuits of the existing OPGC-Jharsuguda ISTS transmission line. This arrangement is vital for us to evacuate power effectively from both units of 350 MW each at our power plant."

6.5. In view of the above, studies have been carried out for two alternatives on the present scenario PSSE file obtained from ERLDC, Grid-India:

Alt-1. LILO of one circuit of OPGC-Sundargarh 400kV D/c (Triple Snowbird) line at DTL of M/s IBEUL at suitable crossover point of the lines.

Alt-2. Connecting both circuits of OPGC – Sundargarh (POWERGRID) 400kV (Triple Snowbird) D/c line with the DTL of M/s IBEUL at crossing point so as to form IBEUL – Sundargarh (POWERGRID) 400kV D/c line. The 400kV section towards OPGC can be kept anti-theft charged either from LILO point with opened at OPGC end or from OPGC end with opened at LILO point.

6.6. Observations on the above two alternatives are as follows:

- In Alt-1, from the study results (**Annexure-VI**), it has been observed that the power flow in the ISTS is generally in order under normal as well as N-1 contingency conditions for drawl of 35MW and injection of 350MW by M/s IBEUL. However, as per earlier inputs from stakeholders it is understood that there is apprehension that there could be some scenarios in which power could flow from Sundargarh to Lapanga via OPGC, resulting in critical loading of OPGC – Lapanga section. Thus, there could be requirement of SPS, which needs to be deliberated, if required.
- In Alt-2, M/s IBEUL would be connected to ISTS and M/s OPGC to intra-state. It is understood that OPGC (2x600MW) generation is completely scheduled by Odisha-SLDC and power is drawn completely by Odisha. Further, it is observed that OPGC – Lapanga 400kV D/c (Twin AAAC Moose) line is N-1 compliant (1015A i.e. 1406MVA, as per inputs from OPTCL vide email dated 29-11-2019). There shall not be any N-1 issue or requirement of SPS. Further, there shall also not be any apprehension of power flow from Sundargarh to Lapanga via OPGC, resulting in critical loading of OPGC – Lapanga section. M/s IBEUL and M/s OPGC can operate independently without any SPS.
- As the Alt-2, involves no requirement of SPS and also N-1 is maintained for both M/s IBEUL and M/s OPGC, it is proposed that interim connection to ISTS may be allowed to M/s IBEUL for 350MW through Alt-2.

6.7. M/s IBEUL may inform the date from which interim arrangement is required.

6.8. May be deliberated.

B. ISTS expansion schemes in Eastern Region

7. Allocation of space for 2 no. 132kV line bays at each Sitamarhi and Chandauti (New) ISTS S/s for intra-state lines

7.1. In a meeting taken by CEA on 15-09-2023 (minutes enclosed at **Annexure-VII**) regarding Intra-state schemes/proposals of BSPTCL, following 132kV D/c lines from ISTS substations were inter alia agreed to be implemented by BSPTCL under intra-state schemes to meet their future demand of 2027-28 timeframe. Further, it was noted in the minutes that, BSPTCL to take up with CTU for allocation of 2 no. 132kV line bays at Sitamarhi (ISTS) and Chandauti (New) (ISTS) substations for termination of intra state lines mentioned below. Accordingly, BSPTCL vide email dated 18-10-2023 (copy enclosed at **Annexure-VIII**) has requested for allocation of space for 2 no. 132kV line bays each at Chandauti (New) ISTS and Sitamarhi (ISTS) for the termination of below mentioned lines.

(i) Sitamarhi (ISTS) – Sheohar (BSPTCL) 132 kV D/c line.

(ii) Chandauti (New) (ISTS) – Sherghati (BSPTCL) 132 kV D/c line.

7.2. 400/220/132kV Sitamarhi (PMTL) and 400/220/132kV Chandauti (New) (PMTL) substations were implemented under Eastern Region Strengthening Scheme-XXI (ERSS-XXI) by M/s POWERGRID Mithilanchal Transmission Limited (PMTL) through TBCB route and are already commissioned. In the RfP, space provisions were kept for 4 no. 132kV future line bays at each of these substations. BSPTCL in their said e-mail have requested for allocation of space for the line bays and have mentioned that they would take up implementation of the same in next financial year under intra state scheme.

7.3. M/s PMTL (POWERGRID) vide email dated 17-10-2023 was requested to confirm space for the said line bays along with the same marked on latest SLD & GA and also indicate bay no. **M/s PMTL (POWERGRID) may update.**

7.4. In view of the above, it is proposed to allocate space at following ISTS substations for 2 no. new 132kV AIS line bays to be implemented by BSPTCL under intra-state scheme:

a) Space at existing 400/220/132kV Sitamarhi (PMTL) S/s

- 2 no. of new 132kV AIS line bays to be implemented by BSPTCL for termination of their Sitamarhi (PMTL) – Sheohar (BSPTCL) 132kV D/c intra-state line.

b) Space at existing 400/220/132kV Chandauti (PMTL) S/s

- 2 no. of new 132kV AIS line bays to be implemented by BSPTCL for termination of their Chandauti (New) (PMTL) – Sherghati (BSPTCL) 132kV D/c intra-state line.

8. Interconnection of Andaman & Nicobar Islands (ANI) with ISTS grid

8.1. A meeting was taken by Hon'ble Minister of Power on 25-05-2023 regarding power supply in ANI, wherein it was decided that based on various issues such as import of fuel, transportation, regasification and storage of gas, the establishment of LNG project is not viable in the near future and in view of energy security and further usage of gas for electricity generation which is also a fossil fuel, the LNG project may not be taken forward.

8.2. To meet the power requirement through clean and green energy and to meet the target of greening the islands, a HVDC link was proposed in the meeting held under the Chairpersonship of Chairperson (CEA) on 07-06-2023. Clean and green power through this link could be supplied to North, Middle and South Andaman. The interconnection of North, Middle and South Andaman through 66kV link with funding support from Govt. of India is already under tendering stage.

8.3. The peak demand of North, Middle and South Andaman is expected to increase to about 72MW by 2029-30 & 92MW by 2042 (as per 20th EPS). In order to facilitate supply of clean and green energy from mainland Indian grid to ANI, a VSC based HVDC link has been planned from Paradeep, Odisha to Port Blair, ANI using the under-sea cable. A major portion of the cost of the project is due to the cost of undersea cable. Accordingly, to reduce the cost of cable, analysis has been carried out for various voltage levels for the HVDC link viz. ±200kV, ±320kV & ±525kV. Observations for each analysis is mentioned below:

- **Observations on ±200kV:** This is not a standardized solution. Further, the loss in the ±200kV cable is very high as compared to ±320kV and ±525kV.
- **Observations on ±525kV:** It would not be prudent to design ±525kV cable for such a small capacity (ampacity 240A). Further, the land required for this design would be about 12-15 acres which might be difficult to arrange in Andaman Islands. This alternative would be an expensive solution for such a small quantum of power.
- **Observations on ±320kV:** ±320kV cable is the techno-economical alternative to feed the load of Andaman Islands. In this alternative, rating of HVDC cable would be suitable for 250MW power transfer capacity. However, the cross-section area of the cable varies with the depth of the cable and the same shall be finalized during detailed engineering. The land requirement for ±320kV HVDC station at Andaman Islands would be about 8 acres which could be arranged by ANI Authority. **ANI to confirm land availability.**

8.4. HVDC Bipole with DMR has been proposed to maintain the redundancy of both cable and HVDC terminal so that in case of outage of any cable/terminal, the power to Andaman Islands could be supplied at reduced capacity (i.e. about half the rated

capacity). The rating of HVDC link has been considered as 250MW, which translates to about 400A. In first phase with only 125MW terminal, there shall not be any terminal redundancy.

8.5. In view the above, following scope of works under ISTS including HVDC link has been identified for connection of Andaman Islands to National grid at Paradeep, Odisha:

a) Establishment of ±320kV, 250MW HVDC station at Paradeep, Odisha in two phases each of 125MW

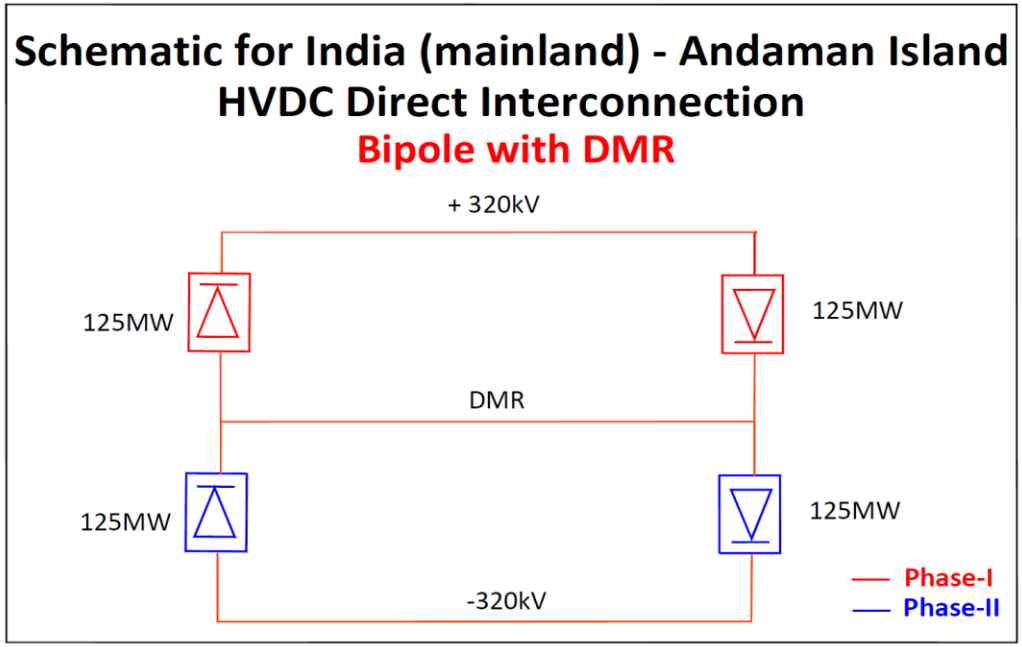
b) Establishment of ±320kV, 250MW HVDC station at Port Blair, ANI in two phases each of 125MW. AC switchyard of Paradeep HVDC station shall be GIS.

c) ±320kV, 250MW HVDC bipole link with DMR from Paradeep HVDC to Port Blair (about 1150km)

d) Paradeep (ISTS) – Paradeep HVDC 400kV D/c line

e) 2 nos. 400kV GIS line bays at Paradeep (ISTS) GIS S/s for termination of Paradeep (ISTS) – Paradeep HVDC 400kV D/c line.

f) 2 nos. 400kV GIS line bays at Paradeep HVDC GIS S/s for termination of Paradeep (ISTS) – Paradeep HVDC 400kV D/c line.



8.6. Considering the present demand of Andaman, it is proposed that out of 250MW HVDC, 1st phase would comprise of 125MW terminal at both ends with tentative timeframe of implementation as 2029-30 and 2nd phase would be taken up in future depending upon demand growth. **Tentative cost of 1st phase (1x125MW) is estimated to be about Rs. 15,120 Cr.**

8.7. May be deliberated.

9. Provision for application for additional GNA by STUs under Regulation 19.1 of GNA Regulations, 2022

9.1. CERC has issued an order in Suo moto petition no. 15/SM/2023 on 01-10-2023 on Removal of difficulties (Third Order) in giving effect to certain provisions of CERC GNA Regulations 2022. Item no. 4 of this order refers to extension of timeline for application for grant of GNA by STUs under 19.1. Accordingly, **STUs are allowed to apply for additional GNA in offline mode as per format available on CTU website for any quantum till 31-03-2024 with start date of additional GNA till 31-03-2025**, which shall be considered for grant by CTUIL in terms of the GNA Regulations. STUs are required to apply in advance to CTU considering two months processing time required for grant of GNA.

9.2. Application for additional GNA quantum needs to be made online on NSWS portal under Regulation 19.2 of GNA Regulations between 01st Apr to 30th Sept of every financial year starting from FY 2024-25 for next three financial years. For example, application can be made between 01-04-2024 to 30-09-2024 for next three financial years i.e. FY 2025-26, 2026-27 and 2027-28.

9.3. Advisory regarding the above along with application format is available on the CTU website at www.ctuil.in/new_advisory >> 1. Application Related >> Advisory for Additional GNA by STUs under Regulation 19.1.

9.4. The above was also communicated to all STUs of Eastern Region vide CTU email dated 06-10-2023.

9.5. All STUs may please note and apply for additional GNA, if required.

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

10.1. 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**.

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

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

11.1. 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**.

11.2. 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.

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

12.1. 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**.

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

*****

Annexure-I

Status of Downstream Transmission Network in ER

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unuti-lised 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	Administrative approval taken, NIT to be invited shortly	November 2025
2.	Daltonganj	Jharkhand	400/220/132kV, 2x315MVA+ 2x160MVA	132	2	Existing bay	Daltonganj (POWERGRID) – Chatarpur 132kV D/c	22-10-2019	Expected by May 2024.
3.	Dhanbad	Jharkhand	400/220kV, 2x500MVA	220	4	Existing bay	LILO of 1st circuit of 220kV Dumka – Govindpur D/c line at Dhanbad (23km)	LoA issued on 17th May 2023	16-05-2024
							Dhanbad - Baliyapur 220kV D/c line.	NIT invited. LoA to be issued shortly.	
4.	Keonjhar	Odisha	400/220kV, 2x315MVA	220	2	Existing bay	Keonjhar (POWERGRID) – Turumunga (OPTCL) 220kV D/c		Expected by Dec 2023.
5.	Rourkela	Odisha	400/220kV, 4x315MVA	220	-	-	Reconductoring of Rourkela – Tarkera 220kV D/c line with HTLS conductor	Awarded	Expected by Mar 2024 and at best effort basis Jan 2024.
6.	Subashgram	West Bengal	400/220kV, 2x315MVA+ 1x500MVA	220	2	Existing bay	Subashgram (POWERGRID) – Baraipur 220kV D/c line		220kV Baruipur substation charged. 132kV downstream viz. Baruipur-Serakol 132kV D/c delayed due to RoW. Line completed except stringing of 1 no. span due to pending court case. The line has been charged as

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unuti-lised bays	Status of ISTS	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
									antitheft measure on 20/04/23 except the incomplete span.
7.	Rajarhat	West Bengal	400/220kV, 2x500MVA	220	2	Existing bay	Rajarhat (POWERGRID) – New Town AA IIC 220kV D/c		Line charged on 26-09-2022 from Rajarhat S/s. New Town AA IIC S/s is getting delayed due to some issues in 132kV GIS bus ducts & 220kV GIS. Expected to be commissioned by December-23.
8.	Sitamarhi (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2	Existing bay	LILO of Benipatti - Pupri 132kV S/c at Sitamarhi (New)		Expected by December 2023.
9.	Saharsa (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2-ISTS (addln.4 by state)	Existing bay	Saharsa (New) - Saharsa 132kV D/c line formed by LILO of Saharsa - Banmankhi and Saharsa - Uda Kishanganj 132kV S/c line	Line portion ready	04 nos. of bays are under construction by BSPTCL at Saharsa (New). These bays are expected in Oct 2023.
10.	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:** Awarded on 03-03-2023. **Bays:** Tender has been cancelled due to high cost. Retendering is under progress.	**Line**: Expected to be completed within 18 months from award i.e. by 02-09-2024. **Bays**: 12 months from the date of issuance of Notification of Award.
11.	Durgapur	DVC	400/220kV, 3x315MVA	220	-	-	Reconductoring of Durgapur – Parulia (DVC) 220kV D/c line with HTLS conductor. (1000A)	Awarded in Feb 2022.	Expected by December 2023.

Annexure-II

Status of 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	**Bakhtiyarpur GIS**	400/220/132kV, 2x500MVA + 2x160MVA	26-11-2019	1st 500MVA: Oct 2023 2nd 500MVA: Oct 2023 1st 160MVA: Dec 2023 2nd 160MVA: Dec 2023
a)	LILO of both circuits of Barh – Patna (PG) 400kV D/c (Quad) line-1 at Bakhtiyarpur 400 kV 2xD/c line	400kV 2xD/c	26-11-2019	Line ready to be charged matching with Bakhtiyarpur S/s.
II	**Chappra (New)**	400/220/132kV, 2x500MVA + 2x200MVA	NIT issued	Dec 2025
a)	LILO of 400 kV Barh (NTPC) – Motihari (DMTCL) D/C (Quad) transmission line at Chappra	400kV 2xD/c	NIT issued	Dec 2025
B	**Odisha (to be implemented by OPTCL)**			
I	**Gopalpur**	400/220kV, 2x500MVA	Tendering activity will be taken within one month and award will be expected till Dec 2023.	Mar 2026
a)	Pandiabili (POWERGRID) – Gopalpur 400kV D/c (AAAC Twin Moose) line	400kV D/c	Tendering activity will be taken within one month and award will be expected till Dec 2023.	Mar 2026
II	**Therubali**	400kV switching station along with 420kV, 1x125MVAr bus reactor	Survey completed. Land schedule is under preparation	2026-27
a)	Gopalpur – Therubali – Jeypore (POWERGRID) 400kV D/c line	400kV D/c	To be taken after tendering of Gopalpur S/s.	2026-27
III	**Bhadrak**	400/220kV, 2x500MVA	Tender was cancelled due to high cost. Exploring Self-funding.	2025-26
a)	LILO of Baripada – New Duburi and Baripada – Pandiabili 400kV line sections at Bhadrak	400kV D/c	Tender was cancelled due to high cost. Exploring Self-funding.	2025-26
IV	**Paradeep**	400/220kV, 2x500MVA	Awarded in Dec 2022	Dec 2024

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
a)	Paradeep – New Duburi 400kV D/c line	400kV D/c	Line work started.	Dec 2024
V	**Joda New**	400/220kV, 3x500MVA	To be taken up under intra state TBCB. Assigned to PFC. Site selection under progress	2025
a)	LILO of Rourkela (POWERGRID) – Talcher (NTPC) 400kV D/c line at Joda New	400kV D/c	To be taken up under intra state TBCB. Assigned to PFC.	2025
VI	**Kolabira**	765/400kV, 2x1500MVA	Land is finalised. Survey work will be awarded in Oct 2023	**-**
a)	Sundargarh-B (POWERGRID) – Kolabira 765kV D/c line	765kV D/c	Survey work will be awarded in Oct 2023	-
b)	Kolabira – Duburi-765kV 765kV D/c line	765kV D/c	Survey work will be awarded in Oct 2023	-
C	**Jharkhand (to be implemented by JUSNL)**			
I	**Chandil (New)**	400/220kV, 2x500MVA	NIT invited & work award is expected to be taken in November 2023.	24 months
a)	PVUNL – Chandil 400kV D/c (Quad) line (130km) (80MVAr sw. line reactor at Chandil end)	400kV D/c (Quad)	LoA issued on 20-07-2023. Works has been awarded.	July 2025 (24 months from the award date)
b)	Chandil – Chaibasa (POWERGRID) 400kV D/c (Quad) line (50km)	400kV D/c (Quad)		
c)	Chandil – Dhanbad (ISTS) 400kV D/c (Quad) line (130km)	400kV D/c (Quad)		
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 are discussing internally and with ISTS licensees of respective substations for mode of implementation of line bays. They mainly focused on award of lines first. Now, bay works would be taken up. CTU highlighted that as line works have already been awarded 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.	
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	NIT invited & Work award is expected to be taken in November 2023.	24 months

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
a)	PVUNL – Koderma 400kV D/c (Quad) line (133km) (80MVAr sw. line reactor at Koderma end)	400kV D/c (Quad)	LoA issued on 20-07-2023. Work awarded	July 2025 (24 months from the award date)
V	**Latehar**			
a)	Patratu – Latehar 400kV D/c line	400kV D/c	Forest Stage-I clearance is awaited.	Mar 2024
b)	Latehar – Chandwa (POWERGRID) 400kV D/c line	400kV D/c	Work in Progress. However, progress is slow. This work is being executed by POWERGRID under Jharkhand Consultancy Project (JCP).	Dec 2023
D	**West Bengal**			
(to be implemented by WBSETCL)				
I	**New Laxmikantpur GIS**	400/132kV, 2x315MVA	Land identified. In process of acquisition.	
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	**Interim arrangement:** M/s HEL is yet to receive the clearance from OEM of their generating units for LILOing of 400KV Haldia-Subhasgram line.	
II	**Falakata**	220/132kV, 2x160MVA	Initial civil works have been started.	Mar-2024
a)	LILO of Birpara – Alipurduar 220kV D/c line at Falakata substation (LILO portion length around 9km)	220kV 2xD/c		Mar-2024 (getting delayed due to poor progress of work by Vendor)
(to be implemented by CESC) – to be updated by WBSETCL				
III	**Subhasgram (POWERGRID)**	-	-	-
	Installation of new 400/220kV, 500MVA (6th) ICT at Subhasgram (POWERGRID) S/s along with associated ICT bays and OLTC by CESC at its own cost	400/220kV, 1x500MVA (6th ICT)	Go ahead clearance from CESC given to POWERGRID for tendering process. Agreement between POWERGRID & CESC executed on 26-05-2023.	Technical bid opened by POWERGRID. Opening of price bid by this month.
E	**DVC (to be implemented by DVC)**			
I	**Gola-B**	400/220/132kV 2x500MVA + 2x200MVA	Will be taken up in TBCB mode by formation of two	December 2026

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
a)	LILO of both circuits of Ranchi – RTPS 400kV D/c line at Gola-B	400kV D/c	different SPVs for WB and Jharkhand area respectively. M/S PFC Consulting Ltd. has been appointed as BPC. Presently RFP documents are under preparation. Deviations in respect of DVC has been observed in the Standard Bidding Documents and the TSA. Letter initiated to MOP for incorporation of changes. Awaiting reply. Once received the RfP document would be issued.	
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		

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.	Rourkela (POWERGRID)	2 No. 220kV lines bays for termination of Rourkela (POWERGRID) – Tikrapara 220kV D/c (HTLS) line	No clarity from beneficiary	On hold	1st & 7th
2.	Keonjhar (POWERGRID)	2 No. 220kV lines bays for termination of Keonjhar (POWERGRID) – Tikarpada 220kV D/c line	No clarity from beneficiary	On hold	1st
3.	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. Agreement between WBSETCL & PGCIL has been executed on 18-07-23. Line survey completed and engineering & cost estimation completed.	Tender for line & WBSETCL end bay works will be floated shortly.	7th

Annexure-IV

COPSE/ 32 /23
Date: 11.10.2023

Mr. Rajesh Kumar
Sr General Manager
CTUIL
Gurugram
Haryana - 122001

Sub: Request to consider start date of GNA_{RE} for application no 2200000260 from 01.10.2025 in place of 01.06.2025

Dear Sir

We have applied for 68 MW GNA_{RE} vide application no 2200000260. The start date of GNA_{RE} in the application is 01.06.2025 and end date is 31.05.2050.

We would like to inform that the developer of the RE project, from where we have planned to source the RE power, had applied for connectivity at Koppal 2 PS in Karnataka wef 01.06.2025 vide application no 2200000045. However, the connectivity has been approved from 30.09.2025 (tentative).

In view of above, we request you to consider the start date of GNA_{RE} in our application no 2200000260 from 01.10.2025 in place of 01.06.2025. End date of GNA_{RE} will remain the same, i.e, 31.05.2050.

Thanking you.

Yours sincerely

Chief, Power Management Group

TATA STEEL LIMITED
Jamshedpur 831 001 India
Registered Office Bombay House 24 Homi Mody Street Fort Mumbai 400 001
Tel 91 22 66658282 Fax 91 22 66657724
Corporate Identity Number L27100MH1907PLC000260 Website www.tatasteel.com

Annexure-V

IND-BARATH ENERGY (UTKAL) LIMITED

(CIN: U40105TG2008PLC058638)

REG. OFFICE: H No. 8-5-210/43, Plot No 44, Shiva Enclave Old Bowenpally Secunderabad, Rangareddi, TG- 500011 **EMAIL ID:** jswel.investor@jsw.in

October 11, 2023

To,
Shri Rajesh Kumar (Sr. General Manager)
Central Transmission Utility of India Limited,
Saudamini, Plot No.2, Sector 29,
Gurugram, Haryana – 122 001.

Dear Sir,

Sub: Interim Connectivity (Revival of Thermal Power Plant)

Ref.: 1) Our letter dated 15th March 2023 – seeking connectivity for interim duration
2) Our connectivity application no. 2200000031 dated 26th April 2023
3) CMETS-ER MoM dated 27th June 2023 – approving connectivity
4) ERPC-OCC MoM dated 11th July 2023 – approving for interim duration
5) ERPC Special MoM dated 2nd August 2023 – recommending CTU's approval
6) In-Principle Grant of Connectivity dated 23rd August 2023 – Granting connectivity
7) Our letter dated 24.08.23 – seeking approval for interim connectivity
8) CEA letter no.278/stressedprojects/TPP&D/CEA/2023/680-683 dated 29th September 2023

As you are aware, we are diligently pursuing revival plan aimed at re-commissioning BTG, Switchyard, Balance of Plant, and repairing existing dedicated transmission system to establish connectivity to ISTS Jharsuguda.

Also in this context, a meeting chaired by CEA took place on 18th September 2023 (a copy of Record of Discussion is enclosed for reference). During this meeting, we were directed to initiate discussions with ERPC/ERLDC regarding the evacuation of power through an interim arrangement. Consequently, we promptly scheduled a meeting and engaged in discussions with ERPC/ERLDC. In the course of these discussions, since we being a connectivity grantee by CTUIL, were advised to approach CTUIL for interim connectivity. CTUIL, it was explained, will address this matter during the upcoming CMETS meeting, jointly with ERPC/ERLDC.

During the CEA's meeting on 29th September '23, it was discussed that interim connectivity could be granted through both circuits of the existing OPGC-Jharsuguda ISTS transmission line. This arrangement is vital for us to evacuate power effectively from both units of 350 MW each at our power plant.

In light of the above, we kindly request you to take up this matter during the forthcoming CMETS meeting. We seek your valuable approval for the granting of interim connectivity through both circuits of the OPGC-Jharsuguda ISTS transmission line.

Your kind approval is pivotal to the successful implementation of this crucial interim arrangement, and we greatly appreciate your support to this matter.

We look forward to your kind approval.

Thanking you,
For Ind Barath Energy Utkal Limited

Pritpal Singh
DGM (Business Development)

सत्यमेव जयते

भारत सरकार
विद्युत् मंत्रालय
केन्द्रीय विद्युत प्राधिकरण
तापीय परियोजना योजना एवं विकास प्रभाग
Thermal Project Planning & Development Division

संख्या: 278/ Stressed Projects/TPP&D/CEA/2023/680 -683 दिनांक: 29.09.2023

विषय: Record of Discussion (RoD) of the meeting held on 18.09.2023 at 04:30 PM under the chairmanship of Chairperson, CEA at Sewa Bhawan, New Delhi to discuss the ongoing issues related to operationalization /construction of Ind-Barath (Utkal) Limited (JSW Energy Limited).

This is in reference to the meeting held under the chairmanship of Chairperson, CEA on 18.09.2023 at 04 :30 PM at 'Chintan' Conference room 2nd Floor, Sewa Bhawan (North), R.K. Puram Sec-1, New Delhi with officials from Energy Department, Govt. of Odisha, Ind Barath Utkal Ltd (JSW Energy), CTUIL & PFC Ltd. to discuss the ongoing issues related to operationalization/construction of TPP. In this regard, please find attached record of discussion of the meeting.

Encl: MoM.

भवदीय
29/9/2023
(एम.पी. सिंह)
मुख्य अभियंता

Distribution (by email):

1. Additional Chief Secretary (Energy), Govt. of Odisha, Kharavel Bhawan, Gopabandhu Marg, Keshari Nagar, Bhubaneswar, Odisha 751001 (energy@nic.in)
2. Managing Director/CEO, Ind Barath Utkal Ltd. (JSW Energy), Jharsuguda Odisha.(prashant.jain@jsw.in , veeresh.devaramani@jsw.in)
3. Chief Operating Officer, CTUIL. (pcgarg@powergrid.in)
4. Shri P.K. Sinha, ED (Project-I) , PFC Ltd. (pksinha@pfcindia.com)

Copy to:

1. PPS to Chairperson, CEA
2. PPS to Member(Thermal), CEA
3. Chief Engineer (TPM), CEA

Record of Discussion (RoD) of the meeting held on 18.09.2023 at 04:30 PM under the chairmanship of Chairperson, CEA at Sewa Bhawan, New Delhi to discuss the ongoing issues related to operationalization /construction of Ind-Barath (Utkal) Limited (JSW Energy Limited).

Chairperson, CEA welcomed all the participants. Representative from JSW Energy Limited informed that Ind-Bharat Energy (Utkal) Limited is an IPP having subcritical capacity of 700 MW (2x350) and located in Jharsuguda district of Odisha. The project was stalled due to financial reasons and admitted to Corporate Insolvency Resolution Process (CIRP) in Aug'18. Further, JSW Energy Limited also intimated the status of the project before NCLT which is as follow:

Unit-1: CoD was achieved in July'16. Post CoD, the unit was kept in service for few days and then stopped.

Unit-2: 60% erection work was completed.

2. JSW Energy Ltd. had taken over the project on 28th Dec'22. Plant revival activities were started after taken over by JSW Energy Ltd. from Jan'23. JSW Energy Limited intimated that revival of unit-1 was started on 01st Jan'23 and expected to be completed by 30th Sept'23. Further, it was also stated that revival of unit-2 was started on 01st Apr'23 and expected to be completed by 31st Mar'24.

Chairperson (CEA) instructed JSW Energy Limited to complete the revival of unit-2 till Dec'23.

3. Representative of JSW Energy Limited informed that requisite licenses/clearances and NoC have been received and overhauling of BOP systems like WTP, CHP, Ash handling, CW and ACW systems are in final stage. Boiler steam blowing process has already started today (i.e. 19.09.2023).

Further, it was intimated that 63 KM 400kV dedicated double circuit transmission line (DTL) from plant to Sundargarh was damaged whose revival work is in progress which will further take 06-08 months as around 40-50 towers are damaged. However, unit-1 of the plant is expected to get synchronized on 20th Oct'23.

4. JSW Energy Limited stated following concerns:

- Draft MOU verification was completed from all authorities (GRIDCO, IPICOL, IDCO, DoWR and Energy Department of Govt. of Odisha). Same is pending due to payment of old dues.

- Approval for water allocation was accorded by all Dept. (IPICOL, DoWR, SLFC, WAC) and water allocation committee cleared the same. Matter is pending due to payment of old dues (prior to acquisition by JSW energy) & signing of MOU.

- Application for Environment Clearance of unit-2 for term of reference (TOR) has been submitted. Same is in process and expected by Sep'23.

- Since, 63 KM DTL is damaged at many places due to non-operational from long time (7 years) whose revival work is in progress and expected to be completed by Feb'24. Further, CTU approved interim LILO arrangement with 400kV OPGC-Sundargarh line for start-up and synchronization. However, approval was accorded for drawl only and injection of power is not allowed.

5. JSW Energy Limited requested for evacuation of power through LILO arrangement (interim) till DTL get ready. Representative from CTUIL intimated that Odisha state

is also evacuating the power from the same line (Ib Valley OPGC to Powergrid Sundergarh SS) and further evacuation of power by JSW Energy Limited may lead to a condition of overloading a segment of the said line. JSW Energy Limited representative informed that study has been done & it was observed that 600 MW can be evacuated from the alternative LILO arrangement, which is around 10 kms from Ind Barath TPP.

6. JSW Energy Limited representative stated that implementation of LILO arrangement is in process and it will be completed within 20 days. Further, SPS will get implemented within 10 days. Further, Representative of CTUIL has informed that JSW Energy has applied for LILO connection of Unit-1. JSW Energy shall apply for GNA for Unit -2 as well so that a compressive analysis may be done.

7. JSW Energy Limited representative stated that permanent railway siding is under construction, till then alternate arrangement of transportation of coal via road mode is made for evacuation of 4.5 LT of coal. Till date, Plant is not having any PPA & expected to sell power in Energy Market.

Chairperson (CEA), instructed JSW Energy Limited to implement the SPS and to apply and complete the LILO arrangement within time frame and further, directed JSW Energy to approach the ERPC/ERLDC for evacuation of power from Ind-Barath (Utkal) TPP through LILO arrangement till DTL is made ready.

Meeting ended with vote of thanks to Chair.

xx-xxxx-xx

Annexure-I

List of Participants

Central Electricity Authority

1. Shri Ghanshyam Prasad, Chairperson - In Chair
2. Shri Praveen Gupta, Member (Thermal)
3. Shri M. P. Singh, Chief Engineer (TPP&D)
4. Shri J. N. Prasad, Chief Engineer (TPM)
5. Shri Himanshu Katiyar, Assistant Director (TPP&D)
6. Shri Ankit Khasa, Assistant Director (TPM)
7. Shri Satyam Soni, Assistant Director (TPP&D)

GRIDCO

1. Shri Trilochan Panda, Managing Director
2. Shri, V. K, Sahoo, Director (T&BD)

CTUIL

1. Shri Ashok Pal, Dy, Chief Operating officer
2. Shri, Manish Ranjan Keshari, Chief Manager

PFC Ltd.

1. Shri P. K. Sinha, Executive Director
2. Shri B. Praveen, General Manager

SLDC, Odisha

1. Shri S. K. Mishra, DGM

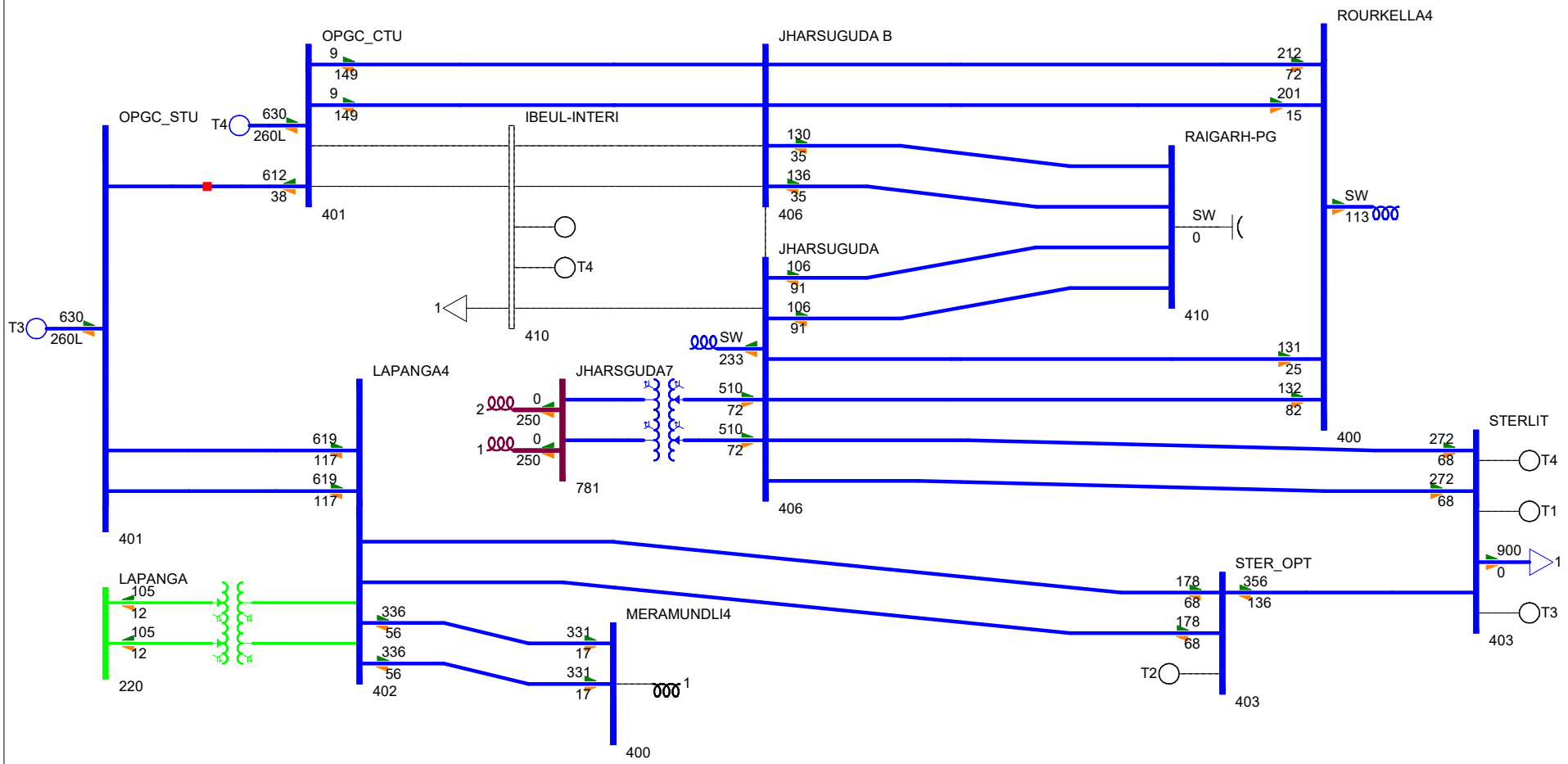
JSW Energy Ltd.

1. Shri Veeresh Devaramani, Head(Thermal)
2. Shri Rohit Chadha, Vice President (Corporate Affairs)
3. C. Venkatarama Reddy, Vice President
4. Shri Anurag Agrawal, General Manager
5. Shri Hanumantha Rao, Dy. General Manager

Interim Arrangement for IBEUL, Odisha

Annex-VI

Without IBEUL



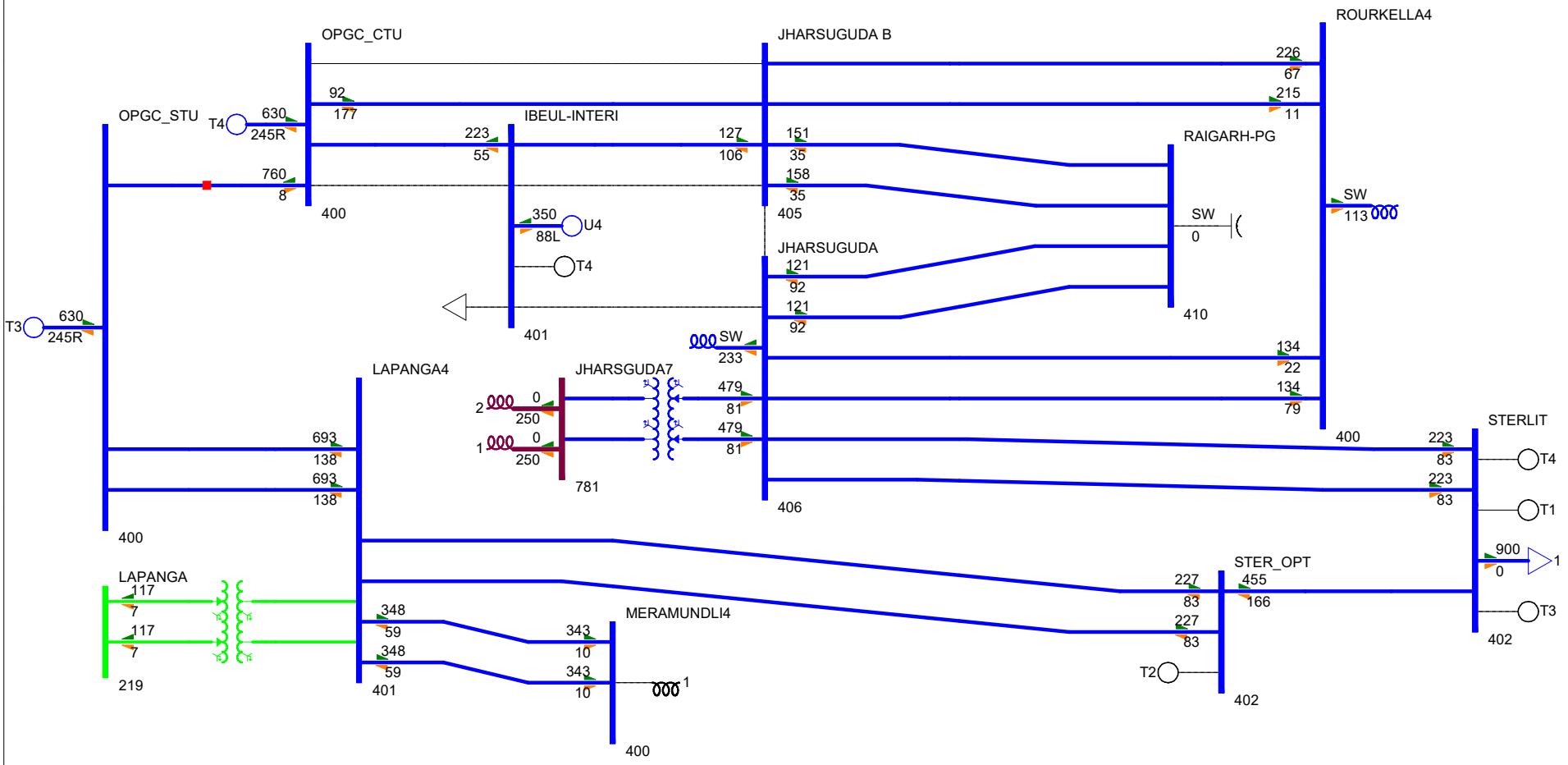
Interim Arrangement for IBEUL, Odisha

Annex-VI A

Case I: LILO of one circuit of OPGC - Sundargarh 400kV D/c line

350MW Injection

Base Case



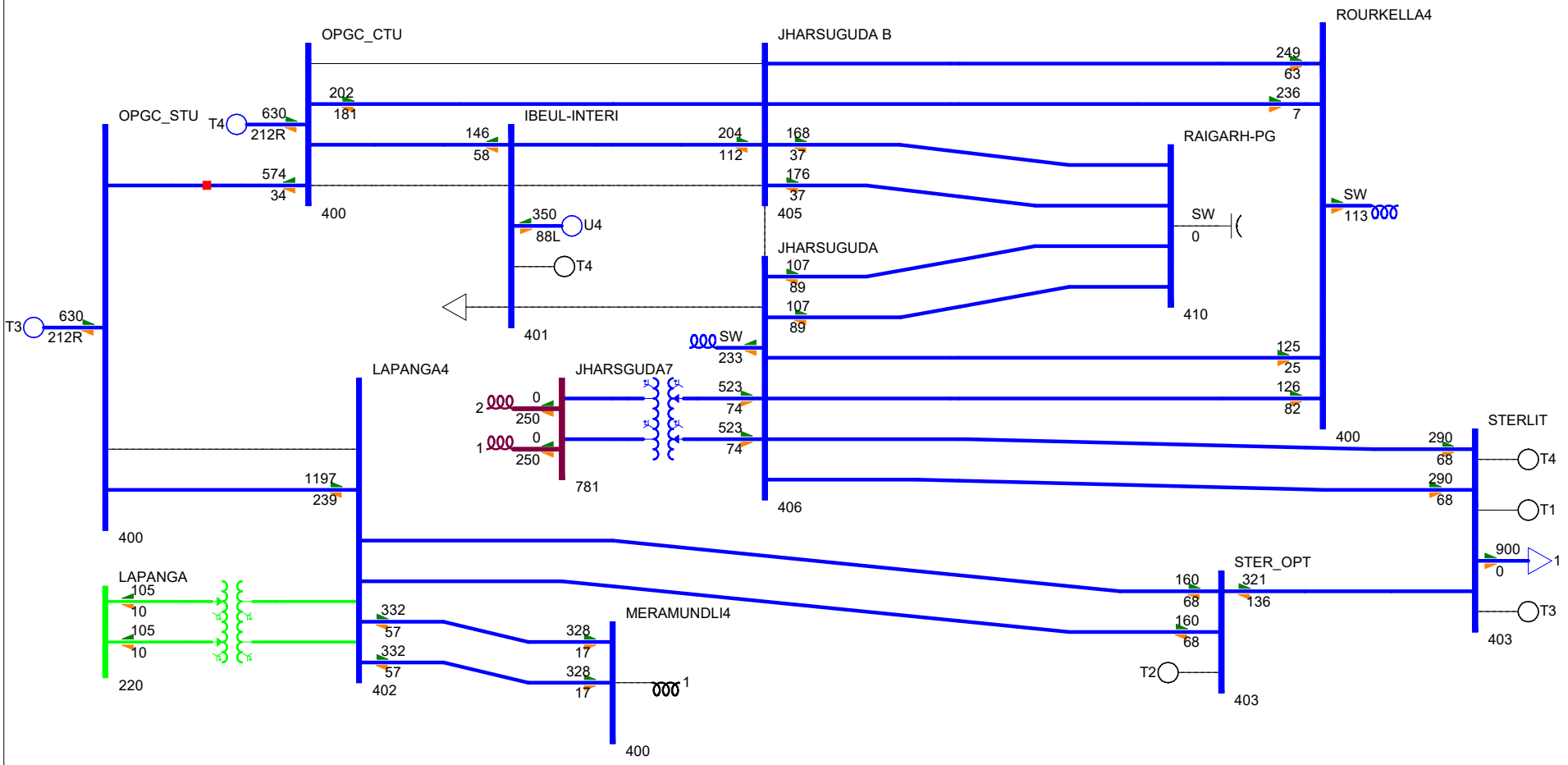
Interim Arrangement for IBEUL, Odisha

Annex-VI B

Case I: LILO of one circuit of OPGC - Sundargarh 400kV D/c line

350MW Injection

N-1 OPGC - Lapanga



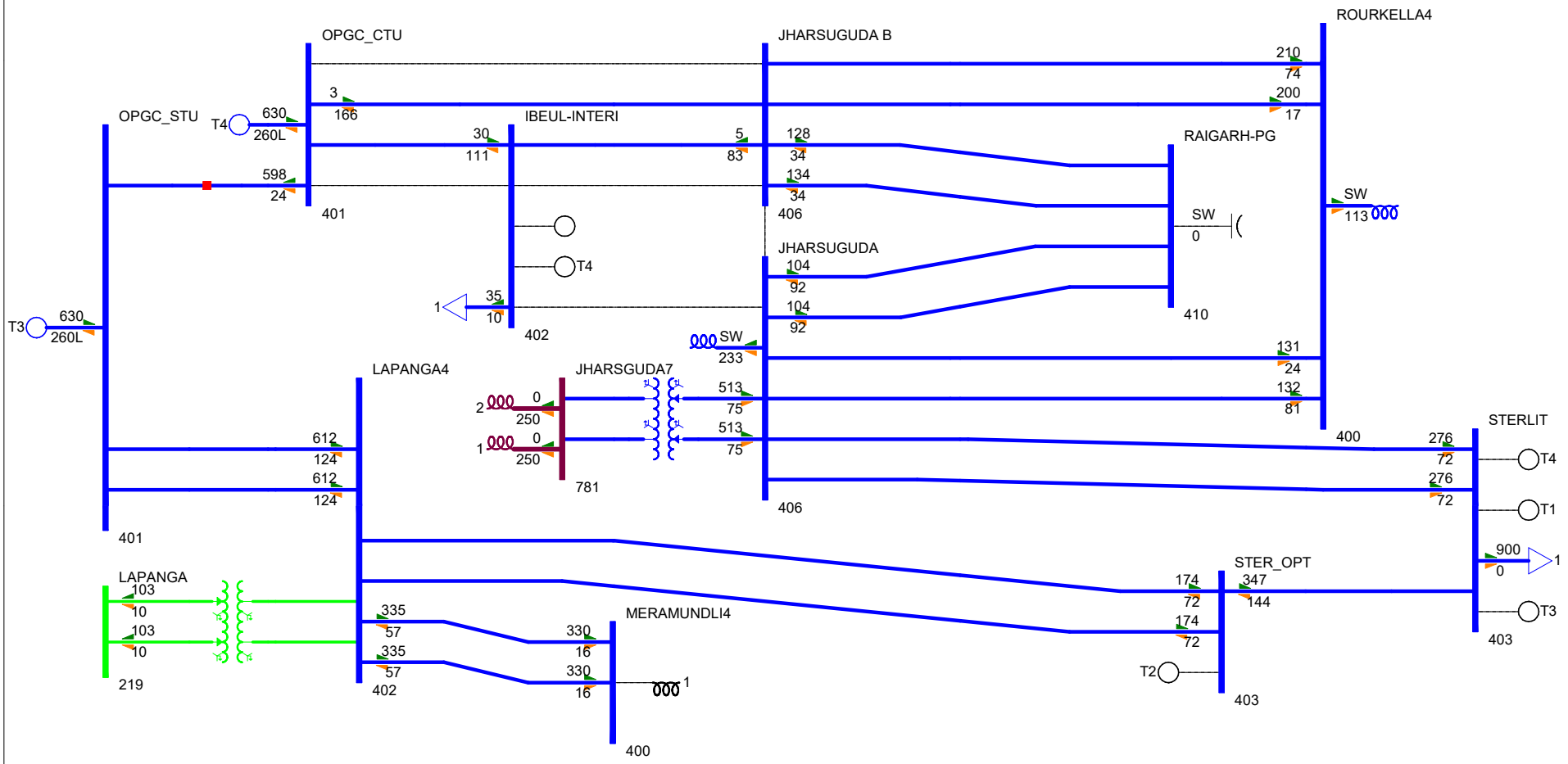
Interim Arrangement for IBEUL, Odisha

Annex-VI C

Case I: LILO of one circuit of OPGC - Sundargarh 400kV D/c line

35MW Drawal

Base Case



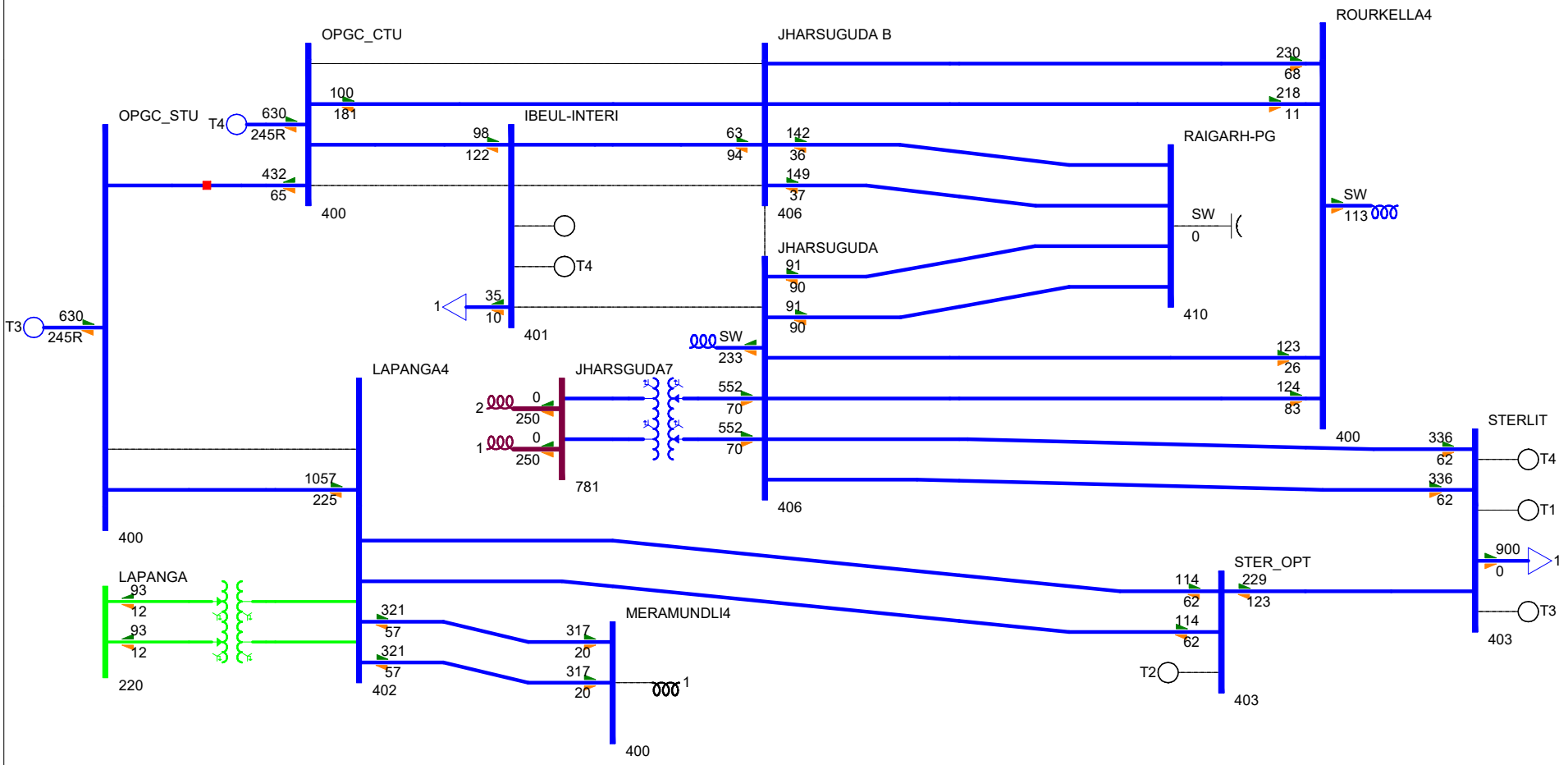
Interim Arrangement for IBEUL, Odisha

Annex-VI D

Case I: LILO of one circuit of OPGC - Sundargarh 400kV D/c line

35MW Drawal

N-1 OPGC - Lapanga



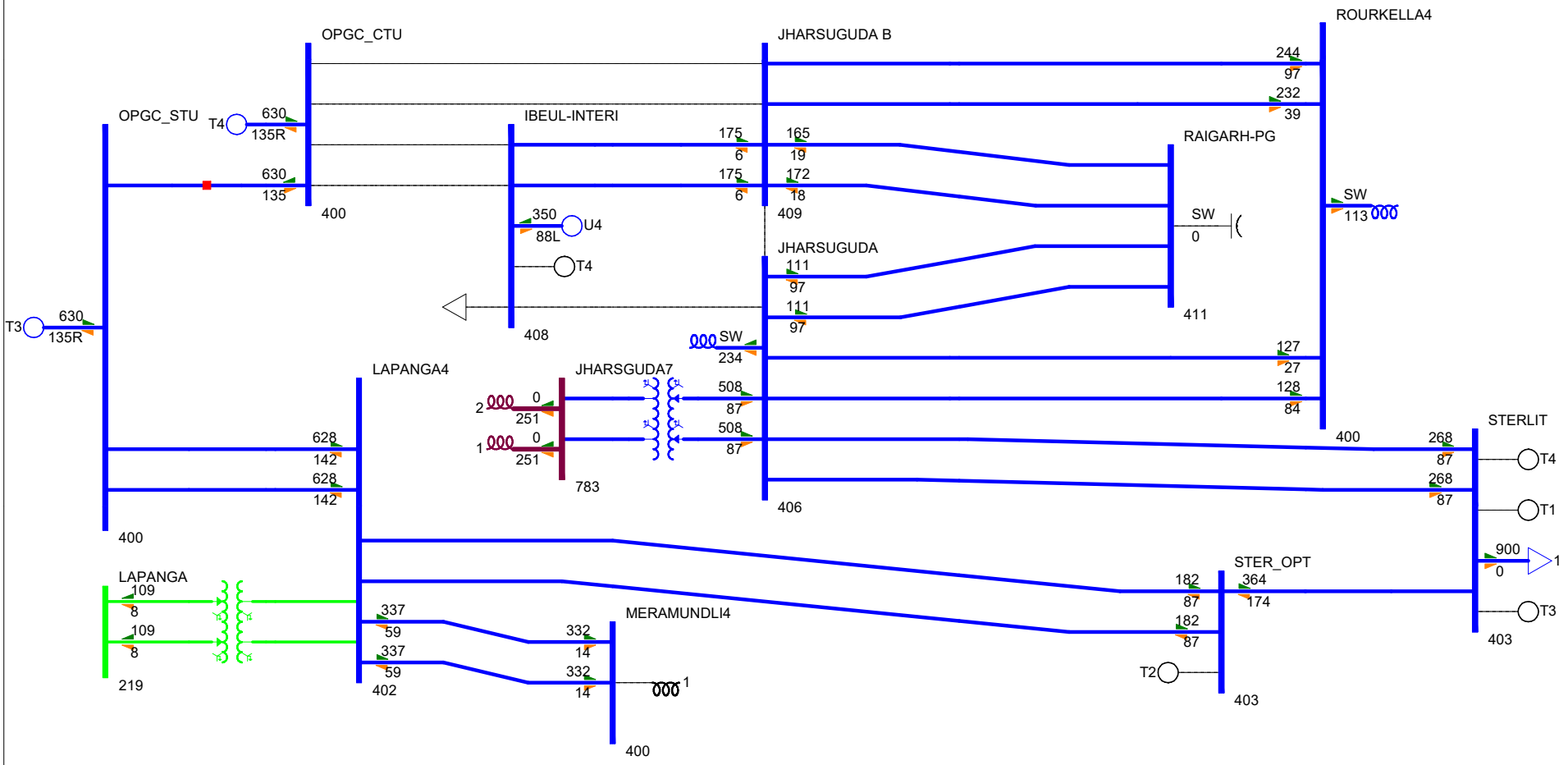
Interim Arrangement for IBEUL, Odisha

Annex-VI E

Case II: IBEUL to Sundargarh & OPGC to Lapanga independently

350MW Injection

Base Case



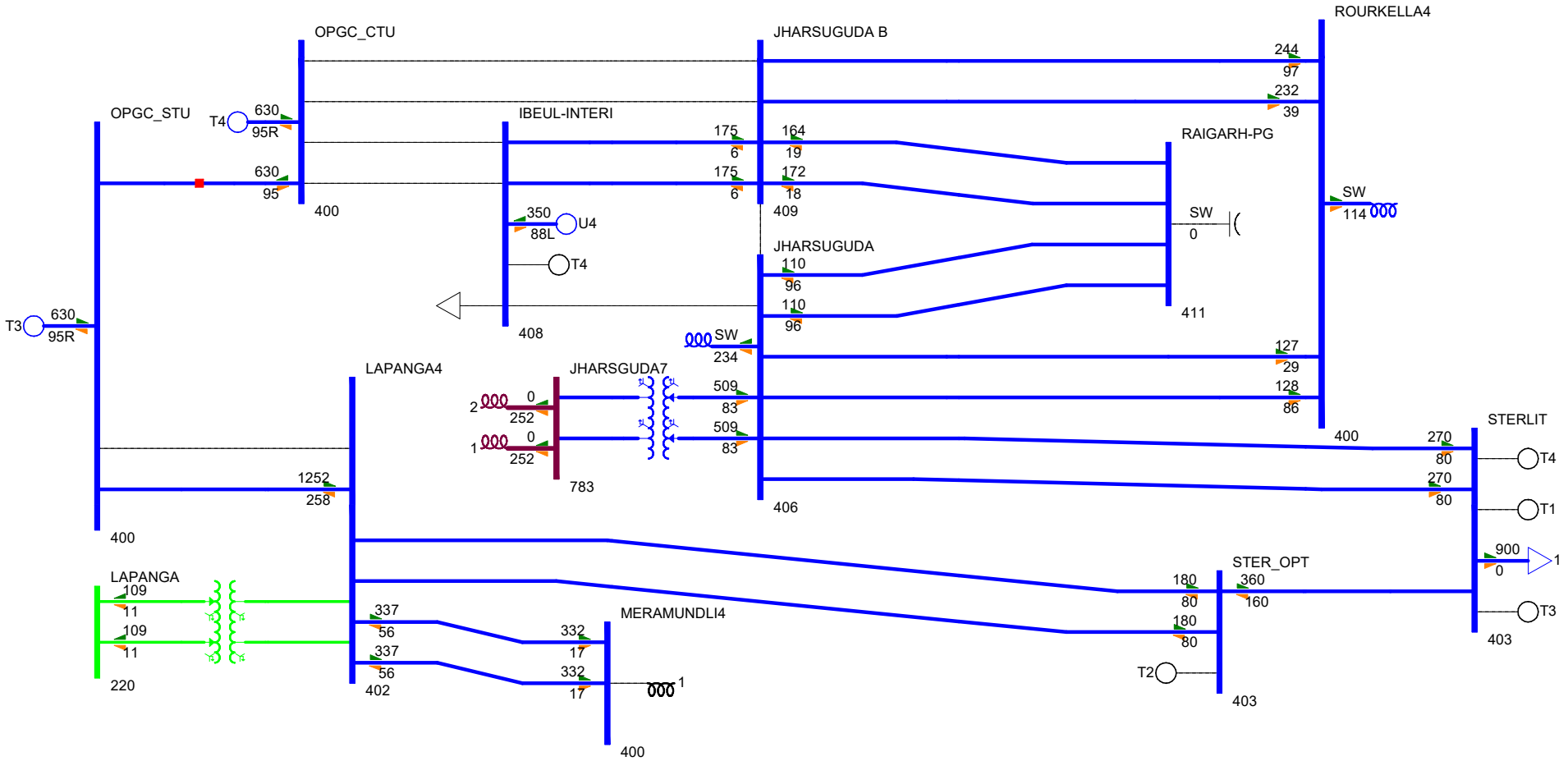
Interim Arrangement for IBEUL, Odisha

Annex-VI F

Case II: IBEUL to Sundargarh & OPGC to Lapanga independently

350MW Injection

N-1 OPGC - Lapanga



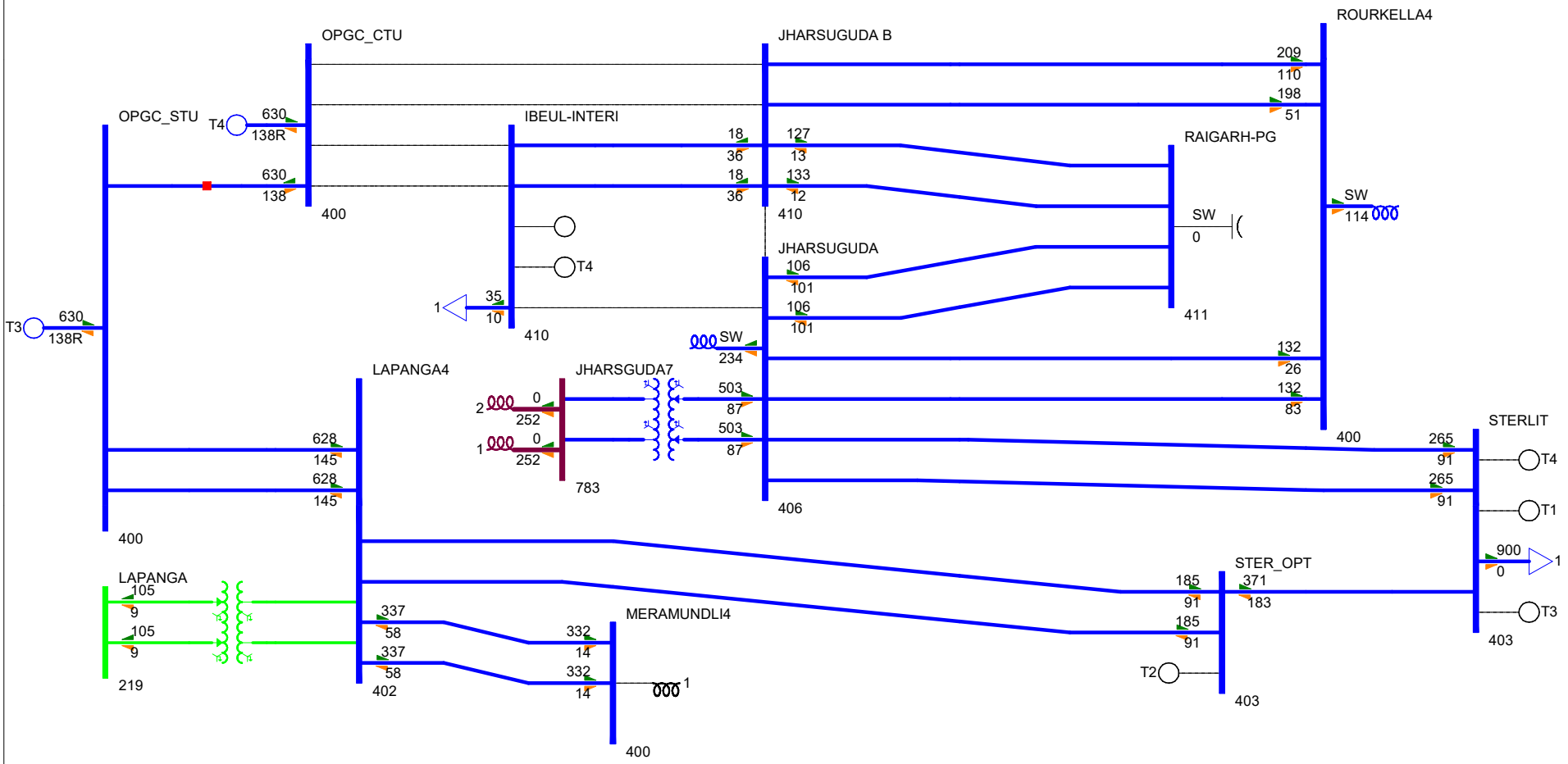
Interim Arrangement for IBEUL, Odisha

Annex-VI G

Case II: IBEUL to Sundargarh & OPGC to Lapanga independently

35MW Drawal

Base Case



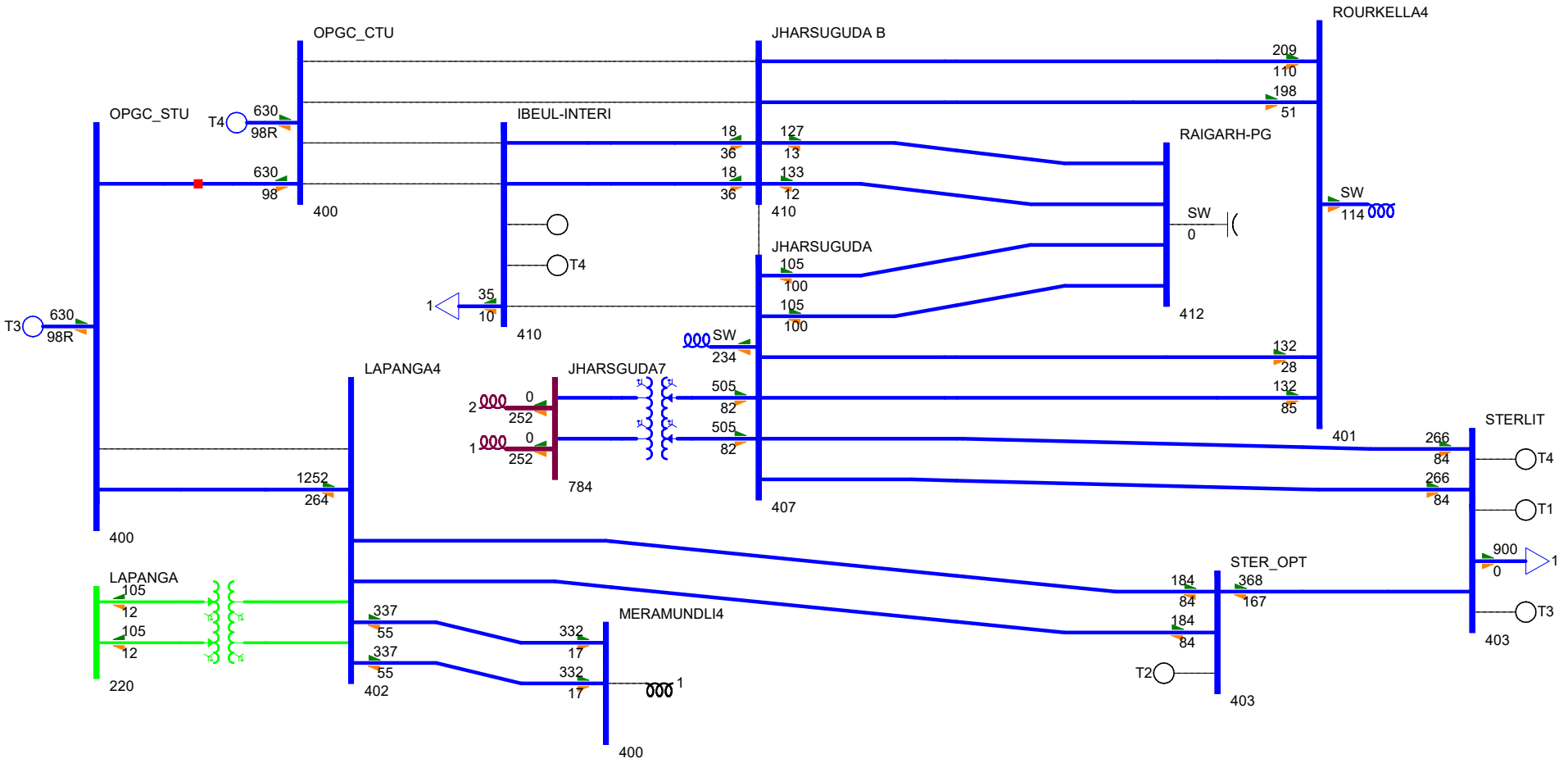
Interim Arrangement for IBEUL, Odisha

Annex-VI H

Case II: IBEUL to Sundargarh & OPGC to Lapanga independently

35MW Drawal

N-1 OPGC - Lapanga



Annexure-VII

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग-II
Power System Planning & Appraisal Division-II

सेवा में / To,

1. मुख्य अभियन्ता,
योजना और इंजीनियरिंग,
बिहार स्टेट पॉवर ट्रांसमिशन कंपनी लिमिटेड,
विद्युत भवन, बेली रोड,
पटना (बिहार)- 800021

Chief Engineer,
Planning & Engineering
Bihar State Power Transmission Company Ltd.,
Vidyut Bhawan, Bailey Road,
Patna (Bihar) - 800021.
E-Mail: planning.dept@bsptcl.bihar.gov.in;
ceplanningengg@gmail.com

2. उप मुख्य परिचालन अधिकारी
(सीटीयूआईएल), गुरुग्राम

Deputy COO (CTUIL), Gurugram
Email: "ashok@powergrid.in"

विषय: बीएसपीटीसीएल की इंट्रा-एसटीएस योजनाओं/प्रस्तावों पर चर्चा के लिए बैठक का कार्यवृत्त।
Subject: Minutes of meeting to discuss Intra-STS schemes/ proposals of BSPTCL.

महोदय / Sir,

A meeting to discuss the Intra-state proposals of Bihar was held on 15th September, 2023 at NRPC Conference Hall, New Delhi. The minutes of the meeting are enclosed herewith.

भवदीय/Yours faithfully,

10-10-2023

(बी.एस.बैरवा / B.S. Bairwa)
निदेशक/ Director

Minutes of Meeting to discuss Intra-State Transmission proposals of BSPTCL held on 15th September, 2023

A meeting to discuss the Intra-state proposals of Bihar was held on 15th September, 2023 at NRPC Conference Hall, New Delhi. Officials from CEA, CTUIL and BSPTCL participated in the meeting. The list of participants is enclosed at **Annexure-I.**

1. Chief Engineer (PSPA-II), CEA, welcomed the participants. He requested Director (PSPA-II), CEA to take up the agenda.

2. Director (PSPA-II), CEA stated that a Meeting to discuss Intra-State Transmission proposals of BSPTCL was held on 08th June, 2023. In the meeting, few proposals were deferred for joint study which includes construction of Chandi substation, second source connectivity of 132 kV sub-stations and reconductoring of transmission lines. He requested BSPTCL to present study on their proposals. Item wise deliberations and decisions are as under.

A. Construction of 132/33 kV GSS Chandi, Dist.-Nalanda and associated transmission lines.

3. Representative of BSPTCL stated that presently the load demand of 33 kV S/s at Chandi, Nagarnausha, Bhobhi, Sirnawan, Noorsarai, Hilsa and Tharthari are 40 MW and it is expected to increase upto 96 MW in the time frame of 2027-28. With the increased demand, the voltage profile at these 33/11 kV Power Sub-station (PSS) would deteriorate as they are fed through long 33kV feeders.

   He further stated that with the establishment of proposed 132/33 kV S/s at Chandi, the existing 33 kV feeder length will decrease and voltage profile would improve. The proposed S/s would cater the projected load demand of 60 MW in the area out of 96 MW by 2027-28. He stated that following systems have been envisaged.

   (i) Construction of 132/33 kV, 2x50 MVA GSS at Chandi, Dist. Nalanda

   (ii) Asthawan – Chandi 132 kV DCDS (Double Circuit Double Strung) (Panther conductor) transmission line

   (iii) Harnaut – Chandi 132 kV DCDS (Panther conductor) transmission line.

4. Director (PSPA-II), CEA stated that considering the expected demand growth, the proposed 132/33 kV Chandi sub-station may be connected with two circuits only, instead of proposed four circuits in initial stage, which will meet the N-1 contingency criteria. Further, the transformation capacity at Chandi 132/33 kV may be considered as 2x80 MVA to meet N-1 criteria of ICTs.

5. BSPTCL informed that the distance of Chandi from Asthawan and Harnaut substations would be about 40 km and 13 km respectively. Further, it was observed that Asthawan being a 220kV S/s and connected to Biharsharif S/s, is a better source for supply of power to Chandi.

6. After deliberations, following system was agreed to be implemented as intra-state transmission system of Bihar:

(i) Construction of 132/33 kV, 2x80 MVA Sub-station at Chandi, Dist. Nalanda

(ii) Asthawan – Chandi 132 kV DCDS (Panther conductor) transmission line.

B. Transmission Schemes for Evacuation of Power from Kajra Solar Power Plant.

7. Representative of BSPTCL stated that Bihar State Power Generation Company Limited (BSPGCL) is constructing Kajra Solar Plant. Initially the project was envisaged for 250 MW, however, due to unavailability of sufficient land, the project capacity has been revised to 185 MW. The generating station has approached to BSPTCL for grant of connectivity. BSPTCL has proposed LILO of Haveli Kharagpur – Lakhisarai (BSPTCL) 132 kV D/c line (LILO length 8 km) at Kajra Solar Power Plant with HTLS conductor, as connectivity system.

8. Director (PSPA-II), CEA stated that as per power system studies, the proposed LILO of Haveli Kharagpur – Lakhisarai (BSPTCL) 132 kV D/c line (Panther conductor) will be sufficient to meet N-1 contingency criteria and HTLS conductor may not be required.

9. After deliberations, following transmission system was agreed to be implemented as intra-state transmission system of Bihar to provide Connectivity to Kajra solar plant:

(i) LILO of Haveli Kharagpur – Lakhisarai (BSPTCL) 132 kV D/c line at Kajra Solar Power Plant.

C. 2nd Source Connectivity of 132 kV sub-stations

10. Representative of BSPTCL stated that considering the load growth and to meet the N-1 contingency criteria, 2nd source connectivity of following 16 Nos. of S/s have been envisaged.

Table 1 Second Source connectivity proposals of BSPTCL

Sl. No.	Sub station	Expected load (MW) in 2027-28	Second source connectivity line
1.	Bhabhua	47	Karmnasha (New) – Bhabhua 132 kV S/C line
2.	Benipur	22	Jhanjharpur – Benipur 132 kV D/C line
3.	Chakia	65	Pakridyal – Chakia 132 kV D/C line
4.	Pakhridayal	20	
5.	Teghra	32	Shahpur Patori – Teghra 132 kV D/C line
6.	Simri Bakhtiyarpur	35	Khagaria (New) – Shimri Bakhtiyarpur 132 kV D/C line
7.	Triveniganj	30	Murliganj – Triveniganj 132 kV D/C line
8.	Rosera	45	Samastipur (220 kV New) – Rosera 132 kV D/C Line
9.	Nathnagar (New)	30	Goradih (GIS) – Nathnagar 132 kV D/C line
10.	Balia	42	Khagaria (New) – Bakhri 132 kV D/C line
11.	Manjhaul	40	
12.	Bakhri	22	
13.	Ramgarh	30	Karmnasha (New) – Ramgarh 132 kV D/C line
14.	Sheohar	42	Sitamarhi (400 kV) – Sheohar 132 kV D/C Line
15.	Sherghati	52	Chandauti (New) – Sherghati 132 kV D/C Line
16.	Tarapur	45	Jamalpur (GIS) BGCL – Tarapur 132 kV D/C Line

11. Director (PSPA-II), CEA stated that for the sub-stations mentioned from Sl. No. 1 to 6 at above Table 1, second circuit stringing has been agreed in the meeting held on 08th June, 2023. The second circuit stringing will fulfill the N-1 contingency criteria and is sufficient to cater the expected load demand in 2027-28, therefore, the proposal of second source connectivity at these six substations may be dropped.

12. He further stated that the substations at Sl. No. 7, 8, 9, 13 and 16 at Table 1 above are already connected with two different sub-stations which suffices the N-1 contingency criteria. Further, as per expected load demand of 2027-28, additional connectivity at these sub-stations may not be required to be planned as of now.

13. Representative of CTUIL stated that the substations at Sl.No. 10, 11 and 12 at Table 1 above i.e. Balia, Manjhaul and Bakhri are making a 132 kV S/c ring with Begusarai S/s. The cumulative projected load demand of these three substations is observed to be 104 MW. In case of outage of either Begusarai – Balia 132 kV S/c or Begusarai – Manjhaul 132 kV S/c transmission lines, the entire demand would be fed from other end which would become critically loaded. Accordingly, the proposed additional line to 132 kV Bakhri S/s may be beneficial.

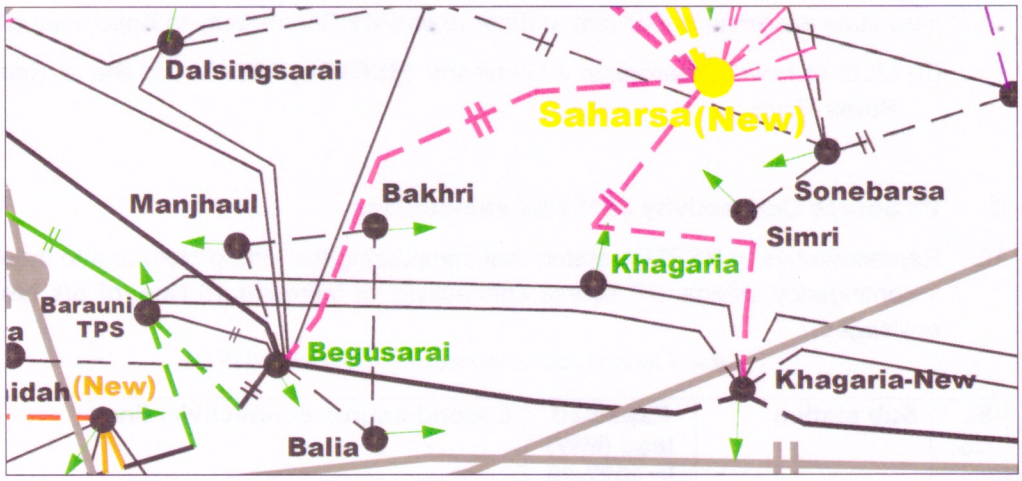


Figure 1 Single line diagram of Bakhri, Manjhaul and Balia S/s

14. Considering the future load demand, implementation of Khagaria (New) – Bakhri 132 kV D/c transmission line was agreed.

15. Representative of BSPTCL stated that the substation at Sl. No. 14 at Table 1 above i.e. Sheohar is connected with 132 kV Dhaka S/s and 132 kV Sitamarhi (BSPTCL) S/s. Dhaka is connected to the nearest 400 kV S/s i.e. Motihari 400/132 kV through Motihari (ISTS) – Motihari – Dhaka 132 kV D/c line and Sitamarhi is connected to the nearest 400 kV S/s i.e. Sitamarhi 400/220/132 kV through Sitamarhi (ISTS) – Runni Saidpur – Sitamarhi 132 kV line. A major portion of power from these ISTS stations are consumed at Motihari and Sitamarhi substations of BSPTCL. Accordingly, additional connectivity at 132 kV Sheohar S/s is required.

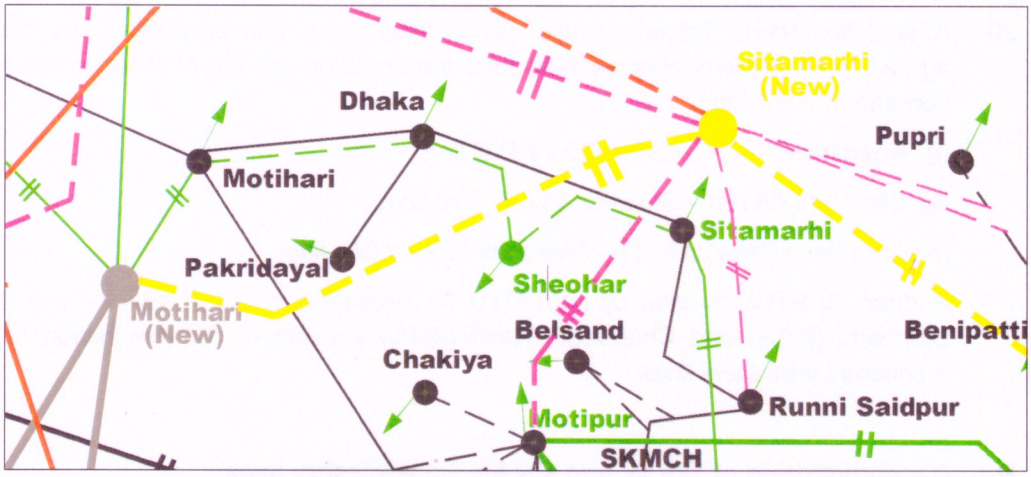


Figure 2 Single line diagram of Sheohar and Sitamarhi S/s

16. Chief Engineer (PSPA-II), CEA stated that considering the remote connectivity of 132 kV Sheohar S/s with source, proposed Sitamarhi (ISTS) – Sheohar 132 kV D/c transmission line will be beneficial.

17. Representative of BSPTCL stated that the substation at Sl. No. 15 at Table 1 above i.e. 132 kV Sherghati is connected with 132 kV Bodhgaya and 132 kV Imamganj S/s. He further stated that 132 kV S/s is very remote and if Bodhgaya- Sherghati 132 kV line trips it becomes difficult to serve the load of Sherghati and due to long distance of Bodhgaya -Sherghati-Imamganj circuit low voltage problems are also prominent.

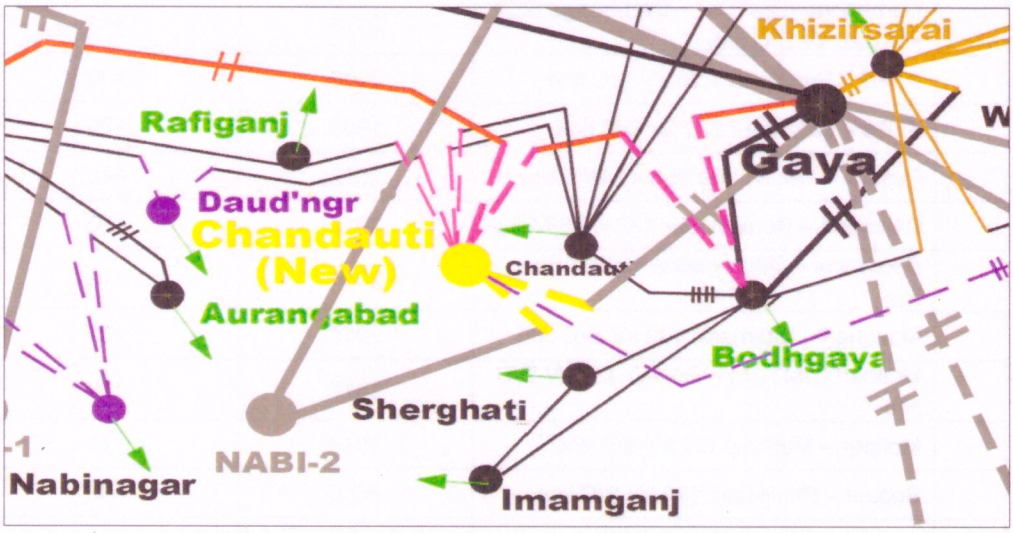


Figure 3 Single line diagram of Sherghati and Chandauti S/s

18. Considering the load growth and low voltage conditions, the proposal of Sherghati – Chandauti (ISTS) 132kV D/c line was agreed.

19. Representative of CTUIL stated that for allocation of 2 Nos. 132 kV line bays at Sitamarhi (ISTS) and Chandauti (New) (ISTS) substations for termination of intra state lines mentioned above, BSPTCL may approach to them.

20. After deliberations, following transmission lines along with associated line bays was agreed to be implemented as intra-state transmission system of Bihar to meet future demand of 2027-28:

(i) Khagaria (New) – Bakhri 132 kV D/C line.

(ii) Sitamarhi (ISTS) – Sheohar 132 kV D/C line.

(iii) Chandauti (New) (ISTS) – Sherghati 132 kV D/C line.

Further, BSPTCL to take up with CTU for allocation of 2 no. 132 kV line bays at Sitamarhi (ISTS) and Chandauti (New) (ISTS) substations for termination of above mentioned intra state lines.

D. Reconductoring of 220 kV and 132 kV Transmission lines

21. Representative of BSPTCL stated that based on increase in load at Grid Sub-stations, System improvement, Enhancement of power availability by complying N-1 contingency of transmission lines, High Capacity conductor at source points and Evacuation of power from generating plants, BSPTCL have planned reconductoring of following 220 kV and 132 kV Transmission Lines with HTLS conductor equivalent to Zebra and Panther conductor respectively.

Table 2 Reconductoring proposals of BSPTCL

Sl. No.	Name of Transmission Line	Year of Commissioning	Maximum Load (MW)	% Loading
	Darbhanga (DMTCL) – Darbhanga (220 KV) 220 kV D/C line	2018	360	120
	BTPS – Begusarai 220 kV D/C line	2009	300	100
	TTPS – Biharsarif 220 kV D/C line	1987	175	109.37
	Pusauli – Nadhokhar 220 kV D/C line	2012	440	146.67
	Sitamarhi – Runisaidpur 132 kV S/C line	2012	70	85.71
	Begusarai – Dalsingsarai 132 kV S/C line	2011	70	100
	Musahari – Sitamarhi 132 kV D/C line	2017	135	96.43
	Motihari (DMTCL) – Bettiah 132 kV D/C line	2017	168	120
	Motipur – Motihari 132 kV S/C line	2017	75	107.14
	Supaul – Phulparas 132 kV S/C line	2006	80	114.28
	Supaul – Nirmali 132 kV S/C line	2006	84	120
	Phulparas – Nirmali 132 kV S/C line	2006	77	110

22. He further stated that stated that upgradation of bay equipment has also been considered in accordance with the capacity of the HTLS conductor. Further, tower healthiness and sag of conductor has also been taken into consideration.

23. Director (PSPA-II), CEA stated that Darbhanga (DMTCL) – Darbhanga (220 KV) 220 kV D/C line, Musahari – Sitamarhi 132 kV D/C line, Motihari (DMTCL) – Bettiah 132 kV D/C line and Motipur – Motihari 132 kV S/C line are only 5 to 6 year old and loading

limits of these lines are hitting the thermal limit which is unlikely, he advised Bihar that the assessment of load growth should be done optimistically.

24. Representative of BSPTCL stated that the loading limits of these lines are reaching upto 120% of loading limit. Therefore, there is an urgent requirement of reconductoring of these lines.

25. On enquiry about the requirement of reconductoring of TTPS – Biharsharif 400 kV S/c line (presently operated at 220 kV), BSTPCL mentioned that the line has been implemented with twin zebra conductor but 2.5 km of line near the entry point at Biharsharif S/s has been implemented with 220 kV single Zebra conductor. The loading limit of the line is restricted due to this 220 kV single Zebra conductor section. The instant proposal is for reconductoring of the 2.5 km section (220 kV section) only with HTLS conductor at Biharsharif end so that the line can be used up to the rated capacity.

26. After deliberations, following transmission lines were agreed for reconductoring with HTLS conductor (along with upgradation of necessary bay equipment at terminal ends and strengthening of towers, if required), and to be implemented as intra-state transmission system of Bihar. Further, the ampacity of HTLS conductors, for 220 kV and 132 kV level conductors shall be about 1540 A and 1050 A respectively.
    (i) Darbhanga (DMTCL) – Darbhanga (220 kV) 220 kV D/C line
    (ii) BTPS – Begusarai 220 kV D/C line
    (iii) TTPS – Biharsarif 220 kV D/C line
    (iv) Pusauli – Nadhokhar 220 kV D/C line
    (v) Sitamarhi – Runisaidpur 132 kV S/C line
    (vi) Begusarai – Dalsingsarai 132 kV S/C line
    (vii) Musahari – Sitamarhi 132 kV D/C line
    (viii) Motihari (DMTCL) – Bettiah 132 kV D/C line
    (ix) Motipur – Motihari 132 kV S/C line
    (x) Supaul – Phulparas 132 kV S/C line
    (xi) Supaul – Nirmali 132 kV S/C line
    (xii) Phulparas – Nirmali 132 kV S/C line

***

Annexure-I

List of Participants

Sl. No	Name & Designation	Email-id
Central Electricity Authority		
1.	Sh. Rakesh Goyal, Chief Engineer (PSPA-II)	goyal.rakesh@nic.in
2.	Sh. B.S. Bairwa, Director (PSPA-II)	bs.bairwa@nic.in
3.	Sh. Manish Maurya, Deputy Director (PSPA-II)	manishmaurya.89@nic.in
4.	Sh. Manish Kumar Verma, Assistant Director (PSPA-II)	manish31.cea@gov.in
CTUIL		
5.	Sh. Rajesh Kumar, Sr. GM	rajeshkumar@powergrid.in
6.	Sh. Manish Ranjan Keshari, Chief Manager	manish.keshari@powergrid.in
7.	Sh. Anupam Kumar, Manager	i.anupamk@powergrid.in
BSPTCL		
8.	Sh. Sunil Agrawal, Director(Project)	sunil694@gmail.com
9.	Sh. Kumar Prasant, CE (P&E)	ceplaningengg@gmail.com
10.	Sh. Bhaskar Sharma, Consultant	bsharma2407@gmail.com
11.	Sh. Rakesh Kumar , ESE (P&E)	rk.bsptcl@gmail.com
12.	Sh. Abhishek Kumar, EEE(P&E)	abhishek.bsptcl@hotmail.com
13.	Ms. Sarita Kumari, AEE (P&E)	sarita.trans17@gmail.com

Annexure-VIII

Anupam Kumar {अनुपम कुमार}

From: CE (P&E), BSPTCL Patna <ceplanningengg@gmail.com>
Sent: Wednesday, October 18, 2023 14:28
To: Manish Ranjan Keshari {मनीष रंजन केशरी}
Cc: PLANNING DEPT; Project One; Project Two; nidhibipul15; aeeplanningengg; BSPTCL abhishek; osd bsptcl; sunil694; BSPTCL adviser; rk bsptcl; Ashok Pal {अशोक पाल}; Rajesh Kumar {राजेश कुमार}; Anupam Kumar {अनुपम कुमार}; Abhilash Thakur {अभिलाष ठाकुर}; AMIT KUMAR {अमित कुमार}
Subject: Re: Requesting agenda for CMETS-ER

Dear Sir,

After technical deliberation done in the meeting scheduled on 15th September 2023 as notified in the MOM dated 10.10.2023, proposal for 2nd Source connectivity (considering N-1 contingency)of the following lines has been agreed upon:

1. Sitamarhi(400KV) - Sheohar 132KV D/C line
2. Chandauti(400KV) - Sherghati 132KV D/C line

In this regard, it is requested to kindly earmark/ allocate space for construction of 02 nos. 132 kV Bays each at Sitamarhi (PMTCL) and Chanduati (PMTCL).

Therefore, it is requested to kindly acknowledge the requirement and place this issue as an agenda item in the upcoming 24th CMETS-ER meeting.

However, BSPTCL will take up the work accordingly after allocation of space in the next Financial Year..

Regards:
Chief Engineer (P&E)
BSPTCL, Patna

Planning and Engineering
Bihar State Power Transmission Company Ltd, Patna
E-mail: ceplanningengg@gmail.com
web: http://www.bsptcl.in

On Tue, Oct 17, 2023 at 11:43 AM Manish Ranjan Keshari {मनीष रंजन केशरी} <manish.keshari@powergrid.in> wrote:

> Dear Sir,
>
> As per minutes of meeting issued by CEA for intra-state scheme, BSPTCL is requested to provide agenda for CMETS-ER for allocation of bay space at Sitamarhi and Chandauti ISTS substations for their intra-state lines.
>
> **सादर,**

मनीष रंजन केशरी

मुख्य प्रबंधक

सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ़ इंडिया लिमिटेड
(पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड)

केन्द्रीय कार्यालय, गुरुग्राम, हरियाणा-122001

मोबाईल: +91-8826094864

From: Chief Engineer (PSPA-II), CEA <cea-pspa2@gov.in>
Sent: Tuesday, October 10, 2023 14:27
To: PLANNING DEPT <planning.dept@bsptcl.bihar.gov.in>; Project One <project.1@bsptcl.bihar.gov.in>; Project Two <project.2@bsptcl.bihar.gov.in>; nidhibipul15 <nidhibipul15@gmail.com>; aeeplanningengg <aeeplanningengg@gmail.com>; BSPTCL abhishek <abhishek.bsptcl@hotmail.com>; osd bsptcl <osd.bsptcl@gmail.com>; bihar CE planning official i.d. <ceplanningengg@gmail.com>; Manish Ranjan Keshari {मनीष रंजन केशरी} <manish.keshari@powergrid.in>; Anupam Kumar {अनुपम कुमार} <i.anupamk@powergrid.in>; Rajesh Kumar {राजेश कुमार} <rajeshkumar@powergrid.in>; Ashok Pal {अशोक पाल} <ashok@powergrid.in>; Anupam Kumar {अनुपम कुमार} <i.anupamk@powergrid.in>; sunil694 <sunil694@gmail.com>; BSPTCL adviser <bsharma2407@gmail.com>; rk bsptcl <rk.bsptcl@gmail.com>; BSPTCL abhishek <abhishek.bsptcl@hotmail.com>
Cc: Rakesh Goyal <goyal.rakesh@nic.in>; B S Bairwa <bs.bairwa@nic.in>; Manish Maurya <manishmaurya.89@nic.in>; ajay malav ajaymalav.cea@gov.in
Subject: Minutes of Meeting to discuss Intra-STS proposals of BSPTCL

महोदया (Madam) / महोदय (Sir)

A meeting to discuss Intra-STS proposals of BSPTCL was held on 15th September, 2023 at NRPC Conference hall, New Delhi. The minutes of the meeting are enclosed herewith.

Regards,

O/o Chief Engineer

विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग-II/

Power System Planning & Appraisal Division-II

केंद्रीय विद्युत प्राधिकरण/

Central Electricity Authority

Phone no. : +91(11) 2673 2347