

## Agenda for 32<sup>nd</sup> 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 31<sup>st</sup> CMETS-ER held on 30-05-2024 were issued vide letter dated 19-06-2024. As no comment has been received, the minutes may be confirmed as circulated.

### A. Application related matters in ER

### 2. Applications under GNA Regulations, 2022

- 2.1. The following applications for grant of GNA/GNA<sub>RE</sub> and Connectivity have been received in the month of May 2024 in ER:

#### 2.1.1. GNA/GNA<sub>RE</sub> Application(s):

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Start date of GNA <sub>RE</sub>	End date of GNA <sub>RE</sub>
1	2200000834 (Original Application)	The Dhamra Port Company Limited (DPCL)	Drawee entity connected to Intra State transmission system	23-05-2024	132kV level at Bhadrak (OPTCL) S/s	9 [Within: 0 Outside:9]	01-09-2024	31-03-2026
<ul style="list-style-type: none"> <li>Applicant [as an eligible entity under Regulation 17.1 (ii)] has applied for GNA<sub>RE</sub> as Drawee entity connected to Intra State transmission system for 9MW (Within Region: 0MW &amp; Outside Region: 9MW) with start and end date as 01-09-2024 &amp; 31-03-2026 respectively.</li> <li>Applicant has submitted No Objection Certificate (NOC) dated 18-05-2024 of Odisha STU viz. OPTCL for 9MW with validity 01-09-2024 to 31-03-2026. OPTCL may confirm the same.</li> <li>It has been observed that adequate margin is available in the ISTS network for transfer of this additional 9MW to Odisha network.</li> <li>In view of the above, it is proposed that GNA<sub>RE</sub> of 9MW may be granted to M/s DPCL as Drawee entity connected to Intra State transmission system of OPTCL with the start date &amp; end date as 01-09-2024 &amp; 31-03-2026 respectively.</li> <li>Matter may be deliberated.</li> </ul>								

## 2.1.2. Connectivity Application(s):

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Connectivity sought from
1	2200000805 (Revised Application)	Damodar Valley Corporation	Generating station(s), including REGS(s), without ESS	20-05-2024	Parulia (Durgapur) 400kV S/s (POWERGRID)	400	01-08-2028
<ul style="list-style-type: none"> <li>Applicant under Regulation 4.1 as Generating station(s), including REGS(s), without ESS, has applied for Connectivity of 400MW for its Durgapur Thermal Power Station (DTPS) (1x800MW) generation in Paschim Bardhaman district of West Bengal with start date of connectivity as 01-08-2028.</li> <li>Along with the application, the applicant has submitted its letter dated 17-05-2024 wherein the following is mentioned:  <i>“DVC’s application for GNA connectivity is to the extent of 400 MW only against 800 MW installed capacity for its upcoming Durgapur Thermal Power Station (1x800 MW). This quantum for GNA connectivity has been agreed internally envisaging that 400 MW out of total 800MW from Durgapur Thermal Power Station (1 X 800 MW) will be required for meeting consumer demand in the Damodar Valley area. In this regard, it may be noted that DVC Act, 1948 enforces DVC to meet the Damodar Valley consumer power demand first and after meeting this obligation surplus capacity (if any) may be allocated to outside Damodar Valley Area. Considering these facts 400 MW is under the purview of MOP for allocation. Accordingly, out of the 800MW installed capacity 400MW capacity may be considered to be connected in Intra State Transmission System and balance 400MW may please be allowed to be connected to ISTS network under this application.”</i> </li> <li>From the above, it is understood that DVC is intending to transfer the 400MW to its own network for internal consumption, and balance 400MW is proposed to be transferred to ISTS. From SLD provided along with application, it is observed that DVC is planning to step-up at 400kV and connect the existing 220kV system at Durgapur/Waria TPS to 400kV with 400/220kV, 2x500MVA ICTs for drawl of their share of power. Evacuation of 400MW to ISTS is planned as per switchyard SLD at 400kV level. <b>Applicant may confirm.</b></li> <li>The nearest 400kV substations to DTPS in ISTS are Maithon (POWERGRID) and Durgapur (POWERGRID). Both these substations have split bus arrangement at 400kV level viz. Maithon-A &amp; B and Durgapur-A &amp; B. Studies were carried out for 2028-29 timeframe by connecting DTPS at both sections of Maithon (POWERGRID) and Durgapur (POWERGRID) substations through 400kV D/c DTL.</li> <li>From the preliminary study results, it has been observed that due to substantial load growth particularly in West Bengal in ER and DVC area, majority of power in all scenarios is flowing towards intra-state network of DVC. The old generation of DTPS (total about 500MW) has been decommissioned and in its place 800MW instant unit is being installed, but loads are still there in DVC network. Thus, with dual connectivity, most of the power is flowing towards DVC network.</li> <li>At Maithon (POWERGRID) and Durgapur (POWERGRID) substations, both DVC and WBSETCL are connected. Further, WBSETCL has also proposed new drawl substations at 220kV level to be fed from ISTS (refer Item-4) including from Maithon S/s. Recently, ERLDC had highlighted the issue of high loading on Ranchi – Purulia 400kV D/c ISTS line during peak demand in West Bengal.</li> </ul>							

- Thus, considering the instant Connectivity application and drawl requirement of West Bengal from ISTS (including three no. new 220kV substations), it is felt that a comprehensive study is required especially of West Bengal network. Accordingly, it is proposed that a joint study may be held among ERPC, CTU, ERLDC, DVC and West Bengal. Based on the outcome of the joint study, the grant of Connectivity for the instant application shall be deliberated in the next CMETS-ER.
- Matter may be deliberated.

2.2. The following Connectivity application was deliberated in the previous CMETS-ER:

Sl. No.	Application ID	Name of the Applicant	Applicant Type	Submission Date	Connection to ISTS (requested)	Quantum (MW)	Connectivity sought from
1	2200000648	Ind-Barath Energy (Utkal) Limited (IBEUL)	Generating station(s), including REGS(s), without ESS	15-03-2024	Jharsuguda (PGCIL), Odisha	350	15-03-2024 (as per application in Mar 2024)
<ul style="list-style-type: none"> <li>• M/s Ind-Barath Energy (Utkal) Limited under Regulation 4.1 as Generating station(s), including REGS(s), without ESS, has applied for Connectivity of 350MW for its 2<sup>nd</sup> unit at existing 765/400kV Sundargarh (Jharsuguda) ISTS substation in Odisha with start date of connectivity as 15-03-2024.</li> <li>• The subject matter was discussed in the 30<sup>th</sup> &amp; 31<sup>st</sup> CMETS-ER meetings. The following was recorded in the 31<sup>st</sup> CMETS-ER:  <i>“CTU mentioned that CTU vide letter dated 30-04-2024 had requested CEA to convene a meeting of all concerned stakeholders for deliberation and finalisation of the subject grant of Connectivity. The meeting was held on 24-05-2024 (minutes awaited), wherein it was decided that OPTCL and ERLDC will submit the studies by 28-05-2024 and thereafter decisions would be taken.”</i> </li> <li>• Subsequently, CEA vide letter dated 06-06-2024 issued minutes of the meeting held on 24-05-2024, wherein following has been concluded: <ul style="list-style-type: none"> <li>i. <i>IBEUL shall submit the progress of construction/commissioning of Unit #2 and the dedicated line to CEA. All efforts to be made by IBEUL to complete the DTL on urgent basis.</i></li> <li>ii. <i>OPTCL and ERLDC shall submit the system studies to CEA / CTU by 28<sup>th</sup> May 2024.</i></li> <li>iii. <i>Matter will be discussed again after examination of the studies.</i></li> </ul> </li> <li>• It is understood that OPTCL and ERLDC have submitted the studies to CEA, however, outcome/decision from CEA is still awaited. Upon receipt of outcome/directions from the CEA, the matter will be deliberated further.</li> </ul>							

**B. ISTS expansion schemes in ER**

**3. Installation of 5<sup>th</sup> 400/220kV, 315MVA ICT at Jeerat (WBSETCL) S/s to maintain N-1 – Agenda by WBSETCL**

3.1. The installation of 5<sup>th</sup> 400/220kV, 315MVA ICT at Jeerat (WBSETCL) S/s has been under discussion since the 29<sup>th</sup> CMETS-ER meeting held in March 2024. In the absence of clarity from WBSETCL on re-installation of the 2x50MVAR ISTS bus reactor for vacating the space for proposed intra-state ICT, no decision could be reached. In the 31<sup>st</sup> CMETS-ER meeting following was agreed:

*a) A joint visit may be carried out by officials from CTU, POWERGRID & WBSETCL for finalization of the modalities of shifting and reinstallation of the existing 2x50MVAR ISTS bus reactors at Jeerat (WBSETCL) S/s so as to create space for installation of 5th 400/220kV, 315MVA ICT in vacated bay. ERLDC will submit the studies by 28-05-2024 and thereafter decisions would be taken.*

*b) Based on the outcome of the joint visit, the matter would be deliberated in the next CMETS-ER.*

3.2. WBSETCL vide email dated joint visit 21-06-2024 has informed the following:

- *Joint visit was fixed on 15-06-2024 from POWERGRID end.*
- *Subsequently, it was learnt from POWERGRID that the scheduled date for joint site visit on 15-06-2024 had to be cancelled/ postponed under unavoidable circumstances.*
- *POWERGRID has informed that the date for joint site visit will be fixed in the next week.*

3.3. WBSETCL may update.

**4. New intra-state transmission system in West Bengal including power evacuation from Rammam-I HEP – Agenda by WBSETCL**

4.1. WBSETCL through various recent emails have proposed the following transmission systems to be considered for implementation under intra-state by WBSETCL along with PSSE files:

**a) Establishment of a new 220/132 KV SS at Dendua:**

- With the load growth in the Burdwan(W) and industrial load of about 250MW, WBSETCL has proposed a new 220/132kV substation at Dendua (WBSETCL) to feed the loads. The following system has been proposed:

a. Establishment of new 220/132kV Dendua S/s

b. Maithon (POWERGRID) – Dendua 220kV D/c (HTLS) line

- **Preliminary observations of CTU:** Space allocation for 2 no. of 220kV line bays at Maithon (POWERGRID) S/s for termination of the above line is required. Capacity in ICTs from drawl of additional power needs to be checked. Joint study required.

**b) Installation of 4<sup>th</sup> 220/132kV, 200MVA ICT utilizing the existing 220kV feeder bay of Durgapur (WBSETCL) – Waria (DVC) Ckt-II at Durgapur (WBSETCL) 220kV S/s to maintain N-1 criteria**

- Existing transformation capacity at 220/132kV Durgapur (WBSETCL) S/s is 600MVA (3x200MVA). The peak demand of 530MW has already been catered through the existing ICTs, thus violating the N-1 criteria.
- Accordingly, to fulfill the future demand and to maintain N-1 criteria, a new 220/132kV, 200MVA (4<sup>th</sup>) ICT is proposed to be installed at Durgapur (WBSETCL) S/s. It has been mentioned that due to space constraint of 220kV bay, WBSETCL proposes that the existing feeder bay of 220kV Durgapur – Waria (DVC) ckt-II, which is lying unutilized since a long time due to system constraint may be utilized for installation of the said 4<sup>th</sup> ICT.
- **Preliminary observations of CTU:** Durgapur (WBSETCL) – Waria (DVC) 220kV ckt-II is a tie line between DVC and WBSETCL. Matter may be deliberated and finalized among WBSETCL and DVC.

**c) Establishment of new 220/132kV Farakka (WBSETCL) substation**

- The demand of West Bengal is rising rapidly which has reached more than 12GW in recent times. The load is also increasing in the nearby areas of Farakka, Dist-Murshidabad. The approximate present maximum load at 132kV S/s of WBSETCL in the area is Khejuria (93MW), Malda (140MW), Dhullian (67MW) & Raghunathganj (110MW). The load is expected to rise further by 2028-29 timeframe.
- With the expected increase in load, it has been observed by WBSETCL from studies that the loading on Malda (POWERGRID) – Malda (WBSETCL) 132kV (HTLS) line reaches 125MW/ckt and that on Malda - Khejuria 132 kV line (ACSR Panther) reached about 50MW/ckt. Further, low voltages have also been observed in and around areas of Dhullian & Khejuria. Thus, due to high loading in the lines & low voltages issues, WBSETCL has proposed the following system:

a. Establishment of new 220/132kV Farakka (WBSETCL) substation

b. Farakka TPS (NTPC) – Farakka (WBSTECL) 220kV D/c line

c. LILO of existing Dhulian – Farakka SW 132kV D/c line at Farakka (WBSETCL) substation

- **Preliminary observations of CTU:** Space requirement for 2 no. of 220kV line bays at Farakka TPS (NTPC) for termination of the above line is required from NTPC Ltd. Capacity in ICTs from drawl of additional power needs to be checked. Joint study required.

**d) Upgradation of existing 132/33kV Raiganj S/s to 220kV level**

- The load is increasing in the nearby area of Dinjapur district with the approximate present load at 132kV substation as Raiganj (132MW), Kushmundi (31MW), Gangarampur (80MW) & Balurghat (67MW). The load is expected to rise further by 2028-29 timeframe.
- With the expected increase in load, it has been observed by WBSETCL from studies that the loading on Dalkhola – Raiganj 132kV D/c, Gazol – Balurghat 132kV & Gazol – Ganagrampur 132kV lines are becoming very high and N-1 is not being maintained. Accordingly, the following transmission system has been proposed by WBSTECL:
  - a. Upgradation of existing Raiganj substation to 220kV level with installation of 220/132kV ICTs
  - b. LILO of Dalkhola (POWERGRID) – Gazol 220kV D/c line at Raiganj (WBSETCL) with Dalkhola – Raiganj with HTLS conductor
  - c. Raiganj (WBSETCL) – Gangarampur (WBSETCL) 132kV D/c line (one ckt via Kushmundi): additional 132kV line
- **Preliminary observations of CTU:** Space allocation for 2 no. of 220kV line bays at Dalkhola (POWERGRID) S/s for termination of the above line is required. Dalkhola – Gazol already proposed for reconductoring with HTLS. Joint study required.

**e) Power evacuation from Rammam-I HEP (4x12MW)**

- WBSEDCL has envisaged implementation of 48MW (4x12MW) Rammam Stage-I HEP in Darjeelinbg Dist. of West Bengal. The said project is in the vicinity of existing 51 MW Rammam Stage-II HEP.
- Initially it was proposed to terminate 132kV D/c line from proposed Rammam Stage-I HEP to Rammam Stage-II HEP for power evacuation. But the proposed evacuation scheme was not found feasible due to non-availability of space required for construction of 02 nos. of 132kV line bays at switchyard of Rammam Stage-II HEP.

- Accordingly, it is proposed to explore the feasibility of evacuation of power from proposed Rammam Stage-I HEP through LILO of Kurseong-Rangit 132kV S/c line.
- **Preliminary observations of CTU:** Kurseong – Rangit is an ISTS line, whereas Rammam-I HEP is an intra-state generation project and it is understood that ISTS connectivity is not sought. As such ISTS Connectivity can be provided for 50MW and above only (25MW for NER and Sikkim). **WBSETCL may clarify.**

4.2. WBSETCL may present the studies and explain their proposals.

4.3. As already explained at the para 2.1.2 and above it is proposed that a comprehensive study is required especially of West Bengal network. Accordingly, it is proposed that a joint study may be held among ERPC, CTU, ERLDC, DVC and West Bengal. Based on the outcome of the joint study, the grant of Connectivity for the instant application shall be deliberated in the next CMETS-ER.

**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/entities in ER 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-state 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. 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.

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## Annexure-I

## Status of Downstream Transmission Network in ER

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unutilised bays	Status of ISTS	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
1.	Chaibasa	Jharkhand	400/220kV, 2x315MVA	220	2	Existing bay	Chaibasa (POWERGRID) – Jadugoda (JUSNL) 220kV D/c	-	March 2026
2.	Daltonganj	Jharkhand	400/220/132kV, 2x315MVA+ 2x160MVA	132	2	Existing bay	Daltonganj (POWERGRID) – Chatarpur 132kV D/c	22-10-2019	Aug 2024. Issues of forest clearance.
3.	Dhanbad	Jharkhand	400/220kV, 2x500MVA	220	4	Existing bay	LILO of 1 <sup>st</sup> circuit of 220kV Dumka – Govindpur D/c line at Dhanbad (23km)	17-05-2023	16-05-2024 <b>(Not updated by JUSNL from 30<sup>th</sup> CMETS-ER. JUSNL may update)</b>
							Dhanbad – Baliyapur 220kV D/c line	07-11-2023	06-11-2025
4.	Keonjhar	Odisha	400/220kV, 2x315MVA	220	2	Existing bay	Keonjhar (POWERGRID) – Turumunga (OPTCL) 220kV D/c	Awarded	Mar 2024 <b>(Not updated by OPTCL from 29<sup>th</sup> CMETS-ER. OPTCL may update)</b>
5.	Rourkela	Odisha	400/220kV, 4x315MVA	220	-	-	Reconductoring of Rourkela – Tarkera 220kV D/c line with HTLS conductor	Awarded	Mar 2024 <b>(Not updated by OPTCL from 29<sup>th</sup> CMETS-ER. OPTCL may update)</b>
6.	Malda	West Bengal	400/220kV 2x500MVA + 220/132kV, 3x160MVA	132	2 no. new 132kV GIS line bays	132kV upgradation in GIS ongoing. 4 out of 7 bays completed. Balance 3 to be completed	Malda (POWERGRID) – Manikchak (WBSETCL) 132kV D/c line	Awarded	132kV D/c line work is getting delayed due to severe ROW issues at 5 locations. ROW issue resolved at 1 location. Meetings are being held regularly with land owners in presence of Dist. Civil & Police admin. for resolving the ROW issues at balance locations. Foundation work started at 5 nos. of low-lying water stagnant locations. Approval from POWERGRID for

Sl. No.	ISTS S/s	State	Voltage ratio, Trans. Cap	Downstream Voltage level (kV)	Unutilised bays	Status of ISTS	STU lines for unutilised bays	Status of Lines	
								Date of Award	Completion schedule
						by end of Dec 23			finalisation of termination tower inside POWERGRID S/s premises has been obtained. Considering severe ROW issues & other constraints being faced for land development (full of mango gardens) anticipated completion is Sep-24.
7.	Sitamarhi (New)	Bihar	400/220/132kV, 2x500MVA + 2x200MVA	132	2	Existing bay	LILO of Benipatti - Pupri 132kV S/c at Sitamarhi (New)	Awarded	90% of the work is completed. Expected by Oct 2024. Delay due to financial issue with the contractor.
8.	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	Awarded	Work Completed. Commissioning under progress in consultation with POWERGRID and expected to be completed by July'2024.
9.	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/	<b>Line:</b> 03-03-2023. <b>Bays:</b> Tendering is under process.	<b>Line:</b> 02-09-2024. <b>Bays:</b> work awarded on 05-03-2024. Expected by Sep 2025.
10.	Lakhisarai	Bihar	400/220kV, 2x500MVA	220	2	May 2025	Lakhisarai (POWERGRID) – Haveli Kharagpur 220kV D/c line along with 2 no. 220kV line bays at Haveli Kharagpur	05-03-2024	Expected by Sep 2025.

## 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
<b>A Bihar (to be implemented by BSPTCL)</b>				
<b>I</b>	<b>Bakhtiyarpur GIS</b>	400/220/132kV, 2x500MVA + 2x160MVA	26-11-2019	Expected by 30-09-2024
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.
<b>II</b>	<b>Chappra (New)</b>	400/220/132kV, 2x500MVA + 2x200MVA	Retendering work is under process	24 months from date of award
a)	LILO of 400 kV Barh (NTPC) – Motihari (DMTCL) D/C (Quad) transmission line at Chappra	400kV 2xD/c	Awarded in Dec-23	Dec 2025
<b>B Odisha (to be implemented by OPTCL)</b>				
<b>I</b>	<b>Gopalpur</b>	400/220kV, 2x500MVA	To be Tendered	Dec 2026
a)	Pandiabili (POWERGRID) – Gopalpur 400kV D/c (AAAC Twin Moose) line	400kV D/c	Deferred	-
<b>II</b>	<b>Therubali</b>	400kV switching station along with 420kV, 1x125MVA r 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
<b>III</b>	<b>Bhadrak</b>	400/220kV, 2x500MVA	Tender was cancelled due to high cost.	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.	2025-26
<b>IV</b>	<b>Paradeep</b>	400/220kV, 2x500MVA	Dec 2022	Dec 2024
a)	Paradeep – New Duburi 400kV D/c line (136 km)	400kV D/c	Line work started.	Dec 2024
<b>V</b>	<b>Joda New</b>	400/220kV, 3x500MVA	To be taken up under intra state TBCB.	2025

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
			Assigned to PFC. Site selection completed.	
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
<b>VI</b>	<b>Kolabira<sup>#</sup></b>	765/400kV, 2x1500MVA	Land is finalised	-
a)	Sundargarh-B (POWERGRID) – Kolabira 765kV D/c line	765kV D/c	Survey work will be awarded in Mar 2024	-
b)	Kolabira – Duburi-765kV 765kV D/c line	765kV D/c	Survey work will be awarded in Mar 2024	-
<b>C</b>	<b>Jharkhand (to be implemented by JUSNL)</b>			
<b>I</b>	<b>Chandil (New)</b>	400/220kV, 2x500MVA	Awarded in Jan 2024	24 months
a)	PVUNL – Chandil 400kV D/c (Quad) line (130km) (80MVAR sw. line reactor at Chandil end)	400kV D/c (Quad)	20-07-2023	July 2025 (24 months from the award date)
b)	Chandil – Chaibasa (POWERGRID) 400kV D/c (Quad) line (50km)	400kV D/c (Quad)	20-07-2023	July 2025 (24 months from the award date)
c)	Chandil – Dhanbad (ISTS) 400kV D/c (Quad) line (130km)	400kV D/c (Quad)	20-07-2023	July 2025 (24 months from the award date)
<b>II</b>	<b>Extn. at Chaibasa (ISTS) S/s</b>	2 no. 400kV line bays at Chaibasa (ISTS) S/s for termination of Chandil – Chaibasa (ISTS) 400kV D/c (Quad) line	JUSNL mentioned that they initially focused on award of lines first. Now, bay works would be taken up. CTU highlighted that as line works have already been awarded 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.	
<b>III</b>	<b>Extn. at Dhanbad (ISTS) S/s</b>	2 no. 400kV line bays at Dhanbad (ISTS) S/s for termination of Chandil – Dhanbad (ISTS) 400kV D/c (Quad) line		
<b>IV</b>	<b>Koderma</b>	400/220/132/33kV, 2x500MVA + 2x200MVA + 2x80MVA	Expected in March 2024	24 months
a)	PVUNL – Koderma 400kV D/c (Quad) line (133km) (80MVAR sw. line reactor at Koderma end)	400kV D/c (Quad)	20-07-2023	July 2025 (24 months from the award date)

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
<b>V</b>	<b>Latehar</b>			
a)	Patratu – Latehar 400kV D/c line	400kV D/c	Forest Stage-I clearance is awaited.	Aug 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).	Aug 2024
<b>D</b>	<b>West Bengal</b>			
<b>(to be implemented by WBSETCL)</b>				
<b>I</b>	<b>New Laxmikanpur GIS</b>	400/132kV, 2x315MVA	Land identification & short listing are in progress. 400kV & 132kV line survey for connectivity feasibility in progress for finalisation of land.	
a)	LILO of one circuit of Jeerat (New) – Subhasgram 400kV D/c (Quad) line at New Laxmikanpur (Interim arrangement: LILO of Haldia – Subhasgram 400kV D/c line at Laxmikanpur)	400kV D/c	<b>Interim arrangement:</b> M/s HEL is yet to receive & convey the clearance from OEM of their generating units for LILOing of 400KV Haldia-Subhasgram line.	
<b>II</b>	<b>Falakata</b>	220/132kV, 2x160MVA	Works in progress	Nov-2024 (getting delayed due to poor progress of work by Vendor)
a)	LILO of Birpara – Alipurduar 220kV D/c line at Falakata substation (LILO portion length around 9km)	220kV 2xD/c	95% works completed. Only line tapping & termination portion of work pending	Nov-2024 (termination of line at SS may get delayed due to slow progress of SS works)
<b>(to be implemented by CESC) – to be updated by POWERGRID</b>				
<b>III</b>	<b>Subhasgram (POWERGRID)</b>			
	Installation of new 400/220kV, 500MVA (6 <sup>th</sup> ) ICT at Subhasgram (POWERGRID) S/s along with associated ICT bays and OLTC by CESC at its own cost	400/220kV, 1x500MVA (6 <sup>th</sup> ICT)	LOA placed in Nov'23.	May 2025 (as intimated by POWERGRID)
<b>E</b>	<b>DVC (to be implemented by DVC)</b>			
<b>I</b>	<b>Gola-B</b>	400/220/132kV 2x500MVA + 2x200MVA	Will be taken up in TBCB mode by formation of two different SPVs for WB and	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	Jharkhand area respectively.	
II	Ramkanali-B	400/220/132kV 2x500MVA + 3x200MVA (3 <sup>rd</sup> ICT to be installed progressively with load growth)	M/S PFC Consulting Ltd. has been appointed as BPC. Presently RFP documents are under preparation. Deviations in respect of DVC have been observed in the Standard Bidding Documents and the TSA. Letter initiated to MoP, Gol for incorporation of changes. Awaiting reply. Once received, the RfP document would be issued.	
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	1 <sup>st</sup> & 7 <sup>th</sup>
2.	Keonjhar (POWERGRID)	2 No. 220kV lines bays for termination of Keonjhar (POWERGRID) – Tikarpada 220kV D/c line	No clarity from beneficiary	On hold	1 <sup>st</sup>
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. The agreement between WBSETCL & PGCIL has been executed on 18-07-23. LOA by PGCIL for 2 nos 220KV Fdr bays at Maithon SS placed in Nov'23. LOA for 220 KV D/C line & 2 nos 220KV Fdr bays at Asansol 220KV SS has been placed by WBSETCL ON 13.03.2024.	18 months from date of LOA. (Sept 2025)	7 <sup>th</sup>
4.	Sitamarhi (New) (PMTL)	2 no. line bays for termination of Sitamarhi (New) (PMTL) – Sheohar (BSPTCL) 132kV D/c line	Fund tie up in progress	Fund tie up in progress	24 <sup>th</sup>
5.	Chandauti (New) (PMTL)	2 no. line bays for termination of Chandauti (New) (PMTL) – Sherghati (BSPTCL) 132kV D/c line	Fund tie up in progress	Fund tie up in progress	24 <sup>th</sup>