

**Ref: TPCODL/P&S/1000000369/2023-24/corrigendum/002**

Dated: 10<sup>th</sup> May 2023

**Sub: Corrigendum to open tender number TPCODL/P&S/1000000369/2023-24 for 11KV & LT Network Maintenance & Allied Works, 33KV Network Maintenance and Operational Assistance of 33/11KV Substations of all TPCODL Divisions.**

- i) **“Scope of Metering Installation Activity”** annexed to Corrigendum No. TPCODL/P&S/1000000369/2023-24/corrigendum/001 dt 03.05.2023 is being changed as per Annexure-A attached herewith. All other terms of the above corrigendum will remain same.
- ii) Price Schedule, Annexure I, Rev 2 (11KV AMC Extra Jobs sheet) will be modified as per the revised scope of Metering Installation Activity and uploaded on ARIBA site.

All other terms and conditions of the above tender will remain same.

**By Order**

**Chief-Procurement & Stores, TPCODL**

**Annexure A to Corrigendum No TPCODL/P&S/1000000369/2023-  
24/corrigendum/002 dt 10.05.2023**

**METER INSTALLATION ACTIVITY**

**1. Scope of Work and SLA**

- a. Meter Installation Services for Single Phase meters in the rural divisions :
- The offer is invited for a period of 3 years. Initially Contact shall be issued for 1 year and based on satisfactory performance in first year it will be extended for another year.
  - Entire TPCODL is divided into 10 clusters. All BAs have to bid for all 10 clusters as per Tender BOM format. TPCODL reserve the right to allocate the Circle as per the execution capacity / tender evaluation done for each bidder.
  - BA shall provide their working execution capacity. The same shall be evaluated during tender evaluation of bidders.
  - Tentative quantum of work for each year is mentioned in annex-I of this document.
  - One BA can be allotted work in at the max 2 Clusters.
  - Engineer In-Charge (EIC) for the contract will be concerned MRT Divisions Manager.

**2. Meter Installation Services**

**2.1 Scope of Work shall include as per below:**

**2.1.1 Key Activities:**

1. Installation / Replacement / Removal / Reconnection / Shifting of meter with or without service cable (assorted Sizes) as per the requirement. (Single Phase Meter). Scrap / warranty material has to be returned back to central store within 30 days of removal from site. Payment of meter removal will be paid only after returning the meters to relevant Central stores
2. Pole Mounted Distribution box Installation (wherever there is LT ABC) and replacement with removal Distribution box (this will include supply of IPC connectors) by BAs where incoming cable is required to be connected in ABC
3. BA has to maintain space for stacking transit material at suitable locations in Division / Sub-division in urban and Sub-division / Section in Rural area to ensure timely execution of the cases.
4. Rectification of site as per instruction of EIC or as per TPCODL representative.
5. BA will have to receive free issue material from TPCODL stores for execution of work on need basis. Currently two central stores are operational i.e. Bhubaneswar – Power House and Choudwar, Cuttack. If any new store will be developed, same will be intimated to BA accordingly for receiving material from.
6. It is the responsibility of the BA to maintain the store properly. TPCODL may audit this facility on monthly basis or as and when required.
7. BA shall be responsible for any damage / theft of materials issued to him for installation.
8. Cases to be executed for meter installation will be shared through Soft copy / Excel list / Notifications in SAP.

9. BA to fill the pre-printed SAP protocols and handover consumer copy to consumer and return TPCODL copy to EIC. BA to keep record of protocols with him in hard and soft in traceable manner. Soft copy of Protocol / PV sheet need to be uploaded in SAP as well as per mode advised by TPCODL.
10. Installation of wall corner clamp / pipes / angles / fasteners etc. for quality installation shall be provided by BA. Same to be captured in protocols and accordingly consumables shall be claimed by BA in invoice.
11. BA has to reconcile/submit monthly detail of Material received, consumed & balance material. Period of reconciliation can be increased or decreased by TPCODL EIC.
12. BA will provide monthly MIS of executed work & the improvement plan of the deficiency in activity and discuss the same with Engineer In-charge.
13. BA can be asked to operate on a fixed duration basis in any area other than their allocated area at the cost they have opted to work in their allocated area.
14. Line item wise scope for every activity has been described in BOM in detail.
15. These BA Employees Will Primarily Work For Metering Activities. However they Will Also Support Other functions such as Fuse Call Complaints, 11kv/DSS/LT Maintenance , AT&C loss reduction initiatives , Breakdown activities etc. on Regular Basis as per the direction of TPCODL EIC/ Divisional Manager.
- 16.** Since meter replacement is a time bound activity so BA has to engage additional manpower/vehicle in case the quantum is high during any period to meet the OERC PA timelines.

### 2.1.2 Salient features of Safety Compliances:

1. BA has to ensure implementation of Contractor Safety Management (CSM) as per latest revision.
- 2.** Required PPEs as per TPCODL standard has to be provided by bidder to all BA staff deployed in field and as well as in stores. List of PPEs is provided in this scope document.
3. The safety Engineer deployed by the BA will ensure compliances of Contractor Safety Management (CSM) in field and provide MIS on daily basis for safety audits done during the day.
  - Safety Engineer will be reporting to TPCODL EIC & Safety Group.
  - Minimum 2% site audits for the executed cases to be conducted by safety engineer of BA with photographs. Report of same has to be submitted to TPCODL Safety Engineer / EIC. Testing of new installed meters with accucheck by BA team on sample basis for each division will also be considered as part of audit.
  - It will be responsibility of BA to ensure Safety of team i.e. Lineman and Helper at site in all respect. He will ensure implementation of Job Safety Analysis (JSA) and Standard Operating Process (SOP) provided by TPCODL during metering activities.
4. All staff deployed in field will have to go through HOTT process of TPCODL and only those person who clears the qualifying criteria will be allowed to work in field. Subsequently, the staff will be assessed for workmanship as and when required by EIC.
5. It is the responsibility of BA to keep their manpower well trained in Safety and well aware of following the Standard operating procedures (SOP) while working provided by TPCODL. BA will provide training schedule for their employees in particular month. After conducting the training,

MIS of same shall be provided to TPCODL EIC. TPCODL officials may join in for such training sessions.

6. BA to ensure all statutory compliances required for scope of work, covered under this document.

## 2.2 Service Level Agreement

### 2.2.1 The agency shall execute the various activities through experienced and authorised persons as mentioned below:

Single Phase meter installation team shall be comprising of:

- a. One Lineman ITI (Electrical), having MV license and preferably 2 years of relevant experience. He should be capable of reading/ writing (Hindi/English/Odia).
- b. One Helper preferably **10<sup>th</sup> pass with knowledge of electrical distribution system** less than 45 years of age.

#### Note:

- BA to ensure that adequate manpower is available for working at site if required over and above the above mentioned composition to execute the work.
- Meter Installer and Helper will not work on live line.

#### Type of Vehicle to be used for metering activities:

### 2.2.2 Single Phase Metering services :

- a. **BA to deploy vehicle in each subdivision for the meter installation activity.** Any 4 Wheeler suitable for geographical terrain in area of operations **(like Mahindra Supro / Tata Magic / equivalent or higher).**
- b. Driver of 4 wheeler vehicles must have valid commercial license.
- c. Fully closed 4 wheeler vehicles can be deployed with team.
- d. Bidder to ensure all Statutory Requirements & documents **(Insurance, Vehicle fitness , Pollution etc.)** as per motor vehicle act / RTO guidelines for operating these vehicles during all working hours in TPCODL.
- e. Single Phase team will assemble in office from where vehicles have to start for work on daily basis. This place may change with in division based on availability of work.
- f. TPCODL engineer may accompany the BA Team for performing metering activities. BA has to accommodate his movement from office to site / site to site along with BA team.
- g. All vehicles should not be more than 5 years old or should not have run for more than 1,00,000 KM at the start of contract.

### **2.2.3 EIC Monitoring Mechanism for daily activities**

- a. DM / SDO / JM (C) will provide details to BA for meter shifting/ new meter installation / meter replacement for any month.
- b. BAs' areas/ division/ sub-division, as the case may be, can be restricted to specific location/ area as per the business requirement to operate. Localisation of BAs' Division wise / Sub-division wise, Jobwise (Normal business/ smart meter) or Hierarchy-wise can be done as per the decision of engineer in-charge and will be informed to bidders in advance to plan their movement accordingly.
- c. EIC may allocate any central stores to a BA operating in any Division from where material can be drawn.

### **2.2.4 BA compliances for daily activities :**

- a. Company is in the process of deployment of uploading meter, seals, material consumed details and GEO tagging details from site using mobile application. So, BA Line staff must have Smart Phone with required data enablement to upload the required information through mobile on daily basis from site itself.
- b. Capturing clear photographs of all meters installation cases and return (not executed) cases due to constrains at site. The photographs shall be submitted to Metering Team in form of digital media / Pen drive, bi-weekly on sorted CA / Notification-wise. Generally 5-6 photos have to be brought as:
  - a. New Installed Meter, b. Connection point at pole end, c. Sag provided, d. Service Cable at consumer end & e. Pole No, f. Photograph of old removed meter, g Photograph of old removed meter reading. Same is to be converted in to a single PDF and uploaded in SAP. This will be considered as a part of meter installation activity. Mobile app may be used for this activity.
    - a. The photos shall be sorted based on notification number & meter number wise and same shall be submitted to respective Engineer In-charge on weekly basis and should be uploaded in SAP
    - b. Capturing of GPS co-ordinates of meters in protocol will be must. Mobile app may be used for this purpose
- d. The agency will get the job advices for next working day, on previous evening through Service Order. The vehicle may be loaded with meters and accessories on previous evening itself and must be parked at designated location. These vehicles can be audited by TPCODL staff at any time with or without prior intimation to BAs.
- e. The agency will be responsible for loss or damage of meters and other associated material if any for which TPCODL can resort to recoveries.
- f. BA to co-ordinate with EIC and ensure that sufficient no of tested meters are received from lab for next 3 days of execution.

### **2.2.5 Submission and punching of protocols :**

- a. The Agency shall ensure daily submission of filled protocol sheets of all type of activities, for all the jobs completed during the day, at MMG Sub-Division / Division office / Data Centre for Circle or other suggested **TPCODL location on same day of execution.**
- b. Bidder to arrange sufficient manpower for punching of **protocols in system on next day of execution of work.** Movement of protocols to data centre (where Protocol Punching operators will be sitting) and after punching to record room (where all protocol will be kept for record) will be in scope of BA. **BA to arrange for required no of computers, broadband internet connections for punching of same. These KPOs will be stationed at MRT Division headquarters for that particular circle in an office arranged by BA or at any location as agreed by EIC and BA.**
- c. Agency should maintain proper records of duplicate copies of protocols in hard and soft in easily retrievable formats at his location. Agency shall submit the same on any such requirement of protocols / data as per requirement from TPCODL.
- d. TPCODL is in the process of automation of bringing mobility app for updating required data of meter installation from field. BA to keep resources ready for same.
- e. EIC reserves the right to amend the schedule for submission of protocols. All such data maintained cannot be shared with third party without prior information to Engineer In-charge.

**Note :** As per current trend, it is identified that one KPO can punch 50 meter protocols in a day, so BA should deploy KPOs accordingly.

## **2.2.6 Daily Monitoring Mechanism, Reports and MIS :**

- a. Agency shall provide Daily Meter Installation Report in format provided by TPCODL to capture site visit details and submit the same to MMG on the same evening. TPCODL may change the format of control sheet as per requirement of EIC on time to time basis.
- b. BA shall be responsible for reconciliation of material and generating all reports & formats including exception reports on daily basis.
- c. All new connection cases shall be completed in 24 hours from the date of issuance of case.
- d. Utilisation report of all the materials will be submitted along with bills of subsequent month in prescribed format along with check list.

## **2.6 Activity Penalty (Liquidated damages):**

### **2.6.1 Penalty for inadequate execution:**

1. Penalty of Rs. 50/- per day per case will be imposed in each of the following categories :
  - a. Delay in installation of New connections beyond 2 working day if the case is applied through SAP.
  - b. Delay in punching of Protocol beyond two working days after completion of job.
  - c. Delay in installation along with punching beyond 24 hours.
  - d. Return of removed meters / material at scrap / warranty store beyond 30 days.
2. If meter gets burnt due to poor workmanship, penalty equal to cost of meter will be recovered.

3. In case of false reporting (like wrong picture, wrong details, and wrong return remarks) for return case by bidder, a penalty @ 2 times the rate of execution of the concerned case shall be levied.
4. Penalty of Rs 100 per case will be levied for wrong punching of protocol in system.
5. Penalty of Rs 100 per case will be levied for not uploading photographs in SAP within 2 working day of execution of case.
6. If company owned meter after removal from site is not returned to TPCODL store, cost equivalent to new meter cost will be recovered for every meter.
7. Any re-work done to improve the quality as required under tender will be free of cost to TPCODL.
8. Two times the cost of testing of meters at site (Unsupervised Job) will be deducted from the bill of BA for each incorrect test results declared.

### **2.6.2 Penalty for non-compliance of Tools and Vehicle**

1. Non-availability of items in vehicles / non-availability of specified vehicle, at the time of surprise inspection. Penalty @ Rs 2000/- per such occurrence will be imposed.

Total penalty under clause 2.6.1 and 2.6.2 taken together will be as following:

- This will have an upper sealing of 10% of monthly bill amount raised by BA.
- List of tentative tools required is given in tender document, however any tool which is required for quality work should be arranged by BA in required numbers.

### **2.6.3 Penalty for non- compliance of Safety and Ethics**

1. All penalties as per Contractor Safety Management (CSM) will be applicable.
2. BA not able to conduct 2% safety audit as per submitted monthly report for any set of division, failing which penalty @ Rs 5000/- per month, will be imposed on the bill of that set of division.
3. Reporting of any unethical activity against BA / replacement of tamper meter, a penalty of Rs 10,000/- per occurrence will be imposed and or termination of employee / contract with Agency can be done as per the discretion of EIC.

### **2.6.4 Penalty for Non-reconciliation of material :**

1. Monthly reconciliation of new and removed meter to be completed by bidder by 30<sup>th</sup> of every month for last month. Processing of bill for the month will be done only after submission of reconciliation report for previous month to EIC i.e. for processing the bill of month of Nov, reco report of Oct, duly signed by concerned engineer should be submitted. Upon reconciliation, if any material (other than meters and Seals) is found missing, 1.5 times the cost of such missing material will be recovered.
2. Loss of any TPCODL meter or seal (**FIR lodged** with police station and informing TPCODL within 3 working days) Rs 5000/- per single phase meter, Rs 12,000/- per three phase whole current meter, Rs 20,000 /- per CT meter and Rs 1000/- per seal will be imposed.

Engineer in Charge or MRT Circle In charge is the final authority to waive off any penalty based on site conditions / circumstances beyond the control of BA.

**No penalty will be imposed in first 2 months of execution on target based performance parameters.**

## 2.7 PPE, Tools & Tackles:

The agency shall provide the tools and tackles to each team as per specifications / PPE matrix (Annexure-1) or through any other notification as shared by TPCODL, Brief list is provided below :

### 2.7.1 Regular Tools:

Tools	Make	Specification
a. CMRI for all 3 Phase teams	Sands / Analogic	Suitable for Data download of meters commonly installed in TPCODL
b. Crimping tools	Dowll, Jainson or Equivalent	4sq mm to 300 sq mm
c. Clamp Meter of	Rishab or equivalent	0-20A-200A
d. Multimeter for testing voltage	Rishab or equivalent	0-650 Volts
e. Drill Machine with extension and ELBC. Battery operated Drill will be preferred.	Bosch, Black and Decker	Suitable for fixing meters of Single Phase and Three Phase.
f. Extension cord with ELCB for Drill Machine.	GE, Ligrand , L&T or equivalent	Rating : 30 mA
g. Hammer	Taparia / Pye	0.5 KG
h. Phase tester	Taparia / Pye	LT Line
i. Lineman's Insulated pliers	Taparia / Pye	8 Inch
j. Wire stripping pliers	Taparia / Pye	
k. Cut resistant gloves for team cutting cables.	Ugygi	
l. Saddles	Any Make	For Holding cable
m. Screw Driver of different heads	Taparia / Pye	One sided fixed only.
n. Box Spanner set	Taparia / Pye	Suitable for fixing lugs up to 300 sq mm
o. Tool box / Tool Bag	Taparia / Pye	Suitable for keeping required equipment
p. Double test lamp with Pigni Lamp	Self Developed	2 Pigni Lamp in series
q. Pre-define Insulated torque Spanner Set	Taparia / Pye	Suitable up to 300 sq mm lugs
r. Measuring Tape	Any Make	30 M
s. Phase Separator	NA	Bakelite sheet



t. Safety Pouch for keeping tools while working	Any Make	Canvas bag with Belt holding at waist.
u. Safety cones with Caution tapes	Any make	LDPE material 750 MM
v. Torch / Emergency light	Eveready or equivalent	LED Torch
w. First Aid Box	Metalic Box	As per table below
x. Rope	8 mm or more	Nylon Rope various size suitable for passing tools to lineman working at height, for pulling cable to top of pole.
y. Copper/ Brass chains & shorting leads	Any Make	Suitable length to short 11 KV line
z. Fire extinguisher	Any Make	ABC Dry Powder type 2KG
aa. Ladder (foldable type( 2/3 Layer)or as advised by TPCODL) for suitable height.	Sintex or equivalent	FRP with holding 'U' clamp on top rug, collapsible 9 M
bb. Neon Tester for HT Teams.	Technology Products	Suitable for up to 33KV
cc. Discharge Rod 6 Nos with each Three Phase Team.	Taurus Power	
dd. Water Level Gauge.	Any Make	For holding meter straight w r.t. ground reference

#### Material in First Aid Box

S.No.	Name of Medicine/ Items	Quantity at the time refilling FAB	Usage
1	Bandage 5CM x 3M	6	For dressing of wounds
2	Hansa Plast Wash Proof or Equivalent	16	For dressing of minor wounds / scratches/ injury
3	Cotton 30 GM	2 Rolls	For cleaning / dressing of wounds
4	ORS Power 21GM	2	For dehydration
5	Savlon 50ML	1	Antiseptic solution for cleaning of wounds
6	Cipladine Ointment 15 GM	1	For cut/ burnt wounds
7	Omni Gel Cream 30GM	1	For sprain/ swelling / pain, etc
8	Sterilized Cotton Pad 10CM x 10CM	2	For dressing
9	Scissor 110MM	1	For dressing
10	Forceps 4 inches	1	For dressing
11	Safety Pins	1 Pack (10 pieces)	For misc. use
12	Splint	5 pieces	For support of fractured part
13	Tablet Crocin	30	For fever / headache / body pain
14	Tablet Digene	30	For gas / acidity / pain/ abdomen problem

## **2.7.2 PPEs**

1. As per PPE Matrix shared by TPCODL in Annexure 1:
  - Double rope Full body safety Harness with latch system & thigh protection (EN 361:2002/ EN 358 : 2000/IS: 3521:1991/2002)
  - Safety helmet (IS:2925-1984) with visor (EN: 166 CE marked)
  - Safety shoes (IS:15298), insulated gloves(EN: 60903 CE marked),
  - Rubber mat (for shock resistant upto 11KV).
  - Electrical Safety Gloves.
  - Face Visor (big enough to cover up to neck)
  - Reflector Jacket
  - Hand Cotton Gloves.

Any other PPE as per Engineer In-charge requirement.

Note : Any other Standard tool which BA considers to be used should also be included. Bidder to ensure to keep minimum of 5 % reserve of all tools and tackles to meet the daily requirement without hampering the work. Stock register to be maintained by BA and shall submit a copy of same to TPCODL for verification along with monthly bill being invoice submitted.

## **2.8 Materials for execution of work:**

### **2.8.1 Materials issued by TPCODL:**

All major items viz Meter, Meter Boxes, Cable, meter seals, Bus bars Box, Distribution boxes, Cable Glands (for pole mounted DBs), PVC Caps for LTCT box. BA will reconcile the material issued by TPCODL on regular intervals specified by TPCODL.

### **2.8.2 Materials would be supplied by BA :**

1. (Cost shall be included in the BOM activities) : IPC of various sizes, Cable anchor clamp, shackle insulator, GI wire(7/10Sq.mm), D- clamp, line taps, wedge connectors, cable tie, wall corner clamps etc, Lugs for 95sq mm & 150 sq mm, fasteners (assorted), nails, Saddles, Nut Bolts, Thimbles, ISI marked Insulation tape, HT tape, M seal, Ferrule, Aluminum binding wire, Bobbins, Earth wire (multi stand-16 MM), Pre-paid meter connector, cotton tape, spring washer, Link of suspension clamp, Steel Straps & Buckles, carbon paper, pins etc. and any other miscellaneous items of quality specified by TPCODL. All metallic material should be GI only. PVC Suction Hose Pipe 1.5 Inch suitable for holding control cable of HT Metering Units (avg. 10 M length with elbows).
2. Material shall be supplied by BA as and when required /as per site requirement and would be paid by TPCODL -
  - a. Pre-fabricated MS structural angle/channel/ flats of size (b x h x t) (50 x 50 x 6) of 300 mm long.

- b. Pre-fabricated GI structural angle /channel/flats of required size. 1 set GI angle contains 2 no. of Slotted angle of size (40 x 40 x 6) of 400 mm long) and 2 nos of GI nut bolts of size (16 mm x 200 mm long) for cable size upto 4\*150 sq.mm.
- c. Pre-fabricated GI structural angle /channel/flats of size. 1 set GI angle contains 2 nos of Slotted angle of size ((50 x 50 x 6) of 400 mm long) and 2 nos of GI nut bolts of size (16 mm x 200 mm long) for cable size upto 4\*300 sq.mm.
- d. Assorted Size (25 mm to 100 mm) of GI Pipe for underground cable connection. Digging provision along with ROW permission wherever required for underground cable connection will be taken care by BA. MS /GI structure will be in the form of slotted angle/D Clamp (at pole end/Temporary Connection/Distribution box), extension angle (where ground clearance to be extended at consumer end), angle bracket with double anchor fastener (at consumer end ) etc. (Wherever not mentioned, TPCODL reserves the right to modify / amend the above as per requirement), Any other petty material.

## **2.9 Certificate of Quality:**

BA shall submit a self-certification for quality of installation with every bill submitted to TPCODL to confirm that installations have been in accordance with procedures / standards laid down in this document and other quality norms of TPCODL. If any deviation in Quality is observed, agency will rectify within 10 days of notice given by TPCODL.

## **2.10 Statutory Requirements:**

The BA is required to complete the following minimum statutory compliances and submit the documentary evidence for the same.

- a) Provident Fund code
- b) Obtains ESI no. of all employees.
  - a. Gets its workers insured so that he is in a position to make the payment under Workmen Compensation Act in case of any eventuality. Please refer GCC guidelines for the same having mention of insurance requirement.
  - b. Submits information to Principle Employer on the Standard Format
- c) Obtains Form V from the Principle Employer
- d) Obtains labor license from the Labor Dept.
- e) Complies with the CL (R&A) Act.
- f) Possesses a valid Service tax registration certificate.
- g) Workmen Compensation, PA Insurance of worker / supervisor deployed in the job ; Copies to be submitted to TPCODL
- h) Any other document required as per statutory requirement / applicable time to time.

### **2.11 Installation Practice:**

- a. Installation / replacement of meters shall be done with proper fixing using drills, commissioning, and energization, communication of Meter (if applicable) and seal installation.
- b. All service cable installation / replacement shall include the installation of saddle, fastener for support.
- c. Installation of distribution box / pole mounted bus bar on pole shall be done with steel strap and buckles.
- d. Meter terminals will include installation of thimble / socket crimping in the service cable.
- e. Cable entry /exit gland must be properly fixed & tightened.
- f. BA to ensure all safety precautions while meter installation activity.
- g. BA to avoid loose hanging cables.

**Detail Standard Operating Practice will be shared with successful bidders on award of contract and shall be binding for BA.**

## For list of tools and PPE -

List of PPEs and Relevant Standards.

Sl. No.	Name of PPE	IS / EN Standard	Proposed Brand & Model
01	Leather Safety Shoes (Colour – Black) with PU toe cap.	IS:15298 part2	BATA Liberty ACME M/s Unicare Fire Safety (India) Pvt Ltd
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell M/s Unicare Fire Safety (India) Pvt Ltd ACME
03	Full body harness (Safety belt) with double lanyard	EN 361 :2002 , EN 358-2000(2) ,EN355-2002(2)	Karam (PN Safetech) Joseph Leslie Accent Industries M/s Unicare Fire Safety (India) Pvt Ltd Abrigo
04	Electrical Safety Gloves	EN: 60903 CE marked	Make -Spanian / Sumitech / CATU, Honeywell, JYCO,
05	Full face visor	EN: 166 CE marked (Visor) or as approved by TATA POWER-DDL	Karam (PN Safetech) Joseph Leslie Accent Industries Honeywell Paras Industries Windsor
06	Rope grab fall arrester with Polyamide life line rope.	EN353-2	Karam, Udyogi , Honeywell, Saha Rope Grab fall arrester
07	Reflective Jacket	Confirming to 15809	Crossway vertical solution, safety house, M/s Unicare Fire Safety (India) Pvt Ltd, safety solution, safety house or any other manufacturer confirming to BIS and TPDDL standard.
08	Hand Gloves Cotton	IS 6994(part1)	Safety house, safety solution, M/s Unicare Fire Safety (India) Pvt Ltd, or any other reputed make conforming to BIS.
09	Hand Gloves (Rubber type)	IS 6994( part1)	Safety house , safety solution, M/s Unicare Fire Safety (India) Pvt Ltd or any other reputed make conforming to BIS.
10	Leather Hand Gloves	IS 6994(part1)	Safety house , safety solution, M/s Unicare Fire Safety (India) Pvt Ltd or any other reputed make conforming to BIS.
11	Welding face shield	IS 1179/ EN166 ANZIZ 87.1	Safety house , safety solution, M/s Unicare Fire Safety (India) Pvt Ltd or any other reputed make conforming to BIS/EN 166.
12	Safety goggles	IS 1179/ EN166 ANZIZ 87.1	Safety house , safety solution, M/s Unicare Fire Safety (India) Pvt Ltd or any other reputed make conforming to BIS/EN 166.
13	Apron	IS 6994(part1)	Safety house , safety solution or any other reputed make conforming to BIS
14	Gum boot	IS 3738	Safety house , safety solution, M/s Unicare Fire Safety (India) Pvt Ltd or any other reputed make conforming to BIS

### METERING SERVICES IN AMC CONTRACT

TPCODL is under obligation to replace faulty meters and release new connections as per OERC timelines and presently the job is undertaken by MMG teams in all the 20 divisions. MMG teams are involved in mass meter replacement against faulty/mechanical meters and are also undertaking smart meter installation project.

Going forward it is expected that the mass meter replacement work will be completed by September '23 and thereafter the routine new connections and faulty meter replacement has to be done on SOS basis.

In order to facilitate the rural consumers of 15 divisions and to optimize the overall resources and cost of reaching out to rural consumers for meter replacement against faulty meters / installation of new connections. The scope of faulty meter replacement and installation of new connections in 15 divisions is included in the AMC contract.

The details of 15 divisions and the projected volume of meter faulty & new connection installation / replacement required annually is mentioned below:

#### ANNEX-I

Indicative annual volume for meter services					
S.no.	Division	Meter Shifting	Meter faulty	New service connection	Total
1	NED	4000	12000	6000	18000
2	Khurda	4000	10000	6000	16000
3	Nayagarh	4000	12000	4000	16000
4	Balugaon	4000	6000	3000	9000
5	Puri	4000	7000	8000	15000
6	CED	4000	11000	5000	16000
7	Salipur	4000	7000	3000	10000
8	Athagarh	4000	8000	3000	11000
9	Dhenkanal	4000	14000	5000	19000
10	Angul	4000	6000	6000	12000
11	Talcher	4000	10000	5000	15000
12	Paradeep	4000	4000	4000	8000
13	Jagatsinghpur	4000	4000	3000	7000
14	Kendrapada-1	4000	15000	7000	22000
15	Kendrapada-2	4000	4000	2000	6000
	<b>Total</b>	<b>60000</b>	<b>130000</b>	<b>70000</b>	<b>200000</b>

The above annex-I is the indicative list of Meter Replacement Job. The minimum manpower & vehicle requirement in each division & cluster is given below in Annex-II.

**Annex-II**

Cluster	Division	Lineman	Helper	Total BA Manpower	12 hrs Vehicle
1	BCDD I	0	0	0	0
	BCDD II	0	0	0	0
2	BED	0	0	0	0
	NED	8	8	16	3
3	NyED	8	8	16	4
	BaED	5	5	10	2
4	KHD	9	9	18	5
	PED	8	8	16	4
5	CDD I	0	0	0	0
	CED	8	8	16	4
6	CDD II	0	0	0	0
	SED	5	5	10	3
7	AED	6	6	12	2
	DED	7	7	14	4
8	TED	7	7	14	4
	ANED	8	8	16	3
9	KED I	7	7	14	4
	KED II	4	4	8	2
10	JED	6	6	12	3
	PDP	4	4	8	3
<b>Total</b>		<b>100</b>	<b>100</b>	<b>200</b>	<b>50</b>

Note:

- a) Minimum manpower requirement of 200 person for meter installation works is to be deployed along with AMC manpower deployment by the BA division wise.
- b) The monthly payment for the above mentioned 200 manpower will not be the part of AMC bill.
- c) The monthly payment to the BA will be made by TPCODL as per a separate invoice raised for meter replacement / new meter installation / Meter Shifting for a particular division.
- d) The BA will pay salary to these manpower on the basis of minimum wages & applicable TPCODL norms.
- e) Each BA has to quote their rates for meter shifting, faulty meter replacement (with & without service cable) & new meter installation with service cables and as per the BOM.