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/00/10th CMETS-ER

दिनांक/Date: 25-08-2022

वितरण सूची के अनुसार/ As per distribution list

विषय/Subject: पूर्वी क्षेत्र में पारेषण योजनाओं के विकास के लिए 10वीं परामर्श बैठक की कार्यावली (सीएमईटीएस-ईआर) / Agenda for 10th 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 **10वीं** परामर्श बैठक (सीएमईटीएस-ईआर) **30 अगस्त, 2022 (मंगलवार)** को वीडियो कॉन्फ्रेंसिंग के माध्यम से नीचे दिए गए विवरण के अनुसार आयोजित होने वाली है:

The **10th** Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) for ISTS planning and open access applications processing is scheduled to be held on **30th August, 2022 (Tuesday)** through video conferencing as per details below:

विषय/Topic	:	10th CMETS-ER
दिनांक/Date & समय/Time	:	30th August 2022 at 03:30 PM
बैठक लिंक/ Meeting Link	:	MS-Teams (in email)

इस संबंध में, कृपया बैठक की कार्यावली (संलग्न), जो सीटीयू वेबसाइट (*www.ctuil.in >> ISTS Planning and Coordination >> Consultation Meetings for ISTS >> ER*) पर भी उपलब्ध है, प्राप्त करे । कृपया उपरोक्त लिंक के माध्यम से बैठक में शामिल होने और रिटर्न मेल के माध्यम से इस संबंध में भागीदार होने की पुष्टि करे।

In this regard, please find enclosed agenda of the meeting which is also available on CTU website (*www.ctuil.in >> ISTS Planning and 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) / (Rajesh Kumar) 25/08/2022

महाप्रबंधक/ 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)** Power System Operation Corporation Ltd. (POSOCO) 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.	**Managing Director** Haldia Energy Limited (HEL) 2A, Lord Sinha Road, First Floor, Kolkata, West Bengal - 700 071, Email: haldiaenergy@rpsg.in
3.	**Chairman** CESC Limited CESC House, Chowringhee Square Kolkata – 700001 Email: cesclimited@rpsg.in		

Agenda for 10th Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER)

1. Confirmation of minutes of the previous meeting

The minutes of the 9th CMETS-ER held on 29-07-2022 were issued vide letter dated 18-08-2022. As no comments have been received, the minutes may be confirmed.

A. Application related matters in Eastern Region (ER)

No new open access Application with drawl or injection in North Eastern Region has been received in the month of July 2022.

B. ISTS expansion schemes in Eastern Region

2. Revised connectivity for Laxmikantpur 400/132kV S/s and split bus arrangement at Laxmikantpur S/s

2.1. In the 9th CMETS-ER held on 29-07-2022, following was deliberated:

(a) WBSETCL and CESC would provide the required data to HEL.

(b) HEL to provide their decision on the LILO of Haldia – Subhasgram 400kV D/c line at 400/132kV New Laxmikantpur substation, prior to the next CMETS-ER meeting.

(c) The detailed scope of works would be finalized after receipt of the comments from HEL.

2.2. HEL may present their observations for establishment of LILO of Haldia – Subhasgram 400kV D/c line at New Laxmikantpur 400/132kV substation.

2.3. WBSETCL may share the bus splitting plan for Laxmikantpur 220/132kV S/s in a way that some portion of load would be fed from existing Laxmikantpur – Subhasgram (POWERGRID) 220kV D/c line and balance from 400/132kV New Laxmikantpur S/s.

2.4. Matter may be deliberated.

3. Augmentation of transformation capacity at Subhasgram (POWERGRID) S/s and other intra-state substations of WBSETCL

3.1. In the 9th CMETS-ER held on 29-07-2022, all the stakeholders including CESC and WBSETCL agreed for installation of new 400/220kV, 500MVA ICT (6th) on technical grounds. However, the scheme could not be finalized due to commercial issues of cost sharing. It was decided to refer the matter to forthcoming ERPC meeting for resolution on the cost sharing mechanism.

3.2. As per deliberations in the 46th TCC & ERPC meeting held on 5th & 6th Aug 2022 (minutes awaited), it is understood that CESC is agreeable for installation of new 400/220kV, 500MVA ICT (6th) at Subhasgram (POWERGRID) S/s along with

associated ICT bays at their own cost in similar manner as that of the existing 400/220kV ICTs of CESC at Subhasgram (POWERGRID) S/s.

3.3. Accordingly, it is proposed that the new 400/220kV, 500MVA (6th) ICT may be installed at Subhasgram (POWERGRID) S/s along with associated ICT bays by CESC at their own cost for reliable power supply in and around Kolkata area. The space for installation in this regard would be provided by POWERGRID.

4. Eastern Region Expansion Scheme-XXX (ERES-XXX)

4.1. In the 7th CMETS-ER meeting, augmentation of ICT at Gangtok 132/66kV S/s under ERES-XXX scheme was agreed with the following scope:

a) Paralleling of 132/66kV, 50MVA regional spare ICT available at Rangpo (POWERGRID) S/s with any of the existing 132/66kV, 2x50MVA ICTs at Gangtok (POWERGRID) S/s as permanent arrangement along with suitable isolation arrangement, upgradation of bay equipment, and necessary ICT protection, if necessary.

b) Installation of new 132/66kV, 100MVA ICT in place of single 50MVA ICT (not in parallel connection) along with upgradation of bay equipment, if necessary, and release of regional spare 50MVA ICT.

4.2. Subsequently, POWERGRID informed that a joint survey by CTUIL and POWERGRID needs to be carried out for finalization of detailed scope under ERES-XXX. Accordingly, the matter was deliberated in the 8th CMETS-ER held on 30-06-2022 wherein it was agreed that the joint survey as requested above would be carried out for installation of 50MVA ICTs in parallel including feasibility of transportation of new 100MVA ICT to Gangtok.

4.3. In view of the above, a committee was constituted with officials from POWERGRID and CTUIL, and joint survey was carried out. Major outcomes of the joint visit are mentioned below:

(a) Major constraints in respect to transportation of 100MVA ICT to Gangtok (POWERGRID) S/s like load bearing capacity of bridges, clearance in tunnels, sharp turns, steep roads etc.

(b) Space constraints for installation of new 100MVA ICT in the Gangtok (POWERGRID) S/s.

(c) Issues in paralleling of 132/66kV, 50MVA spare ICT with any of the existing 50MVA ICT such as:

- Space constraint for installation of Isolators for ICT
- Compromising with the protection of ICTs (paralleled)
- Long shutdown required for implementing this scheme
- Less transformation availability under N-1 outage of ICT

4.4. Accordingly, the committee has recommended that the installation of new 132/66kV, 1x100MVA ICT is not feasible at Gangtok (POWERGRID) S/s, and also there are technical difficulties in paralleling of 50MVA ICTs.

4.5. Thus, it is suggested that the scope under the ISTS scheme viz. Eastern Region Expansion Scheme-XXX (ERES-XXX) may be modified as under with implementation timeframe of 18 months from date of allocation:

a) Installation of existing spare 132/66kV, 1x50MVA ICT (already stationed at Gangtok) as 3rd ICT at Gangtok (POWERGRID) S/s along with conversion of existing 132kV TBC bay as 132kV ICT bay for 3rd ICT and construction of new 66kV ICT bay in Hybrid/Outdoor GIS with suitable modification in the gantry structure of 66kV side.

b) Construction of new 132kV TBC bay in Hybrid/Outdoor GIS.

4.6. Matter may be deliberated.

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

5.1. 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**.

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

6. Status of 400kV substations being implemented by STUs in ER under intra-state schemes to be connected through ISTS

6.1. 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**.

6.2. 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.

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

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

7.2. 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 bay	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		Will be taken up in future. No firm plan as of now.
2.	Daltonganj	Jharkhand	400/220/132kV, 2x315MVA+ 2x160MVA	132	2	Existing bay	Daltonganj (POWERGRID) – Chatarpur 132kV D/c	22-10-2019	Expected by 31-03-2023.
3.	Dhanbad	Jharkhand	400/220kV	220	4	Existing bay	LILO of 1st circuit of 220kV Dumka – Govindpur D/c line at Dhanbad (23km)	Bid evaluation is in progress. Price bid opened. Additional funds are required, proposal sent to state govt. for approval	Expected by Dec 2023.
							LILO of 2nd circuit of 220kV Dumka – Govindpur D/c line at Dhanbad	Survey and estimation are being taken up. Thereafter, funding will be tied up.	
4.	Keonjhar	Odisha	400/220kV, 2x315MVA	220	2	Existing bay	Keonjhar (POWERGRID) – Turumunga (OPTCL) 220kV D/c		Expected by Dec 2022.
5.	Subashgram	West Bengal	400/220kV, 3x315MVA	220	2	Existing bay	Subashgram (POWERGRID) – Baraipur 220kV D/c line		220kV Baruipur substation charged. 132kV downstream delayed due to RoW. Expected by Oct 2022.
6.	Rajarhat	West Bengal	400/220kV, 2x500MVA	220	2	Existing bay	Rajarhat (POWERGRID) – New Town AA2C 220kV D/c		Cabling of 0.5km is remaining which is expected by Sep 2022. Line would be charge upon completion of same.

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unuti-lised bays	Status of ISTS bay	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
									Substation is expected by Dec 2022.
7.	Sitamarhi (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2	Existing bay	LILO of Benipatti - Pupri 132kV S/c at Sitamarhi (New)		Expected by Mar 2023
8.	Saharsa (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	220	2	Existing bay	Saharsa (New) - Begusarai 220kV D/c line		Charged on 21st July 2022
				132	2-ISTS (addln.4 by state)		Saharsa (New) - Saharsa 132kV D/c line formed by LILO of Saharsa - Banmankhi and Saharsa - Uda Kishanganj 132kV S/c line		04 nos. of bays are under construction by BSPTCL at Saharsa (New). Two bays are expected in Sep 2022, and balance two in Nov 2022.
9.	Banka	Bihar	400/220/132kV, 2x500MVA + 2x200 & 1x315MVA	220	2	Under Bidding	Banka (POWERGRID) – Goradih (Sabour New) 220kV D/c line	Funds tied up. Tender documents ready	Expected by Mar '24

Annexure-II

Status of 400kV & 220kV substations being implemented by STUs in ER under intra-state schemes to be connected to ISTS

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
A	**Bihar (to be implemented by BSPTCL/BGCL)**			
I	**Bakhtiyarpur GIS**	400/220/132kV, 2x500MVA + 2x160MVA	26.11.2019	Progressively from Oct'22 to Dec'22.
a)	LILO of both circuits of Barh – Patna (PG) 400kV D/c (Quad) line-1 at Bakhtiyarpur 400 kV 2xD/C	400kV 2xD/c	26.11.2019	Line ready to be charged matching with Bakhtiyarpur S/s.
Ii	**Chappra (New)**	400/220/132kV, 2x500MVA + 2x200MVA	Funds not yet tied up	SOR rates increased. Cabinet approval to be taken up.
a)	LILO of 400 kV Barh (NTPC) - Motihari (DMTCL) D/C (Quad) transmission line at Chappra	400kV 2xD/c	Funds not yet tied up	SOR rates increased. Cabinet approval to be taken up.
B	**Odisha (to be implemented by OPTCL)**			
I	**Digapahandi**	400/220kV, 2x500MVA	Tendering activity to be taken up	2025-26
a)	Digapahandi – Therubali – Jeypore 400kV D/c line	400kV D/c	Tendering activity to be taken up (*in first phase: Pandiabil – Digapahandi 400kV D/c line portion would be taken up*)	2025-26
II	**Therubali**	400kV switching station along with 420kV, 1x125MVAr bus reactor	Survey completed. Land schedule is under preparation	2026-27
III	**Bhadrak**	400/220kV, 2x500MVA	Tendering in progress	2024-25
a)	LILO of Baripada – Duburi and Baripada – Pandiabili 400kV line sections at Bhadrak	400kV D/c	Tendering in progress	2024-25
IV	**Paradeep***	400/220kV, 2x500MVA		24 months
a)	Paradeep – Duburi 400kV D/c line	400kV D/c	Line package awarded May'22and substation	24 months

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
			award is expected by Aug 2022	
V	**Paradeep***	765/400kV, 2x1500MVA	Survey completed. Land schedule is under preparation	2026-27
a)	Angul (POWERGRID) – Paradeep (OPTCL) 765kV D/c line	765kV D/c	Survey completed. Land schedule is under preparation	2026-27
VI	**Begunia**	765/400kV, 2x1500MVA	Kept in abeyance	Kept in abeyance
a)	Angul – Begunia 765kV D/c line	765kV D/c	Kept in abeyance	Kept in abeyance
b)	LILO of Pandiabil – Digapahandi 400kV D/c line at Begunia	400kV D/c	Kept in abeyance	Kept in abeyance
C	**Jharkhand (to be implemented by JUSNL)**			
I	**Chandil (New)**	400/220kV, 2x500MVA	Bid opened on 13-07-2022. Technical Evaluation of entire scope has been started.	24 months
a)	PVUNL – Chandil 400kV D/c (Quad) line	400kV D/c (Quad)		
b)	Chandil – Chaibasa (POWERGRID) 400kV D/c (Quad) line	400kV D/c (Quad)		
c)	Chandil – Dhanbad 400kV D/c (Quad) line	400kV D/c (Quad)		
II	**Koderma**	400/220/132/33kV, 2x500MVA + 2x200MVA + 2x80MVA		
a)	PVUNL – Koderma 400kV D/c (Quad) line	400kV D/c (Quad)		
III	**Latehar**			
a)	Patratu – Latehar 400kV D/c line	400kV D/c	Forest Stage-I clearance is awaited.	Feb 2023
b)	Latehar – Chandwa (POWERGRID) 400kV D/c line	400kV D/c	All clearances have been obtained. Works for 20km is pending due to theft of line.	Dec 2022
IV	**Jasidih**	400/220kV, 2x500MVA	-	No firm plan now. To be taken up in future.
a)	Koderma (JUSNL) – Jasidih 400kV D/c (Quad) line	400kV D/c (Quad)	-	
b)	Jasidih – Dumka 400kV D/c (Quad) line	400kV D/c (Quad)	-	
V	**Mander**	400/220kV, 2x500MVA	-	

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
a)	LILO of Patratu – Ranchi (New) 400kV D/c line at Mander	400kV 2xD/c	-	
VI	**Dumka (New)**	400/220kV, 2x500MVA	-	
a)	Dumka (New) – Dhanbad (ISTS) 400kV D/c (Quad) line	400kV D/c (Quad)	-	
D	**West Bengal (to be implemented by WBSETCL)**			
I	**Laxmikantpur GIS#**	400/132kV, 2x315MVA	Land identified. In process of acquisition. Expected by Dec 2024	
a)	LILO of Haldia – Subhasgram 400kV D/c line at Laxmikantpur	400kV D/c	-	Expected by Dec 2024
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	220kV 2xD/c		Mar 2024

* ***As per inputs from OPTCL:*** *Paradeep 765/400kV S/s shall be established at a different location from the already under-construction Paradeep 400/220kV S/s, accordingly, 400kV 2xD/c line shall be established between two substations.*

The 400kV infeed to Laxmikantpur 400/132kV S/s is under discussion in the item no 3. Based on the deliberations, the lines would be updated, if required.

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.	Angul (POWERGRID)	2 nos. 765kV lines bays for termination of Angul (POWERGRID) – Paradeep 765kV D/c line (including suitable switchable line reactors)		Survey is going on. Expected by 2025-26	1st
2.	Rourkela (POWERGRID)	2 No. 220kV lines bays for termination of Rourkela (POWERGRID) – Tarkera 220kV D/c (HTLS) line		Would be taken up after reconductoring of 1st D/c line	1st & 7th
3.	Keonjhar (POWERGRID)	2 No. 220kV lines bays for termination of Keonjhar (POWERGRID) – Tikarpada 220kV D/c line	NIT yet to be taken up	Expected by 2024-25	1st
4.	Maithon (POWERGRID)	2 No. 220kV lines bays for implementation of Maithon (POWERGRID) – Asansol 220kV D/c line		Survey has started.	7th