

# **Open Tender Notification**

# For

# 11KV & LT Network Maintenance & Allied Works, 33KV Network Maintenance and Operational Assistance of 33/11KV Substations of all TPCODL Divisions

Tender Enquiry No.: TPCODL/P&S/100000369/23-24

Due Date for Bid Submission: 10 May 2023 [15:00 Hrs.]

TP Central Odisha Distribution Limited 2<sup>nd</sup> Floor, IDCO Towers, Janpath, Bhubaneswar – 751022

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# **Tender Enquiry No -**

Tender Enquiry No.	Description	EMD (Rs.) *	Tender Fee (Rs.) **	Last Date and Time for payment of Tender Fee
TPCODL/P&S/ 1000000369/23 -24	11KV & LT Network Maintenance & Allied Work, 33KV Network Maintenance and Operational Assistance of 33/11KV Substations of all TPCODL Divisions for 3 years	20,00,000	5000	

\* EMD is exempted for MSMEs registered in the State of Odisha.

\*\* MSMEs registered in the State of Odisha shall pay tender fee of Rs. 1,000/- including GST. For details of MSME norms, please refer "Annexure A" below.

# Annexure-A

#### Preferential norms for procurement from MSMEs registered in the State of Odisha

# 1) Tender Fees

To participate in the tender, MSMEs registered in the State of Odisha shall pay Rs.1,000/including GST towards cost of tender paper. Those bidder who has already paid above tender fee against tender number TPCODL/P&S/1000000187/21-22 for Operational assistance of 33/11 KV sub stations, need not pay the same again. They need to provide only the document with respect to earlier payment for purchase of the tender document this time.

# 2) Earnest Money Deposit (EMD)

EMD shall be exempted for MSME registered in the State of Odisha. However, Bidder shall be barred to participate in the tendering process for a period of 2 years in case it backs out post award of the contract.

# 3) Qualification Requirement for Open Tenders

Qualification Requirement of Financial Turnover for MSME registered in the State of Odisha shall be reduced to 20% of the existing criteria.

For past experience, assessment of the Bidder shall be done on the basis of feedback from Customers. Past performance experience at Tata Power and its Group Companies shall supersede feedback from other Customers.

# 4) Reservation for MSME

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It shall be mandatory to procure at least 20% of the total volume of the procurement from MSME registered in the State of Odisha (however, it shall not apply where goods/services are not available with the MSME), subject to matching L1 discovered prices and meeting technical specifications including quality requirements.

## 5) Performance Bank Guarantees

Performance Bank Guarantee for MSME registered in the State of Odisha shall be 25% of the value normally prescribed.

# INFORMATION TO THE BIDDERS TO PARTICIPATE IN E-OPEN TENDER SYSTEM OF TPCODL

# -: Steps for E-tender submission:-

Bids are to be submitted only through online e-procurement platform, ARIBA. Any other form of bid submission will not be accepted. Online Link for submission of bid through ARIBA will be sent only after confirmation of payment of tender fee from bidder.

**Step 1**: The bidder can get primary information about the tender from the Newspaper advertisement / TPCODL website <www.tpcentralodisha.com> and can download the tender document from the above website.

**Step 2**: Non-Refundable Tender Participation Fee, as indicated in tender document, to be submitted before last date of tender fee payment, in the form of direct deposit/NEFT/RTGS in the following bank account.

Account Name: TP Central Odisha Distribution Limited Bank Name: State Bank of India, IDCO Towers, Bhubaneswar Bank Account No. : 10835304915 IFSC Code : SBIN0007891

**Step 3**: Eligible and Interested bidder to send an email to TPCODL attaching duly signed and stamped letter on Bidder's letterhead, with following details, expressing their intend to bid against above tender:

SI No	Description	Bidder's Response
i)	Tender Enquiry No.	
ii)	Description of materials / Works Tendered	
iii)	Name and address of the bidding company	
iv)	Name of the authorized contact person	
V)	Contact No. authorized person	
vi)	E-mail Id of the where online ARIBA link to be	

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vii)	Tender Fee details (Amount / NEFT-RTGS UTR No	
viii)	GST No.of bidder	
ix)	MSME Certificate, wherever applicable	
x)	Postal address of bidder for return of EMD BG	

E-mail has to be sent to <asish.karmakar@tpcentralodisha.com> with copy to <sudhakar.behera@tpcentralodisha.com> before "Last date and time for payment of Tender Participation Fee".

**Step 4**: On receipt of the document as mentioned in Step 3 above and after due verification of the same, ARIBA link for participation in the tender will be sent to bidder's mail address from ARIBA system.

Step 5: In this mail there will be an online link as <u>Click Here</u> to participate in the tender.

Step 6: Click <u>"Click Here"</u> to access this event.

**Step 7:** If bidder is bidding first time for TPCODL through ARIBA site then please "Sign UP" by creating User Name and password as mentioned in Sign Up page. Please follow the process, as mentioned in the Sign Up page, during creation of User Name and password. Also a simple one-page registration screen will open for first time user. All \* mark mandatory field to be filled in.

Those who are already having User Name and password for accessing TPCODL events, they can LOGIN using same User Name and password.

If bidder has got User name and password for their other customer, same will not be applicable for TPCODL.

Step 8: You will be able to see the RFQ

Step 9: After review and downloading of all documents click on "Review Pre-requisites"

Step 10: Review and accept "Bidder Agreement".

**Step 11:** You can see attached pdf tender document against clause no 1.1.1 (Introduction).

**Step 12:** Vendor has to attach pdf version of technical bid in clause no. 2.1 and 2.2. In this field do not attach any price document.

Price schedule is attached in clause no.3.2. Same has to be downloaded and price and tax details to be filled in as per the format given, print to be taken in vendor's letter head and signature and seal to be made by authorised person. PDF version of this price bid to be attached in clause 3.2 For Price Bid put all the unit price and taxes and duties in provided field. Put "0" (ZERO) in not applicable field.

**Step 13:** After successfully putting Techno commercial offer and price part then click on "Submit Entire Response"



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# 1.0 Event Information

# 1.1. Scope of work

Open Tenders are invited from interested Bidders entering into a Rate Contract valid for for the following:

S.	Description	EMD Amount	Tender Fee
No.		(Rs.)	(Rs.)
1.	11KV & LT Network Maintenance & Allied Works, 33KV Network Maintenance and Operational Assistance of 33/11KV Substations of all TPCODL Divisions for 3 years	<sup>20</sup> ,00,000/-	5,000

Note: Tender Fee is inclusive of GST

## A1.2. Availability of Tender Documents

Please refer "Procedure to participate in the e-tender".

#### 1.3. Calendar of Events

(a)	Date of sale/ availability of tender documents from TPCODL Website	From 18.04.2023 onwards
(b)	Date by which Interested and Eligible Bidder to pay Tender Fee and confirm participation as mentioned in "Procedure to Participate in Tender"	29.04.2023; 17:00 Hours
(c)	Last Date of receipt of pre-bid queries	04.05.2023; 17:00 Hours
(d)	Date & Time of Pre-Bid Meeting	06.05.2023
(f)	Last date and time of receipt of Bids	10.05.2023; 15:00 Hours

**Note :-** In the event of last date specified for submission of bids and date of opening of bids is declared as a closed holiday for TPCODL's office, the last date of submission of bids and date of opening of bids will be the day following working day at appointed times.

#### 1.4 Mandatory documents required along with the Bid

- 1.4.1 EMD of requisite value and validity
- 1.4.2 Requisite Documents for compliance to Qualification Criteria mentioned in Clause 1.7.
- 1.4.3 Duly signed and stamped 'Schedule of Deviations' as per Annexure III on bidder's letter head.
- 1.4.4 Duly signed and stamped 'Schedule of Commercial Specifications' as per Annexure IV on bidder's letter head.
- 1.4.5 Proper authorization letter/ Power of Attorney to sign the tender on the behalf of bidder.
- 1.4.6 Copy of PAN, GST, PF and ESI Registration (In case any of these documents is not available with the bidder, same to be explicitly mentioned in the 'Schedule of Deviations')

Please note that in absence of any of the above documents, the bid submitted by a bidder shall be liable for rejection.

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# 1.5. Deviation from Tender

Normally, the deviations to tender terms are not admissible and the bids with deviation are liable for rejection. Hence, the bidders are advised to refrain from taking any deviations on this Tender. Still in case of any deviations, all such deviations shall be set out by the Bidders, clause by clause in the 'Annexure III - Schedule of Deviations' and same shall be submitted as a part of the Technical Bid.

## 1.6. Right of Acceptance/Rejection

Bids are liable for rejection in absence of following documents:-

- i. EMD of requisite value and validity
- ii. Price Bid as per the Price Schedule mentioned in Annexure I (7 Parts)
- iii. Necessary documents against compliance to Qualification Requirements mentioned at Clause 1.7 of this Tender Document
- iv. Filled in Schedule of Deviations as per Annexure III
- v. Filled in Schedule of Commercial Specifications as per Annexure IV
- vi. Receipt of Bid within the due date and time

TPCODL reserves the right to accept/reject any or all the bids without assigning any reason thereof.

#### 1.7 Qualification Criteria

The bidder should meet the following criteria:

1.7.1 The prospective Bidder(s) should be a registered Sole Proprietor Firm/ Partnership Firm/ Company, possessing valid HT Electrical License from the ELBO, Government of Odisha.

The Bidder should possess the followings:

- i. Valid EPF Registration Certificate.
- ii. Valid ESI Registration Certificate.
- iii. Valid GST Registration Certificate.
- iv. PAN No.
- v. TIN No.
- 1.7.2 The bidder(s) must have valid HT License from Electrical Licencing Board of Odisha (ELBO) for his firm. Bidder must submit copy of the same with Technical bid. Bid will get disqualified in absence of the license.
- 1.7.3 Bidder should also have valid ELBO license for all of his workmen. If the same is not available now, then undertaking should be given to TPCODL that such license will be obtained with 6 months from the date of award of order, if applicable.
- 1.7.4 The Average Annual Turnover of the prospective bidder(s) during last three financial years preceeding to the year of tender notification should be equal to or more than Rs 30 crores (Rupees Thirty Crores). The bidder shall furnish documents for the last three years, evidencing their turnover requirement.
- 1.7.4 Bidder should have executed O&M works related to 11KV Network , 33KV Network , 33/11KV Substations Operations in any Distribution utility for a cumulative value of 30



Cr in last three years. Copy of work order / completion certificate to be submitted in this regard.

- 1.7.5 The indending bidder(s) shall furnish the documentary evidence pertaining to the above qualifying criteria or else their bid shall be rejected outright without any further correspondence.
- 1.7.6 Bidder may bid for any / all Package as per Annexure- I based on their preference. Bid for any package will mandatorily include the entire scope for the package as per specifications i.e. 11KV & LT Network AMC, 33KV Network AMC and 33/11 KV Substation Operation Assistance.
- 1.7.7 Bidder shall submit Bid and meet all the QR requirement on his own. A bidder in joint venture/ consortium shall not be allowed to participate in the Tender.
- 1.7.8 Subcontracting of any job shall normally be not allowed, however any subcontractor, if proposed for minor scope shall be subject to approval of TPCODL.

However TPCODL reserve the right to scrutinize and reject any of such existing vendors without assigning reason what so ever may be.

#### **1.8. Marketing Integrity**

We have a fair and competitive marketplace. The rules for bidders are outlined in the General Condition of Contracts. Bidders must agree to these rules prior to participating. In addition to other remedies available, TPCODL reserves the right to exclude a bidder from participating in future markets due to the bidder's violation of any of the rules or obligations contained in the General Condition of Contracts. A bidder who violates the market place rules or engages in behavior that disrupts the fair execution of the marketplace, may result in restriction of a bidder from further participation in the marketplace for a length of time, depending upon the seriousness of the violation. Examples of violations include, but are not limited to:

- Failure to honor prices submitted to the marketplace
- Breach of terms as published in TENDER/NIT

#### **1.9. Supplier Confidentiality**

All information contained in this tender is confidential and shall not be disclosed, published or advertised in any manner without written authorization from TPCODL. This includes all bidding information submitted to TPCODL. All tender documents remain the property of TPCODL and all suppliers are required to return these documents to TPCODL upon request. Suppliers who do not honor these confidentiality provisions will be excluded from participating in future bidding events.

# 2.0 Evaluation Criteria

 The bids will be evaluated on the compliance to tender terms and conditions including but not limited to Safety Parameters, Statutory Compliance and on techno-Commercial aspects.



- The bids will be evaluated commercially on the individual Package-wise all-inclusive lowest cost for the tender BoQ as calculated in Price Schedule [Annexure I, 7 Parts]. A bidder will be awarded contract for one package. However TPCDOL reserves the right to award more than one Package to a single bidder based on assessment of capacity and capability.
- Bidders are advised to quote their most competitive rates against each package. TPCODL reserves the right to allocate appropriate package/s as per its own assessment to any particular bidder.
- Bidders have to provide breakup of the prices in the format as mentioned in Annexure I for each Package.
- Bidder should maintain a justified margin on their manpower costing which will take care
  of Training, Statutory Licenses, GPA Policy, conveyance, Overhead, Interest on Working
  Capital, Profit etc. In case it is observed that if any bidder has quoted prices which is
  unviable as assessed by TPCODL evaluation committee, TPCODL reserves the right to
  out rightly-reject such bid.

**NOTE:** In case a new bidder is not registered with TPCODL, site inspection and evaluation shall be carried out to ascertain bidder's capability and quality procedures. However TPCODL reserves the right to carry out site inspection and evaluation for any bidder prior to technical qualification.

In case a bidder is found as Disqualified in the technical & commercial evaluation, their bid shall not be evaluated any further and shall be summarily rejected. The decision of TPCODL shall be final and binding on the bidder in this regard.

#### 3.0 Submission of Bid Documents

#### 3.1 Bid Submission

Bidders are requested to submit their offer in line with this Tender document. TPCODL shall respond to the clarification raised by various bidders and the replies will be sent to all participating bidders through TPCODL website/ e-tender portal/ e-mail.

Bids shall be submitted in 3 (three) parts:

**FIRST PART: "EMD"** as applicable shall be submitted. The EMD shall be <u>valid for 210 days</u> from the due date of bid submission in the form of BG / Bank Draft / Bankers Pay Order (issued from a Scheduled Bank) online NEFT/ RTGS transfer favoring 'TP Central Odisha Distribution Limited' payable at Bhubaneswar. The EMD has to be strictly in the format as mentioned in General Condition of Contract, failing which it shall not be accepted by TPCODL and the bid as submitted shall be liable for rejection. A separate non-refundable tender fee of stipulated amount also needs to be transferred online through NEFT/ RTGS in case the tender document is downloaded from our website.

TPCODL Bank Details for transferring Tender Fee and EMD is as below:

Account Name: TP CENTRAL ODISHA DISTRIBUTION LIMITED Bank Name: SBI, IDCO Towers, Bhubaneswar Bank Account No. : 10835304915 IFSC Code: SBIN0007891

For Tender Fee and EMD submitted via online transfer, bidder to ensure that the same are carried out through separate transactions.

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The EMD in the form of Bank Draft / BG /Bankers Pay Order shall be delivered at the following address in sealed envelope clearly indicating the tender reference / enquiry number, name of tender and bidder name:

### Chief (Procurement & Stores)

TP Central Odisha Distribution Limited

2<sup>nd</sup> Floor, IDCO Towers, Janpath, Bhubaneswar-751022

SECOND PART: "TECHNICAL BID" shall contain the following documents:

- a) Documentary evidence in support of qualifying criteria as per clause no. 1.7 above.
- b) No Deviation Certificate as per the Annexure III Schedule of Deviations
- c) Acceptance to Commercial Terms and Conditions viz. Delivery schedule/period, payment terms etc. as per the Annexure IV Schedule of Commercial Specifications.
- d) Acceptance of Annexure II-Scope of work and service level agreement.

#### The technical bid shall be properly indexed and is to be submitted through TPCODL Etender platform (Ariba) only. Hard copy of Technical Bids need not be submitted.

The Bid prepared by the Bidder, and all correspondence and documents relating to the Bid exchanged by the Bidder and the TPCODL, shall be written in the English Language. Any printed literature furnished by the Bidder may be written in another Language, provided that this literature is accompanied by an English translation, in which case, for purposes of interpretation of the Bid, the English translation shall govern.

**THIRD PART: "PRICE BID**" shall contain only the price details and strictly in format as mentioned in Annexure I (7 Parts) along with explicit break up of basic prices, Taxes & duties, Freight etc. In case any discrepancy is observed between the item description stated in Schedule of Items mentioned in the tender and the price bid submitted by the bidder, the item description as mentioned in the tender document (to the extent modified through Corrigendum issued if any) shall prevail. Price Bid is to be submitted in soft copy through TPCODL E-Tendering system (Ariba) only. Hard copy of Price Bid not be submitted. Bidder need to fill up all the seven parts for the relevant packages for which bidding will be done by him.

#### SIGNING OF BID DOCUMENTS:

The bid must contain the name, residence and place of business of the person or persons making the bid and must be signed and sealed by the Bidder with his usual signature. The names of all persons signing should also be typed or printed below the signature.

The Bid being submitted must be signed by a person holding a Power of Attorney authorizing him to do so, certified copies of which shall be enclosed.

The Bid submitted on behalf of companies registered with the Indian Companies Act, for the time being in force, shall be signed by persons duly authorized to submit the Bid on behalf of the Company and shall be accompanied by certified true copies of the resolutions, extracts of Articles of Association, special or general Power of Attorney etc. to show clearly the title, authority and designation of persons signing the Bid on behalf of the Company. Satisfactory evidence of authority of the person signing on behalf of the Bidder shall be furnished with bid.

A bid by a person who affixes to his signature the word 'President', 'Managing Director', 'Secretary', 'Agent' or other designation without disclosing his principal will be rejected.

The Bidder's name stated on the Proposal shall be the exact legal name of the firm.



### **3.2 Contact Information**

All the bidders are requested to send their pre-bid queries (if any) against this tender through e-mail within the stipulated timelines. The consolidated reply to all the queries received shall be posted on TPCODL website by the stipulated timelines as detailed in calendar of events.

#### **Communication Details:**

#### Package Owner

Name:Asish KarmakarDesignation:HOG-ProcurementContact No.:8768455566E-Mail ID:asish.karmakar@tpcentralodisha.com

#### **Escalation Matrix**

Name:Mr. Sudhakar BeheraDesignation:Sr. General Manager - ProcurementContact No.:9437282663E-Mail ID:sudhakar.behera@tpcentralodisha.com

Bidders are strictly advised to communicate with Package Owner through TPCODL E-tender System (Ariba) only. They need to pay Tender Participation Fee to receive the Ariba log-in. The above escalation details are for reference purpose only.

#### 3.3 Bid Prices

Bidders shall quote for the entire Scope of Supply/ work with a break up of prices for individual items and Taxes & duties. The bidder shall complete the appropriate Price Schedules included herein, stating the Unit Price for each item & total price with taxes, duties & freight up to destination at various sites of TPCODL. The all-inclusive prices offered shall be inclusive of all costs as well as Duties, Taxes and Levies paid or payable during the execution of the supply work, breakup of price constituents.

#### Applicable GST to be specified clearly.

The quantity break up shown else-where other than Price Schedule is tentative. The bidder shall ascertain himself regarding material required for completeness of the entire work. Any items not indicated in the price schedule but which are required to complete the job as per the Technical Specifications/ Scope of Work/ SLA mentioned in the tender, shall be deemed to be included in prices quoted.

#### 3.4 Bid Currencies

Prices shall be quoted in Indian Rupees Only.

#### 3.5 Period of Validity of Bids

Bids shall remain valid for 180 days from the due date of submission of the bid.

Notwithstanding clause above, the TPCODL may solicit the Bidder's consent to an extension of the Period of Bid Validity. The request and responses thereto shall be made in writing.

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## 3.6 Alternative Bids

Bidders shall submit Bids, which comply with the Bidding documents. Alternative bids will not be considered. The attention of Bidders is drawn to the provisions regarding the rejection of Bids in the terms and conditions, which are not substantially responsive to the requirements of the bidding documents.

## 3.7 Modifications and Withdrawal of Bids

The bidder is not allowed to modify or withdraw its bid after the Bid's submission. The EMD as submitted along with the bid shall be liable for forfeiture in such event.

## 3.8 Earnest Money Deposit (EMD)

The bidder shall furnish, as part of its bid, an EMD amounting as specified in the tender. The EMD is required to protect TPCODL against the risk of bidder's conduct which would warrant forfeiture.

The EMD shall be denominated in any of the following form:

- Banker's Cheque/ Demand Draft/ Pay order drawn in favor of TP Central Odisha Distribution Limited payable at Bhubaneswar.
- Online transfer of requisite amount through NEFT/ RTGS.
- Bank Guarantee valid for 210 days after due date of submission.

#### The EMD shall be forfeited in case:

a) The bidder withdraws its bid during the period of specified bid validity.

Or

- b) The successful Bidder does not
  - a) accept the Purchase Order, or
  - b) furnish the required Performance Security Bank Guarantee

#### 4 Bid Opening & Evaluation process

#### 4.1. Process to be confidential

Information relating to the examination, clarification, evaluation and comparison of Bids and recommendations for the award of a contract shall not be disclosed to Bidders or any other persons not officially concerned with such process. Any effort by a Bidder to influence the TPCODL's processing of Bids or award decisions may result in rejection of the Bidder's Bid.

#### 4.2. Technical Bid Opening

Bids will be opened at TPCODL Office, Bhubaneswar. All tender bids shall be opened internally by TPCODL. Presence of any bidder will not be allowed during bid opening process. Technical bid must not contain any cost information whatsoever.

First the envelope marked "EMD" will be opened. Bids without EMD/cost of tender (if applicable) of required amount/ validity in prescribed format, shall be rejected.

Next, the technical bid of the bidders who have furnished the requisite EMD will be opened, one by one.

#### 4.3. Preliminary Examination of Bids/Responsiveness

TPCODL will examine the Bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Bids are generally in

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order. TPCODL may ask for submission of original documents in order to verify the documents submitted in support of qualification criteria.

Arithmetical errors will be rectified on the following basis: If there is a discrepancy between the unit price and the total price per item that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price per item will be corrected. If there is a discrepancy between the Total Amount and the sum of the total price per item, the sum of the total price per item shall prevail and the Total Amount will be corrected.

Prior to the detailed evaluation, TPCODL will determine the substantial responsiveness of each Bid to the Bidding Documents including production capability and acceptable quality of the Goods offered. A substantially responsive Bid is one, which conforms to all the terms and conditions of the Bidding Documents without material deviation.

Bid determined as not substantially responsive will be rejected by the TPCODL and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

#### 4.4. Techno Commercial Clarifications

Bidders need to ensure that the bids submitted by them are complete in all respects. To assist in the examination, evaluation and comparison of Bids, TPCODL may, at its discretion, ask the Bidder for a clarification on its Bid for any deviations with respect to the TPCODL specifications and attempt will be made to bring all bids on a common footing. All responses to requests for clarification shall be in writing and no change in the price or substance of the Bid shall be sought, offered or permitted owing to any clarifications sought by TPCODL.

#### 4.5. Price Bid Opening

Price bids will be opened internally without the presence of any bidder representative. The EMD of the bidder withdrawing or substantially altering his offer at any stage after the technical bid opening will be forfeited at the sole discretion of TPCODL without any further correspondence in this regard.

#### 4.6. Reverse Auctions

TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products/ services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached as Annexure VI of this document. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form attached as Annexure VI as a token of acceptance for the same.

#### 5 Award Decision

TPCODL will award the contract to the successful bidder whose bid has been determined to be the lowest-evaluated responsive bid as per the Evaluation Criterion mentioned at Clause 2.0. The Cost for the said calculation shall be taken as the all-inclusive cost quoted by bidder in Annexure I (Schedule of Items) subject to any corrections required in line with Clause 4.3 above. The decision to place purchase order/LOI solely depends on TPCODL on the cost competitiveness across multiple lots, quality, delivery and bidder's capacity, in addition to other factors that TPCODL may deem relevant.

TPCODL reserves the rights to award contract to one or more bidders so as to meet the delivery requirement or nullify award decision without assigning any reason thereof.

In case any supplier is found unsatisfactory during delivery process, the award will be cancelled and TPCODL reserves right to award contract to other suppliers who are found fit.

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#### 6 Order of Preference/Contradiction

In case of contradiction in any part of various documents in tender, following shall prevail in order of preference:

- 1. Schedule of jobs (Annexure I, 7 parts)
- 2. Post Award Contract Administration (Clause 7.0)
- 3. Submission of Bid Documents (Clause 3.0)
- 4. Scope of Work and SLA (Annexure II)
- 5. Acceptance Form for Participation in Reverse Auction (Annexure VI)
- 6. General Conditions of Contract (Annexure VIII)

#### 7 Post Award Contract Administration

#### 7.1. Special Conditions of Contract

- Firm POs shall be placed annually and shall be renewed on annual basis based on satisfactory performance of the BA and Business requirement.
- Bidder has to bid same price for each year without any escalation.
- Contract price will be variable based on applicable minimum wages structure to be announced by Government of Odisha, time to time. Price amendment will be applicable only to the part of the manpower charges. The bid shall be based on minimum wages as applicable from 01.04.2023.
- Vehicle rental service rate will remain fixed in each year of Contract.
- Fuel cost shall be reviewed annually at the end of each year of contracts. The fuel price on the date of start of contract shall be treated as the "Base Rate". In case the fuel price on the date of Annuity of the contract changes by more than +/-10% of the Base Rate, then vehicle rental service rate will change as follows for next year:

The difference (Rate at Annuity-Base Rate)%-10% shall be increased on 40% of the vehicle rental service charge. Business Associate (BA) shall submit applicable Contract Performance Bank Guarantee @ 2% of annual contract value, within 30 days of issuance of order. PBG shall be valid till expiry of contract plus one month. In case of value amendment or extension of contract, BG value has to be amended to that effect.

- BA shall deploy resources within 15 days from date of placement of Release Order.
- Maintenance of Statutory compliance is one of the major performance criteria of the contract. TPCODL shall have the right to terminate contract on account of any statutory non-compliance.
- Statutory changes in Minimum Wages shall be pass through only on the manpower cost part of the contract value.
- Payment terms: 90% of monthly bill within 7 days and balance 10% within 30 days based on SLA compliance.
- In case of non-submission CPBG within stipulated time, BG value will be retained from bills.
- This tender is for 3 years tenure.
- Bid evaluation shall be done on package wise lowest bid.
- This is a service contract. All materials unless specifically mentioned in the scope of the work / tender document shall be supplied by TPCODL.

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- All vehicles deployed by BA for AMC should not be older than 5 years.
- Contractor Safety Management System along with its amendments as issued time to time by TPCODL shall be applicable in this contract. All new amendments shall be effective from the date of their issue or from its date of intimation to the Business Associate by TPCODL whichever is later.
- BA shall obtain an undertaking of having provided required T&P/Safety Gadgets/PPEs from each of its workman and submit the same to EIC within 15 days of commencement of this contract. BA shall also obtain an undertaking from each of its workman to work with utmost safety while rendering services. The format for these undertakings shall be provided by Corporate Operation Services Team.
- All supervisors/Lineman/Helper should be physically fit and healthy with maximum age limit of 50 Years. Competency assessment of Supervisor/Lineman and Helper will be carried out by TPCODL officials within two months of deployment and the Lineman in bronze badge category will not be allowed to work on the network until they upgrade their skill and qualify for Platinum/Gold or Silver badge category. Those in bronze category however will be allowed to work as helpers.
- TPCODL will scrutinize the profile / CV of the BA's team member before signing of the contract and has right to reject the member who does not meet the requisite criteria as mentioned in the tender. Bidder has to replace the member and provide alternate replacement within 15 days who fulfil all the criteria. Bidder has to submit around 10 CV's of Supervisors along with the bid for evaluation.
- Before award of Contract, the Business Associate has to submit attested copies of qualification and experience certificate of each individual with HOGs/Heads of TPCODL. No person with past record of unethical conduct shall be hired by Business Associate.
- BA shall obtain an undertaking of having provided required safety training to each of its workman and submit the same to EIC. The format of undertaking shall be devised by TPCODL safety department.
- TPCODL reserves the right to make changes to the scope of work with a view to optimize on the overall cost to TPCODL. The Business Associate shall fully cooperate with TPCODL in making such changes with an aim for overall cost optimization. The revised charges for AMC shall be jointly agreed upon between TPCODL and the Business Associate in such case.
- In case, a mutual consensus on the rates and other terms and conditions is not reached at between TPCODL and the Business Associate, TPCODL reserves the right to terminate the contract by giving suitable notice period and allocating the same to any other Business Associate as deemed fit by TPCODL to maintain uninterrupted operations at site.
- Unless communicated by TPCODL in writing, the contract shall automatically stand terminated after the expiry of its validity period without serving any notice thereof.
- TPCODL appreciates and welcomes the engagement/employment of persons from SC/ST community or any other deprived section of society by their BAs.
- TPCODL reserves the right to reject bids which in its assessment is non-viable
- TPCODL reserves the right to carry out RA and to restrict bidders participating in RA based on their quoted prices.



- Any change in statutory taxes, duties and levies during the contract period shall be borne by TPCODL.
- All the terms and conditions of TPCODL General Conditions of Contract for Service Orders shall be applicable.

# 7.2 Invoice and Payment process

- BA shall submit monthly invoices by 3rd of every month for previous month's bill along with supported documents in BIRD (TPCODL's Bill Inward Receipt Desk) with soft copy to EIC & OS.
- OS team will create SES (Service Entry Sheet) upon receipt of Invoice.
- Finance will release 90% of full the payment within 7 days of SES creation.
- EIC will get the invoices verified from concerned TPCODL officers with reference to SLA.
- Based on EIC feedback on SLA, OS team will intimate finance about SLA score for release of balance 10% payment.
- EIC shall check every month with safety department for CSM violations by BA and also check the monthly performance of the BA with respect to performance measurement parameters in SLA. Based on the data & information available, EIC shall prepare performance scorecard indicating deduction of marks for non-compliance and shall forward the same to OS team.
- Finance will release the balance 10%payment as per T&C.

Note: The performance of BA will be evaluated & validated by EIC/OS on the basis of MIS/evidences submitted by the BA. Payment of the balance 10% monthly invoice amount will be made as per the marks scored against total 100 marks under various performance criteria in the month. (For example, if the BA has secured 90 marks in the performance measurement, the BA will be paid 90% of the balance 10% monthly invoice amount).

# 8. Climate Change

Significant quantities of waste are generated during the execution of job and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. Also as per the directive from Government of India, there shall be no use of Single Use Plastic, having thickness less than 120 micron, by Associate in the execution of the job. This would ensure the minimization of environmental and social impact in order to combat the climate change. Please refer attached Environment Policy and Sustainability Policy, Annexure-X for more details.

# 9. <u>Ethics</u>

TPCODL is an ethical organization and as a policy TPCODL lays emphasis on ethical practices across its entire domain. Bidder should ensure that they should abide by all the ethical norms and in no form either directly or indirectly be involved in unethical practice.

TPCODL work practices are governed by the Tata Code of Conduct which emphasizes on the following:

- We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.

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- Our suppliers and service providers shall represent our company only with duly authorized written permission from our company. They are expected to abide by the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.
- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- We respect our obligations on the use of third party intellectual property and data.

Bidder is advised to refer Tata Code of Conduct (TCOC) attached at Annexure X for more information. Any ethical concerns with respect to this tender can be reported to the following e-mail ID:<u>pravin.jain@tpcentralodisha.com</u>

## 10. Scope of job and Service Level Agreement(SLA)

As per Annexure II.

#### **11. General Condition of Contract**

Any condition not mentioned above shall be applicable as per GCC attached along with this tender.

#### 12. Safety

All jobs are this tender have to be executed strictly in compliance to the Contractor Safety Management System document of TP Central Odisha Distribution Limited. Please refer attached Annexure-VIII, for details. Violation of Safety norms will result in Penalty as mentioned in the above document.

Bidder need to fill up attached Safety Performance Assessment Form



Manpower break up cost to be provided in the following format:

SI No	ltem	High Skilled (Rs/month)	Skilled (Rs/month)	Unskilled (Rs/month)
1	Basic plus VDA *			
2	Total Wages per month:			
3	Leave Encashment@ 5.77% on Basic & DA			
4	Statutory Bonus @ 8.33% on Basic & DA			
	Gross Salary & Allowances			
5	EPF Contribution (Employer) @ 13%			
6	NH and FH for 8 days in a year			
6	ESIC Contribution (Employer) @ 3.25%			
7	Labour Welfare			
8	Total CTC/month/person			

\* Minimum wages as applicable on 01.04.2023 to be considered.

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# ANNEXURE III

#### **Schedule of Deviations**

Bidders are advised to refrain from taking any deviations on this TENDER. Still in case of any deviations, all such deviations from this tender document shall be set out by the Bidders, Clause by Clause in this schedule and submit the same as a part of the **Technical Bid**.

Unless <u>specifically</u> mentioned in this schedule, the tender shall be deemed to confirm the TPCODL's specifications:

S. No.	Clause No.	Tender Clause Details	Details of deviation with justifications

By signing this document we hereby withdraw all the deviations whatsoever taken anywhere in this bid document and comply to all the terms and conditions, technical specifications, scope of work etc. as mentioned in the standard document except those as mentioned above.

Seal of the Bidder:

Signature:

Name:



## ANNEXURE IV

### **Schedule of Commercial Specifications**

(The bidders shall mandatorily fill in this schedule and enclose it with the offer Part I: Technical Bid. In the absence of all these details, the offer may not be acceptable.)

S. No.	Particulars	Remarks
1.	Prices firm or subject to variation	Firm / Variable
	(If variable indicate the price variation	
	clause with the ceiling if applicable)	
1a.	If variable price variation on clause given	Yes / No
1b.	Ceiling	%
1c.	Inclusive of GST	Yes / No (If Yes, indicate % rate)
1d.	Inclusive of transit insurance	Yes / No
2.	Delivery	Weeks / months
3.	Guarantee clause acceptable	Yes / No
4.	Terms of payment acceptable	Yes / No
5.	Performance Bank Guarantee acceptable	Yes / No
6.	Liquidated damages clause acceptable	Yes / No
7.	Validity (180 days)	Yes / No
	(From the date of opening of bid)	
8.	Inspection during stage of manufacture	Yes / No
9.	Rebate for increased quantity	Yes / No (If Yes, indicate value)
10.	Change in price for reduced quantity	Yes / No (If Yes, indicate value)
11.	Covered under Small Scale and Ancillary	Yes / No
	Industrial Undertaking Act 1992	(If Yes, indicate, SSI Reg'n No.)

# Seal of the Bidder:

Signature: Name:



# ANNEXURE V

# Checklist of all the documents to be submitted with the Bid

Bidder has to mandatorily fill in the checklist mentioned below:-

S. No.	Documents attached	Yes / No / Not Applicable
1	EMD of required value	
2	Tender Fee as mentioned in this tender	
3	Signed copy of this tender as an unconditional acceptance	
5	Duly filled schedule of commercial specifications (Annexure IV)	
6	Sheet of commercial/technical deviation if any (Annexure III)	
7	Balance sheet for the last completed three financial years; mandatorily enclosing Profit & loss account statement	
8	Acknowledgement for Testing facilities if available (duly mentioned on bidder letter head)	
9	List of Machine/tools with updated calibration certificates if applicable	
10	Details of order copy (duly mentioned on bidder letter head)	
11	Order copies as a proof of quantity executed	
12	Details of Type Tests if applicable (duly mentioned on bidder letter head)	
13	All the relevant Type test certificates as per relevant IS/IEC (CPRI/ERDA/other certified agency) if applicable	
14	Project/supply Completion certificates	
15	Performance certificates	
16	Client Testimonial/Performance Certificates	
17	Credit rating/solvency certificate	
18	Undertaking regarding non blacklisting (On company letter head)	
19	List of trained/untrained Manpower	

Seal of the Bidder:

Signature:

Name



# <u>ANNEXURE VI</u>

# **ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT**

#### (To be signed and stamped by the bidder)

In a bid to make our entire procurement process more fair and transparent, TPCODL intends to use the reverse auctions as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

# The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

- 1. TPCODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
- **2.** TPCODL will make every effort to make the bid process transparent. However, the award decision by TPCODL would be final and binding on the supplier.
- **3.** The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPCODL, bid process, bid technology, bid documentation and bid details.
- **4.** The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPCODL.
- 6. In case of intranet medium, TPCODL shall provide the infrastructure to bidders. Further, TPCODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case of an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
- 7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be out-rightly rejected by TPCODL.
- 8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- **9.** The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPCODL site.
- **10.** The prices submitted by a bidder during the auction event shall be binding on the bidder.
- **11.** No requests for time extension of auction event shall be considered by TPCODL.
- **12.** The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all-inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

# Signature & Seal of the Bidder



### Annexure-XI

# **UNDER TAKING**

This is to certify that

My firm is not participating in this tender in any other name or through any sister concern and group company.

Signature and company seal of bidder

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### TP Central Odisha Distribution Limited

Bid Document

Document No. TPSMS/GSP/CSM/015 REV 02 TPCØDL

Date of Issue: 01/08/2016

# **ANNEXURE XII-Safety Competency Form**

2-

2-

Name of the Vendor/Bidder

Name of the Sub Vendor (If job is given to Sub Vendor):-

Description of the Job

Request for Quotation (RFQ) No. :-

Vendor/Bidder to mandatorily provide the below safety competency related information.

#### 1. Proposed Manpower Deployment Schedule :-

Category of Manpower Deployed	Minimum Qualification & Experience	Proposed Numbers against each category month-wise			
	-	Month 1	Month 2		Month n
Project Manager					
Site-In-Charge (Site Manager)					
Shift-in-Charge					
Safety Officers					
Supervisors					
Technicians					
a					
b					
Highly Skilled Workmen					
a					
b					
Skilled Workmen					
Semi-Skilled Workmen					
Unskilled Workmen					
Total Manpower					

Instructions to Bidder to fill:

1. Bidder to provide the overall site manpower deployment schedule as above.

2. Bidder to indicate (through colour code mentioned below ) their direct and sub-contracted employees

Direct bidder employee

Partly Direct / Partly sub-contracted Sub-Contracted

3. Against each of the category, bidder to indicate the minimum qualification and experience of the proposed manpower.

4. Rows can be added to also identify other specialised manpower e.g. specific details to be included for high risk activities operators 5. Columns can be extended to the actual duration of Site activities.

6. Bidder to note that if operations is in shifts, then Shift-in-charge / safety officers are required for each shift of operation.

<b>TP Central</b>	Odisha	Distribution
Limited		

Bid Document

Document No. TPSMS/GSP/CSM/015 REV 02 Date of Issue: 01/08/2016

# 2. List of Tools ,Tackles & Equipments :-

Bidder/Vendor to provide the list of tools, tackles, equipments to be used during the job/ project execution. Bidder/Vendor to ensure that all the lifting tools and tackles, pressure vessels are duly certified by the competent person authorised by the Chief Inspector of Factories of the respective state prior to start of the job

**TPCØDL** 

Sr. No.	Description of Tools / Tackles	Capacity / Rating	Quantity	Make	Remarks
1					
2					
3					
4					
5					
6					
7					

#### 3. Safety Records:

Bidder to provide the details of fatalities and lost work day cases (LWDC) which may happened during the last three years (data to be provided for the last completed year and preceding 2 years).

Description	Safety Data for Last 3 Years			
	Year 1	Year 2	Year 3	
	20	20	20	
Fatalities (Nos.)				
Lost Work Day Cases (Nos.)				

In case of no fatalities, LWDC during any year, the form may be filled stating NIL against the respective year. Bidders are encouraged to also submit the RCA / incident investigation reports and the learning's implemented out of the above reported incidents

TP Central Odisha Distribution		
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Document No. TPSMS/GSP/CSM/015 REV 02 Bid Document

Date of Issue: 01/08/2016

#### 4. Job Safety Plan/ Method Statement:

Bidder to provide / enclose a detailed Site/Job Safety Plan along with a Method statement detailing the execution philosophy (how the bidder intends to execute the Job/Project), identifying all key activities which are required to be performed by the contractor at Site. Bidder to also list down all high risk activities and provide the Hazard Identification and Risk Assessment (HIRA) for all such high risk activities involved in the site work.

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#### 5. Accreditations:

Sr.	Certification	Yes / No	If Yes, Year of Certification	If No, Planned date for Certification
1.	ISO 9001			
2.	ISO 14001			
3.	OSHAS 18001			
4.	Any other (please specify)			
	: Please attach certifi ed for, application let		oort above. In case not ac attached.	credited for above but

#### TP Central Odisha Distribution Limited

Document No. TPSMS/GSP/CSM/015 REV 02 Bid Document

Date of Issue: 01/08/2016

# **CSM-F8-PPE** Requirements

The Bidder/Vendor shall ensure that the following PPE of Approved standards shall be available at all time and shall be used by his employees with no exception whatsoever.

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1	All contractor's employees at site	Safety Florescent Jacket (orange colour), Safety helmet & safety shoes with steel toe cap
2	Workers mixing asphalt , cement , lime / concrete	Safety goggle & protective Hand gloves and footwear, Nose mask.
3	Welders / Grinders	Welding screen/goggles , safety shoes, leather hand gloves, aprons , leg guard
4	Stone breaker	Protective goggle, hearing protection, anti vibration hand gloves and Protective clothing.
5	Electricians	Rubber hand gloves & Electrical resistant shoes.
6	Workers engaged in insulation using glass wool etc.	Respiratory mask & leather Hand gloves, goggles.
7	Workers engaged in coal handling plant, ash handling plant and working in high dust area.	Dust mask, Hand gloves, protective goggles.
8	Workers working at a height of 1.8 Meter or above.	Double lanyard full body harness, Fall arrestor and safety net made of reinforced nylon fiber ropes firmly supported with steel structures

• PPE shall be conforming to BIS/DGMS/DIN specifications, in good condition and shall be comfortable to his employees, when used.

# <u>Vendor Need to sign on each page with the seal along with his Name & designation in his company.</u>

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# Annexure II Scope of Work & SLA for 11KV and LT Network AMC

# 11 kV and LT Network

**Title:** <u>Performance Based Annual Maintenance Contract for operation and maintenance of</u> <u>11KV feeders, Distribution sub-station, LT Feeder, Techno-commercial activities for a period of</u> <u>02 years in TPCODL Odisha.</u>

# Scope of the Work

# 1. <u>Inspection, monitoring, maintenance of 11 kV/LT Network and Distribution</u> <u>Substations</u>

# A. <u>11 kV OH/ UG Feeders</u>

# a. Routine Inspection of feeders

Inspection of complete length of all feeders including Tap-off feeders (branch lines) shall be carried out as per "Monthly Inspection Schedule" provided by Operation services (OS) and Engineer-In-charge (EIC). EIC/OS shall release feeder inspection schedule every month which BA team to implement till end of the same month. BA shall inspect the feeder/s as per the schedule and submit "Feeder Inspection Report" to EIC & OS indicating feeder wise defects, bill of material to attend the defect and required outage duration by last day of same month. BA shall adhere to the inspection schedule fully and no deviation shall be permitted.

Inspection shall be carried out to detect:

- 1. Trees and tree branches close to the feeder / above the feeder
- 2. Hotspots / poor joints in the feeder
- 3. Abnormalities Poles, cross arms, AB Switch, DD / HG fuse, cables, Earthing systems, hardware, stay wires, pole foundation, guard wire, insulators, conductors (undersize, damage, multiple joints), Jumpers, switchgears such as ACB, MCCB, Auto-recloser, Sectionalizer, FPI, RMU, etc.
- 4. Missing and bypassed accessories such as cross arms, Insulators, Danger board, Anti climbing device, stay insulators, stay wires, earth connection, cradle guard, AB Switch, DD/ HG fuse cables, Earthing systems, lightning arresters, power connectors, hardware fittings, switchgear such as ACB, MCCB, Auto-recloser, Sectionalizer, FPI, RMU, etc.
- 5. Unauthorized construction, excavation, digging, dumping work under/near the line.
- 6. Over sagged wires, cables, guard wire.



- 7. Abnormalities in cable terminations, mounting frames, missing cleats, missing cable earth connections.
- 8. Missing cable route / joint markers.
- 9. Damaged / Weak Cable Joints.
- 10. Approach pathway to poles for maintenance
- 11. Patrolling of underground cable route for advance intimation of any planned excavation activity, exposure of cable, storage of fire hazardous materials on cables, etc.
- 12. Any other abnormality that will affect safety to people, equipment or smooth functioning of 11 kV feeders.

## b. Emergency Inspection of 11 kV Feeders

Emergency inspection of 11 kV feeder shall be carried out by the BA as per the directions of EIC whenever 11 kV feeder trips to identify the exact reason of feeder tripping/breakdown. BA may use binocular to identify exact nature of defect. All close inspections shall be done under the guidance and supervision of TPCODL staff.

## c. 11 kV Feeder Maintenance Activities

1. Trimming of trees /tree branches under/near/above the feeders with tree pruners (to be provided by BA) as per "Monthly maintenance Schedule" issued by OS and in coordination with EIC. BA shall maintain most optimized RoW so as to reduce the tree trimming cycles. Creepers shall be removed before creeper reaches 2.5 m height so as to avoid feeder outage to clear the same. BA shall also shift the cut pieces of tree branches to nearby designated dumping yard of Civic body. Note : BA Shall deploy specialised manpower for cutting big trees including coconut

trees/palm/ bamboo etc. Tree trimming activities shall be carried out as per the norms of NGT/ Forest Dept. / Local Civic bodies / Municipal authorities, as applicable.

- Replacement of weak/damaged/tilted/broken poles and accessories. Transportation of pole (from any site to work location within same division) will be in scope of BA.
- 3. BA has to ensure proper cleaning / disposal of debris during earth excavation, refilling. BA shall ensure to shift broken poles/ pole accessories to nearby designated dumping yard of Civic body.
- 4. Straightening of tilted poles/cross arms/insulators.
- 5. Installation of new & mid-span poles with all accessories along with concreting, coping for ensuring statutory clearances & physical strengthening. Transportation of pole (from any site to work location within same division) will be in scope of BA. For installation of new / mid-span poles separate order will be placed.
- 6. Replacement of corroded, cracked, flashed insulators (Disc/Pin/Shackle).
- 7. Replacement / Repairing of GO switch / AB switch / DD & HG Fuse / line isolators



- 8. Replacement/repair of Binding wire joints by clamps and connectors.
- 9. Rectification of hotspots by tightening loose connections, replacing clamps / connectors or replacement of jumpers / other actions.
- 10. Replacement of undersized / burnt / damaged conductors, cables and jumpers. This includes replacement of conductor/cable spans with two or more joints.
- 11. Repairing/replacement of broken or weak guard wire. Provision of guard wire / cradle guard wire beneath conductors at identified locations.
- 12. Digging & refilling of any nature required for proper maintenance of HT system.
- 13. Repairs and re-tensioning of conductors for attending low vertical / lateral clearance.
- 14. Repairs and re-tensioning of Earth wire.
- 15. Repair/replacement of guard laces & stay wires with stay insulator.
- 16. Installation of bird guards.
- 17. Transportation of all men and materials required to attend preventive maintenance and breakdowns of OH and UG system.
- 18. Replacement of barbed wire / anti-climbing devices.
- 19. Painting of poles as per instruction of EIC. Paint shall be supplied by TPCODL.
- 20. Removal of bird nest / cable / internet / telephone wires / hoardings from 11 kV poles as per the specific instructions/directions of EIC.
- 21. Installation of danger boards on poles.
- 22. Installation of cable route / joint markers (Markers will be supplied by TPCODL)
- 23. Numbering / Sign writing on pole and switchgear using stencils as per TPCODL standard.
- 24. Replacement of burnt / weak CTVT unit.
- 25. Replacement of missing / burnt lightning arresters.
- 26. Installation of insulating sleeves / MVLC / LVLC on bare conductors / installations. Material will be provided by TPCODL.
- 27. Fixing/replacement of spacers in HT feeders.
- 28. All breakdowns shall be attended promptly within timelines as per the defined service level agreement. BA shall analyse all breakdowns and check the exact reason of breakdown and inform the same to TPCODL.
- 29. BA to enable network/public safety by ensuring installation of new earthing as per instruction of EIC (Earthing material shall be provided by TPCODL).
- 30. The above list of activities are indicative in nature. To achieve AMC goals, compliance to SLA and Safety requirements BA shall take up all the necessary activities in time.

# B. <u>11 kV/415 V/ 230 V Distribution Sub-Station (DSS)</u>

# a. Inspection of 11 kV DSS:

BA shall keep all DSSs neat and clean at all times. Maintenance of DSS equipment shall be carried out as per the monthly schedule provided by EIC and under supervision of



authorised person of TPCODL. BA shall deploy expert technician for maintenance and upkeep of all equipment installed in the DSS including transformers. The technician deployed for maintenance of DSS should be able to perform preventive & breakdown maintenance, troubleshooting, and replacement of defective equipment/parts as per work requirement.

The DSS inspection shall be carried out as per "Inspection Check List for DSS" (Refer Annexure-C) for Distribution transformer, AB Switch, HG/DD Fuse, Lightening Arrestor, KIT KAT Fuse, LT Distribution Box (MCCB/ACB), DTR meter cubicle & Energy meter.

BA shall conduct Thermal Scanning of DSS equipment to identify hotspots and capture DT /LT loading under supervision of TPCODL authorised person.

# b. Maintenance of 11 kV DSS:

- 1. Carry out preventive maintenance as per "Monthly Maintenance Schedule" and attending to breakdown and restoration of all DSS equipment safely by taking required & appropriate action as per the directions of EIC.
- 2. Replacement of failed equipment in DSS including modification of mounting structure/plinth as per instruction from EIC.
- 3. Transportation of men & materials/equipment including loading /unloading to carry out preventive or breakdown maintenance of DSS equipment. Charges for crane/Hydra, if used, will be paid as per scheduled/agreed rates.
- 4. Painting of equipment/mounting structures. Paint will be provided by TPCODL.
- 5. All fabrication works involving drilling, welding and gas cutting etc. required for DSS
- 6. Replacement of defective power and control cables as envisaged by EIC. Cables will be supplied by TPCODL.
- 7. Removal of vegetation from DSS yard. Removal of vegetation from DSS shall be done under the supervision of TPCODL staff. Removal and disposal of dry vegetation from DSS.
- 8. Housekeeping of all DSS substations by cleaning and de-weeding and by removing shrubs, cobwebs, dust, creeper.
- 9. Digging and backfilling work of any nature within DSS premises.
- 10. Sign writing on equipment at all DSS as per TPCODL standards (Paints will be provided by TPCODL).
- 11. Pre-monsoon maintenance of DSS as per the "Pre-monsoon Check lists" (Refer Annexure-D) provided by TPCODL.

Major activities to be carried out is as follows:

#### i. Distribution Transformer:

- a) Connections of all LT and HT terminations of the transformers with all connected equipment and accessories.
- b) Dressing of LT/HT cable



- c) Yearly Oil BDV test of each transformer having capacity ≥ 100 kVA. In addition, Oil BDV test of transformers of any rating shall be carried out as instructed by EIC.
- d) Yearly IR testing (Megger) of each transformer having capacity ≥ 100 kVA. In addition, IR testing of transformers of any rating shall be carried out as instructed by EIC.
- e) Load measurement of transformers during peak hours and load balancing wherever the neutral current is above 25% with reference to the phase current wherever feasible.
- f) Silica gel replacement and breather replacement.
- g) Checking of oil level & attending to minor leakages of the transformer.
- h) Topping up of Oil level in transformer conservator up to 1/3<sup>rd</sup> level wherever required.
- i) Attending to all hot spots in terminations and connections.
- j) Yearly measurement of resistance of individual earth pit at DSS.
- k) Repair/Rectification of old Earthing and installation of new Earthing as instructed by EIC. (Earthing material and earth enhancement material will be provided by TPCODL)
- I) Welding of DTR top cover and drain valve to prevent theft as instructed by EIC.

# ii. Other equipment in DSS :

- a) AB Switch: Repair of AB switch. Replacement of parts or installation of new AB switch as instructed by EIC. (AB switch will be provided by TPCODL).
- b) HG/DD Fuse set: Repair of HG/DD Fuse set. Replacement of parts or installation of new HG/DD Fuse as instructed by EIC. (HG/DD Fuse set material will be provided by TPCODL).
- c) Lightening Arrestor (LA): Replacement or installation of new LA as instructed by EIC. (LA will be provided by TPCODL).
- d) KIT KAT Fuse: Repair of KIT KAT Fuse. Replacement or installation of new KIT KAT Fuse as instructed by EIC. (KIT KAT Fuse will be provided by TPCODL).
- e) LT Distribution Box (MCCB/ACB): Repair of LTDB including panel cover and door through welding. Replacement or installation of new LTDB as instructed by EIC. (LTDB will be provided by TPCODL).
- f) Repair or replacement of burnt/faulty meter cubicle.
- g) Repair or replacement of DTR Energy meter/CT/wiring. Installation of new DTR Energy meter/CT/wiring as instructed by EIC.

# c. DTR Replacement/swapping:

- i. Replacement of transformers with low IR/oil leakage:
  - a) Transportation of the new/repaired transformer from one location to other location within the division.
  - b) Installation, testing and commissioning of new/ repaired transformer with all related works at site.
  - c) Transportation of old transformer from site to designated place within the division.



#### ii. Replacement of faulty/burnt transformer

- a) Transportation of new / repaired transformer either from DT workshop/ TPCODL store or from other sites within the same division to the faulty/burnt transformer work location.
- b) Installation, testing and commissioning of new/ repaired transformer with all related works at site.
- c) Transportation of old transformer from site to designated place within the division.

Note: BA shall bear the entire cost of transportation & installation required for replacement of burnt/faulty transformer by new/repaired transformer. BA will not be paid for this activity.

#### iii. Swapping of transformer:

Based on EIC's instruction, complete the activity of swapping of transformers. In swapping, one overloaded/underloaded transformer is removed from its existing location, shifted and installed at intended new allocated location within the division. While other transformer at other location within division is removed from its existing location, shifted and installed at intended new allocated located location within the division.

Note: Installation of two swapped transformers will be considered as one activity.

#### iv. To complete the activity for Augmentation of Transformer as per EIC instruction:

- a) Transportation of new / repaired transformer either from DT workshop/ TPCODL store or from other sites within the same division to the augmentation work location.
- b) Installation, testing and commissioning of new/ repaired transformer with all related works at site.
- c) Transportation of old transformer from site to designated place within the division.

#### v. Dismantle/Removal of unused transformer as instructed by EIC :

Dismantling and transportation of unused transformer from its existing location to the location instructed by EIC within the same division.

- vi. Installation, removal and transportation of Mobile transformer as instructed by EIC :
  - a) To transport within division and install the mobile transformer to the site provided by EIC.
  - b) To remove the mobile transformer after its purpose and to transport back the mobile transformer to its original location.

#### C. <u>LT Feeder OH/ UG Network</u>:

a. Routine Inspection of feeders



Inspection of complete length of all feeders including Tap-off feeders (branch lines) as instructed by Engineer-In-charge (EIC) shall be carried out as per "Monthly LT Inspection checklist" provided by EIC. EIC shall release list of feeders to be inspected every month which BA team to implement till end of the same month. BA shall inspect the feeder/s as per the list and submit "LT Feeder Inspection Report" by last day of same month to EIC indicating feeder wise defects, bill of material to attend the defect and required outage duration.

Inspection shall be carried out to detect:

- 1. Trees and tree branches close to the feeder.
- 2. Hotspots / poor joints in the feeder
- Abnormalities of Poles, cross arms, MS/GI structure, Insulator, Danger board, Anti climbing device, stay insulators, stay wires, earthing connection, guarding & cradle guard, Kit Kat Fuse, cables, Earthing systems, hardware fittings, pole foundation, multiple jointed conductors, damaged or undersized conductors, Jumpers ACB, MCCB, Feeder Pillar, Service Pillar, etc.
- 4. Missing and bypassed network accessories such as cross arms, MS/GI structure, hardware fittings, Insulators, Danger board, Anti climbing device, stay insulators, stay wires, earth connection, guarding & cradle guard, Kit Kat, Earthing systems, connector, hardware fittings, switchgears such as ACB, MCCB, Feeder Pillar, Service Pillar, etc.
- 5. Unauthorized construction, excavation, digging, dumping work under/near the line.
- 6. Over sagged wires, cables, guard wire.
- 7. Abnormalities in cable terminations, mounting frames, missing cleats, missing cable earth connections.
- 8. Missing cable route / joint markers.
- 9. Damaged / Weak Cable Joints.
- 10. Approach pathway to poles for maintenance
- 11. Patrolling of underground cable route for advance intimation of any planned excavation activity, exposure of cable, storage of fire hazardous materials on cables, etc.
- 12. Peak load capturing of LT feeders as instructed by EIC.
- 13. Any other abnormality that will affect safety to people, equipment or smooth functioning of LT feeders.

# b. LT Feeder Maintenance Activities, Techno-commercial and Fuse Call Activities

- Repairing / replacement of LT conductor/cable/ Line jumper/ Service line / service line jumper/ Cable jumpers. All LT AB cable connections to be made using IP Connector and will be supplied by TPCODL.
- 2. Rectification of conductor/LT AB cable sagging of various sizes.



- 3. Replacement of broken /damaged LT pole (of all sizes) including painting of GIS numbers on poles. Transportation of pole (from any site to work location within same division) will be in scope of BA.
- 4. Trimming of trees /tree branches under/near/above the feeders with tree pruners (to be provided by BA) as per monthly list of feeders issued by EIC. BA shall maintain most optimized RoW so as to reduce the tree trimming cycles. Creepers shall be removed before creeper reaches 2.5 m height so as to avoid feeder outage to clear the same. BA shall also shift the cut pieces of tree branches to nearby designated dumping yard of Civic body.

Note : BA Shall deploy specialised manpower for cutting big trees including coconut trees/palm/ bamboo etc. Tree trimming activities shall be carried out as per the norms of NGT/ Forest Dept. / Local Civic bodies / Municipal authorities, as applicable.

- 5. Fixing/Re-fixing of spacers in between the lines
- 6. Removal of bird nest / cable / internet / telephone wires / hoardings from 11 kV poles as per the specific instructions/directions of EIC.
- 7. Repair/Rectification of old Earthing and installation of new Earthing as instructed by EIC. (Earthing material and earth enhancement material will be provided by TPCODL)
- 8. Making connector hooks and installation of two lines wherever required
- 9. Making cable termination
- 10. Repair the faulty cable of size 95 mm2 & below. This includes digging, jointing & refilling work for repairing the faulty UG cable.
- 11. Installation of new & mid-span poles with all accessories along with concreting, coping. Transportation of pole (from any site to work location within same division) will be in scope of BA. For installation of new / mid-span poles separate order will be placed.
- 12. Installation of new & mid-span poles with all accessories along with concreting, coping, stays sets, drawing bare conductor/ LT ABC along with installation of Distribution Boxes, earthing, hardwares and accessories on Pole for network extension purpose. The poles have to be numbered as per GIS requirement. Transportation of pole (from any site to work location within same division) will be in scope of BA. Separate Invoicing to be done as per the rates mentioned in contract for 'Erection of Poles for Line extension'.
- 13. Installation of all hardware such as Eye hook/ bracket/Dead end / Suspension clamps/ cross arm/ clamp / two line etc.
- 14. Repair / Replacement/ installation of Distribution Boxes on existing LT Poles with earthing
- 15. Dressing of cable / conductor / service wires.
- 16. Execution of Disconnection (DC)/ Re- connection (RC)/ illegal hooking removal/ Enforcement raids/ Meter Removal (MRO)/Service Cable removal/Temporary Disconnection(TD) or any other cases as instructed by EIC.



- 17. Replacement of burnt/damaged/faulty fuses / ACB/MCCBs/MCBs in feeder pillar / service pillar.
- 18. Replacement/ repair / installation of bus bar boxes as per requirement.
- 19. Meter Installation against new connection, burnt/faulty meter in rural divisions with or without service cable.
- 20. Meter shifting of consumers in rural divisions with or without service line.
- 21. Replacement/Augmentation of Service cable with or without meter in rural divisions.
- 22. Laying/stringing of LT 1.1 kV armoured cable of (all sizes) for LT connections as instructed by EIC. The cable will be provided by TPCODL.
- 23. Installation of wall corner clamp / pipes / angles / fasteners for quality installation. Material shall be provided by TPCODL.
- 24. Replacement of freedom unit (without pre-paid meter).
- 25. Dismantling of pole/ network as instructed by EIC.
- 26. BA has to ensure proper cleaning / disposal of debris during earth excavation, refilling. BA shall ensure to shift broken poles/ pole accessories to nearby designated dumping yard of Civic body.
- 27. Load balancing/swapping of LT Circuits.
- 28. Assist TPCODL Staff for Daily registration & closure of complaints entered in FCC App/ FFA software.
- 29. To assist TPCODL staff for attending & resolving complaints maintaining the records in the stipulated registers and complaint folios.
- 30. Attending to Fuse Call Complaints / No Power Supply Complaints.
- 31. Attending to leakage current complaint.
- 32. Repair and replacement of broken / damaged service line.

# D. Feeder Pillar and Service Pillar

- 1. Replacement of MCB and fuse carrier, kit-Kat/Cartridge/HRC type fuses.
- 2. Repairing and replacement of bus bar.
- 3. Dressing of LT cables, Tighten all I/C & O/G joints.
- 4. Attending leakage current in feeder pillar or service pillar.
- 5. Repairing of Doors including welding. (Material will be provided by TPCODL).
- 6. Painting of feeder pillars/service pillars. (Paint will be provided by TPCODL).
- 7. Painting of Numbers & stencilling on Feeder /Service Pillar.
- 8. Replacement of damaged feeder pillar/ service pillar, as an emergency repair, not more than 24 Nos. /Division in a year.
- 9. Recording of peak load & cable sizes on each feeder/service pillar.
- 10. Grounding of neutral inside the feeder pillar & making of proper earthing for each feeder pillar.

# E. Auto Recloser, Sectionalizer, RMUs, and MCCB/ACBs

Inspection of Auto Recloser, Sectionalizer, RMUs, and MCCB/ACBs shall be carried out as per "Monthly Inspection Schedule" provided by Operation services (OS) and Engineer-In-



charge (EIC). EIC/OS shall release inspection schedule every month, which BA team to implement till end of the same month. BA shall inspect the Auto Recloser, Sectionalizer, RMUs, and MCCB/ACBs as per the schedule and submit "Inspection Report" to EIC & OS indicating equipment-wise defects, bill of material to attend the defect and required outage duration by last day of same month. BA shall adhere to the inspection schedule fully and no deviation shall be permitted.

## Maintenance activities:

- 1. Cleaning,
- 2. Tightening of loose connections,
- 3. Rectification of hot spots
- 4. Repairs/minor welding of door/panel covers
- 5. BA shall assist TPCODL line staff in attending emergencies concerning these equipment.

## F. Minor Civil Repair Work as and when required

- Welding of RS joist steel pole, locking arrangement of doors, damaged sheets/angle/ channel of doors & shutters of substations. Welding work of mesh fencing panel for plinth/ pole mounted sub-stations. [Quantity of the material used per month per subdivision shall not exceed - hinges up to 02 No's sliding door bolt - 01 No; IRC welding mesh - up to 5 m2 or 25 kg, MS angle/Channel/Flat – 25 kg, MS Sheet (2mm thick X 5 m2) – 25 kg].
- Repair of 11 kV DT foundations/plinth (Minor repair implies Brick work up to 100 bricks per foundation/plinth, Cement plaster with neat cement up to 2.5 m2, CC 1:1.5:3 up to 0.15 m3 per month per Sub-division). However, TPCODL will pay BA for use of crane for lifting of 11 kV DT for carrying out repairs to the foundation/plinth on actual as per TPCODL's rate schedule.
- 3. Plugging/ Sealing of cable openings at sub-stations. (Brick work up to 0.12 m3 & Cement plaster up to 2m2 per month per Sub-division).
- 4. Repair of Plinths of Feeder Pillar/ Service Pillar.
- 5. Repair (Filling of holes) of existing trench covers with CC 1:1.5: 3. Realigning the disturbed trench covers. Repair of trench involving brick-work up to 0.25 m3 and plastering of the same up to 5 m2 per month per Sub-division. Providing new covers is not in the scope of BA
- 6. Pole cooping and concreting as per instruction of EIC/ OS.
- 7. Soil digging and backfilling work of any nature
- 8. The cumulative amount of cement and bricks for all above mentioned works should not exceed 3000 kg and 12000 nos. respectively per Division per year.

(The quantities mentioned are only for the purpose of estimation of the work carried out under minor civil repair works. The same does not form part of contractual obligation)



## 2. Minimum Resources deployment (Manpower and Vehicle)

To achieve the desired maintenance and breakdown tasks, BA shall consider structure manpower including their minimum qualification, job description and structure of vehicles as given in Annexure-E

Operation services will advise on the allocation of BA manpower / vehicles to respective divisions/Sub-Divisions/Sections/E&MR in discussion with respective Circle Heads and Chief - Operation Services.

## Note:

- BA shall ensure availability of sufficient trained linemen for preventive maintenance / trouble shooting of equipment such as transformer, circuit breaker, CT/VT, control panels, battery and battery charger and industrial wiring etc.
- 2. Lineman should have valid MV license from Govt. of Odisha/ other state Govt. He should be able to climb on pole for working on line and before climbing the pole.
- 3. The vehicles deployed for operation and maintenance shall not be more than Five years old (from date of LOI/PO/renewed PO) with good condition of interior and exterior. All statuary laws/motor vehicle ACT/RTO Rules (mainly RC, Insurance, fitness and pollution control) should be complied. In case of accidents TPCODL has no liability towards Police/RTA authorities, Law Courts, injured parties, damage to the vehicle or property etc. The vehicles should be run on authorized fuel like CNG/Petrol/Diesel as endorsed on the vehicle registration certificate. The copies of Registration, Insurance and other statutory documents should be submitted to TPCODL before deployment of the vehicles
- 4. Driver deployed should have valid license. Driver should be medically fit. The information of change in driver/Vehicle to be informed to TPCODL, before making such changes.

<u> </u>	
Vehicle	Running km/month
12 Hours	2500 km
24 Hours	3500 km

5. Each vehicle deployed will have limit of running average as below:

Each vehicle deployed will have limit of running average month as shown above. Further, cumulative average of 2500 km (12 Hrs Vehicle) and 3500 km (24 Hrs vehicle) per month of all running 4 Wheeler vehicles utilised per Cluster will be considered for every FY Quarter for excess mileage of any vehicle. Beyond cumulative average of 2500 km (12 Hrs Vehicle) and 3500 km (24 Hrs vehicle), BA may claim per km charges as per schedule of rates.

6. Log Book shall be maintained for every vehicle separately in the prescribed format by TPCODL. Daily running of Vehicle should be entered in this diary on daily basis.



The total kilometres run by the vehicle will be calculated from this Log Book. Vehicles driver will ensure that each entry should be signed by the user.

- 7. Vehicle (Mahindra Bolero Camper or equivalent) deployed shall have capacity to accommodate 5 passengers and minor loading of material and minimum 2 nos. FRP Ladders in the backside and top carriage respectively. This is basic requirement in the nature of job handled by TPCODL.
- 8. Vehicle should be equipped with one extra tyre as Stepney in the vehicle with all the tools to replace the damaged tyre.
- 9. Vehicle deputed in a cluster must/can be run to any location within the cluster boundary. However, during exigency, the vehicles may be made available to other cluster as instructed by EIC.
- 10. Vehicles are running on authorized fuel like Petrol/Diesel and the same are endorsed on the vehicles RC (Registration Certificate). If any vehicles found without endorsement of authorized fuel in RC payment for the particular month will not be made by TPCODL
- 11. Competency assessment of Supervisor/Lineman and Helper will be carried out by TPCODL officials within two months of deployment and the Lineman in bronze badge category will not be allowed to work on the network until they upgrade their skill and qualifies for Gold or Silver badge category. Those in bronze category however will be allowed to work as helpers.

12. In case of accidents, TPCODL has no responsibility whatsoever towards police/ RTA authorities, Law, Courts, injured parties, damages to the vehicle or property etc. All these shall be entirely contractor's sole responsibility. The contractor/agency will obtain comprehensive insurance policy for all the personnel deployed to cover any injury or death to any staff or other person in or around the work premises without extra cost to TPCODL. TPCODL will not pay and/or reimburse anything on this account over and above the contract considerations.

## 3. Performance Standard and Measurement:

## A. Service Level Agreement

- 1. In the event of any performance based measurement criteria not reported/ reported partially in the appropriate format, would lead to deduction of 100% marks specific to the criteria and no incentive (of any kind) would be paid.
- TPCODL reserves the right to change/ add to the list of existing performance base measurements, at any point of time during the execution of the contract. This will be communicated in writing to the BA by TPCODL's Head (Operations) on mutually agreed terms.
- 3. The performance system shall comprise measurement of BA's performance on the parameters listed under Performance Measurement (3.B). The total marks for the performance will be 100 in a month.



#### a) Safety aspects, Statutory Compliances and Asset Upkeep

- 1. All jobs shall be carried out after taking necessary 'Permit to work and following PTW and tagging system of TPCODL. PSCC shall issue corresponding PTW numbers as per guidelines of TPCODL.
- 2. All jobs shall be carried out by using PPEs and safety equipment. List of PPEs as per the specifications mentioned in CSM to be allocated to all the BA personnel.
- 3. All jobs shall be carried out as per approved standard operating procedure (SOP). Copy of latest SOP shall be provided after award of contract.
- 4. All statutory compliances as mentioned in attached GCC and applicable laws to be complied to.
- Locking of assets (DSS, Fencing, Feeder Pillars and Service Pillars etc.) shall be ensured by BA staff. BA staff will also notify EIC on missing covers / doors of substation / DTs / FPs / SPs and other equipment and work with TPCODL staff to refit the same at the earliest.
- 6. Upkeep of assets (Substations, Feeder Pillars and Service Pillars to be free from Posters, loose hanging wires. Vegetation and Garbage removal from in and around Substations, Feeder Pillars and Service Pillars) to be ensured by BA.

The performance measurement parameters along with sub measures and penalty/bonus are mentioned under "Performance Measurement Parameter (3.B)". For safety incidents/violations, Contractor Safety Management shall be applicable.

## b) Supply and Use of Testing equipment and Tools & Plant (T&P)

Following testing equipment and T& P must be available with BA for carrying out the jobs. At any given point of time regular replenishment is the responsibility of BA. The below mentioned list may be considered as requirement for each.

#### S. No. Equipment Quantity Digital/ Motorized Insulation tester (500-5000V) with suitable 1 1 / Sub-division probes (Make Rishabh) Digital/ Motorized earth resistance tester with suitable probes 2 1/ Sub- division (Make Rishabh) 2 Multi-meter (digital) 1 / Sub-division Set of flexible wires of suitable current rating and connector clips 3 1 / Sub-division 16 sq.mm cu. Cable – 90 mts 4 **Digital Clamp On meters** 10 / Sub-division 5 **Oil BDV Tester set** 1 / Sub Division 6 Series Double Test Lamp Set 1/lineman

## 1. Testing Equipment's:



7	Smart tools (battery operated- Bosch Cordless impact wrench GDS 18 v-EC-250 1no.)	1 / Division
8	Line tester (1.1 kV)	1/ Lineman
9	Neon Tester (up to 33 kV) with 7.5 mts operating stick	1/ vehicle

## 2. Tools and Plants (T&P)

S. No	Tool/T&P	UoM	Min. Qty.
1	Screw Driver Set	Set	1 per L/M
2	Hammer 500 gm	No	1 per L/M
3	Insulated Plier	No	1 por 1 /04
5	(Combination pliers 150/160/170mm)	No	1 per L/M
4	Clip Plier	No	1 per L/M
5	Nose Plier	No	1 per L/M
6	Monkey Plier	No	1 per L/M
7	Hacksaw with blades	No	1 per L/M
0	Knife	No	1 por 1 /04
8	(Min. Length of Insulated Handle- 100mm)	No	1 per L/M
9	Wire stripper	No	1 per L/M
10	C headed spanners Set	Set	1 per L/M
11	Ring Spanners Set	Set	1 per L/M
12	Box Spanners Set	Set	1 per sub division
13	Adjustable spanners	No	1 per L/M
14	Ratchet set	Set	1 per section
15	Double Chain Pulley block 5 Ton	No	1 per section
			i) 6m (1 fold) : 1/FCC
16	FRP ladder	No	ii) 9m (2 fold): 1/vehicle.
			iii) 12m (3fold):1/section.
17	Bamboo ladder	No	i) 6 m: 1 per L/M
18	Industrial vacuum cleaner	No	1 per division
19	Hot Air blower	No	1 per Sub division
21	Crimping tool (hydraulic)	No	1 per section
22	Pressure Torque wrench manual	No	1 per section
23	Gas cutter	No	1 per division
24	Hydraulic nut Cutter	No	1 per sub division
25	Welding machine with rods	No	1 per division
26	Bench Drill machine	No	1 per division
27	Hand Drill machine battery operated (with 1	No	1 per section
27	spare battery)	No	
28	Hand grinder	No	1 per division
29	Compressor with painting gun	No	1 per division
30	Portable DG set 5KVA	No	1 per division
31	Measuring tape	No	1 per Lineman
33	Hand operated oil pump	No	1 per section



34	Tool box	No	1 per L/M
25	Cable pulling winch, eye, socks, PVC rollers	Nia	
35	(4 no's) and tirfors	No	1 per subdivision
36	Pneumatic hammer	No	1 per division
37	Hammer 5 Kg	No.	1 per section
38	Level gauge	No	1 per section
39	Heavy base Traffic Cone with barricading tape	No	20 per section
40	Visor for helmet	No	1 per L/M
42	Manual tree pruner (with 7.5 mts operating rod)	No	5 per section
43	Nylon rope	m	15 m per L/M
44	File 12" and 8"	No	1 per L/M
45	Round file and half round file	No	1 per L/M
46	Gaiti ( Spade)	No	5 each per section
47	Axe (Kuradhi)	No	1 per FCC
48	Katuri	No	3 per FCC
49	Motorised dewatering pump with Pipe	No	2 per Division
50	Power cutter	No	1 per division
51	Chainsaw	No	1 per section
53	Tap kit with handle	Set	1 per Division
Ε 4		6	1 per FCC & 1 per
54	First AID Kit (along with medicine)	Set	vehicle.
55	Discharge Rod suitable with 15 m long 25 mm sq. or 10 mm. sq. insulated Copper wire & 7.5 m operating stick.	No.s	i) 10 mm sq. Cu wire : 4 per FCC ii) 25 mm sq. cu wire : 4 per vehicle
56	Brass Shorting Chain	No.s	4 per L/M
57	Shorting link with Crocodile clamp with 10mts long flexible Copper wire 10 mm sq.	No.s	8 per FCC & 8 per vehicle.
58	Portable earthing spikes (GI)	No.s	4 per FCC + 4 per vehicle
59	Allen Key set	Set	1 per section
60	All sizes of GI washer, nut bolts of different sizes.	Kg	BA must maintain Regular stock of 5 Kg per section
61	PVC insulation Tape 1.1 kV	Roll	BA must maintain
62			Regular stock
62	M seal Putty	Packet	BA must maintain Regular stock
62 63	M seal Putty Re chargeable Torch light 500W	Packet Nos.	BA must maintain
			BA must maintain Regular stock
63	Re chargeable Torch light 500W	Nos.	BA must maintain Regular stock 2 per FCC + 2 per vehicle
63 64	Re chargeable Torch light 500W Gum boot	Nos. Pair	BA must maintain Regular stock 2 per FCC + 2 per vehicle 1 Per Lineman & Helper



68	68 Cotton (dhoti) Clothes for cleaning		BA must maintain Regular stock
69	Poly propylene rope 24 mm	Kg	40 kg/section
70	Come-along clamp for AAAC/ACSR conductor Rabbit, Racoon, Dog, wolf conductor	No.s	2 per section
71	Compressor machine with all dies suitable for jointing of Rabbit, Racoon, Dog, wolf conductor	No.s	1 per subdivision
72	<ul> <li>RCCB/ELCB Mounted Extension Board</li> <li>(Capacity - 63 A, Industrial Plug Type) with</li> <li>MCCB &amp; 25 mts of extension flexible wire</li> </ul>		1 per vehicle
73	Wire Cutter (for ACSR/AAA Conductor)	No.s	1 per sub division

The above list of testing equipment's and tools is not exhaustive in nature. AMC service provider should be able to provide all those instruments and tools which may be needed to carry out any particular job in the scope of work. BA shall also manage buffer stock so as to replace any damaged/lost tool within 24 hours failing which marks/payment would be deducted. BA shall ensure service worthiness of all tools and tackles by conducting monthly audit.

Calibration to be done on a yearly basis and two copies of the calibration report to be submitted to the respective EIC/Corporate Operation services. Functionality of testing equipment to be checked in house on quarterly basis.

## B. <u>Performance Measurement</u>

EIC at his discretion will deduct marks for mentioned below:

#### a. Statutory Compliances and Asset Upkeep (Total Weightage: 20 Marks):

Sr. No.	Parameter	Max. Marks	Violation Frequency	Marks to be deducted
	Statutory compliances (any		1st Non Compliance	2
1	Statutory compliances (any or all as mentioned in GCC & applicable laws)	10	2nd Non Compliance	4
1		10	3rd Non Compliance	6
			4th Non Compliance	10
	2 Asset Upkeep- Tree branches/Creepers(creeper to be clear 2.5 m below conductor) close to HT/LT feeder and equipment, Open Door of switchgears / locking		Non adherence (reporting up to 2 cases)	3
2		10	Non adherence (reporting up to 5 cases)	6
			Non adherence (reporting more than 5 cases)	10



of DSS/Pole cleaning, DSS		
Cleaning, etc. )		

## b. Restoration time (Total Weightage: 20 Marks):

S.	S. Type of Breakdown		Restoration timeline target		
No.			Mobilization of Team	<b>Restoration time</b>	
1	Line Breakdown	Urban	Within 2 Hrs.	8 Hrs.	
1	Line Breakdown	Rural	Within 3 Hrs.	12 Hrs.	
2	Major Breakdown	Urban	Within 3 Hrs.	12 Hrs.	
Z		Rural	Within 4 Hrs.	24 Hrs.	
2	3 DT Failure	Urban	Within 2 Hrs.	12 Hrs.	
5		Rural	Within 4 Hrs.	24 Hrs.	
4	Fuse Call/ No Power	Urban	Immediate	3 Hrs.	
4	4 Supply Complaint Rural	-	18 Hrs.		
5	Reconnection of Power	Urban/	Within 1 Hrs.	2 Hrc	
5	Supply as instructed by EIC	Rural		3 Hrs	

S. No.	Type of Breakdown	% of non-compliance w.r.t. TPCODL target	Marks to be deducted
1	Line Breakdown		
2	Major Breakdown	i) 2 %	i) 5 Marks
3	DT Failure	ii) 3-4%	ii) 10 Marks
4	Fuse Call/ No Power Supply Complaint	iii) 5-7% iv) >7%	iii) 15 Marks iv) 20 Marks
5	Reconnection of Power Supply as instructed by EIC	,	,

## c. Numbers of Feeder Tripping attributable to BA (Total Weightage: 20 Marks):

S. No.	Feeder Tripping Frequency	Marks to be Deducted
1	1 Conductor snapping – each instance	
2	Jumper parting – each instance	2
3	3 Overall Tripping increase up to 5% w.r.t. same month of LFY in urban/town/industrial/high priority feeders.	
4	Overall Tripping increase up to 10% w.r.t. same month of LFY urban/town/industrial/high priority feeders.	10
5	Overall Tripping increase up to 15% w.r.t. same month of LFY urban/town/industrial/high priority feeders.	20



**Note:** Reduction of feeder tripping here will be considered exclusively due to maintenance activities carried out by BA. Credit will not be given to BA in the case where tripping reduction is due to special initiatives completed by the division.

In-case of feeder tripping, if the tripping is attributable to the BA because of negligence/poor maintenance of feeder then penalty will be levied to BA as indicated above in case of non-compliance as described. EIC and HoG(Distribution Services) will decide whether feeder failure is attributable to the BA and the decision will be final.

S. No.	DT Failure Criteria	Marks to be Deducted	Incentive
1	Reduction by > 40% wrt same month of LFY and no DT Failure >= 100 KVA	Zero	5 bonus marks
2	Reduction by >30%but < 40% wrt same month of LFY and no DT Failure >= 100 KVA	Zero	3 bonus marks
3	DT Failure same wrt same month of LFY or any DT Failure >=100 KVA	4	Zero
4	Increase up to 10% wrt same month of LFY or any DT Failure >=100 KVA	10	Zero
5	Increase up to 20% wrt same month of LFY or any DT Failure >=100 KVA	15	Zero
6	Increase of >20% wrt same month of LFY or any DT Failure >=100 KVA	20	Zero

#### d. Transformer failure (Total Weightage: 20 Marks):

In-case of DT Failure, if the transformer failure is attributable to the BA because of negligence/poor maintenance of DT then penalty will be levied to BA as indicated above in case of non-compliance as described.

After every failure, Section Manager shall submit DT failure report indicating cause of failure to EIC and HoD (DT Management). They will study the DT failure report and will decide whether DT failure is attributable to the BA and the decision will be final.

Generally Low oil level, Pink Silica Gel, Missing breather, Loose Connection, Hot Spot, Non-Availability of lightning arrester, Damaged / missing earthing, Overloading, unbalancing, improper size of Fuses on HT/LT side will be considered as probable reasons of DT Failure attributable to BA.

**Note:** The bonus marks shall be decided on the performance of BA & reduction of DTR failure due to maintenance activities exclusively cumulatively on total DTR failure of the division.



e. Non-availability of T&P during maintenance leading to delay in execution of job & Vehicle compliances : (Total Weightage: 15 Marks):

i.	Non-availability	of T&P:

S. No.	Parameter	Maximum Marks Deducted	Marks to be Deducted
1	2 instance of T&P violation during the month		2
2	3-5 instance of T&P violation during the month	10	5
3	More than 5 instance of T&P violation during the month		10

#### ii. Vehicle compliances

S. No.	Parameter	Maximum Marks to be Deducted	Marks to be Deducted
1	Non-Compliance for vehicle	5	One mark deduction for each non- compliance on any of the following attribute: i) Vehicle insurance. ii) Fitness certificate. iii) Pollution certificate. vi)Vehicle life as per contract. v)Vehicle not reporting for duty > 4hrs

f. **Theft reporting (Total Weightage: 0 , Bonus : 10 Marks**): The bonus marks will be as following on successful booking of the theft cases:

S. No.	Load booked	Marks to be Deducted	Incentive
1	1MW and above during the month	Zero	10 bonus marks
2	750KW-1MW during the month	Zero	5 bonus marks
3	500KW-750KW during the month	Zero	4 bonus marks

#### g. Submission of MIS (Total Weightage: 5 Marks):

In case the BA does not submit the monthly MIS and Performance Report by 7th date of the next month the BA will be liable to deduction of up to 5 marks.

Thus, BA can score a maximum of 115 marks (including 15 marks as bonus).



#### h. Safety Aspects

Any safety violation will be governed as per Contractor Safety Management (CSM) of TPCODL.

All Workmen of Associate will be trained in TPCODL's Skill Development Centre for 3 to 4 days in a year. During training days, food will be provided to trainees by TPCODL and food cost @ Rs. 200 per head will be recovered from bill of Associates. Conveyance for workmen for travelling to Training Centre will be in scope of BA. Appropriate reliever should be deployed at site by BA during absence of regular worker for training.

All workmen must undergo Medical Test once in a year and report to be submitted to TPCODL. Cost of Medical test will be borne by respective BA. Tests to be conducted are as follows:

	Medical Test - TPCOD	DL - BA ID Cards			
SI No	Medical examinations	For employees working in heights	For All Rest Employees		
	Frequency	Once in every 12 months	Once in every 12 months		
1	Haemoglobin	√	√		
2	Random Blood Sugar	√	$\checkmark$		
3	Urine - R/M	$\checkmark$	$\checkmark$		
4	Audiometry (Tuning Fork Test)	$\checkmark$	$\checkmark$		
7	Colour Vision	$\checkmark$	$\checkmark$		
8	Vertigo Test	$\checkmark$	×		

Format of Medical Fitness Certificate is enclosed in Annexure-H

## 4. <u>Record Keeping/MIS</u>

The following Reports/ MIS shall be submitted by BA to EIC/OS as detailed in the table below.

Sr. No.	MIS / Reports	Frequency
1	Compliance Reports-	
	a. Near miss / incident/ accident	Immediate
	b. Statutory Compliances Report (to BA legal Cell)	Monthly
	c. List of Required V/s Available PPE with BA Buffer Stock	Monthly
	d. List of Required V/s. Available PPE with BA Staff	Monthly
	e. List of Required V/s. Available Safety Equipment and Tools & Tackles- BA	Monthly
	f. List of Required V/s. Available Testing Equipment with BA	Monthly
	g. List of Resource Available- Manpower and Vehicles (along with necessary documents)	Monthly



2	Feeder Tripping Report (ESD/PSD)	Daily & Monthly
3	DT Failure report	Daily & Monthly
4	Maintenance Report	
	a. 11 kV Feeder Inspection Report	Monthly
	b. 11 kV Feeder Maintenance Report	Daily & Monthly
	c. 11 kV DSS Inspection Report	Monthly
	d. 11 kV DSS Maintenance Report	Daily & Monthly
	e. LT Feeder Inspection Report	Monthly
	f. LT Feeder Maintenance Report	Daily & Monthly
5	MIS on Faulty Feeder / Equipment	
	a. AB Switch/DD Fuse/HG Fuse/ Kit Kat Fuses	Monthly
	b. Auto- Recloser and Sectionalizer, FPI	Monthly
	c. LT Protection- ACB/MCCB	Monthly
	d. LT Distribution Box. (Pole mounted Box)	Monthly
	e. Feeder Pillar and Service Pillar	Monthly
	f. List of Areas of Low Voltage	Monthly
	g. Lightning Arrestor	Monthly
	h. Earthing	Monthly
7	Load Monitoring	
	a. DT Peak Load & LT feeder peak load	Monthly
	b. Load Balancing	Monthly
8	Unsafe to Safe Work (along with before after Pics)	
	a. Re-Sagging HT and LT	Monthly
	b. Interposing Pole HT and LT	Monthly
	c. Damaged Pole Replacement Pole HT and LT	Monthly
	d. Straightening of tilted pole HT and LT	Monthly
	e. Stay support/Stay Set HT and LT	Monthly
	f. Replacement of Multiple joints of conductor- HT and LT	Monthly
	g. Installation and Repair of Guard Wire	Monthly
10	Fuse Call Complaint Report	Daily
11	DTR stolen Report	Weekly

# TPCØDL

## 5. TPCODL Asset

#### A. <u>Circle, Division, Subdivision, Section & Fuse Call Centres</u>

Sr.			Nos. of	Nee of	Nee		FCC Loca	lity Type	
Sr. No.	Circle	Division	Sub Division	Nos. of Section	Nos. of FCC	Urban	Town	Rural	Ex Rural
1		BCDD I	3	13	13	13	0	0	0
2	BBSR-1	BCDD II	3	13	18	13	5	0	0
3	BB3K-1	BED	2	12	18	14	4	0	0
4		NED	3	12	58	0	5	38	15
5		NyED	4	16	62	0	5	42	15
6		BaED	2	10	38	0	4	34	0
7	BBSR-2	KHD	5	17	68	0	5	50	13
8		PED	4	18	56	0	9	35	12
9		CDD I	4	14	14	14	0	0	0
10		CED	4	12	70	0	2	34	34
11	Cuttack	CDD II	3	10	23	6	6	11	0
12		SED	3	10	59	0	1	43	15
13		AED	2	8	45	0	2	30	13
14		DED	4	16	78	0	4	54	20
15	Dhenkanal	TED	4	14	68	0	3	50	15
16		ANED	3	10	55	0	3	40	12
17		KED I	4	18	70	0	7	43	20
18	Daradaar	KED II	2	7	31	0	0	25	6
19	Paradeep	JED	3	9	47	0	4	25	18
20		PDP	3	8	51	0	2	30	19
	Total		65	247	942	60	71	584	227

Please refer Annexure-F, for present list of TPCODL assets (11 kV Feeder, Distribution Sub-Stations, DTR, Auto Recloser & Sectionalizer, Ring Main Unit, Air Circuit Breakers, Feeder and Service Pillars. Further, as per OERC approval, above TPCODL assets will keep on increasing at the rate of about 10% per year. Such additional assets shall be considered as part of scope of this AMC and need to be maintained by BA whenever added to the respective & applicable network.

## 6. Schedule of Items(BoQ)

**Refer Annexure-G** 

## Note:

1. The above mentioned activities of the scope are indicative in nature. However, BA shall ensure that the maintenance & resource deployment will be made in such a way that the activities to enhance power supply reliability & prompt restoration of breakdowns/ fuse call or no power supply complaints will be completed safely within defined SLA timelines.



- 2. BA shall arrange for required resources in shift/rest/leave reliever as applicable laws.
- 3. BA shall deploy adequate manpower, vehicles, T&P items at no extra cost for adherence to the scope and SLA of this tender document based on the direction of EIC/Corporate Operation services.
- 4. BA must deploy a single person of contact (SPOC) in each of the allocated division(s) for day to day co-ordination with EIC/OS and MIS.
- 5. BA has to provide applicable Fuel allowance to its manpower travelling in two wheelers on account of official duties.
- 6. BA has to establish Fuse call centre by taking Premises on rent for running Fuse call Camp in the TPCODL area as per requirement & directions from OS team. The Premises shall be adequate for minimum sitting capacity of 6 persons along with proper & safe storage of T&P items, Ladder, Discharge Rod, Neon tester etc. The premises shall have a sign board of "TPCODL Fuse Call Centre" (to be provided by TPCODL).

The monthly rent of fuse call camp shall be limited up to Rs. 1500 for rural areas & Rs.2500 for urban areas. (The list of such Fuse Call Centre shall be provided by TPCODL).

- 7. Business associate shall analyse all breakdowns and identify the exact reason of breakdown and report same to TPCODL EIC & OS on monthly basis.
- 8. BA workforce must have ability to use FCC App & other FFA devices and capable of receiving and sending complaints for closing through FCC App / FFA device.
- 9. BA shall arrange for movement of its manpower from one Division/Sub Division/Section/Fuse Call Centre to other as per the requirement of TPCODL EIC during exigencies or mass maintenance.
- 10. BA shall increase manpower, vehicles T&P items during exigency or natural calamities on the direction of EIC/OS. The payment will be made as per agreed rates and T&C. BA shall in no case refuse to increase the manpower / vehicles / T&P items during exigencies.
- 11. BA shall also assist TPCODL in reduction of (AT&C) technical and commercial losses as per direction of EIC.
- 12. BA must maintain daily attendance of his/her manpower & submit the monthly attendance report duly verified by EIC along with monthly AMC bill to OS.

\_\_\_\_\_

#### Annexure-C

### Inspection Check List- DT

	DISTRIBUTION TRANSFORMER Maintenance Record (SectionS/Division, Division																											
<u>_</u>	eder	ame	er Rating A)	ion	ice Date	IR Val	lue (G/M-	Ohm)	Resis	arth stance nms)	' (KV)	(V)	Leakage (yes/no)	Oil (Ltrs.)	Status hK/NA)	gel t (Yes/No)	Status No)	her ement No)	iing (OK/ Repaired)	ket (OK/ Repaired)	er (OK/ Repaired)	e (OK/ Repaired)	ection 3/ Kit Kat E)	Status of LT rotection (OK/BY Passed)	Fuse ced	of LT Feeder	ctification ss/No)	/ Section
Sr No	11 KV fe	DSS Name	Transformer Rating (KVA)	SAP Function Location	Maintenance	HT-E	LTE	нт-ст	N-E	Body-Earth	Oil BDV	Load	Oil Leakage	Topping of Oil (Ltrs.)	Silica Gel Status (Blue/pinK/NA)	Silica gel replacement (Yes	Breather Status (Yes/No)	Breather Replacemer (Yes/No)	HT/LT Bushing (OK/ Replaced/ Repaired)	HT/LT Socket (OK/ Replaced/ Repaired)	HT jumper (OK/ Replaced/ Repaired)	LT Cable (OK/ Replaced/ Repaired)	LT Protection (ACB/MCCB/ Kit Kat FUSE)	Status - Protection Passi	Kit Kat Fuse Replaced	No. of LT	Hot Spot Rectification done (Yes/No)	Remarks by I/C
1												R- Y- B- N																
2												R- Y- B- N																
3												R- Y- B- N																
4												R- Y- B- N																
5												R- Y- B- N																

Business Associate Authorised Signatory (With Stamp) Section In Charge

Sub Divisional Manager

Divisional Manager TPCODL

TPCODL

TPCODL

#### Annexure-D

#### Pre-Monsoon Check List

	Pl	RE-MO	NSOO	N CHE	CKLIS	T - (Na	me of S	Sub Div	vision, I	Division	, Circle	2)			
	NAME OF FEEDER / SUBSTAT	ION													
	NAME OF SECTION :			Location 2	Location 3	Location 4	Location 5	Location 7	Location 8	Location 9	Location 10	Location 12			Total
	Date:			dd/mm/ yy	dd/mm/ yy										
	Description	Unit													
1	Tree trimming	nos													
2	Creeper removal	nos													
3	Replacement of cracked Pole	nos													
4	Straightning of Pole	nos													
5	Repair / Installation of stay insulator	nos													
6	Leakage Current Testing done	no.s													

Business Associate

Authorised Signatory (With Stamp)

Section In Charge TPCODL S/Div Manager

TPCODL

DIVISIONAL MANAGER TPCODL

## ANNEXURE-E

## Minimum Resource Deployment Division Wise (Manpower and Vehicle Requirement)

Cluster	Division	No. of Sub Division	No. of Section	No's of FCC	Supervisor	Lineman	Helper	Total Proposed Manpower
1	BCDD I	3	13	13	13	86	80	179
1	BCDD II	3	13	18	13	101	95	209
2	BED	2	12	18	12	96	92	200
2	NED	3	12	58	12	130	121	263
n	NyED	4	16	62	16	146	134	296
3	BaED	2	10	38	10	96	90	196
4	KHD	5	17	68	18	168	153	339
4	PED	4	18	56	17	141	129	287
5	CDD I	4	14	14	14	98	90	202
5	CED	4	12	70	12	140	128	280
6	CDD II	3	10	23	10	91	85	186
0	SED	3	10	59	10	129	120	259
7	AED	2	8	45	8	95	89	192
/	DED	4	16	78	16	172	160	348
0	TED	4	14	68	14	162	150	326
8	ANED	3	10	55	10	125	116	251
0	KED I	4	18	70	18	159	147	324
9	KED II	2	7	31	7	72	66	145
10	JED	3	9	47	9	104	95	208
10	PDP	3	8	51	8	109	100	217
То	tal	65	247	942	247	2420	2240	4907

## Minimum qualification & Requirement of Manpower

Designation	Minimum Educational Qualification	Work Experience
Section Engineer	Degree/Diploma in electrical	2 years of relevant post –qualification experience with valid
Section Engineer	engineering	supervisory license
	Diploma/ Degree in Engineering or	Minimum 3 Yrs. of relevant Post- Qualification Experience in
Safety Engineer	Diploma in Industrial Safety from	the field of electrical Safety.
	recognised institute	the field of electrical safety.
	ITI (Electrical Trade) or Qualification	Minimum 2 year Post Qualification experience in construction
Lineman	shall be as per CEA regulation Chapter 2	or maintenance of 33/11/0.415 kV system.
	clause 7.2	
Helper	Preferably 10 <sup>th</sup> Pass	Having basic knowledge of working in power distribution,
rielpei		ability to read and write and emphasis on safety

## <u>Vehicle</u>

		<b>Division Details</b>			Annual Re	quirement
Cluster	Division	No. of Sub	No's of Sections	No's of FCC	Total Nos	of Vehicle
Cluster	Division	Division	No s of Sections	NO S OFFCC	12 Hrs	24 Hrs
1	BCDD I	3	13	13	186	54
T	BCDD II	3	13	18	186	54
2	BED	2	12	18	164	36
Z	NED	3	12	58	174	54
3	NyED	4	16	62	232	72
	BaED	2	10	38	140	36
4	KHD	5	17	68	254	90
4	PED	4	18	56	256	72
_	CDD I	4	14	14	208	72
5	CED	4	12	70	184	72
<u> </u>	CDD II	3	10	23	150	54
6	SED	3	10	59	150	54
_	AED	2	8	45	116	36
7	DED	4	16	78	232	72
	TED	4	14	68	208	72
8	ANED	3	10	55	150	54
0	KED I	4	18	70	256	72
9	KED II	2	7	31	104	36
10	JED	3	9	47	138	54
10	PDP	3	8	51	126	54
	Total	65	247	942	3614	1170

Type of VehicleBolero Camper or similar vehicle with minimum seating capacity of 4+1 person along arrangement for carrying 1 no. FRP Ladder
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## ANNEXURE-F Asset details

## A. <u>11 kV Feeder</u>

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1	BBSR1	BCDD-1	SDO 1	Power House 2	СВІ	ОН	5
2	BBSR1	BCDD-1	SDO 1	Power House 1	RAJ BHAWAN	ОН	0.8
3	BBSR1	BCDD-1	SDO 1	Power House 2	UNIT 5	UG	1.5
4	BBSR1	BCDD-1	SDO 1	Power House 2	OERC	ОН	5.5
5	BBSR1	BCDD-1	SDO 1	BRIT	UNIT-8 DELTA	ОН	2
6	BBSR1	BCDD-1	SDO 1	UNIT 6	OUAT	MIX	6.5
7	BBSR1	BCDD-1	SDO 1	UNIT 6	A. NAGAR	UG	3
8	BBSR1	BCDD-1	SDO 1	Power House 2	G.B.NAGAR	ОН	7
9	BBSR1	BCDD-1	SDO 1	UNIT 6	TEL.BHAWAN	UG	2.4
10	BBSR1	BCDD-1	SDO 1	Power House 1	ASSEMBLY	MIX	1.5
11	BBSR1	BCDD-1	SDO 1	UNIT I	UNIT-1	MIX	3.7
12	BBSR1	BCDD-1	SDO 1	UNIT 6	MEDICAL	ОН	2.2
13	BBSR1	BCDD-1	SDO 1	UNIT I	FOREST PARK	MIX	6.5
14	BBSR1	BCDD-1	SDO 1	UNIT I	SPRING TANK	MIX	3
15	BBSR1	BCDD-1	SDO 1	UNIT I	BAPUJI NAGAR	MIX	7.8
16	BBSR1	BCDD-1	SDO 1	UNIT 6	UNIT-6	ОН	1.5
17	BBSR1	BCDD-1	SDO1	UNIT I	PALLASHAPALLI	MIX	5
18	BBSR1	BCDD-1	SDO1	UNIT I	AIRPORT	UG	1
19	BBSR1	BCDD-1	SDO1	UNIT 6	GANGANAGAR	MIX	5.5
20	BBSR1	BCDD-1	SDO 2	UNIT 4	BM RMU-5	MIX	2.3
21	BBSR1	BCDD-1	SDO 2	UNIT 4	BM RMU-6/MS NAGAR	MIX	3
22	BBSR1	BCDD-1	SDO 2	UNIT-3	RMU SM-5	UG	0.8
23	BBSR1	BCDD-1	SDO 2	UNIT-3	UNIT-3	ОН	2.8

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
24	BBSR1	BCDD-1	SDO 2	UNIT-3	UNIT-2	ОН	3
25	BBSR1	BCDD-1	SDO 2	UNIT-3	MAA GIRI DURGA/RAM MANDIR	ОН	3.7
26	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	SATYA NAGAR	ОН	5.8
27	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	PRESS FDR	ОН	6.5
28	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	TOSHALI PLAZA	ОН	1.8
29	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	RAHUL CO.	ОН	2.5
30	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	FEEDER-1	ОН	6
31	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	FEEDER-2	ОН	3.3
32	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	FEEDER-3	ОН	5
33	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	FEEDER-4	ОН	2.5
34	BBSR1	BCDD-1	SDO 3	UNIT9 FLAT	FLAT	ОН	2
35	BBSR1	BCDD-1	SDO 3	BOARD COLONY	BOARD COLONY/GRIDCO COLONY	MIX	3
36	BBSR1	BCDD-1	SDO 3	BOARD COLONY	SM RMU-1(Acharya Vihar)	MIX	5.5
37	BBSR1	BCDD-1	SDO 3	BOARD COLONY	BM RMU-1(Police Colony)	MIX	6
38	BBSR1	BCDD-1	SDO1	BRIT	SIRIPUR	ОН	5.5
39	BBSR1	BCDD-1	SDO1	DELTA	SATABDI NAGAR	ОН	9.5
40	BBSR1	BCDD-1	SDO1	BRIT	FIRE STATION	ОН	7
41	BBSR1	BCDD-1	SDO2	UNIT2	SUCHANA BHAWAN	MIX	3
42	BBSR1	BCDD-1	SDO2	UNIT2	ASHOK NAGAR	UG	4
43	BBSR1	BCDD-1	SDO2	UNIT2	MARKET BUILDING	MIX	3.5
44	BBSR1	BCDD-1	SDO2	UNIT2	JANAPATH	MIX	3
45	BBSR1	BCDD-1	SDO 3	UNIT9 FLAT	BM RMU-2	MIX	4
46	BBSR1	BCDD-1	SDO 3	UNIT9 FLAT	SM RMU-2	MIX	5

Sr.	Circle	Division	Sub-Division	Continu	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
47	BBSR1	BCDD-1	SDO 3	BOARD COLONY	JP RMU-36	MIX	2.5
48	BBSR1	BCDD-1	SDO 3	UNIT9 FLAT	JP RMU-37	MIX	2.5
49	BBSR1	BCDD-1	SDO 2	UNIT-3	JP RMU-41	UG	2
50	BBSR1	BCDD-1	SDO 2	UNIT 4	BM RMU-22	MIX	3.5
51	BBSR1	BCDD-1	SDO 2	UNIT 4	BM RMU-23	MIX	3
52	BBSR1	BCDD-1	SDO 2	UNIT 4	BM RMU-7	MIX	5
53	BBSR1	BCDD-1	SDO 2	UNIT 4	SM RMU-15	MIX	3
54	BBSR1	BCDD-1	SDO 2	UNIT 4	SM RMU-14	MIX	2.2
55	BBSR1	BCDD-1	SDO 1	UNIT 6	SM-RMU 7	MIX	2.2
56	BBSR1	BCDD-1	SDO 1	UNIT 6	SM-RMU-16	MIX	2
57	BBSR1	BCDD-1	SDO 1	UNIT 6	BM RMU-19	UG	2.7
58	BBSR1	BCDD-1	SDO 1	UNIT 6	SM-RMU 8	UG	2.5
59	BBSR1	BCDD-1	SDO 2	UNIT-3	RMU JP-42	MIX	4.5
60	BBSR1	BCDD-1	SDO 2	UNIT-3	RMU-SM-4	MIX	2.5
61	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	JP RMU-45	UG	3.2
62	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	JP RMU-03	MIX	3
63	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	JP RMU-40	MIX	3.8
64	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	JP RMU-13	UG	1.8
65	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	JP RMU- 35	UG	3
66	BBSR1	BCDD-1	SDO 3	UNIT9 ROAD	JP RMU-14	MIX	2.4
67	BBSR1	BCDD-1	SDO 3	SAHEEDNAGAR	JP RMU-02	MIX	3.5
68	BBSR1	BCDD-1	SDO2	UNIT I	SM RMU-19	UG	0.93
69	BBSR1	BCDD-1	SDO2	UNIT I	AIRPORT RMU-1	UG	0.03
70	BBSR1	BCDD-2	NAYAPALLI	BARAMUNDA	BARAMUNDA RE	ОН	6.82
71	BBSR1	BCDD-2	NAYAPALLI	BARAMUNDA	BARAMUNDA DELTA	ОН	6.12
72	BBSR1	BCDD-2	NAYAPALLI	BARAMUNDA	CRPF	ОН	6.08
73	BBSR1	BCDD-2	NAYAPALLI	BARAMUNDA	BARAMUNDA HB	ОН	5.8

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
74	BBSR1	BCDD-2	NAYAPALLI	BARAMUNDA	BARAMUNDA BDA	ОН	3.45
75	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	JAYDEV VIHAR	ОН	5.6
76	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	RENTAL	ОН	10
77	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	NALCO	ОН	4.5
78	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	IRC-2	ОН	4.9
79	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	IRC-3	ОН	9.42
80	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	IRC-1	ОН	6.6
81	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	IRC-4	ОН	5.16
82	BBSR1	BCDD-2	NAYAPALLI	XAVIER	STPI	ОН	0.82
83	BBSR1	BCDD-2	NAYAPALLI	XAVIER	GOPABANDHU	ОН	4.5
84	BBSR1	BCDD-2	NAYAPALLI	XAVIER	XAVIER NALCO	ОН	3.56
85	BBSR1	BCDD-2	NAYAPALLI	XAVIER	SOI	ОН	5.5
86	BBSR1	BCDD-2	NAYAPALLI	XAVIER	LIC	ОН	4.5
87	BBSR1	BCDD-2	NAYAPALLI	vss nagar	GAJAPATINAGAR	ОН	9.8
88	BBSR1	BCDD-2	NAYAPALLI	vss nagar	PRESS	ОН	5.14
89	BBSR1	BCDD-2	NAYAPALLI	vss nagar	VANIVIHAR	ОН	5.1
90	BBSR1	BCDD-2	NAYAPALLI	vss nagar	VSS NAGAR	ОН	6.5
91	BBSR1	BCDD-2	NAYAPALLI	vss nagar	SAINIK SCHOOL	ОН	8.5
92	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	CSPUR H B	ОН	6.19
93	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	SRI VIHAR	ОН	18
94	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	BDA	ОН	6
95	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	DIST CENTER	ОН	4
96	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	RMRC & KH	ОН	3.63
97	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	QUALITY CARE	ОН	4
98	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	HOUSING BOARD-1	ОН	7.3
99	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	HOUSING BOARD-2	ОН	9.06
100	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	HOUSING BOARD-3	ОН	9.15

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
101	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	CSPUR BDA -1	ОН	6
102	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	CSPUR BDA -2	ОН	4
103	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	CSPUR INDUSTRIAL	ОН	6
104	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	NAVAL	ОН	3.8
105	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	INFOCITY	ОН	3
106	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	BANK	ОН	6.76
107	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	NEW INDUSTRY-1	ОН	12
108	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	POLYMER COMPLEX	ОН	14
109	BBSR1	BCDD-2	PERIPHERI	BARANG	BARANGA-1	ОН	42
110	BBSR1	BCDD-2	PERIPHERI	BARANG	BARANGA-2	ОН	18
111	BBSR1	BCDD-2	PERIPHERI	BARANG	TRISULIA	ОН	12
112	BBSR1	BCDD-2	PERIPHERI	BARANG	ANDHARUA	ОН	12
113	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	K-9	ОН	7.5
114	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	DUMDUMA	ОН	12.81
115	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	KN RE	ОН	30.99
116	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	KN INDUSTRIAL	ОН	25.31
117	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	K-5	ОН	22
118	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	TAMANDO	ОН	7.7
119	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	VIPUL GARDEN	ОН	4.51
120	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	KHANDAGIRI	ОН	15.97
121	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	BHARATPUR BDA	ОН	8.8
122	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	SATELITE	ОН	14
123	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	PHD	ОН	11.47
124	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	BHARATPUR	ОН	37
125	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	SAMPUR	ОН	7.8
126	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	K-2	ОН	24
127	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	KIIT	ОН	15.2

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
128	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	KALARAHANGA	ОН	7.6
129	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	ΡΑΤΙΑ	ОН	15.5
130	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	РКВ	ОН	6.06
131	BBSR1	BCDD-2	KHANDAGIRI	KHANDAGIRI	KOLATHIA	ОН	26.67
132	BBSR1	BCDD-2	KHANDAGIRI	KHANDAGIRI	DHARMAVIHAR	ОН	5.4
133	BBSR1	BCDD-2	KHANDAGIRI	KHANDAGIRI	GANDMUNDA	ОН	11
134	BBSR1	BCDD-2	KHANDAGIRI	KHANDAGIRI	JAGAMOHAN NAGAR	ОН	8.4
135	BBSR1	BCDD-2	PERIPHERI	CSPUR-1	POKHARAN	ОН	2
136	BBSR1	BCDD-2	NAYAPALLI	vss nagar	UNIVERSITY-1	ОН	4.2
137	BBSR1	BCDD-2	NAYAPALLI	vss nagar	UNIVERSITY-2	ОН	3.5
138	BBSR1	BCDD-2	NAYAPALLI	vss nagar	INCOME TAX	ОН	5.5
139	BBSR1	BCDD-2	NAYAPALLI	vss nagar	LAXMI VIHAR	ОН	2.3
140	BBSR1	BCDD-2	NAYAPALLI	XAVIER	RRL	UG	0.13
141	BBSR1	BCDD-2	NAYAPALLI	XAVIER	IIT	ОН	4
142	BBSR1	BCDD-2	NAYAPALLI	XAVIER	PAL HEIGHT	ОН	5.4
143	BBSR1	BCDD-2	NAYAPALLI	NAYAPALLI	ESI	UG	0.5
144	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	SARAKANTARA	ОН	5
145	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	SIJUA	ОН	9.56
146	BBSR1	BCDD-2	KHANDAGIRI	DUMDUMA	HOUSING BOARD	ОН	8.53
147	BBSR1	BCDD-2	KHANDAGIRI	DUMDUMA	PANCHASAKHA NAGAR	ОН	12.89
148	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	IIIT	ОН	4
149	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	NUAGAON	ОН	19
150	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	PAIKRAYPUR	ОН	9
151	BBSR1	BCDD-2	KHANDAGIRI	BHARATPUR	GODIBARI	ОН	26
152	BBSR1	BCDD-2	PERIPHERI	GODISAHI	MADHUBAN	ОН	10
153	BBSR1	BCDD-2	PERIPHERI	GODISAHI	INDUSTRIAL	ОН	6
154	BBSR1	BCDD-2	PERIPHERI	GODISAHI	BIDYADHARPUIR	ОН	21

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
155	BBSR1	BCDD-2	PERIPHERI	GODISAHI	TALAGARH	ОН	10
156	BBSR1	BCDD-2	PERIPHERI	BARANG	PATHARGADIA	ОН	13
157	BBSR1	BCDD-2	PERIPHERI	BARANG	INDUSTRIAL- CHANDAKA	ОН	12
158	BBSR1	BCDD-2	PERIPHERI	BARANG	DASPUR & ANDHARUA	ОН	11
159	BBSR1	BCDD-2	PERIPHERI	BARANG	KUJIMAHAL	ОН	35
160	BBSR1	BCDD-2	KHANDAGIRI	KALINGA NAGAR	AIGINIA	ОН	11.47
161	BBSR1	BCDD-2	PERIPHERI	GODISAHI	NARANPUR	ОН	14
162	BBSR1	BCDD-2	PERIPHERI	GODISAHI	MADHUPUR	ОН	20
163	BBSR1	BCDD-2	PERIPHERI	GODISAHI	MUNDUMUHAN	ОН	8
164	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	NANDDANVIHAR	ОН	5.8
165	BBSR1	BCDD-2	PERIPHERI	KANAN VIHAR	SIKHAR CHANDI	ОН	11.8
166	BBSR1	BCDD-2	KHANDAGIRI	DUMDUMA	ASIAN PLAZA	ОН	2
167	BBSR1	BCDD-2	PERIPHERI	BARANG	TANGIBANTA	ОН	23
168	BBSR1	BCDD-2	PERIPHERI	BARANG	INJANA	ОН	6
169	BBSR1	BCDD-2	PERIPHERI	BARANG	PATIA STATION	ОН	1.5
170	BBSR1	BCDD-2	PERIPHERI	BARANG	DHAWA	ОН	7
171	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	VEGILENCE	ОН	2
172	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	AWHO	ОН	2.5
173	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	CENTRAL SCHOOL	ОН	2
174	BBSR1	BCDD-2	PERIPHERI	CSPUR-2	RAJVATIKA	ОН	8
175	BBSR1	BED	RASULGARH	RASULGARH	CR RMU 12	UG	2
176	BBSR1	BED	TEMPLE	UTTARA	JAISHPATNA	ОН	6.5
177	BBSR1	BED	TEMPLE	BADAGADA	RMU11	UG	2
178	BBSR1	BED	TEMPLE	UTTARA	PATSHANI PUR	ОН	20
179	BBSR1	BED	RASULGARH	MANCHESWAR	MANCHESWAR-1	ОН	3
180	BBSR1	BED	RASULGARH	MANCHESWAR	MANCHESWAR-2	ОН	4.8
181	BBSR1	BED	RASULGARH	MANCHESWAR	MANCHESWAR-3	ОН	7

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
182	BBSR1	BED	RASULGARH	MANCHESWAR	VSS NAGAR	ОН	7
183	BBSR1	BED	RASULGARH	RASULGARH	RASULGARH	ОН	17
184	BBSR1	BED	RASULGARH	RASULGARH	PURI ROAD	ОН	6
185	BBSR1	BED	RASULGARH	RASULGARH	KALPANA	ОН	6.5
186	BBSR1	BED	RASULGARH	RASULGARH	PRESS	ОН	2.5
187	BBSR1	BED	RASULGARH	PHULNAKHARA	NAHARKANTA	ОН	12
188	BBSR1	BED	RASULGARH	PHULNAKHARA	BALIANTA	ОН	35
189	BBSR1	BED	RASULGARH	PHULNAKHARA	ATALA	ОН	22
190	BBSR1	BED	RASULGARH	LAXMISAGAR	SBI	ОН	0.9
191	BBSR1	BED	RASULGARH	KALPANA-2	JHARAPADA	ОН	8.6
192	BBSR1	BED	RASULGARH	KALPANA-2	KALPANA-2	ОН	7.2
193	BBSR1	BED	RASULGARH	LAXMISAGAR	BOMIKHAL	ОН	3
194	BBSR1	BED	RASULGARH	LAXMISAGAR	LAXMISAGAR	ОН	14
195	BBSR1	BED	RASULGARH	LAXMISAGAR	KALPANA-1/RMU-14	UG	4
196	BBSR1	BED	TEMPLE	UTTARA	SARDEIPUR	ОН	7.6
197	BBSR1	BED	TEMPLE	UTTARA	KAUSHALYAGANGA	ОН	35
198	BBSR1	BED	TEMPLE	UTTARA	DHAULI	ОН	49
199	BBSR1	BED	TEMPLE	UTTARA	KEC	ОН	4.5
200	BBSR1	BED	TEMPLE	BADAGADA	BADAGADA LINGARAJ	ОН	6
201	BBSR1	BED	TEMPLE	BADAGADA	BRAHMESWAR	ОН	4
202	BBSR1	BED	TEMPLE	BADAGADA	MAUSIMA	ОН	2
203	BBSR1	BED	TEMPLE	BADAGADA	B.J.B NAGAR	ОН	5.2
204	BBSR1	BED	TEMPLE	BADAGADA	BADAGADA	ОН	4.2
205	BBSR1	BED	TEMPLE	BADAGADA	SAI	ОН	4
206	BBSR1	BED	TEMPLE	BADAGADA	RAJARANI	ОН	3.2
207	BBSR1	BED	TEMPLE	OT-1	BHUASUNI	ОН	4.55
208	BBSR1	BED	TEMPLE	OT-1	WATER WORKS	ОН	10.15

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
209	BBSR1	BED	TEMPLE	DHAULI	POKHARIPUT-1	ОН	14
210	BBSR1	BED	TEMPLE	DHAULI	LINGARAJ	ОН	4.5
211	BBSR1	BED	TEMPLE	DHAULI	BHIMATANGI	ОН	3
212	BBSR1	BED	TEMPLE	DHAULI	R.E JAMUKOLI	ОН	15
213	BBSR1	BED	RASULGARH	PHULNAKHARA	GOBINDPUR RE	ОН	30
214	BBSR1	BED	RASULGARH	PHULNAKHARA	PAHAL	ОН	32
215	BBSR1	BED	RASULGARH	PHULNAKHARA	TRINATH BAZAR	ОН	32
216	BBSR1	BED	RASULGARH	PHULNAKHARA	DPS	ОН	12
217	BBSR1	BED	RASULGARH	PHULNAKHARA	GANGESWAR	ОН	10
218	BBSR1	BED	RASULGARH	PHULNAKHARA	BHINGARPUR	ОН	28
219	BBSR1	BED	TEMPLE	OT-1	SISUPALGADA	ОН	6.2
220	BBSR1	BED	TEMPLE	OT-1	KUAKHAI	ОН	14.5
221	BBSR1	BED	TEMPLE	OT-1	CIFA	ОН	3.15
222	BBSR1	BED	TEMPLE	OT-1	GANGUA	ОН	6.25
223	BBSR1	BED	RASULGARH	KALPANA 1	KALPANA FLAT	ОН	13.5
224	BBSR1	BED	TEMPLE	OT3	MULAPADIA	ОН	2.02
225	BBSR1	BED	TEMPLE	OT3	KAPILESWAR	ОН	3.4
226	BBSR1	BED	RASULGARH	LAXMISAGAR	KESURA	UG	13
227	BBSR1	BED	TEMPLE	OT3	MAHAVIR COTTAGE	ОН	2.5
228	BBSR1	BED	RASULGARH	KALPANA-2	RMU-16	UG	2
229	BBSR1	BED	RASULGARH	KALPANA-2	LAXMISAGAR_RMU-15	UG	2
230	BBSR1	BED	RASULGARH	KALPANA-2	RMU-6A	UG	2
231	BBSR1	BED	RASULGARH	RASULGARH	PRACHI VIHAR	ОН	4.5
232	BBSR1	BED	RASULGARH	LAXMISAGAR	LAXMISAGAR_RMU-5	UG	2
233	BBSR1	BED	RASULGARH	RASULGARH	JAGANNATH NAGAR	ОН	7
234	BBSR1	BED	RASULGARH	RASULGARH	MANGRAJ POINT	ОН	2
235	BBSR1	BED	RASULGARH	RASULGARH	PANDRA VILLAGE	ОН	4

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
236	BBSR1	BED	RASULGARH	LAXMISAGAR	RMU 6	ОН	2
237	BBSR1	BED	RASULGARH	MANCHESWAR	RAJDHANI COLLEGE	ОН	1
238	BBSR1	BED	TEMPLE	OT3	RATHAROAD	UG	0.2
239	BBSR1	BED	TEMPLE	BADAGADA	GOUTAM NAGAR	ОН	4
240	BBSR1	BED	TEMPLE	DHAULI	PRADHANSAHI	ОН	7
241	BBSR1	BED	TEMPLE	DHAULI	PANCHAGAON	ОН	3
242	BBSR1	BED	TEMPLE	DHAULI	HI TECH OH	ОН	16
243	BBSR1	BED	TEMPLE	DHAULI	KALYANI PLAZA	ОН	8.5
244	BBSR1	BED	TEMPLE	UTTARA	LAXMINARAYANPUR	ОН	5.2
245	BBSR1	NED	PIPILI	PIPILI NO-1	OLD RAJAS	ОН	50
246	BBSR1	NED	PIPILI	PIPILI NO-1	BAZAR	ОН	100
247	BBSR1	NED	PIPILI	PIPILI NO-2	MANGALAPUR-1	ОН	120
248	BBSR1	NED	PIPILI	PIPILI NO-2	MANGALAPUR-2	ОН	110
249	BBSR1	NED	PIPILI	BALIPATNA	BANAMALIPUR	ОН	30
250	BBSR1	NED	PIPILI	BALIPATNA	BALIPATNA	ОН	80
251	BBSR1	NED	PIPILI	BALIPATNA	BUDHIPADA	ОН	130
252	BBSR1	NED	PIPILI	BALIPATNA	NARODA	ОН	85
253	BBSR1	NED	PIPILI	BALAKATI	SATYABHAMAPUR	ОН	60
254	BBSR1	NED	PIPILI	BALAKATI	BALAKATI	ОН	30
255	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	BASANT MALA	ОН	50
256	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	NIMAPARA GOP	ОН	70
257	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	CHARICHHAKA	ОН	40
258	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	OMFED	ОН	19
259	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	DANDIPUR	ОН	223
260	BBSR1	NED	KAKATPUR	ASTRANGA	JUINTY	ОН	96
261	BBSR1	NED	KAKATPUR	ASTRANGA	ASTARANG	ОН	76
262	BBSR1	NED	KAKATPUR	ASTRANGA	SUNDARA	ОН	15

Sr.	Sr. Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
263	BBSR1	NED	KAKATPUR	KAKATPUR NO-1	KAKATPUR-1	ОН	4
264	BBSR1	NED	KAKATPUR	KAKATPUR NO-1	KAKATPUR-2	ОН	89
265	BBSR1	NED	KAKATPUR	KAKATPUR NO-1	NILAKANTHAPUR	ОН	51
266	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Nayahat-2	ОН	61
267	BBSR1	NED	NIMAPADA	GOP	CHARISHREE	ОН	49
268	BBSR1	NED	NIMAPADA	GOP	DALANAI	ОН	42
269	BBSR1	NED	NIMAPADA	GOP	GOP	ОН	17
270	BBSR1	NED	NIMAPADA	GOP	NAGAPUR	ОН	49
271	BBSR1	NED	NIMAPADA	GOP	BEGUNIA	ОН	47
272	BBSR1	NED	NIMAPADA	GOP	PAYARA	ОН	70
273	BBSR1	NED	NIMAPADA	KONARK	KONARK O/H	ОН	25
274	BBSR1	NED	NIMAPADA	KONARK	BALI DOKAN	ОН	100
275	BBSR1	NED	NIMAPADA	KONARK	KONARK U/G	ОН	3
276	BBSR1	NED	NIMAPADA	KONARK	ANASARA	ОН	45
277	BBSR1	NED	NIMAPADA	KONARK	DASABATIA	ОН	120
278	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Tikarpada	ОН	90
279	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Bangurigaon	ОН	41
280	BBSR1	NED	PIPILI	BALIPATNA	BANAMALIPUR NEW	ОН	110
281	BBSR1	NED	PIPILI	BALIPATNA	BHANARA	ОН	20
282	BBSR1	NED	PIPILI	BALIPATNA	JAYDEV	ОН	40
283	BBSR1	NED	NIMAPADA	GOP	Mallagrama	ОН	24
284	BBSR1	NED	NIMAPADA	GOP	Madaranga	ОН	32
285	BBSR1	NED	NIMAPADA	GOP	Nagapur Bazar	ОН	8
286	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	VANTI	ОН	56
287	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	NUASANTHA	ОН	55
288	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	DAVAR	ОН	45
289	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Binispur	ОН	27

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
290	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Tulasipur	ОН	26
291	BBSR1	NED	KAKATPUR	KAKATPUR NO-2	Nayahat	ОН	46
292	BBSR1	NED	NIMAPADA	KONARK	SIRIPUR (KONARK)	ОН	35
293	BBSR1	NED	PIPILI	PIPILI NO-1	TRYACHUT NAGAR	ОН	12
294	BBSR1	NED	PIPILI	PIPILI NO-1	NEW RAJAS	ОН	25
295	BBSR1	NED	PIPILI	PIPILI NO-1	MUKUNDASPUR	ОН	31
296	BBSR1	NED	PIPILI	BALAKATI	VAINCHUA	ОН	35
297	BBSR1	NED	PIPILI	BHARATIPUR	SADANGOI	ОН	85
298	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	ABHYAMUKHI	ОН	28
299	BBSR1	NED	NIMAPADA	NIMAPADA NO-1	SAILO	ОН	50
300	BBSR1	NED	PIPILI	PIPILI NO-1	KHELAR BAZZAR	ОН	35
301	BBSR1	NED	PIPILI	PIPILI NO-1	CHINGUDIAKANTA	ОН	10
302	BBSR1	NED	KAKATPUR	ASTRANGA	PATALDA	ОН	62
303	BBSR1	NED	KAKATPUR	ASTRANGA	NUAGADA	ОН	30
304	BBSR1	NED	KAKATPUR	ASTRANGA	KANAMANA	ОН	38
305	BBSR1	NED	NIMAPADA	KONARK	ODAFFP	ОН	6
306	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	ALANDA	ОН	35
307	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	KALIAPADA	ОН	20
308	BBSR1	NED	NIMAPADA	NIMAPADA NO-2	DHANUA	ОН	25
309	BBSR1	NED	PIPILI	PIPILI NO-2	MANGALAPUR	ОН	55
310	BBSR1	NED	PIPILI	PIPILI NO-2	RAIGARAPUR	ОН	15
311	BBSR1	NED	PIPILI	PIPILI NO-2	BARAJUPATAN	ОН	15
312	BBSR1	NED	NIMAPADA	KONARK	BALIKAPILESWAR	ОН	15
313	BBSR2	NEYD	Nayagarh	Nayagarh	Nayagarh	ОН	30
314	BBSR2	NEYD	Nayagarh	Nayagarh	Similisahi	ОН	32
315	BBSR2	NEYD	Nayagarh	Nayagarh	Sinduria	ОН	14
316	BBSR2	NEYD	Nayagarh	Periphery	Barabati	ОН	70

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
317	BBSR2	NEYD	Nayagarh	Nayagarh	Medical	ОН	0.8
318	BBSR2	NEYD	Nayagarh	Sarankul-1	Darapada	ОН	55
319	BBSR2	NEYD	Nayagarh	Sarankul-1	Machipada	ОН	2
320	BBSR2	NEYD	Nayagarh	Sarankul-1	Sarankul	ОН	5
321	BBSR2	NEYD	Nayagarh	Sarankul-2	Panchrida	ОН	90
322	BBSR2	NEYD	Nayagarh	Sarankul-2	Godipada	ОН	85
323	BBSR2	NEYD	Nayagarh	Odagaon-2	Bahadajholla	ОН	110
324	BBSR2	NEYD	Nayagarh	Odagaon-1	Komanda	ОН	87
325	BBSR2	NEYD	Nayagarh	Odagaon-2	Nandighor	ОН	97
326	BBSR2	NEYD	Nayagarh	Odagaon-1	Odagaon-1	ОН	1
327	BBSR2	NEYD	Nayagarh	Odagaon-1	Odagaon-2	ОН	4
328	BBSR2	NEYD	Nayagarh	Odagaon-2	Ambarapur	ОН	26
329	BBSR2	NEYD	Itamati	Itamati-2	Champatipur	ОН	52
330	BBSR2	NEYD	Itamati	Itamati-2	Badapandusara	ОН	60
331	BBSR2	NEYD	Itamati	ltamati-1	Itamati	ОН	15
332	BBSR2	NEYD	Itamati	ltamati-1	Lathipada-1	ОН	40
333	BBSR2	NEYD	Itamati	ltamati-1	Lathipada-2	ОН	22
334	BBSR2	NEYD	Itamati	Bolagarh	Khanguria	ОН	30
335	BBSR2	NEYD	Itamati	Bolagarh	Shyamasundrpur	ОН	60
336	BBSR2	NEYD	Itamati	Bolagarh	Kapasia	ОН	22
337	BBSR2	NEYD	Itamati	Bolagarh	Bolagarh	ОН	15
338	BBSR2	NEYD	Nayagarh	Periphery	Mahipur	ОН	45
339	BBSR2	NEYD	Nayagarh	Periphery	Viruda	ОН	75
340	BBSR2	NEYD	Nayagarh	Periphery	Singarpalli-1	ОН	75
341	BBSR2	NEYD	Nayagarh	Periphery	Singarpalli-2	ОН	80
342	BBSR2	NEYD	Dasapalla	Nuagaon	Nuagaon	ОН	5
343	BBSR2	NEYD	Dasapalla	Nuagaon	Sampada	ОН	20

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
344	BBSR2	NEYD	Dasapalla	Dasapalla	Dasapalla	ОН	80
345	BBSR2	NEYD	Dasapalla	Dasapalla	Madhyakhanda	ОН	137
346	BBSR2	NEYD	Dasapalla	Nuagaon	Poibadi	ОН	187
347	BBSR2	NEYD	Khandapada	Khandapada	Khandapada	ОН	11
348	BBSR2	NEYD	Khandapada	Khandapada	Baigunia	ОН	63
349	BBSR2	NEYD	Khandapada	Khandapada	Panipoila	ОН	60
350	BBSR2	NEYD	Khandapada	Bhapur-2	Bijipur	ОН	65
351	BBSR2	NEYD	Khandapada	Bhapur-1	Bhapur	ОН	41
352	BBSR2	NEYD	Khandapada	Bhapur-1	Golapokhari	ОН	65
353	BBSR2	NEYD	Khandapada	Kantilo	Kantilo	ОН	32
354	BBSR2	NEYD	Khandapada	Kantilo	Banapur	ОН	17
355	BBSR2	NEYD	Khandapada	Kantilo	Benagadia	ОН	113
356	BBSR2	NEYD	Dasapalla	Gania	Gania	ОН	106
357	BBSR2	NEYD	Dasapalla	Gania	Koska	ОН	108
358	BBSR2	NEYD	Dasapalla	Gania	Balaram Prasad	ОН	32
359	BBSR2	NEYD	Nayagarh	Odagaon-1	Kural	ОН	18
360	BBSR2	NEYD	Nayagarh	Odagaon-1	Sunamuhin	ОН	60
361	BBSR2	NEYD	Nayagarh	Sarankul-1	Machhipada Bazar	ОН	3
362	BBSR2	NEYD	Nayagarh	Sarankul-1	Kalyanpur	ОН	52
363	BBSR2	NEYD	Nayagarh	Sarankul-1	Pallisasan	ОН	24
364	BBSR2	NEYD	Nayagarh	Sarankul-1	Lenkudipada	ОН	23
365	BBSR2	NEYD	Nayagarh	Sarankul-2	Godipada Bazar	ОН	8
366	BBSR2	NEYD	Nayagarh	Sarankul-2	Damasahi	ОН	44
367	BBSR2	NEYD	Nayagarh	Sarankul-2	Nagamunduli	ОН	35
368	BBSR2	NEYD	Nayagarh	Sarankul-2	Kespania	ОН	45
369	BBSR2	NEYD	Dasapalla	Dasapalla	Kuanria	ОН	271
370	BBSR2	NEYD	Dasapalla	Nuagaon	Mahitama	ОН	110

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
371	BBSR2	NEYD	Dasapalla	Nuagaon	Khamarsahi	ОН	55
372	BBSR2	NEYD	Khandapada	Bhapur-2	Marada	ОН	26
373	BBSR2	NEYD	Khandapada	Bhapur-2	Fategarh	ОН	8
374	BBSR2	NEYD	Dasapalla	Gania	Chamundia	ОН	15
375	BBSR2	NEYD	Nayagarh	Periphery	Nuapalli	ОН	15
376	BBSR2	NEYD	Nayagarh	Odagaon-2	Bahadajholla New	ОН	120
377	BBSR2	NEYD	Khandapada	Khandapada	PHD Khandapada	ОН	3
378	BBSR2	NEYD	Khandapada	Kantilo	PHD Kantilo	ОН	3
379	BBSR2	NEYD	Dasapalla	Gania	Iswarpur	ОН	15
380	BBSR2	NEYD	Khandapada	Kantilo	Khalisahi	ОН	21
381	BBSR2	NEYD	Itamati	Bolagarh	Dibyasingpur	ОН	4.05
382	BBSR2	NEYD	Khandapada	Bhapur-1	Badasahara	ОН	29
383	BBSR2	NEYD	Nayagarh	Sarankul-1	Sikharapur	ОН	8
384	BBSR2	NEYD	Itamati	ltamati-1	Lathipada	ОН	40
385	BBSR2	PED	SDO-II	BRAHMAGIRI-2	ALARNATH	ОН	20
386	BBSR2	PED	SDO-IV	SATASANKHA	BALANGA	ОН	76
387	BBSR2	PED	SDO-I	BALIAPANDA	KACHERI	ОН	4.5
388	BBSR2	PED	SDO-I	BALIAPANDA	BALIAPANDA SRIMANDIR U/G	MIX	6
389	BBSR2	PED	SDO-III	TALABANIA	BALIGUALI	ОН	32
390	BBSR2	PED	SDO-II	BRAHMAGIRI-1	BASUDEIPUR	ОН	80
391	BBSR2	PED	SDO-IV	SAKHIGOPAL-1	BAZAR-1	ОН	37.4
392	BBSR2	PED	SDO-III	CHARINALA	BIJAYAMARINE	ОН	1.5
393	BBSR2	PED	SDO-IV	CHANDANPUR	BALABHADRAPUR	ОН	14
394	BBSR2	PED	SDO-IV	CHANDANPUR	BIRANARASINGHPUR	ОН	110
395	BBSR2	PED	SDO-II	SUNAMUHIN	BRAHMAGIRI	ОН	29.25
396	BBSR2	PED	SDO-II	BRAHMAGIRI-2	BRAHMAGIRI-2	ОН	40

Sr.	Sr. Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	300-010131011	Section	Feeder	OH/UG/Mix	Length (km)
397	BBSR2	PED	SDO-IV	CHANDANPUR	CHANDANPUR	ОН	72
398	BBSR2	PED	SDO-III	CHARINALA	KHANDIABANDHA	ОН	30
399	BBSR2	PED	SDO-II	DELANGA	DELANGA	ОН	113
400	BBSR2	PED	SDO-I	KACHERI	DOLAMANDAP	ОН	2.5
401	BBSR2	PED	SDO-I	KACHERI	DUTTATOTA	MIX	7.5
402	BBSR2	PED	SDO-IV	SAKHIGOPAL-1	EXPRESS	ОН	170
403	BBSR2	PED	SDO-II	DELANGA	GHORADIA	ОН	95
404	BBSR2	PED	SDO-III	POWER HOUSE	GUNDICHA	ОН	8.26
405	BBSR2	PED	SDO-II	BRAHMAGIRI-1	HANTUKA	ОН	4.95
406	BBSR2	PED	SDO-III	CHARINALA	HAREKRUSHNAPUR	MIX	32
407	BBSR2	PED	SDO-III	TALABANIA	HOSPITAL U/G	UG	2.45
408	BBSR2	PED	SDO-II	KANASA	JAGANNATHPUR	ОН	77.5
409	BBSR2	PED	SDO-III	TALABANIA	KACHERI	ОН	5.38
410	BBSR2	PED	SDO-I	KACHERI	MANDIRA U/G	UG	1.16
411	BBSR2	PED	SDO-II	KANASA	KANASA	ОН	33.3
412	BBSR2	PED	SDO-II	BRAHMAGIRI-2	KAPILESWARPUR	ОН	10.2
413	BBSR2	PED	SDO-II	KANASA	KARAMALA	ОН	112.32
414	BBSR2	PED	SDO-II	BRAHMAGIRI-2	KHAJURIA	ОН	15
415	BBSR2	PED	SDO-III	POWER HOUSE	KHANDIABANDHA	ОН	30
416	BBSR2	PED	SDO-IV	SATASANKHA	KUMARESWAR	ОН	2
417	BBSR2	PED	SDO-I	BALIAPANDA	LOKANATHA	ОН	10.5
418	BBSR2	PED	SDO-III	POWER HOUSE	MAKUBANA	ОН	1.75
419	BBSR2	PED	SDO-III	TALABANIA	MAUSIMA U/G	MIX	8.93
420	BBSR2	PED	SDO-III	CHARINALA	MM NAGAR	MIX	1.7
421	BBSR2	PED	SDO-II	SUNAMUHIN	MODIRATH	ОН	10.87
422	BBSR2	PED	SDO-II	BRAHMAGIRI-2	PALANKA	ОН	50
423	BBSR2	PED	SDO-I	BALIAPANDA	PHD	ОН	0.2

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
424	BBSR2	PED	SDO-III	TALABANIA	PKRIT	ОН	46.74
425	BBSR2	PED	SDO-I	BALIAPANDA	PRACHI OH	MIX	14.5
426	BBSR2	PED	SDO-I	BALIAPANDA	PRACHI U/G	UG	3.5
427	BBSR2	PED	SDO-III	TALABANIA	RAJBHABAN OH	MIX	2.15
428	BBSR2	PED	SDO-III	TALABANIA	RAJBHABAN U/G	UG	13.3
429	BBSR2	PED	SDO-IV	SAKHIGOPAL-1	SARANGAJODI	ОН	90
430	BBSR2	PED	SDO-II	SUNAMUHIN	SATAPADA	ОН	68.03
431	BBSR2	PED	SDO-IV	SAKHIGOPAL-1	SATASANKHA	ОН	56
432	BBSR2	PED	SDO-I	KACHERI	SEABEACH U/G	UG	1.9
433	BBSR2	PED	SDO-III	TALABANIA	SHREE GUNDICHA	ОН	8.27
434	BBSR2	PED	SDO-III	TALABANIA	SRI MANDIRA	ОН	1.5
435	BBSR2	PED	SDO-III	TALABANIA	SRI MANDIRA U/G	MIX	14.66
436	BBSR2	PED	SDO-I	KACHERI	SWARGADWAR-1	MIX	1.5
437	BBSR2	PED	SDO-I	KACHERI	SWARGADWAR-2	ОН	1.5
438	BBSR2	PED	SDO-II	BRAHMAGIRI-2	TALAMALA	ОН	25
439	BBSR2	PED	SDO-III	TALABANIA	TOSHALI	ОН	32
440	BBSR2	PED	SDO-III	TALABANIA	WATERWORKS	MIX	8.32
441	BBSR2	PED	SDO-II	DELANGA	MAA GELABAI	ОН	30
442	BBSR2	PED	SDO-IV	SAKHIGOPAL-1	GABAKUNDA	ОН	65
443	BBSR2	PED	SDO-II	DELANGA	RENGALA	ОН	28
444	BBSR2	PED	SDO-II	BRAHMAGIRI-2	BASUDEBPUR	ОН	20
445	BBSR2	PED	SDO-II	BRAHMAGIRI-1	KOILAGADA	ОН	33
446	BBSR2	PED	SDO-II	BRAHMAGIRI-2	REBENA	ОН	8
447	BBSR2	PED	SDO-IV	CHANDANPUR	BALIPUT	ОН	50
448	BBSR2	PED	SDO-IV	CHANDANPUR	CHALICEBATIA	ОН	18
449	BBSR2	PED	SDO-II	SUNAMUHIN	PANASAPADA	ОН	40
450	BBSR2	PED	SDO-II	SUNAMUHIN	NEW SATAPADA	ОН	35

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	CITCLE	DIVISION	300-019151011	Section	Feeder	OH/UG/Mix	Length (km)
451	BBSR2	PED	SDO-II	DELANGA	KALYANPUR	ОН	40
452	BBSR2	PED	SDO-II	DELANGA	CHANDAL	ОН	20
453	BBSR2	PED	SDO-I	BALIAPANDA	MANAGALAGHAT	ОН	6
454	BBSR2	BAED	BALUGAON	BALUGAON NO-I	BALUGAON	ОН	48
455	BBSR2	BAED	BALUGAON	BALUGAON NO-I	SINGHESWAR	ОН	47
456	BBSR2	BAED	BALUGAON	BALUGAON NO-I	BANPUR-1	ОН	96
457	BBSR2	BAED	BALUGAON	BALUGAON NO-I	BANPUR-2	ОН	126
458	BBSR2	BAED	BALUGAON	BANPUR NO-II	TOWN	ОН	85
459	BBSR2	BAED	BALUGAON	BANPUR NO-II	NILADRI	ОН	102
460	BBSR2	BAED	BALUGAON	NACHUNI	GAMBHARIMUND	ОН	45
461	BBSR2	BAED	BALUGAON	NACHUNI	NAIRI	ОН	19
462	BBSR2	BAED	BALUGAON	NACHUNI	KAITHAPALLA	ОН	31
463	BBSR2	BAED	TANGI	TANGI	BADAPARI	ОН	84
464	BBSR2	BAED	TANGI	TANGI	CHANDPUR/BHUSANDAPUR	ОН	34
465	BBSR2	BAED	TANGI	TANGI	KALUPADA	ОН	52
466	BBSR2	BAED	TANGI	KUHUDI	KUHUDI	ОН	15
467	BBSR2	BAED	TANGI	KUHUDI	CHANDESWAR	ОН	48
468	BBSR2	BAED	TANGI	CHANDPUR	KAMAGURU	ОН	67
469	BBSR2	BAED	TANGI	TANGI	CHANDAPUR	ОН	22
470	BBSR2	BAED	TANGI	CHANDPUR	RAIPADA	ОН	27
471	BBSR2	BAED	TANGI	CHANDPUR	MAYURJHULLIA	ОН	23
472	BBSR2	BAED	TANGI	CHANDPUR	NATIMI	ОН	14
473	BBSR2	BAED	TANGI	CHANDPUR	MHATPALLA	ОН	62
474	BBSR2	BAED	TANGI	RANPUR	GOURANGAPUR	ОН	59
475	BBSR2	BAED	TANGI	RANPUR	DARPANARAYANPUR	ОН	26
476	BBSR2	BAED	TANGI	RANPUR	RANAPUR	ОН	36
477	BBSR2	BAED	TANGI	RANPUR	GOPALPUR	ОН	145

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	<b>300-DIVISION</b>	Section	Feeder	OH/UG/Mix	Length (km)
478	BBSR2	BAED	TANGI	RANPUR	RE	ОН	120
479	BBSR2	BAED	TANGI	RANPUR	HANSARA	ОН	29
480	BBSR2	BAED	TANGI	BHUSHANDPUR	BHUSANDAPUR	ОН	40
481	BBSR2	BAED	TANGI	BHUSHANDPUR	HARIPUR	ОН	17
482	BBSR2	BAED	BALUGAON	BANPUR NO-II	PANCHUGAON	ОН	69
483	BBSR2	BAED	BALUGAON	NACHUNI	HATABARADI	ОН	45
484	BBSR2	BAED	BALUGAON	NACHUNI	BAULABANDHA	ОН	43
485	BBSR2	BAED	BALUGAON	BALUGAON NO-I	SUBUDHIPATNA	ОН	10
486	Cuttack	CDD-1	RANIHAT	CANTONMENT	SRI VIHAR-1	UG	0.2
487	Cuttack	CDD-1	RANIHAT	BUXIBAZAR	CIRCUIT HOUSE	ОН	0.3
488	Cuttack	CDD-1	RANIHAT	BUXIBAZAR	CB9	ОН	4.3
489	Cuttack	CDD-1	RANIHAT	BUXIBAZAR	MUSEUM	ОН	0.7
490	Cuttack	CDD-1	RANIHAT	BUXIBAZAR	BUXI BAZAR	ОН	3.9
491	Cuttack	CDD-1	RANIHAT	RANIHAT-1	TELEPHONE BHAWAN	ОН	2.5
492	Cuttack	CDD-1	RANIHAT	RANIHAT-1	RANIHAT	ОН	2.9
493	Cuttack	CDD-1	RANIHAT	RANIHAT-2	MEDICAL-2	ОН	2
494	Cuttack	CDD-1	RANIHAT	RANIHAT-2	MANGALABAG	ОН	4.5
495	Cuttack	CDD-1	RANIHAT	RANIHAT-2	MEDICAL-1	ОН	4.09
496	Cuttack	CDD-1	RANIHAT	RANIHAT-2	ENGG, SCHOOL	ОН	1.5
497	Cuttack	CDD-1	RANIHAT	COLLEGE SQUARE	BARRAGE	ОН	2.1
498	Cuttack	CDD-1	RANIHAT	COLLEGE SQUARE	REVENSHAW	ОН	2.5
499	Cuttack	CDD-1	RANIHAT	RANIHAT-2	ΜΑΤΑΜΑΤΗΑ	ОН	2
500	Cuttack	CDD-1	RANIHAT	COLLEGE SQUARE	RAILWAY	ОН	2.3
501	Cuttack	CDD-1	CDA	CDA-VI	SATICHAURA	ОН	1.5
502	Cuttack	CDD-1	CDA	BIDANASI	CDA	ОН	6.5
503	Cuttack	CDD-1	CDA	BIDANASI	NARAJ	ОН	8
504	Cuttack	CDD-1	CDA	BIDANASI	TULASIPUR-1	ОН	3

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
505	Cuttack	CDD-1	SISHUBHAWAN	GANESHGHAT	GANESHGHAT	ОН	5
506	Cuttack	CDD-1	SISHUBHAWAN	KAZIBAZAR	KAZIBAZAR	ОН	3.5
507	Cuttack	CDD-1	SISHUBHAWAN	GANESHGHAT	JUDGE COURT	ОН	2
508	Cuttack	CDD-1	SISHUBHAWAN	GANESHGHAT	TREASURY	UG	0.5
509	Cuttack	CDD-1	CDA	TULASIPUR	TULASIPUR-2	ОН	6.8
510	Cuttack	CDD-1	CDA	CDA-VI	EYE HOSPITAL	ОН	4.3
511	Cuttack	CDD-1	CDA	BIDANASI	NATIONAL LAW UNIVERSITY-1	MIX	3
512	Cuttack	CDD-1	CDA	BIDANASI	SECTOR-13	ОН	6
513	Cuttack	CDD-1	KALINGA	CANTONMENT	CHANDIMANDIR OH+CHANDIMANDIR UG	MIX	2.5
514	Cuttack	CDD-1	SISHUBHAWAN	CITY	HATIPOKHARI(TKB)	ОН	1.7
515	Cuttack	CDD-1	KALINGA	CANTONMENT	LOWER GROUND	UG	2.3
516	Cuttack	CDD-1	CDA	BIDANASI	BIDANASI-1	ОН	5
517	Cuttack	CDD-1	CDA	BIDANASI	BIDANASI-2	ОН	4
518	Cuttack	CDD-1	CDA	CDA-VI	JICA	UG	1.9
519	Cuttack	CED	CHOUDWAR	CHOUDWAR	BANIPADA	ОН	13.6
520	Cuttack	CED	CHOUDWAR	CHOUDWAR	INDUSTRIAL-IDCO	ОН	17.6
521	Cuttack	CED	CHOUDWAR	CHOUDWAR	KUSPANGI	ОН	18.3
522	Cuttack	CED	BADACHANA	BADACHANA	CHANDIKHOL	ОН	23.2
523	Cuttack	CED	BADACHANA	BADACHANA	DEULAPUR	ОН	5.3
524	Cuttack	CED	BADACHANA	BADACHANA	BALICHANDRAPUR	ОН	85.9
525	Cuttack	CED	BADACHANA	BADACHANA	BADACHANA	ОН	28
526	Cuttack	CED	BADACHANA	BADACHANA	SAKUNTALAPUR	ОН	41.1
527	Cuttack	CED	BADACHANA	CHHATIA	CHAMPAPUR	ОН	46.2
528	Cuttack	CED	BADACHANA	CHHATIA	BAIREE	ОН	13
529	Cuttack	CED	BADACHANA	CHHATIA	KADAI	ОН	21

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
530	Cuttack	CED	BADACHANA	CHHATIA	BANDALA	ОН	15.1
531	Cuttack	CED	BADACHANA	CHHATIA	CHHATIA	ОН	19.7
532	Cuttack	CED	CHOUDWAR	CHOUDWAR	CHOUDWAR	ОН	5.1
533	Cuttack	CED	CHOUDWAR	CHOUDWAR	CITY BARRAGE	ОН	17.2
534	Cuttack	CED	CHOUDWAR	CHOUDWAR	OTM	ОН	30.5
535	Cuttack	CED	CHOUDWAR	CHOUDWAR	LOCAL	ОН	10
536	Cuttack	CED	CHOUDWAR	CHOUDWAR	ARC	ОН	16.8
537	Cuttack	CED	CHOUDWAR	TANGI	BHATIMUNDA	ОН	63.1
538	Cuttack	CED	CHOUDWAR	TANGI	HARIPUR-1	ОН	172.5
539	Cuttack	CED	CHOUDWAR	TANGI	MANGULI	ОН	61
540	Cuttack	CED	CHOUDWAR	TANGI	NH5	ОН	28.6
541	Cuttack	CED	CHOUDWAR	TANGI	TANGI-Local	ОН	31.9
542	Cuttack	CED	GOPALPUR	GOBINDPUR	SUNDARGAON	ОН	69.2
543	Cuttack	CED	GOPALPUR	GOBINDPUR	NIRTAR	ОН	4.5
544	Cuttack	CED	GOPALPUR	GOBINDPUR	GOBINDPUR-1	ОН	36.2
545	Cuttack	CED	GOPALPUR	ADASPUR	NODA DIMIRI/SITHALO	ОН	4.1
546	Cuttack	CED	GOPALPUR	ADASPUR	UTARANA/ERANCHA	ОН	42.3
547	Cuttack	CED	GOPALPUR	ADASPUR	ADASPUR & UN COLL	ОН	68.1
548	Cuttack	CED	NIALI	NIALI-1	KAPASI(Jallarpur)	ОН	18
549	Cuttack	CED	NIALI	NIALI-1	BILASUNI (TOLA)	ОН	57.6
550	Cuttack	CED	NIALI	NIALI-1	NIALI TOWN	ОН	30
551	Cuttack	CED	NIALI	NIALI-1	KALIAGHAI	ОН	67.4
552	Cuttack	CED	BADACHANA	BALICHANDRAPUR	CHARINANGALA	ОН	46.4
553	Cuttack	CED	BADACHANA	BALICHANDRAPUR	RUKUTIPATA	ОН	20.6
554	Cuttack	CED	BADACHANA	BALICHANDRAPUR	BALICHADRAPUR	ОН	16.6
555	Cuttack	CED	BADACHANA	BALICHANDRAPUR	MANITRI	ОН	24
556	Cuttack	CED	BADACHANA	BALICHANDRAPUR	BANDARESWARA	ОН	44.2

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
557	Cuttack	CED	GOPALPUR	BALIKUDA	BARANGA	ОН	75
558	Cuttack	CED	GOPALPUR	BALIKUDA	42 MOUZA	ОН	45
559	Cuttack	CED	GOPALPUR	BALIKUDA	UTTAMPUR	ОН	18
560	Cuttack	CED	NIALI	DIMIRI	ERANCHA	ОН	103
561	Cuttack	CED	NIALI	DIMIRI	KASARDA	ОН	54
562	Cuttack	CED	NIALI	DIMIRI	KULASHREE	ОН	28
563	Cuttack	CED	NIALI	DIMIRI	SITHALO	ОН	80
564	Cuttack	CED	CHOUDWAR	CHARBATIA	SANKARPUR	ОН	16.6
565	Cuttack	CED	CHOUDWAR	CHARBATIA	BERHAMPUR	ОН	35.9
566	Cuttack	CED	CHOUDWAR	CHARBATIA	MANGARAJPUR	ОН	50.2
567	Cuttack	CED	GOPALPUR	GOBINDPUR	NAHALPUR	ОН	26
568	Cuttack	CED	GOPALPUR	GOBINDPUR	GOBINDPUR-II	ОН	30.6
569	Cuttack	CED	GOPALPUR	GOBINDPUR	KHALARDA	ОН	30
570	Cuttack	CED	CHOUDWAR	CHOUDWAR	NUNTIKIRI	ОН	28
571	Cuttack	CED	BADACHANA	CHHATIA	SALAPADA	ОН	37
572	Cuttack	CED	BADACHANA	CHHATIA	SIHA	ОН	30
573	Cuttack	CED	BADACHANA	CHHATIA	THENGAD	ОН	29
574	Cuttack	CED	BADACHANA	СННАТІА	KAIMATIA LOCAL	ОН	7
575	Cuttack	CED	NIALI	NIALI-2	PODANA	ОН	53.3
576	Cuttack	CED	NIALI	NIALI-2	PANIMALA	ОН	54.6
577	Cuttack	CED	NIALI	NIALI-2	ARAKATA	ОН	40
578	Cuttack	CED	CHOUDWAR	CHOUDWAR	KALINGA-CHARBATIA	ОН	25.6
579	Cuttack	CED	BADACHANA	BADACHANA	KADAMPAL	ОН	35
580	Cuttack	CED	BADACHANA	BADACHANA	KULAHARIPUR	ОН	2
581	Cuttack	CED	BADACHANA	BADACHANA	KUNDAL	ОН	1
582	Cuttack	CED	BADACHANA	BADACHANA	BHAKUDA	ОН	15
583	Cuttack	CED	GOPALPUR	GOBINDPUR	KANTAPADA	ОН	30

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	305-019131011	Section	Feeder	OH/UG/Mix	Length (km)
584	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	GOSALA	ОН	2.3
585	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	Badambadi-Kalyaninagar UG	UG	4
586	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	OGP-Badambadi UG	ОН	3.2
587	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	OGP-Kalyaninagar UG	UG	2.2
588	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	Haripur UG	UG	3.3
589	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	Mahatab road ug	ОН	4.54
590	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	PHD	ОН	0.27
591	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	KALYANINAGAR-OGP UG	UG	1.2
592	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	KALYANINAGAR- BADAMBADI UG	UG	1.1
593	Cuttack	CDD-2	BADAMBADI	BADAMBADI	Badambadi-OGP UG	UG	3.2
594	Cuttack	AED	NARSINGPUR	BADAMBA	RATTAPATA 2	ОН	52
595	Cuttack	AED	ATHGARH	KHUNTUNI	NEW MEGHA	ОН	46
596	Cuttack	AED	NARSINGPUR	BADAMBA	GOPAPUR LOCAL	ОН	13
597	Cuttack	AED	NARSINGPUR	BADAMBA	BHATTARIKA	ОН	45
598	Cuttack	AED	Athagarh	ATHAGARH NO 2	SUBARNPUR	ОН	21
599	Cuttack	SED	SALIPUR	BAHUGRAM	NANDOL	ОН	11
600	Cuttack	SED	SALIPUR	BAHUGRAM	BAHUGRAM GOPINATHPUR	ОН	25
601	Cuttack	SED	SALIPUR	BAHUGRAM	PATPUR	ОН	24
602	Cuttack	SED	SALIPUR	BAHUGRAM	PADMAPUR	ОН	44
603	Cuttack	SED	SALIPUR	SALIPUR	RAISUNGUDA	ОН	25
604	Cuttack	SED	SALIPUR	SALIPUR	NAIGUAN	ОН	40
605	Cuttack	SED	NISCHINTAKOILI	NISCHINTAKOILI	NISCHINTAKOILI BAZAR	ОН	4.8
606	Cuttack	SED	NISCHINTAKOILI	NISCHINTAKOILI	KHANDASAHI	ОН	10
607	Cuttack	SED	NISCHINTAKOILI	NISCHINTAKOILI	UMARA	ОН	32

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
608	Cuttack	SED	NISCHINTAKOILI	NISCHINTAKOILI	RAMAKRUSNAPUR	ОН	20
609	Cuttack	SED	NISCHINTAKOILI	NISCHINTAKOILI	BUHALA	ОН	6
610	Cuttack	SED	NISCHINTAKOILI	ORIKANTA	GOPINATHPUR	ОН	80
611	Cuttack	SED	NISCHINTAKOILI	ORIKANTA	BILAHATA	ОН	65
612	Cuttack	SED	NISCHINTAKOILI	ORIKANTA	SOGAL	ОН	35
613	Cuttack	SED	MAHANGA	MAHANGA	KUANPALA	ОН	75
614	Cuttack	SED	MAHANGA	MAHANGA	CHAYANPAL	ОН	46
615	Cuttack	SED	MAHANGA	MAHANGA	MAHANGA	ОН	41
616	Cuttack	SED	MAHANGA	KOTAPADA	JAIPUR/KOTAPADA	ОН	40
617	Cuttack	SED	MAHANGA	KOTAPADA	BASUDEVPUR	ОН	42
618	Cuttack	SED	MAHANGA	KOTAPADA	MULABASANTA	ОН	28
619	Cuttack	SED	MAHANGA	ERAKANA	L.N.PUR	ОН	35
620	Cuttack	SED	MAHANGA	ERAKANA	KURUJANGA	ОН	30
621	Cuttack	SED	SALIPUR	RAISUNGUDA	DHARMAGATPUR	ОН	30
622	Cuttack	SED	SALIPUR	RAISUNGUDA	MANOHARPUR	ОН	36
623	Cuttack	SED	SALIPUR	RAISUNGUDA	RAISUNGUDA BAZAR	ОН	5
624	Cuttack	SED	SALIPUR	JAPAKUDA/SALIPUR 2	MALA-MOUDA	ОН	35
625	Cuttack	SED	SALIPUR	JAPAKUDA/SALIPUR 2	RAMESWAR-SOURI	ОН	42
626	Cuttack	SED	SALIPUR	JAPAKUDA/SALIPUR 2	JAPAKUDA	ОН	18
627	Cuttack	SED	SALIPUR	JAPAKUDA/SALIPUR 2	BHIMDASPUR	ОН	35
628	Cuttack	SED	SALIPUR	BAHUGRAM	ICHAPUR	ОН	18
629	Cuttack	SED	SALIPUR	ERAKANA	GOUDAGOPA	ОН	15
630	Cuttack	SED	SALIPUR	SALIPUR	MEDICAL	ОН	6

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
631	Cuttack	SED	SALIPUR	SALIPUR	CHHANIPUR	ОН	25
632	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	GOVINDPUR	ОН	95
633	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	JORANDA	ОН	40
634	Dhenkanal	DED	DHENKANAL	DHENKANAL-1	DKL TOWN-1	ОН	20
635	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	DKL TOWN-2	ОН	25
636	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	SAPTASAJYA	ОН	35
637	Dhenkanal	DED	DHENKANAL	DHENKANAL-1	DEULASAHI	ОН	12
638	Dhenkanal	DED	DHENKANAL	DHENKANAL-1	SASAN-1	ОН	15
639	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	KANTANALI	ОН	10
640	Dhenkanal	DED	DHENKANAL	DHENKANAL-3	SIMINAI	ОН	65.2
641	Dhenkanal	DED	DHENKANAL	DHENKANAL-3	G. BHAPUR	ОН	70
642	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	CALTAX	ОН	19
643	Dhenkanal	DED	DHENKANAL	DHENKANAL-3	PHD-3	ОН	54.8
644	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	INDUSTRIAL	ОН	7
645	Dhenkanal	DED	DHENKANAL	BHAPUR	LAMBODHARPUR	ОН	15
646	Dhenkanal	DED	DHENKANAL	BHAPUR	BHAPUR-1	ОН	83

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
647	Dhenkanal	DED	DHENKANAL	BHAPUR	GHATIPIRI	ОН	130
648	Dhenkanal	DED	HINDOL ROAD	HINDOL ROAD	H.ROAD BAZAR	ОН	15.6
649	Dhenkanal	DED	HINDOL ROAD	HINDOL ROAD	FOUR POLE	ОН	82.4
650	Dhenkanal	DED	HINDOL ROAD	HINDOL ROAD	NIMIDHA	ОН	56.5
651	Dhenkanal	DED	HINDOL ROAD	HINDOL ROAD	BADALO	ОН	95
652	Dhenkanal	DED	HINDOL ROAD	KHAJURIAKATA	BEDAPADA	ОН	131
653	Dhenkanal	DED	HINDOL ROAD	KHAJURIAKATA	KALINGA	ОН	36
654	Dhenkanal	DED	HINDOL ROAD	HINDOL	DUDURKOTE	ОН	124.7
655	Dhenkanal	DED	HINDOL ROAD	HINDOL	HINDOL	ОН	83.6
656	Dhenkanal	DED	GONDIA	GONDIA	MANDAR	ОН	67
657	Dhenkanal	DED	GONDIA	GONDIA	PASUPATI	ОН	15
658	Dhenkanal	DED	GONDIA	NIHALPRASAD	PINGUA	ОН	12
659	Dhenkanal	DED	GONDIA	GONDIA	KAPILASH	ОН	50
660	Dhenkanal	DED	GONDIA	GONDIA	GONDIA	ОН	17
661	Dhenkanal	DED	GONDIA	GONDIA	ANKURDA	ОН	20

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
662	Dhenkanal	DED	GONDIA	JORANDA	NATIMA	ОН	53
663	Dhenkanal	DED	GONDIA	JORANDA	BANASING/KALURIA	ОН	57
664	Dhenkanal	DED	GONDIA	JORANDA	KARMULA	ОН	95
665	Dhenkanal	DED	GONDIA	NIHALPRASAD	N.PRASAD	ОН	85
666	Dhenkanal	DED	GONDIA	NIHALPRASAD	KASHIPUR	ОН	65
667	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	TOWN-1	ОН	15
668	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	BAUNSAPALA/TOWN-2	ОН	36
669	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	JIRIDAMALI	ОН	20
670	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	MOHULPAL	ОН	90
671	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	KADUA	ОН	58
672	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	DANDADHAR	ОН	30.2
673	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	RUPABEDA/DULIA	ОН	92.7
674	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	URBENGI	ОН	78.3
675	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	BIRASALA	ОН	109
676	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	GUNEIBILLI	ОН	75

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
677	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	BELEISAHI	ОН	10.6
678	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	JIRAL	ОН	40
679	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	BALISAHI	ОН	26
680	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	MARTHAPUR	ОН	26.5
681	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	KANHEIPALA	ОН	65
682	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	SURAPRATAPUR	ОН	18.1
683	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	ANALO/GODA	ОН	79.2
684	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	ODISA/BARUAN	ОН	20
685	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	ANANTAPUR	ОН	25.9
686	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	PADAN	ОН	8
687	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	BHUSAL	ОН	33.5
688	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	BHUBAN TOWN-1	ОН	14.9
689	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	BHUBAN TOWN-2	ОН	13.5
690	Dhenkanal	DED	KAMAKHYANAGAR	KALIAPANI	CHINGUDIPALA	ОН	62
691	Dhenkanal	DED	KAMAKHYANAGAR	KALIAPANI	KANASA	ОН	26

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
692	Dhenkanal	DED	KAMAKHYANAGAR	KALIAPANI	TISCO BAZAR	ОН	25
693	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	BAISINGA	ОН	25
694	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	KANPURA	ОН	18
695	Dhenkanal	DED	KAMAKHYANAGAR	RNPUR	SOGAR	ОН	11
696	Dhenkanal	DED	KAMAKHYANAGAR	RNPUR	ANALABERENI	ОН	17
697	Dhenkanal	DED	KAMAKHYANAGAR	RNPUR	KOTAGARA	ОН	25
698	Dhenkanal	DED	KAMAKHYANAGAR	RNPUR	BARUAN	ОН	12
699	Dhenkanal	DED	HINDOL ROAD	KHAJURIAKATA	NAUKIARI	ОН	62.5
700	Dhenkanal	DED	HINDOL ROAD	KHAJURIAKATA	RASOLA	ОН	42.2
701	Dhenkanal	DED	HINDOL ROAD	KHAJURIAKATA	NUABAGHA	ОН	25.5
702	Dhenkanal	DED	GONDIA	JORANDA	BANASING	ОН	65
703	Dhenkanal	DED	GONDIA	JORANDA	CHAULIA	ОН	18
704	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	TARAVA	ОН	27
705	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	CHAULIA	ОН	25
706	Dhenkanal	DED	DHENKANAL	DHENKANAL-2	SIMILIA	ОН	35

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
707	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	EAKATALI	ОН	24
708	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	KUNDA	ОН	15
709	Dhenkanal	DED	KAMAKHYANAGAR	KAMAKHYANAGAR	GUNDICHANALI	ОН	16
710	Dhenkanal	DED	GONDIA	GONDIA	SADANGI	ОН	5
711	Dhenkanal	DED	KAMAKHYANAGAR	BHUBAN	DHALAPADA	ОН	14
712	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	BIRASALA-2	ОН	94
713	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	SENDHASARA	ОН	50
714	Dhenkanal	DED	DHENKANAL	BHAPUR	KALANGA	ОН	60
715	Dhenkanal	DED	HINDOL ROAD	HINDOL	PATALA	ОН	65
716	Dhenkanal	DED	HINDOL ROAD	HINDOL	KURUMITHA	ОН	47
717	Dhenkanal	DED	KAMAKHYANAGAR	MATHAKARGOLA	BEDHAPALA	ОН	15
718	Dhenkanal	DED	DHENKANAL	BHAPUR	NEW GHATIPIRI	ОН	34
719	Dhenkanal	DED	DHENKANAL	BHAPUR	GOBINDAPRASAD	ОН	38
720	Dhenkanal	DED	KAMAKHYANAGAR	KANKADAHADA	KHAJURIA	ОН	48
721	Dhenkanal	TED	PARJANG	PARJANG 2	ВНЕЈІА	ОН	71

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
722	Dhenkanal	TED	CHAINPAL	MERAMANDALI	PURUNAKOTE	ОН	93
723	Dhenkanal	TED	CHAINPAL	BANARPAL	PHULAPADA	ОН	90
724	Dhenkanal	TED	PARJANG	PARJANG 1	KANKILI	ОН	15
725	Dhenkanal	TED	PARJANG	PARJANG 2	GADAPALASUNI	ОН	58
726	Dhenkanal	TED	PARJANG	PARJANG 2	PUNGATHERRAA	ОН	42
727	Dhenkanal	TED	PARJANG	PARJANG 2	MAHABIROAR	ОН	7
728	Dhenkanal	ANED	Angul	ANGUL-II	ANGUL RE-2	ОН	120
729	Dhenkanal	ANED	Angul	ANGUL-II	COLLEGE	ОН	7
730	Dhenkanal	ANED	Angul	ANGUL-II	SIKHYAKPADA	ОН	5
731	Dhenkanal	ANED	Angul	ANGUL-I	HEMUSARAPADA	ОН	6
732	Dhenkanal	ANED	Angul	ANGUL-I	MCL	ОН	42
733	Dhenkanal	ANED	Angul	ANGUL-III	JARASINGHA	ОН	60
734	Dhenkanal	ANED	Angul	ANGUL-II	MEDICAL-3	ОН	3.5
735	Dhenkanal	ANED	Angul	ANGUL-I	INDUSTRIAL ESTATE	ОН	9
736	Dhenkanal	ANED	Angul	ANGUL-I	KURUDUL	ОН	42

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
737	Dhenkanal	ANED	Angul	BANTALA	BANTALA	ОН	160
738	Dhenkanal	ANED	Angul	BANTALA	SABALABHANGA	ОН	80
739	Dhenkanal	ANED	Angul	BANTALA	KHINDA	ОН	85
740	Dhenkanal	ANED	Angul	BANTALA	SARANGAPUR	ОН	12
741	Dhenkanal	ANED	Chhendipada	JARPADA	RAILWAY-1	ОН	2
742	Dhenkanal	ANED	Chhendipada	JARPADA	KASALA	ОН	18
743	Dhenkanal	ANED	Chhendipada	JARPADA	KATADA	ОН	16
744	Dhenkanal	ANED	Chhendipada	JARPADA	KANJARA	ОН	40
745	Dhenkanal	ANED	Chhendipada	JARPADA	JAGANNATHPUR-3	ОН	164
746	Dhenkanal	ANED	Chhendipada	CHHENDIPADA	BAGEDIA	ОН	73.2
747	Dhenkanal	ANED	Chhendipada	CHHENDIPADA	PIPAL BAHAL	ОН	72.3
748	Dhenkanal	ANED	Chhendipada	KOSALA	BRAHMANIBIL	ОН	95
749	Dhenkanal	ANED	Chhendipada	CHHENDIPADA	BAHALASAHI	ОН	65
750	Dhenkanal	ANED	Chhendipada	CHHENDIPADA	DUBANALI	ОН	75
751	Dhenkanal	ANED	Chhendipada	CHHENDIPADA	CHHENDIPADA	ОН	10

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
752	Dhenkanal	ANED	Boinda	BOINDA	HANDAPA	ОН	130
753	Dhenkanal	ANED	Boinda	BOINDA	BOINDA LOCAL	ОН	8
754	Dhenkanal	ANED	Boinda	BOINDA	LUHAMUNDA	ОН	67.2
755	Dhenkanal	ANED	Boinda	BOINDA	JAMUNALI	ОН	89.41
756	Dhenkanal	ANED	Boinda	BOINDA	SANAHULA	ОН	53.42
757	Dhenkanal	ANED	Boinda	BOINDA	PAIKASAHI	ОН	84.73
758	Dhenkanal	ANED	Boinda	BOINDA	KUTULUSINGA	ОН	107.05
759	Dhenkanal	ANED	Boinda	BOINDA	THAKURGARH	ОН	90.32
760	Dhenkanal	ANED	Boinda	BOINDA	KRUTIBASPUR	ОН	28.19
761	Dhenkanal	ANED	Boinda	BOINDA	GHODABANDHUNI	ОН	13.68
762	Dhenkanal	ANED	Boinda	ATHAMALIK	MANTRI	ОН	62.87
763	Dhenkanal	ANED	Boinda	ATHAMALIK	ATHAMALIK TOWN	ОН	25.09
764	Dhenkanal	ANED	Boinda	ATHAMALIK	BAGHUAKATA	ОН	30
765	Dhenkanal	ANED	Boinda	ATHAMALIK	BINKEI	ОН	90
766	Dhenkanal	ANED	Boinda	ATHAMALIK	JADUPUR	ОН	19.74

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
767	Dhenkanal	ANED	Boinda	ATHAMALIK	MADHAPUR	ОН	22.04
768	Dhenkanal	ANED	Boinda	ATHAMALIK	ΚΙΑΚΑΤΑ	ОН	18.91
769	Dhenkanal	ANED	Boinda	ATHAMALIK	NILAKANTHAPADA	ОН	131.27
770	Dhenkanal	ANED	Boinda	ATHAMALIK	LUNAHANDI	ОН	25.15
771	Dhenkanal	ANED	Boinda	BAMUR	FASIPAL	ОН	35
772	Dhenkanal	ANED	Boinda	BAMUR	BRAHMANIDEI	ОН	28
773	Dhenkanal	ANED	Boinda	BAMUR	KHAIRAMUNDA	ОН	10
774	Dhenkanal	ANED	Boinda	BAMUR	AMBAPAL	ОН	28
775	Dhenkanal	ANED	Angul	ANGUL-III	BADAKERA	ОН	140
776	Dhenkanal	ANED	Angul	ANGUL-III	DUDHIABEDA	ОН	80
777	Dhenkanal	ANED	Boinda	BAMUR	TALAPADAR	ОН	35
778	Dhenkanal	ANED	Boinda	BAMUR	RANIAKATA	ОН	148
779	Dhenkanal	ANED	Boinda	BAMUR	KADALIMUNDA	ОН	40
780	Dhenkanal	ANED	Boinda	BAMUR	KISHORENAGAR	ОН	28
781	Dhenkanal	ANED	Angul	ANGUL-III	NALCO TOWN SHIP	ОН	17

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
782	Dhenkanal	ANED	Angul	ANGUL-III	NALCO MAIN GATE	ОН	12
783	Dhenkanal	ANED	Angul	ANGUL-III	TURANGA	ОН	14
784	Dhenkanal	ANED	Angul	ANGUL-III	BENTAPUR	ОН	7
785	Dhenkanal	ANED	Boinda	BAMUR	BUDULIMUNDA	ОН	40
786	Dhenkanal	ANED	Boinda	BAMUR	NAKCHI-1	ОН	37
787	Dhenkanal	ANED	Boinda	BAMUR	URUKULA	ОН	82
788	Dhenkanal	ANED	Chhendipada	KOSALA	KOSALA LOCAL	ОН	90
789	Dhenkanal	ANED	Angul	ANGUL-II	BAZAR	ОН	7
790	Dhenkanal	ANED	Angul	ANGUL-II	AMALAPADA	ОН	8
791	Dhenkanal	ANED	Angul	ANGUL-II	KHALARI	ОН	7
792	Dhenkanal	ANED	Angul	ANGUL-II	BANIABAHAL	ОН	3
793	Dhenkanal	ANED	Angul	ANGUL-II	THANA	ОН	4.9
794	Dhenkanal	ANED	Angul	ANGUL-II	РТС	ОН	11
795	Dhenkanal	ANED	Angul	ANGUL-II	PACNHAMAHALA	ОН	27
796	Dhenkanal	ANED	Angul	ANGUL-II	HARIMAHURI	ОН	4
797	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	ANGULAI	ОН	20

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
798	Paradeep	KED-2	MARSHAGHAI	NUAPADA	ANKO	ОН	95
799	Paradeep	KED-2	MAHAKALPADA	BABAR	BABAR	ОН	45
800	Paradeep	KED-2	MARSHAGHAI	GARADPUR	BANAKUND	ОН	63
801	Paradeep	KED-2	MAHAKALPADA	BABAR	BIJAYANAGAR-1	ОН	73
802	Paradeep	KED-2	MAHAKALPADA	MAHAKALPADA	CHHAPALI	ОН	152.5
803	Paradeep	KED-2	MAHAKALPADA	MAHAKALPADA	DASAMAUJI	ОН	36.5
804	Paradeep	KED-2	MARSHAGHAI	GARADPUR	GARADPUR-1	ОН	41.7
805	Paradeep	KED-2	MARSHAGHAI	GARADPUR	GARADPUR-2	ОН	29
806	Paradeep	KED-2	MAHAKALPADA	BABAR	JAMBOO	ОН	103
807	Paradeep	KED-2	MAHAKALPADA	LUNA	KARANJA	ОН	30
808	Paradeep	KED-2	MARSHAGHAI	KORUA	KORUA	ОН	57
809	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	KURTUNGA	ОН	25.64
810	Paradeep	KED-2	MAHAKALPADA	MAHAKALPADA	MAHAKALPADA	ОН	33
811	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	MARSHAGHAI	ОН	25.9
812	Paradeep	KED-2	MARSHAGHAI	KORUA	NAGANPUR	ОН	46
813	Paradeep	KED-2	MAHAKALPADA	LUNA	NALADIA	ОН	48
814	Paradeep	KED-2	MARSHAGHAI	KORUA	NARENDRAPUR	ОН	4
815	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	ORTAGHAT	ОН	25.23
816	Paradeep	KED-2	MAHAKALPADA	LUNA	OSTARA	ОН	48.4
817	Paradeep	KED-2	MARSHAGHAI	NUAPADA	PATAKURA-1(OLD)	ОН	30
818	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	SILIPUR	ОН	49.5
819	Paradeep	KED-2	MARSHAGHAI	NUAPADA	PATAKURA-2(NEW)	ОН	32
820	Paradeep	KED-2	MARSHAGHAI	NUAPADA	ANTEI	ОН	52
821	Paradeep	KED-2	MARSHAGHAI	MARSHAGHAI	BHARATPUR(KENDRAPADA PSS)	ОН	64
822	BBSR2	NEYD	Khandapada	Khandapada	MARDARAJPUR	ОН	8
823	BBSR2	NEYD	Nayagarh	Periphery	KIRIALANJI	ОН	3.05

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
824	BBSR2	NEYD	Itamati	Itamati-1	NOTARA	ОН	48
825	BBSR2	NEYD	Itamati	Itamati-1	Gambharidihi	ОН	15
826	BBSR2	NEYD	Khandapada	Bhapur-1	RANICHHELI	ОН	35
827	BBSR2	NEYD	Khandapada	Kantilo	SINGHAPADA	ОН	72
828	BBSR2	NEYD	Nayagarh	Odagaon-2	BERUABARI	ОН	70
829	BBSR2	NEYD	ITAMATI	ITAMATI-1	RAJPATNA	ОН	21
830	BBSR2	NEYD	Nayagarh	Periphery	MALISAHI	ОН	25
831	BBSR2	NEYD	Nayagarh	Periphery	BALUGAON PANIPOILA	ОН	30
832	BBSR2	KHD	BEGUNIA	KALAPATHAR	BAIDESWAR	ОН	50.94
833	BBSR2	KHD	BEGUNIA	KALAPATHAR	KALAPATHAR	ОН	35.98
834	BBSR2	KHD	BEGUNIA	KALAPATHAR	GEDIAPALLI	ОН	52.13
835	BBSR2	KHD	BEGUNIA	BAGHAMARI	ATRI	ОН	42.26
836	BBSR2	KHD	BEGUNIA	BAGHAMARI	SARUA	ОН	3.19
837	BBSR2	KHD	BEGUNIA	BAGHAMARI	PODADIHA	ОН	43.98
838	BBSR2	KHD	BEGUNIA	BEGUNIA	PATANAHAT	ОН	39.56
839	BBSR2	KHD	KHURDA	SECTION-III	ROUTPADA	ОН	14.2
840	BBSR2	KHD	KHURDA	SECTION-III	GUDDUM	ОН	11.3
841	BBSR2	KHD	KHURDA	SECTION-III	PARICHHAL	ОН	27.4
842	BBSR2	KHD	BEGUNIA	BEGUNIA	GADAMANITRI	ОН	14.97
843	BBSR2	KHD	BEGUNIA	BEGUNIA	BEGUNIA	ОН	11
844	BBSR2	KHD	BEGUNIA	BEGUNIA	DINGAR	ОН	59.9
845	BBSR2	KHD	JATNI	JANLA	MENDHASAL	ОН	8.5
846	BBSR2	KHD	JATNI	JANLA	OIL MILL-1	ОН	3
847	BBSR2	KHD	JATNI	JANLA	OIL MILL-2	ОН	29
848	BBSR2	KHD	JATNI	JANLA	MADANPUR	ОН	33
849	BBSR2	KHD	KHURDA	SECTION-II	HALADIA	ОН	75
850	BBSR2	KHD	KHURDA	SECTION-I	KHURDA TOWN -1	ОН	7.2

Sr.	Circle	Division	Sub Division	Castion	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
851	BBSR2	KHD	KHURDA	SECTION-I	GURUJANGA	ОН	11.3
852	BBSR2	KHD	KHURDA	SECTION-I	TARATUA	ОН	8.1
853	BBSR2	KHD	KHURDA	SECTION-I	MEDICAL	ОН	3.1
854	BBSR2	KHD	KHURDA	SECTION-I	PANABARAJ	ОН	19.5
855	BBSR2	KHD	KHURDA	SECTION-I	KHURDA TOWN-2	ОН	16.9
856	BBSR2	KHD	KHURDA	SECTION-III	IDCO	ОН	12.5
857	BBSR2	KHD	KHURDA	SECTION-III	TIRIMAL	ОН	10.4
858	BBSR2	KHD	KHURDA	SECTION-III	RENGAL	ОН	2.5
859	BBSR2	KHD	KHURDA	SECTION-III	TARABOI	ОН	39.2
860	BBSR2	KHD	JATNI	JATNI-I	RAJA BAZAR	ОН	4.5
861	BBSR2	KHD	JATNI	JATNI-I	KUSUMATI	ОН	19
862	BBSR2	KHD	JATNI	JATNI-I	JATNI TOWN	ОН	11
863	BBSR2	KHD	JATNI	JATNI-I	BACHHARA	ОН	21
864	BBSR2	KHD	JATNI	JATNI-2	JATNI RURAL	ОН	31
865	BBSR2	KHD	JATNI	HARIRAJPUR	KUDIARY	ОН	10.03
866	BBSR2	KHD	JATNI	HARIRAJPUR	GOLAPADA	ОН	6
867	BBSR2	KHD	JATNI	HARIRAJPUR	KAKUDIA	ОН	10.06
868	BBSR2	KHD	JATNI	HARIRAJPUR	KANTIA	ОН	8.1
869	BBSR2	KHD	JATNI	HARIRAJPUR	BAHILIPADA	ОН	10.06
870	BBSR2	KHD	KHURDA	SECTION-IV	KAIPADAR	ОН	42
871	BBSR2	KHD	KHURDA	SECTION-IV	DADHIMACHHAGADIA	ОН	12
872	BBSR2	KHD	KHURDA	SECTION-IV	BAJAPUR	ОН	40
873	BBSR2	KHD	JANKIA	MALIPADA	NARANGARH-1	ОН	32
874	BBSR2	KHD	JANKIA	MALIPADA	NARANGARH-2	ОН	3
875	BBSR2	KHD	JANKIA	MALIPADA	MALIPADA TAPANGA	ОН	39
876	BBSR2	KHD	JANKIA	MALIPADA	KAIMATIA	ОН	7
877	BBSR2	KHD	JANKIA	MALIPADA	MANDARBASTA	ОН	25

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	505-DIVISION	Section	Feeder	OH/UG/Mix	Length (km)
878	BBSR2	KHD	JANKIA	MALIPADA	NIRAKARPUR-1	ОН	101
879	BBSR2	KHD	JANKIA	MALIPADA	MANPUR	ОН	28
880	BBSR2	KHD	JANKIA	JANKIA	SIKO	ОН	25.55
881	BBSR2	KHD	JANKIA	NIRAKARPUR	NIRAKARPUR-2	ОН	60
882	BBSR2	KHD	JANKIA	JANKIA	GOLABAI	ОН	55
883	BBSR2	KHD	BEGUNIA	SUNAKHALA	BAIAPALLI	ОН	28
884	BBSR2	KHD	BEGUNIA	SUNAKHALA	KADAB	ОН	53
885	BBSR2	KHD	BEGUNIA	SUNAKHALA	SUNAKHALA	ОН	32
886	BBSR2	KHD	BEGUNIA	SUNAKHALA	BANKOI	ОН	94
887	BBSR2	KHD	KHURDA	SECTION-IV	TAPANG	ОН	34
888	BBSR2	KHD	BEGUNIA	SUNAKHALA	SANAPADAR	ОН	52
889	BBSR2	KHD	KHURDA	SECTION-IV	INDUSTRIAL	ОН	5.5
890	BBSR2	KHD	KHURDA	SECTION-IV	MUKUNDAPRASAD	ОН	25
891	BBSR2	KHD	BANKI	BANKI-1	BANKI TOWN	ОН	34
892	BBSR2	KHD	BANKI	BANKI-2	RAJIB	ОН	45
893	BBSR2	KHD	BANKI	BANKI-2	VEDA	ОН	23
894	BBSR2	KHD	BANKI	BANKI-1	TULASIPUR	ОН	18
895	BBSR2	KHD	BANKI	BANKI-1	CHAKAPADA	ОН	14
896	BBSR2	KHD	BANKI	BANKI-3	TALABASTA	ОН	40
897	BBSR2	KHD	BANKI	BANKI-3	RAMACHANDI	ОН	45
898	BBSR2	KHD	BANKI	BANKI-3	TARAPUR	ОН	35
899	BBSR2	KHD	BANKI	BANKI-3	JATAMUNDIA (GHASIPUT/PHD)	ОН	1
900	BBSR2	KHD	KHURDA	SECTION-II	KATHAKHUNTANIA	ОН	6.8
901	BBSR2	KHD	JATNI	JANLA	JAMUJHARI	ОН	8.6
902	BBSR2	KHD	JATNI	JANLA	PANIORA	ОН	24
903	BBSR2	KHD	JANKIA	JANKIA	НАЈА	ОН	25.25

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
904	BBSR2	KHD	JANKIA	JANKIA	OLASINGH	ОН	40.25
905	BBSR2	KHD	BEGUNIA	KALAPATHAR	PUINCHIA	ОН	10
906	BBSR2	KHD	JANKIA	JANKIA	SARAPARI	ОН	12
907	BBSR2	KHD	JANKIA	JANKIA	BADAPOKHARIA	ОН	32
908	BBSR2	KHD	JANKIA	MALIPADA	CHATARAMA	ОН	26
909	BBSR2	KHD	JATNI	JATNI-2	JATNI MEDICAL	ОН	12
910	BBSR2	KHD	JATNI	JANLA	GIRINGAPUT	ОН	7
911	BBSR2	KHD	JATNI	JANLA	DERAS	ОН	12.5
912	BBSR2	KHD	JATNI	JANLA	MENDHASAL-2	ОН	8.5
913	BBSR2	KHD	KHURDA	SECTION-II	INDUSTRIAL-2	ОН	3.5
914	BBSR2	KHD	KHURDA	KALAPATHAR	KADHAMALLA	ОН	11.2
915	BBSR2	KHD	KHURDA	SECTION-II	PUBUSAHI	ОН	16
916	BBSR2	KHD	JANKIA	JANKIA	CHANAGIRI	ОН	6.25
917	BBSR2	KHD	KHURDA	SECTION-II	SARUA-2	ОН	5
918	BBSR2	KHD	JATNI	JATNI-I	GAJAPATINAGAR	ОН	4
919	BBSR2	KHD	KHURDA	SECTION-IV	OTPL	ОН	5
920	BBSR2	KHD	BEGUNIA	SUNAKHALA	HATABASTA	ОН	35
921	BBSR2	KHD	KHURDA	SECTION-IV	BPCL	ОН	0.2
922	BBSR2	KHD	KHURDA	SECTION-IV	DALEIPUT	ОН	11
923	BBSR2	KHD	BANKI	BANKI-2	RAGADI RWSS	ОН	18
924	BBSR2	KHD	BANKI	BANKI-3	GADAJIT	ОН	8
925	BBSR2	KHD	JATNI	JATNI-2	BADATOA	ОН	7
926	BBSR2	KHD	JATNI	JATNI-2	BHIPUR	ОН	6
927	BBSR2	KHD	JATNI	JATNI-2	NUAGAON	ОН	4
928	BBSR2	KHD	JATNI	JANLA	CHATABARA INDUSTRIAL	ОН	5.5
929	BBSR2	KHD	JATNI	JANLA	SEA FOOD	ОН	1.2
930	BBSR2	KHD	JATNI	JANLA	SANTI SOLAR	UG	0.4

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	<b>300-DIVISION</b>	Section	Feeder	OH/UG/Mix	Length (km)
931	Cuttack	CDD-1	KALINGA	ТКВ	CHAUDHURY BAZAR 1	ОН	5.4
932	Cuttack	CDD-1	KALINGA	CANTONMENT	CANTONMENT 2	ОН	3.5
933	Cuttack	CDD-1	KALINGA	CANTONMENT	GORAKABAR	ОН	3
934	Cuttack	CDD-1	KALINGA	CANTONMENT	JNI STADIUM	ОН	0.4
935	Cuttack	CDD-1	KALINGA	CANTONMENT	CANTONMENT 1	MIX	0.7
936	Cuttack	CDD-1	KALINGA	ТКВ	CHAUDHURY BAZAR 2	ОН	6.8
937	Cuttack	CDD-1	KALINGA	CANTONMENT	HIGH COURT	ОН	6
938	Cuttack	CDD-1	KALINGA	CANTONMENT	DD OH	ОН	3.5
939	Cuttack	CDD-1	CDA	CDA-VI	SECTOR 6,7	ОН	4.4
940	Cuttack	CDD-1	CDA	CDA-VI	SECTOR 8,9	ОН	5.3
941	Cuttack	CDD-1	KALINGA	CHANDINI CHOWK	CHANDINICHOWK	ОН	2.6
942	Cuttack	CDD-1	SISHUBHAWAN	TOWNHALL	PURIGHAT(AAYAKAR BHABAN & PUMP HOUSE)	ОН	4
943	Cuttack	CDD-1	SISHUBHAWAN	TOWNHALL	TOWNHALL	ОН	3
944	Cuttack	CDD-1	KALINGA	CANTONMENT	UPPER GROUND	UG	3
945	Cuttack	CDD-1	SISHUBHAWAN	CITY	CITY	ОН	1.5
946	Cuttack	CDD-1	SISHUBHAWAN	GANESHGHAT	HIGH COURT	ОН	2.5
947	Cuttack	CDD-1	RANIHAT	COLLEGE SQUARE	COLLEGE SQUARE UG	UG	2.2
948	Cuttack	CDD-1	RANIHAT	RANIHAT-1	UG FEEDER-1	UG	4.1
949	Cuttack	CDD-1	RANIHAT	RANIHAT-1	UG FEEDER-2	UG	5.2
950	Cuttack	CDD-1	RANIHAT	RANIHAT-2	UG FEEDER-3	UG	3.6
951	Cuttack	CDD-1	RANIHAT	RANIHAT-2	UG FEEDER-4	UG	3.9
952	Cuttack	CDD-2	JOBRA	JOBRA	OLD INDUSTRIAL	ОН	28
953	Cuttack	CDD-2	JOBRA	JOBRA	NADIKULA	ОН	3.5
954	Cuttack	CDD-2	JOBRA	JOBRA	IDCO-1	ОН	4.5
955	Cuttack	CDD-2	JOBRA	JOBRA	BARRAGE	ОН	20
956	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	RING-1	ОН	6

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
957	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	KALYANINAGAR	ОН	3.2
958	Cuttack	CDD-2	MAHANADI VIHAR	CHAULIAGANJ	CHAULIAGANJ-2	ОН	3
959	Cuttack	CDD-2	MAHANADI VIHAR	CHAULIAGANJ	MAHANADI	ОН	2
960	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	DOLAMUNDAI-1	ОН	2
961	Cuttack	CDD-2	BADAMBADI	DOLAMUNDAI	DOLAMUNDAI-2	ОН	2.5
962	Cuttack	CDD-2	BADAMBADI	BADAMBADI	BADAMBADI-1	ОН	4.2
963	Cuttack	CDD-2	BADAMBADI	BADAMBADI	BADAMBADI-2	ОН	4.6
964	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	OGP	ОН	0.6
965	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	INDUSTRIAL-1	ОН	3.2
966	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	INDUSTRIAL-2	ОН	5.4
967	Cuttack	CDD-2	JOBRA	42 MAUZA	BENTKAR	ОН	35
968	Cuttack	CDD-2	JOBRA	42 MAUZA	CHANDULI	ОН	42
969	Cuttack	CDD-2	JOBRA	42 MAUZA	KALAPADA	ОН	15
970	Cuttack	CDD-2	JOBRA	42 MAUZA	JHINKIRIA	ОН	12
971	Cuttack	CDD-2	JOBRA	KANDARPUR	KANDARPUR	ОН	22
972	Cuttack	CDD-2	JOBRA	KANDARPUR	ALL INDIA RADIO	ОН	32
973	Cuttack	CDD-2	JOBRA	KANDARPUR	PARAMAHANSA	ОН	25
974	Cuttack	CDD-2	JOBRA	KANDARPUR	AYATPUR	ОН	28
975	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	KISHANNAGAR	ОН	5
976	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	MALIPUR	ОН	14
977	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	SOMPUR	ОН	5
978	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	RAMCHANDRAPUR	ОН	15
979	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	BISWALAPADA	ОН	8
980	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	MAHANADI VIHAR	ОН	4.3
981	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	CRRI ALL INDIA RADIO	ОН	0.15
982	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	CRRI	ОН	2.1
983	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	NAYABAZAR	ОН	4

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
984	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	POPARADA	ОН	5.5
985	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	MATAGAJA PUR	ОН	6.4
986	Cuttack	CDD-2	BADAMBADI	KHAPURIA (IE)	JAICA	ОН	4
987	Cuttack	CDD-2	JOBRA	JAGATPUR	MAHANADI-1	ОН	2
988	Cuttack	CDD-2	JOBRA	JAGATPUR	NEW INDUSTRIAL	ОН	2.5
989	Cuttack	CDD-2	JOBRA	JAGATPUR	KHAIRA	UG	0.5
990	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	MAHANADI BIHAR-1	ОН	3.5
991	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	MAHANADI BIHAR-2	ОН	2.3
992	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	SIKHARPUR	ОН	5.3
993	Cuttack	CDD-2	MAHANADI VIHAR	MAHANADI VIHAR	GANDARPUR	ОН	2.6
994	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	SOMAPUR	ОН	5
995	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	TELDIA	ОН	10
996	Cuttack	CDD-2	JOBRA	KISHAN NAGAR	RAMKUMARPUR	ОН	18
997	Cuttack	CDD-2	MAHANADI VIHAR	CHAULIAGANJ	OSAP	ОН	3.6
998	Cuttack	CDD-2	MAHANADI VIHAR	CHAULIAGANJ	DIVINE	ОН	1.5
999	Cuttack	AED	ATHGARH	KHUNTUNI	KULEILO	ОН	55
1000	Cuttack	AED	ATHGARH	KHUNTUNI	MAHALAXMIPUR	ОН	85
1001	Cuttack	AED	NARSINGPUR	BADAMBA	RATTAPATA 1	ОН	65
1002	Cuttack	AED	NARSINGPUR	BADAMBA	GOPINATHPUR	ОН	36
1003	Cuttack	AED	NARSINGPUR	BADAMBA	GOPMATHURA	ОН	14
1004	Cuttack	AED	NARSINGPUR	BADAMBA	BADAMBA TOWN	ОН	13
1005	Cuttack	AED	NARSINGPUR	KANPUR	GODIBANDHA	ОН	56.1
1006	Cuttack	AED	NARSINGPUR	KANPUR	BASALIHATA	ОН	28.2
1007	Cuttack	AED	NARSINGPUR	KANPUR	BALIJHARIA	ОН	26.3
1008	Cuttack	AED	NARSINGPUR	KANPUR	KANPUR	ОН	30
1009	Cuttack	AED	NARSINGPUR	KANPUR	BAGDHARIA	ОН	14.2
1010	Cuttack	AED	NARSINGPUR	KANPUR	KARILO	ОН	35.7

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1011	Cuttack	AED	NARSINGPUR	NARSINGPUR	JAIPUR	ОН	29.6
1012	Cuttack	AED	NARSINGPUR	NARSINGPUR	KAMALADIHA OLD	ОН	62.7
1013	Cuttack	AED	NARSINGPUR	NARSINGPUR	NARSINGHPUR	ОН	26
1014	Cuttack	AED	NARSINGPUR	NARSINGPUR	KAKUDIA	ОН	37.6
1015	Cuttack	AED	NARSINGPUR	NARSINGPUR	NUKHAPADA	ОН	48.6
1016	Cuttack	AED	ATHGARH	ATHAGARH NO 2	KHUNTAKATA	ОН	45
1017	Cuttack	AED	ATHGARH	ATHAGARH NO 2	GODIJHARIA	ОН	52.4
1018	Cuttack	AED	ATHGARH	ATHAGARH 1	ATHAGARH TOWN	ОН	26
1019	Cuttack	AED	ATHGARH	ATHAGARH 1	KANTOL	ОН	6
1020	Cuttack	AED	ATHGARH	ATHAGARH NO 2	DORODA	ОН	26.2
1021	Cuttack	AED	ATHGARH	ATHAGARH NO 2	KARIKOLA	ОН	90.4
1022	Cuttack	AED	ATHGARH	NUAPATNA	MANIABANDHA	ОН	27
1023	Cuttack	AED	ATHGARH	NUAPATNA	NUAPATNA	ОН	28
1024	Cuttack	AED	ATHGARH	TIGIRIA	BINDHANIMA	ОН	41
1025	Cuttack	AED	ATHGARH	TIGIRIA	PURUNA TIGIRIA	ОН	18.5
1026	Cuttack	AED	ATHGARH	TIGIRIA	TIGIRIA	ОН	4
1027	Cuttack	AED	ATHGARH	TIGIRIA	PANCHAGAON	ОН	26
1028	Cuttack	AED	NARSINGPUR	BADAMBA	BADABARSINGH	ОН	19
1029	Cuttack	AED	ATHGARH	KHUNTUNI	MEGHA	ОН	85
1030	Cuttack	AED	ATHGARH	KHUNTUNI	GURUDIJHATIA	ОН	30
1031	Cuttack	AED	ATHGARH	KHUNTUNI	KUMARPUR	ОН	60
1032	Cuttack	AED	ATHGARH	KHUNTUNI	GURUDIJHATIA OLD	ОН	35
1033	Cuttack	AED	ATHGARH	KHUNTUNI	MANCHESWAR	ОН	25
1034	Cuttack	AED	NARSINGPUR	BADAMBA	RAGADIPADA	ОН	26
1035	Cuttack	AED	ATHAGARH	ATHAGARH NO 2	KANTAPAHARA	ОН	17
1036	Cuttack	AED	ATHAGARH	ATHAGARH NO 2	GHODABARA	ОН	18
1037	Cuttack	AED	Athagarh	Tigiria	Manapur	ОН	24

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1038	Cuttack	AED	Athagarh	Tigiria	Gadadharpur	ОН	11.5
1039	Cuttack	AED	NARSINGPUR	NARSINGPUR	Kamaladhia (New)	ОН	110
1040	Cuttack	AED	NARSINGPUR	BADAMBA	BAGERSINGH	ОН	25
1041	Cuttack	AED	NARSINGPUR	BADAMBA	KHUNTAKATA NEW	ОН	15
1042	Cuttack	AED	Athagarh	ATHAGARH NO 2	SAMSARPUR	ОН	45
1043	Cuttack	SED	NISCHINTAKOILI	ASURESWAR	ASURESWAR	ОН	22
1044	Cuttack	SED	NISCHINTAKOILI	ASURESWAR	SUKARPADA	ОН	26
1045	Cuttack	SED	NISCHINTAKOILI	ASURESWAR	LUNA	ОН	40
1046	Dhenkanal	TED	TALCHER	TALCHER	TALCHER TOWN-1	ОН	21.5
1047	Dhenkanal	TED	TALCHER	TALCHER	TALCHER TOWN-2	ОН	4.7
1048	Dhenkanal	TED	TALCHER	TALCHER	LIC-1	ОН	9.54
1049	Dhenkanal	TED	TALCHER	ΗΑΤΑΤΟΤΑ	HATATOTA RE-2	ОН	70
1050	Dhenkanal	TED	TALCHER	ΗΑΤΑΤΟΤΑ	HATATOTA RE-1	ОН	73
1051	Dhenkanal	TED	TALCHER	ΗΑΤΑΤΟΤΑ	GODIBANDHA-1	ОН	160
1052	Dhenkanal	TED	CHAINPAL	CHAINPAL	BALHRA	ОН	37
1053	Dhenkanal	TED	CHAINPAL	CHAINPAL	GOTAMARA	ОН	21.61
1054	Dhenkanal	TED	CHAINPAL	CHAINPAL	BHOGABARENI	ОН	42.5
1055	Dhenkanal	TED	TALCHER	KANIHA	KANIHA RE-1	ОН	22.5
1056	Dhenkanal	TED	TALCHER	KANIHA	KANIHA-1	ОН	6

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1057	Dhenkanal	TED	TALCHER	KANIHA	KANIHA RE-2	ОН	55.5
1058	Dhenkanal	TED	TALCHER	KANIHA	KANIHA-2	ОН	0.3
1059	Dhenkanal	TED	TALCHER	KANIHA	KARADEI	ОН	24.7
1060	Dhenkanal	TED	TALCHER	KANIHA	DERANGA	ОН	75.3
1061	Dhenkanal	TED	TALCHER	KANIHA	KIAJHARA	ОН	15.6
1062	Dhenkanal	TED	TALCHER	SAMAL	BIJIGULU	ОН	17.63
1063	Dhenkanal	TED	TALCHER	SAMAL	SAMAL VILLAGE	ОН	8.3
1064	Dhenkanal	TED	TALCHER	SAMAL	COLONY	ОН	5
1065	Dhenkanal	TED	TALCHER	SAMAL	BARRAGE-1	ОН	2.5
1066	Dhenkanal	TED	PALLAHARA	PALLAHARA	PALLAHARA TOWN	ОН	29
1067	Dhenkanal	TED	PALLAHARA	PALLAHARA	KANTALA	ОН	5
1068	Dhenkanal	TED	PALLAHARA	PALLAHARA	SEA GARH	ОН	9.81
1069	Dhenkanal	TED	PALLAHARA	PALLAHARA	PHOPANDA	ОН	59
1070	Dhenkanal	TED	PALLAHARA	PALLAHARA	BATISUAN	ОН	75
1071	Dhenkanal	TED	PALLAHARA	KHAMAR	ODASA	ОН	45

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1072	Dhenkanal	TED	PALLAHARA	KHAMAR	BARAKOTIA	ОН	80
1073	Dhenkanal	TED	PALLAHARA	KHAMAR	SANKHAMUR	ОН	82
1074	Dhenkanal	TED	PALLAHARA	KHAMAR	INJIDI	ОН	98
1075	Dhenkanal	TED	PALLAHARA	KHAMAR	NUAGAON- KUNJAM	ОН	102
1076	Dhenkanal	TED	PALLAHARA	KHAMAR	RAJDANG	ОН	38
1077	Dhenkanal	TED	TALCHER	BALANDA	GURUDWAR	ОН	7.13
1078	Dhenkanal	TED	TALCHER	BALANDA	JAGANNATHPUR-4	ОН	26.1
1079	Dhenkanal	TED	TALCHER	BALANDA	GOBARA	ОН	50.71
1080	Dhenkanal	TED	CHAINPAL	BANARPAL	KULAD	ОН	25
1081	Dhenkanal	TED	CHAINPAL	BANARPAL	CHAINPAL-1	ОН	12
1082	Dhenkanal	TED	CHAINPAL	BANARPAL	BANARPAL HINDOL	ОН	90
1083	Dhenkanal	TED	CHAINPAL	MERAMANDALI	MERAMANDALI	ОН	40
1084	Dhenkanal	TED	PARJANG	PARJANG 1	OLD PARJANG	ОН	160
1085	Dhenkanal	TED	PARJANG	PARJANG 1	R.N. PUR	ОН	28
1086	Dhenkanal	TED	PARJANG	PARJANG 1	KANDARSINGHA	ОН	60

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1087	Dhenkanal	TED	PARJANG	PARJANG 2	NEW SARANG	ОН	8
1088	Dhenkanal	TED	PARJANG	PARJANG 2	OLD SARANG	ОН	26
1089	Dhenkanal	TED	PARJANG	PARJANG 2	KUALO	ОН	24
1090	Dhenkanal	TED	PARJANG	PARJANG 2	JATIA	ОН	12
1091	Dhenkanal	TED	PARJANG	PARJANG 2	MAHAVEER ROAD	ОН	119
1092	Dhenkanal	TED	PARJANG	PARJANG 1	RENGALI	ОН	25
1093	Dhenkanal	TED	PARJANG	PARJANG 1	NEW PARJANG TOWN	ОН	4
1094	Dhenkanal	TED	PARJANG	PARJANG 2	IGIT SARANG FDR	ОН	4.2
1095	Dhenkanal	TED	PALLAHARA	PARABIL	GAHAM	ОН	9.2
1096	Dhenkanal	TED	PALLAHARA	PARABIL	ARKIL	ОН	77.4
1097	Dhenkanal	TED	PALLAHARA	PARABIL	PARABIL (MAHIDHARPUR)	ОН	55.4
1098	Dhenkanal	TED	PALLAHARA	PARABIL	TUMUNGOLA / DANGARBEDA	ОН	40.5
1099	Dhenkanal	TED	PALLAHARA	PARABIL	BARUAN / KULEI	ОН	10.6
1100	Dhenkanal	TED	PALLAHARA	RENGALI	PGCIL 11KV	ОН	16
1101	Dhenkanal	TED	PALLAHARA	RENGALI	RENGALI 11KV	ОН	15

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1102	Dhenkanal	TED	TALCHER	BALANDA	DANARA	ОН	7.24
1103	Dhenkanal	TED	TALCHER	BALANDA	KAMALACHUIN	ОН	32.08
1104	Dhenkanal	TED	TALCHER	BALANDA	GOPAL PRASAD	ОН	34.5
1105	Dhenkanal	TED	TALCHER	BALANDA	BADA JARADA	ОН	10.15
1106	Dhenkanal	TED	PALLAHARA	RENGALI	BAJRAKOT	ОН	58
1107	Dhenkanal	TED	PALLAHARA	RENGALI	GUNDURI	ОН	63
1108	Dhenkanal	TED	PALLAHARA	RENGALI	BRAHMNIDEI	ОН	5
1109	Dhenkanal	TED	PARJANG	PARJANG 1	SANDA	ОН	30
1110	Dhenkanal	TED	PARJANG	PARJANG 1	PANIGENGUTIA	ОН	35
1111	Dhenkanal	TED	PARJANG	PARJANG 2	DADARAGHATI	ОН	38
1112	Dhenkanal	TED	PARJANG	PARJANG 2	BASULEI	ОН	22
1113	Dhenkanal	TED	PARJANG	PARJANG 2	JHARANABAHALA	ОН	12
1114	Dhenkanal	TED	TALCHER	TALCHER	BANTOL	ОН	11
1115	Dhenkanal	TED	TALCHER	TALCHER	HANDIDHUAN	ОН	3
1116	Dhenkanal	TED	TALCHER	TALCHER	TALCHER ITI	ОН	1.5

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1117	Dhenkanal	TED	CHAINPAL	MERAMANDALI	KAMALANG	ОН	132
1118	Dhenkanal	TED	TALCHER	TALCHER	PALACE	ОН	13
1119	Dhenkanal	TED	PALLAHARA	PALLAHARA	JAMARADIHI	ОН	69
1120	Dhenkanal	TED	PALLAHARA	PALLAHARA	SIMILIPALA	ОН	30
1121	Dhenkanal	TED	PALLAHARA	PALLAHARA	JHARABEDA	ОН	52
1122	Paradeep	KED-1	AUL	AUL	AUL	ОН	20
1123	Paradeep	KED-1	AUL	AUL	CHHOTAKANIKA	ОН	11
1124	Paradeep	KED-1	AUL	AUL	SASAN	ОН	12
1125	Paradeep	KED-1	AUL	AUL	MENDHAPUR	ОН	18.5
1126	Paradeep	KED-1	AUL	AUL	BHUINPUR	ОН	57
1127	Paradeep	KED-1	PATTAMUNDAI	CHOUDAKULAT	DOBANDA	ОН	2.5
1128	Paradeep	KED-1	PATTAMUNDAI	CHOUDAKULAT	CHOUDAKULAT	ОН	7.2
1129	Paradeep	KED-1	PATTAMUNDAI	CHOUDAKULAT	NAPANGA	ОН	30.2
1130	Paradeep	KED-1	KENDRAPARA	СННАТА	СННАТА	ОН	44
1131	Paradeep	KED-1	PATTAMUNDAI	DANDISAHI	BERHAMPUR	ОН	60
1132	Paradeep	KED-1	PATTAMUNDAI	DANDISAHI	DANDISAHI	ОН	28.3
1133	Paradeep	KED-1	KENDRAPARA	DANPUR	ASURESWAR	ОН	5
1134	Paradeep	KED-1	KENDRAPARA	DANPUR	CHANDOLA	ОН	45
1135	Paradeep	KED-1	KENDRAPARA	DANPUR	DANPUR	ОН	32
1136	Paradeep	KED-1	KENDRAPARA	DANPUR	DUHURIA	ОН	9
1137	Paradeep	KED-1	KENDRAPARA	DANPUR	LAW COLLEGE	ОН	35
1138	Paradeep	KED-1	KENDRAPARA	DANPUR	D.K. BHOLO	ОН	20
1139	Paradeep	KED-1	KENDRAPARA	DANPUR	JAHARA BARIMULA	ОН	15
1140	Paradeep	KED-1	KENDRAPARA	INDUPUR	BARI	ОН	13.5

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1141	Paradeep	KED-1	KENDRAPARA	INDUPUR	DHUMAT	ОН	12.2
1142	Paradeep	KED-1	PATTAMUNDAI	CHOUDAKULAT	GHAGARA	ОН	10.2
1143	Paradeep	KED-1	KENDRAPARA	INDUPUR	INDUPUR	ОН	2
1144	Paradeep	KED-1	KENDRAPARA	INDUPUR	NIKIREI	ОН	17.1
1145	Paradeep	KED-1	KENDRAPARA	Kendrapara-I	KENDRAPARA TOWN -I	ОН	7.1
1146	Paradeep	KED-1	KENDRAPARA	Kendrapara-I	TINIMUHANI	ОН	20.8
1147	Paradeep	KED-1	KENDRAPARA	Kendrapara-I	KENDRAPARA TOWN -2	ОН	4.5
1148	Paradeep	KED-1	Kendrapara	Kendrapara-II	BAGADA	ОН	14
1149	Paradeep	KED-1	KENDRAPARA	Kendrapara-II	BHARATPUR	ОН	85.3
1150	Paradeep	KED-1	Kendrapara	Kendrapara-II	GOPA	ОН	7
1151	Paradeep	KED-1	KENDRAPARA	Kendrapara-II	THAKURPATANA	ОН	28
1152	Paradeep	KED-1	Kendrapara	Kendrapara-II	ICHAPUR PHD	ОН	4
1153	Paradeep	KED-1	Kendrapara	Kendrapara-III	KANSAR	ОН	76
1154	Paradeep	KED-1	Kendrapara	Kendrapara-III	BLOCK	ОН	52.8
1155	Paradeep	KED-1	Kendrapara	Kendrapara-III	BALDEVJEW	ОН	3.5
1156	Paradeep	KED-1	AUL	OLAVER	DASIPUR	ОН	65
1157	Paradeep	KED-1	AUL	OLAVER	HATSAHI	ОН	85
1158	Paradeep	KED-1	AUL	OLAVER	OLAVAR	ОН	22
1159	Paradeep	KED-1	PATTAMUNDAI	PATRAPUR	PATRAPUR DASIPUR	ОН	52
1160	Paradeep	KED-1	PATTAMUNDAI	PATRAPUR	BATIPADA	ОН	58
1161	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	BALIPATANA	ОН	26.14
1162	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	JARIA	ОН	47.8
1163	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	BELTALA	ОН	6.9
1164	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	BALDEVNAGAR	ОН	25
1165	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	PATTAMUNDAI BAZAR	ОН	2.5
1166	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	BADAPADA	ОН	42
1167	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-I	GANGARAMPUR	ОН	42.96

Sr.	Circle	Division	Sub Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1168	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-II	CHANDAN NAGAR	ОН	110
1169	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-II	DAMARPUR	ОН	45
1170	Paradeep	KED-1	PATTAMUNDAI	PATTAMUNDAI-II	KORAIPALA	ОН	40
1171	Paradeep	KED-1	AUL	RAJKANIKA	BHARIGADA	ОН	27.7
1172	Paradeep	KED-1	AUL	RAJKANIKA	GIRIA	ОН	2.5
1173	Paradeep	KED-1	AUL	RAJKANIKA	OLAVER	ОН	5.6
1174	Paradeep	KED-1	AUL	RAJKANIKA	OSTIA	ОН	56.1
1175	Paradeep	KED-1	RAJNAGAR	RAJNAGAR-I	KEREDAGADA	ОН	70
1176	Paradeep	KED-1	RAJNAGAR	RAJNAGAR-I	KOILIPUR	ОН	68
1177	Paradeep	KED-1	RAJNAGAR	RAJNAGAR-I	MADANPUR	ОН	27
1178	Paradeep	KED-1	KENDRAPARA	RAJNAGAR-II	BALARAMPUR	ОН	14
1179	Paradeep	KED-1	KENDRAPARA	RAJNAGAR-II	JARIMUL	ОН	46
1180	Paradeep	KED-1	RAJNAGAR	RAJNAGAR-I	RAJANAGAR	ОН	99.5
1181	Paradeep	KED-1	RAJNAGAR	TALCHUA	ISWARPUR(BADADIA)	ОН	60
1182	Paradeep	KED-1	RAJNAGAR	TALCHUA	TALCHUA	ОН	140
1183	Paradeep	KED-1	KENDRAPARA	СННАТА	PANCHUPANDAV	ОН	41
1184	Paradeep	KED-1	AUL	BHUINPUR	MAHARAKULA	ОН	32.8
1185	Paradeep	KED-1	AUL	RAJKANIKA	KANTAPADA BAZAR	ОН	0.2
1186	Paradeep	KED-1	AUL	BHUINPUR	GOVINDPUR	ОН	27.1
1187	Paradeep	KED-1	AUL	RAJKANIKA	JAYNAGAR	ОН	92.74
1188	Paradeep	KED-1	AUL	RAJKANIKA	AYATAN	ОН	83.91
1189	Paradeep	KED-1	AUL	RAJKANIKA	NAHULIA	ОН	36.3
1190	Paradeep	KED-1	KENDRAPARA	KENDRAPARA-II	JAJANGA	ОН	11.6
1191	Paradeep	KED-1	Kendrapara	Kendrapara-III	MEDICAL	ОН	3
1192	Paradeep	KED-1	Kendrapara	KENDRAPARA-II	BARO	ОН	35
1193	Paradeep	KED-1	Kendrapara	KENDRAPARA-II	KARO	ОН	30
1194	Paradeep	KED-1	Kendrapara	Danpur	Khardasahi	ОН	18

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1195	Paradeep	PDP	Paradeep	Bhutmundai	11KV RE Bhutmundai	ОН	41.9
1196	Paradeep	PDP	Paradeep	Paradeep	11KV RE Chaumuhani	ОН	18
1197	Paradeep	PDP	Tirtol	Erasama	11KV Ambiki	ОН	102
1198	Paradeep	PDP	Tirtol	Erasama	11KV Erasama	ОН	94
1199	Paradeep	PDP	Tirtol	Erasama	11KV Panchapali	ОН	107
1200	Paradeep	PDP	Tirtol	Erasama	11KV Jaganathpur	ОН	102
1201	Paradeep	PDP	Tirtol	Kolar	Digabarini	ОН	40
1202	Paradeep	PDP	Tirtol	Kolar	11KV Krishnanandapur	ОН	35
1203	Paradeep	PDP	Tirtol	Kolar	Manapur	ОН	35
1204	Paradeep	PDP	Tirtol	Kolar	11KV Paikakula	ОН	20
1205	Paradeep	PDP	Kujang	Kujanga	11KV Chatua	ОН	98
1206	Paradeep	PDP	Kujang	Kujanga	11KV Santara	ОН	42
1207	Paradeep	PDP	Kujang	Kujanga	11KV Taladanda	ОН	21
1208	Paradeep	PDP	Tirtol	Erasama	11KV Dihasahi	ОН	105
1209	Paradeep	PDP	Paradeep	Paradeep	11KV Bijaychandrapur	ОН	30
1210	Paradeep	PDP	Paradeep	Paradeep	11KV Atharabanki	ОН	14
1211	Paradeep	PDP	Paradeep	Paradeep	11KV Paradeepgarh	ОН	6
1212	Paradeep	PDP	Paradeep	Paradeep	11KV Rangiagada	ОН	9
1213	Paradeep	PDP	Paradeep	Paradeep	11KV Handia	ОН	6
1214	Paradeep	PDP	Kujang	Rahama	11KV Pandua	ОН	42
1215	Paradeep	PDP	Kujang	Rahama	11KV Pankapala	ОН	31
1216	Paradeep	PDP	Kujang	Rahama	11KV Rahama	ОН	16
1217	Paradeep	PDP	Kujang	Rahama	11KV Bailo	ОН	36
1218	Paradeep	PDP	Tirtol	Tirtol	11KV Gobindpur	ОН	62
1219	Paradeep	PDP	Tirtol	Tirtol	11KV Kanakpur-I	ОН	22
1220	Paradeep	PDP	Tirtol	Tirtol	11KV Kanakpur-II	ОН	73
1221	Paradeep	PDP	Tirtol	Tirtol	11KV Kotakana	ОН	46

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	DIVISION	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1222	Paradeep	PDP	Kujang	Rahama	Nuapakhori	ОН	41
1223	Paradeep	PDP	Kujang	Rahama	Beheda	ОН	10
1224	Paradeep	PDP	Kujang	Kujanga	11KV Kujanga Bazar	ОН	3.5
1225	Paradeep	PDP	Tirtol	Erasama	Kothi	ОН	45
1226	Paradeep	PDP	Kujang	Rahama	Medical	ОН	10
1227	Paradeep	PDP	Tirtol	Kolar	Posal	ОН	28
1228	Paradeep	PDP	Tirtol	Tirtol	11KV Tartol	ОН	75
1229	Paradeep	PDP	Tirtol	Kolar	11KV Garadpur(Garadpur S/S) Kolar Part	ОН	22
1230	Paradeep	PDP	Tirtol	Tirtol	11KV TIRTOL BAZAR	ОН	8
1231	Paradeep	PDP	kujang	Chatua	Trilochanpur	ОН	2
1232	Paradeep	PDP	kujang	Chatua	Dhinkia	ОН	15
1233	Paradeep	PDP	kujang	Chatua	Sandhakuda	ОН	8
1234	Paradeep	PDP	Paradeep	Bhutmundai	Kothi-bhutmundei	ОН	11.5
1235	Paradeep	PDP	Paradeep	Bhutmundai	Jhimani	ОН	2
1236	Paradeep	PDP	Paradeep	Bhutmundai	Bagadia	ОН	5.8
1237	Paradeep	PDP	Paradeep	Erasama	PADAMPUR	ОН	26
1238	Paradeep	PDP	Paradeep	Erasama	AMBIKI-2	ОН	12
1239	Paradeep	PDP	Paradeep	Erasama	JAPA	ОН	60
1240	Paradeep	JED	RAGHUNATHPUR	birdi	22 MAUZA	ОН	15
1241	Paradeep	JED	RAGHUNATHPUR	birdi	ADHANGA	ОН	40
1242	Paradeep	JED	Balikuda	NAUGAON	ALANAHAT(Naugaon HQ)	ОН	19
1243	Paradeep	JED	Jagatsinghpur	jspr-1	ALIPINGAL	ОН	55
1244	Paradeep	JED	Balikuda	BALIKUDA-2	AMBASALA	ОН	19
1245	Paradeep	JED	raghunathpur	birdi	BAGALPUR	ОН	54.4
1246	Paradeep	JED	RAGHUNATHPUR	birdi	OLD BALIA	ОН	15

Sr.	Circle	Division	Sub-Division	Section	Name of associated 11KV	Feeder Type	Feeder Route
No.	Circle	Division	Sub-Division	Section	Feeder	OH/UG/Mix	Length (km)
1247	Paradeep	JED	Balikuda	bkd-1	BALIKUDA	ОН	6
1248	Paradeep	JED	Balikuda	bkd-1	BORIKINA-1	ОН	60
1249	Paradeep	JED	Balikuda	NAUGAON	CHANDAPURA	ОН	43
1250	Paradeep	JED	Jagatsinghpur	jspr-2	CHHAPADA	ОН	145.2
1251	Paradeep	JED	Balikuda	Naugaon	DERIKI	ОН	6
1252	Paradeep	JED	Jagatsinghpur	dhiasahi	DHIASAHI	ОН	90
1253	Paradeep	JED	Jspr	jspr-2	ICCHAPUR	ОН	92.3
1254	Paradeep	JED	Jagatsinghpur	jspr-1	JAIL	ОН	48
1255	Paradeep	JED	RAGHUNATHPUR	birdi	JAYSOL	ОН	20
1256	Paradeep	JED	Jagatsinghpur	jspr-1	JSPUR MEDICAL	ОН	1.5
1257	Paradeep	JED	Jagatsinghpur	jspr-1	JSPUR TOWN	ОН	28
1258	Paradeep	JED	RAGHUNATHPUR	RAGHUNATHPUR	KANTUAR	ОН	53
1259	Paradeep	JED	Balikuda	BALIKUDA-2	MACHHAGAON	ОН	85
1260	Paradeep	JED	Jagatsinghpur	mandasahi	MANDASAHI	ОН	181.7
1261	Paradeep	JED	Balikuda	BALIKUDA-2	OSKANA	ОН	70
1262	Paradeep	JED	Jspr	jspr-2	NALIBERA	ОН	49.2
1263	Paradeep	JED	Balikuda	bkd-1	NAUGAON / DENGAPOLA	ОН	38
1264	Paradeep	JED	Jagatsinghpur	dhiasahi	ODISSO	ОН	120
1265	Paradeep	JED	Raghunathpur	birdi	PARBATIPUR	ОН	53.3
1266	Paradeep	JED	Jspr	jspr-2	PETEIPUR	ОН	75.5
1267	Paradeep	JED	Jagatsinghpur	jspr-1	PUNANGA	ОН	40
1268	Paradeep	JED	RAGHUNATHPUR	RAGHUNATHPUR	R N PUR	ОН	14.2
1269	Paradeep	JED	RAGHUNATHPUR	RAGHUNATHPUR	RAILWAYS	ОН	5
1270	Paradeep	JED	RAGHUNATHPUR	birdi	RANIPADA	ОН	45
1271	Paradeep	JED	Balikuda	NAUGAON	ROHIA	ОН	23.2
1272	Paradeep	JED	Balikuda	bkd-1	Naranpur RWSS /PHD	ОН	6
1273	Paradeep	JED	Balikuda	bkd-1	SANGRAMPUR	ОН	46.2

Sr. No.	Circle	Division	Sub-Division	Section	Name of associated 11KV Feeder	Feeder Type OH/UG/Mix	Feeder Route Length (km)
1274	Paradeep	JED	Raghunathpur	birdi	SIBAPUR	OH	10.2
1275	Paradeep	JED	Jspr	jspr-1	SITHALA	ОН	30
1276	Paradeep	JED	Balikuda	BALIKUDA-2	SOVA	ОН	17
1277	Paradeep	JED	Jagatsinghpur	mandasahi	TARIKUNDA	ОН	67
1278	Paradeep	JED	RAGHUNATHPUR	RAGHUNATHPUR	TARPUR	ОН	35
1279	Paradeep	JED	Balikuda	Naugaon	DEBIDOLA	ОН	17
1280	Paradeep	JED	Balikuda	bkd-1	NAGAPUR	ОН	46.3
1281	Paradeep	JED	Balikuda	Naugaon	Khaira	UG	32
1282	Paradeep	JED	Balikuda	Naugaon	Salijanga	ОН	25
1283	Paradeep	JED	Balikuda	Naugaon	Mutunia	ОН	12
1284	Paradeep	JED	RAGHUNATHPUR	birdi	NEW BALIA	ОН	18
1285	Paradeep	JED	RAGHUNATHPUR	RAGHUNATHPUR	Chikinia(Tarapur)	ОН	30
1286	Paradeep	JED	Balikuda	BALIKUDA-2	Naharana(Dasbatia Camp)	ОН	16
1287	Paradeep	JED	Balikuda	NAUGAON	DERIKI (SHIKHAR)	ОН	13
1288	Paradeep	JED	Balikuda	BALIKUDA-2	BORIKINA	ОН	60
1289	Paradeep	JED	Balikuda	BALIKUDA-2	TITIRA	ОН	26
1290	Paradeep	JED	Jagatsinghpur	jspr-1	PUNANGA -B	ОН	9
1291	Paradeep	JED	Jagatsinghpur	jspr-2	Redhua	ОН	60
1292	Paradeep	JED	Balikuda	BALIKUDA-2	Bandar	ОН	16
1293	Paradeep	JED	Balikuda	BALIKUDA-2	Tentulibelari	ОН	68
1294	Paradeep	JED	Jagatsinghpur	jspr-1	Mangalpur	ОН	35
1295	Paradeep	JED	Jagatsinghpur	jspr-1	Jankothi	ОН	36

## B. Equipment Numbers:

S. No.	Accest Description	No's									
5. NO.	Asset Description	BCDD1	BCDD2	BED	NED	KHD	PED	BaED	NyED	CDD1	CDD2
1	Distribution Transformers	1480	4444	2491	5448	5623	3803	3206	6338	1291	1273
2	Auto Recloser & Sectionalizer	38	21	54	0	4	3	2	2	50	46
3	Ring Main Units	251		113	2		166			103	49
4	Air Circuit Breakers	136	294	142	0	53	37	0	6	41	20
5	Feeder and Service Pillars	385		288	9		181			192	126

S. No.	Assot Description	No's									
5. NO.	Asset Description	AED	CED	SED	DED	AnED	TED	KED1	KED2	PDP	JED
1	Distribution Transformers	3207	4316	2610	6457	5317	4917	4887	1954	2268	3006
2	Auto Recloser & Sectionalizer	0	16	8	12	8	3	1	1	1	0
3	Ring Main Units										
4	Air Circuit Breakers	12	84	0		8	22	0			0
5	Feeder and Service Pillars										

# ANNEXURE G

rcle Di	vision	Description	Annual Qty	Unit
		Network operation and maintenance - Manpower charges	12	EA
		DT replacement charges (for Augmentation or replacement of low IR value DTR)		
		a. Up to 25KVA	5	EA
		b. 63/100KVA	21	EA
		c. 250/315/500KVA	21	EA
		d. >500KVA	3	EA
		DT swapping charges		
		a. Up to 25KVA	3	EA
		b. 63/100KVA	10	EA
		c. 250/315/500KVA	10	EA
		d. >500KVA	2	EA
		Mid/New Pole Erection charges (For network strengthening or to meet statutory		
		clearances)		
		a. Concrete pole	45	EA
		b. RS Joist pole	25	EA
		Vehicle Charges	25	277
		Breakdown Vehicle 12Hrs	102	EA
		Breakdown Vehicle 24 Hrs	54	EA
		DC Vehicle 12 hrs	48	EA
		Maintenance Vehicle 12 Hrs	36	EA
		Additional Services to attend emergency / natural calamity	50	LA
		Addl. Highly Skilled Manpower (Supervisor)	1	Manday
		Addl. Skilled Manpower (L/M)	10	Manday
		Addl. Unskilled Manpower (Helper)	10	Manday
В	CDD1	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
		Addl. Vehicle (Boloero)/22 hours to attend emergency	1	EA
		Additional charges / KM per vehicle	2000	kM
		Construction of New plinth for equipment	2000	EA
		Hiring charges of Hydra for 4 Hrs.	7	EA
		Hiring charges of Hydra for 8 Hrs.	8	EA
		Hiring charges of Tractor for 4 Hrs.	4	EA
		Hiring charges of Tractor for 8 Hrs.	6	EA
		Hiring charges of Pole Master for 4 Hrs.	4	EA
		Hiring charges of Pole Master for 8 Hrs.	6	EA
			5	EA
		Hiring charges of DG set 3 phase, 7.5 KVA/Day Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
		Hiring charges of Water Pump 1 phase/Day	5	EA
		Hiring charges of Tempo/Pickup vehicle per Day	10	EA
		Hiring charges of TATA 709 - Upto 150 km	3	EA
		Hiring charges of TATA 709 - 150 km to 300 km	2	EA
		Charges for extension of LT feeder/span	2	LA
		a. Three phase AB cable	60	Span
		b. Single phase bare/AB cable	168	Span Span
		Charges for installation of 1 Phase Energy meter for new connection with service		
		cable	1380	Nos.
		Sub-total for a year (Rs.)		
		GST @ 18%		

	Total all-inclusive value for 2 years (Rs.)	

	Network operation and maintenance - Manpower charges	12	EA
	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
	a. Up to 25KVA	45	EA
	b. 63/100KVA	70	EA
	c. 250/315/500KVA	30	EA
	d. >500KVA	3	EA
	DT swapping charges		
	a. Up to 25KVA	3	EA
	b. 63/100KVA	12	EA
	c. 250/315/500KVA	12	EA
	d. >500KVA	2	EA
	Mid/New Pole Erection charges (For network strengthening or to meet statutory		
	clearances)		
	a. Concrete pole	150	EA
	b. RS Joist pole	100	EA
	Vehicle Charges		
	Breakdown Vehicle 12Hrs	102	EA
	Breakdown Vehicle 24 Hrs	54	EA
	DC Vehicle 12 hrs	48	EA
	Maintenance Vehicle 12 Hrs	36	EA
	Additional Services to attend emergency / natural calamity		
	Addl. Highly Skilled Manpower (Supervisor)	1	Manday
	Addl. Skilled Manpower (L/M)	10	Manday
CDD2	Addl. Unskilled Manpower (Helper)	10	Manday
0002	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
	Additional charges / KM per vehicle	2000	kM
	Construction of New plinth for equipment	20	EA
	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
	Hiring charges of Tractor for 4 Hrs.	4	EA
	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Hiring charges of Water Pump 1 phase/Day	5	EA
	Hiring charges of Tempo per Day	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 150 km to 300 km	2	EA
	Charges for extension of LT feeder/span		
	a. Three phase AB cable	120	Span
	b. Single phase bare/AB cable	360	Span
	Charges for installation of 1 Phase Energy meter for new connection with service		
	cable	5400	Nos.
	Sub-total for a year (Rs.)		
	GST @ 18%		1
	Total all-inclusive value for a year (Rs.)		1
	Total all-inclusive value for 2 years (Rs.)		

BBSR1

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	25	EA
b. 63/100KVA	65	EA
c. 250/315/500KVA	28	EA
d. >500KVA	2	EA
DT swapping charges		
a. Up to 25KVA	3	EA
b. 63/100KVA	20	EA
c. 250/315/500KVA	20	EA
d. >500KVA	2	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory		
clearances)		
a. Concrete pole	180	EA
b. RS Joist pole	100	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	108	EA
Breakdown Vehicle 24 Hrs	36	EA
DC Vehicle 12 hrs	32	EA
Maintenance Vehicle 12 Hrs	24	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	1	Manday
Addl. Skilled Manpower (L/M)	10	Manday
Addl. Unskilled Manpower (Helper)	10	Manda
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	20	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	60	Span
b. Single phase bare/AB cable	180	Span
Charges for installation of 1 Phase Energy meter for new connection with service	4800	Nos.
cable	4600	NOS.
Sub-total for a year (Rs.)		
GST @ 18%		
Total all-inclusive value for a year (Rs.)		
Total all-inclusive value for 2 years (Rs.)		

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	100	EA
b. 63/100KVA	150	EA
c. 250/315/500KVA	18	EA
d. >500KVA	2	EA
DT swapping charges		
a. Up to 25KVA	2	EA
b. 63/100KVA	4	EA
c. 250/315/500KVA	3	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)		
a. Concrete pole	250	EA
b. RS Joist pole	60	EA
Vehicle Charges		1
Breakdown Vehicle 12Hrs	90	EA
Breakdown Vehicle 24 Hrs	54	EA
DC Vehicle 12 hrs	48	EA
Maintenance Vehicle 12 Hrs	36	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	5	Manday
Addl. Skilled Manpower (L/M)	50	Manday
Addl. Unskilled Manpower (Helper)	50	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	210	Span
b. Single phase bare/AB cable	570	Span
Charges for installation of 1 Phase Energy meter for new connection with service cable	300	Nos.
Sub-total for a year (Rs.)		
GST @ 18%		
Total all-inclusive value for a year (Rs.)		1
		1

	Network operation and maintenance - Manpower charges	12	EA
	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
	a. Up to 25KVA	50	EA
	b. 63/100KVA	100	EA
	c. 250/315/500KVA	13	EA
	d. >500KVA	2	EA
	DT swapping charges		
	a. Up to 25KVA	1	EA
	b. 63/100KVA	2	EA
	c. 250/315/500KVA	1	EA
	d. >500KVA	1	EA
	Mid/New Pole Erection charges (For network strengthening or to meet statutory		
	clearances)		
	a. Concrete pole	300	EA
	b. RS Joist pole	50	EA
	Vehicle Charges		
	Breakdown Vehicle 12Hrs	120	EA
	Breakdown Vehicle 24 Hrs	72	EA
	DC Vehicle 12 hrs	64	EA
	Maintenance Vehicle 12 Hrs	48	EA
	Additional Services to attend emergency / natural calamity		
	Addl. Highly Skilled Manpower (Supervisor)	2	Manday
	Addl. Skilled Manpower (L/M)	20	Manday
NyED	Addl. Unskilled Manpower (Helper)	20	Manday
NyLD	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
	Additional charges / KM per vehicle	2000	kM
	Construction of New plinth for equipment	30	EA
	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
	Hiring charges of Tractor for 4 Hrs.	4	EA
	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Hiring charges of Water Pump 1 phase/Day	5	EA
	Hiring charges of Tempo per Day	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 150 km to 300 km	2	EA
	Charges for extension of LT feeder/span		
	a. Three phase AB cable	102	Span
	b. Single phase bare/AB cable	300	Span
	Charges for installation of 1 Phase Energy meter for new connection with service		
	cable	2400	Nos.
	Sub-total for a year (Rs.)		1
	GST @ 18%		1
	Total all-inclusive value for a year (Rs.)		1
	Total all-inclusive value for 2 years (Rs.)		1

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	30	EA
b. 63/100KVA	40	EA
c. 250/315/500KVA	8	EA
d. >500KVA	2	EA
DT swapping charges		
a. Up to 25KVA	1	EA
b. 63/100KVA	2	EA
c. 250/315/500KVA	1	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory		
clearances)		
a. Concrete pole	250	EA
b. RS Joist pole	50	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	84	EA
Breakdown Vehicle 24 Hrs	36	EA
DC Vehicle 12 hrs	32	EA
Maintenance Vehicle 12 Hrs	24	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	1	Manda
Addl. Skilled Manpower (L/M)	10	Manda
Addl. Unskilled Manpower (Helper)	10	Manda
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	96	Span
b. Single phase bare/AB cable	288	Span
Charges for installation of 1 Phase Energy meter for new connection with service	1920	Nos.
cable	1920	INOS.
Sub-total for a year (Rs.)		
GST @ 18%		
Total all-inclusive value for a year (Rs.)		
Total all-inclusive value for 2 years (Rs.)		

	Network operation and maintenance - Manpower charges	12	EA
c.	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a	a. Up to 25KVA	65	EA
Ł	0. 63/100KVA	75	EA
c	250/315/500KVA	25	EA
c	d. >500KVA	2	EA
	OT swapping charges		
a	a. Up to 25KVA	4	EA
Ł	0. 63/100KVA	4	EA
c	250/315/500KVA	5	EA
c	d. >500KVA	1	EA
ſ	Mid/New Pole Erection charges (For network strengthening or to meet statutory		
	clearances)		
a	a. Concrete pole	350	EA
	p. RS Joist pole	60	EA
	/ehicle Charges		
_	Breakdown Vehicle 12Hrs	114	EA
	Breakdown Vehicle 24 Hrs	90	EA
_	DC Vehicle 12 hrs	80	EA
	Maintenance Vehicle 12 Hrs	60	EA
_	Additional Services to attend emergency / natural calamity		
_	Addl. Highly Skilled Manpower (Supervisor)	2	Manda
	Addl. Skilled Manpower (L/M)	20	Manda
	Addl. Unskilled Manpower (Helper)	20	Manda
	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
	Additional charges / KM per vehicle	2000	kМ
	Construction of New plinth for equipment	30	EA
	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
	Hiring charges of Tractor for 4 Hrs.	4	EA
	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Hiring charges of Water Pump 1 phase/Day	5	EA
	Hiring charges of Valler 1 drip 1 phase bay	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 000 150 km	2	EA
_	Charges for extension of LT feeder/span	-	
_	a. Three phase AB cable	228	Span
	b. Single phase bare/AB cable	690	Span
	Charges for installation of 1 Phase Energy meter for new connection with service	0.00	Span
	able	3360	Nos.
_	Sub-total for a year (Rs.)		
	GST @ 18%		
1	Fotal all-inclusive value for a year (Rs.)		
-	Fotal all-inclusive value for 2 years (Rs.)		

BBSR2

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR	)	
a. Up to 25KVA	60	EA
b. 63/100KVA	100	EA
c. 250/315/500KVA	10	EA
d. >500KVA	2	EA
DT swapping charges		
a. Up to 25KVA	2	EA
b. 63/100KVA	4	EA
c. 250/315/500KVA	4	EA
d. >500KVA	2	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutor	ry -	
clearances)		
a. Concrete pole	350	EA
b. RS Joist pole	80	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	144	EA
Breakdown Vehicle 24 Hrs	72	EA
DC Vehicle 12 hrs	64	EA
Maintenance Vehicle 12 Hrs	48	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	5	Manday
Addl. Skilled Manpower (L/M)	50	Manday
Addl. Unskilled Manpower (Helper)	50	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	150	Span
b. Single phase bare/AB cable	450	Span
Charges for installation of 1 Phase Energy meter for new connection with servic	<u>A</u>	
cable	4500	Nos.
Sub-total for a year (Rs.)		1
GST @ 18%		
Total all-inclusive value for a year (Rs.)		
Total all-inclusive value for 2 years (Rs.)		1

b. 63/100KVA       17       E         c. 250/315/500KVA       20       E         d. >500KVA       3       E         DT swapping charges       4       E         a. Up to 25KVA       4       E         b. 63/100KVA       14       E         c. 250/315/500KVA       14       E         c. 250/315/500KVA       15       E         d. >500KVA       15       E         d. >500KVA       1       E         a. Concrete pole       70       E         b. R5 Joist pole       50       E         Breakdown Vehicle 24 hrs       96       E         Breakdown Vehicle 24 hrs       72       E         DC Vehicle 12 hrs       64       E         Maintenance Vehicle 12 hrs       64       E         Addit. Highly Skilled Manpower (supervisor)       1       Mar         Addit. Neikiled Manpower (supervisor)       1       Mar         Addit. Ushiled Boleorol/12 hours to attend emergency       9       E         Addit. Vehicle (Boleorol/12 hours to attend emergency       1       E         Addit. Vehicle (Boleorol/12 hours to attend emergency       1       E         Addit. Vehicle (Boleorol/12 hours to attend emergen		12	EA
b. 63/100KVA       17       E         c. 250/315/500KVA       20       E         d. >500KVA       3       E         DT swapping charges       -       -         a. Up to 25KVA       4       E         b. 63/100KVA       14       E         c. 250/315/500KVA       14       E         c. 250/315/500KVA       11       E         d. >500KVA       12       E         d. >6.3/100KVA       14       E         c. 250/315/500KVA       11       E         d. S00KVA       15       E         d. concrete pole       70       E         b. R3 Joist pole       50       E         Breakdown Vehicle 12Hrs       96       E         Breakdown Vehicle 12Hrs       64       E         Maintenance Vehicle 12 Hrs       48       E         Addi. Nighly Skilled Manpower (supervisor)       1       Mara         Addi. Unskilled Boleorol/12 hours to attend emergency       9       E	eplacement charges (for Augmentation or replacement of low IR value DTR)		
C 250/315/500KVA20C 250/315/500KVA3E3B W apping chargesa. Up to 25KVA4b. 63/100KVA114C 250/315/500KVA15C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11C 250/315/500KVA11A Concrete pole70b R5 Joist pole50Vehicle Charges72Breakdown Vehicle 12Hrs96Breakdown Vehicle 12Hrs64Mithenace Vehicle 12 Hrs64Additional Services to attend emergency / natural calamityAddit. Inghly Skilled Manpower (Supervisor)1Addit. Unal Services to attend emergency / natural calamityAddit. Skilled Manpower (L/M)10Addit. Vehicle (Boloero)/12 hours to attend emergency9Addit. Vehicle (Boloero)/12 hours to attend emergency1Additional charges / KM per vehicle2000C Costruction of New plinth for equipment20Additional charges of Tractor for & Hrs.4Hiring charges of Tractor for 8 Hrs.6Hiring charges of Dole Master for 4 Hrs.4Hiring charges of Tool S & Hase., 10 to 25 KVA/Day5Hiring charges of Tool To eet Hrs.4Hiring charges of Tool for 8 Hrs.6Hiring charges of Tool for 8 Hrs.6Hiring char	o to 25KVA	5	EA
d. >SOOVA       3       E         DT swapping charges	3/100KVA	17	EA
DT swapping charges4a. Up to 25KVA4b. 63/100KVA144c. 250/315/500KVA15c. 250/315/500KVA1d. SOOKVA1Mid/New Pole Erection charges (For network strengthening or to meet statutory (clearances)1a. Concrete pole70b. R5 Joist pole50Vehicle Charges72Breakdown Vehicle 12Hrs96Breakdown Vehicle 24 Hrs72DC Vehicle 12 hrs64Maintenance Vehicle 12 Hrs64Addl. Highly Skilled Manpower (Supervisor)1Addl. Highly Skilled Manpower (Supervisor)1Addl. Unskilled Manpower (Supervisor)1Addl. Unskilled Manpower (L/M)10Maid. Vehicle (Boloero)/12 hours to attend emergency9Addl. Vehicle (Boloero)/12 hours to attend emergency1Addl. Vehicle (Boloero)/12 hours to attend emergency1Addl. Vehicle Boloero)/12 hours to attend emergency1Addl. Vehicle Boloero)/12 hours to attend emergency2000Kiring charges of Hydra for 8 Hrs.8Hiring charges of Tractor for 8 Hrs.6Hiring charges of Doe Master for 4 Hrs.6Hiring charges of Doe Set 3 phase, 7.5 KVA/Day5Hiring charges of Tactor for 4 Hrs.6Hiring charges of Tactor for 4 Hrs.6Hiring charges of Doe Set 3 phase, 7.5 KVA/Day5Hiring charges of Tactor for 4 Hrs.6Hiring charges of Tactor for 8 Hrs.6Hiring charges of Tactor for 4 Hrs.6<	0/315/500KVA	20	EA
a. Up to 25KVA       4         b. 63/100KVA       114         c. 250/315/00KVA       15         d. >500KVA       1         d. >500KVA       1         mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)       70         a. Concrete pole       70         a. Concrete pole       70         b. R5 Joist pole       50         Vehice Charges       96         Breakdown Vehicle 12 Hrs       96         Breakdown Vehicle 12 Hrs       64         Maintenance Vehicle 12 Hrs       64         Maintenance Vehicle 12 Hrs       48         Addl. Highly Skilled Manpower (Lypervisor)       1         Addl. Vehicle (Boloero)/22 hours to attend emergency       10         Addl. Vehicle (Boloero)/24 hours to attend emergency       9         Addl. Vehicle (Boloero)/24 hours to attend emergency       1         Addl. Vehicle (Boloero)/24 hours to attend emergency       1         Addl. Vehicle (Boloero)/24 hours to attend emergency       1         Addl. Vehicle Boloero)/24 hours to attend emergency       1         Addl. High Skilled Manpower (L/M)       10         Miring charges of Hydra for 8 Hrs.       7         Hiring charges of Fole Master for 8 Hrs.       6	500KVA	3	EA
b. 63/100KVA14c. 250/315/500KVA15d. >500KVA1d. >500KVA1ed. >500KVA1a. Concrete pole70b. RS Joist pole50velocite concrete pole50b. RS Joist pole50Vehicle Charges72Breakdown Vehicle 24 Hrs72DC Vehicle 12 hrs64Mid/New Nehicle 24 Hrs72DC Vehicle 12 hrs64Matinenance Vehicle 12 Hrs64Matinenance Vehicle 12 Hrs64Additional Services to attend emergency / natural calamity10Addi. Unskilled Manpower (Supervisor)1Addl. Uskilled Manpower (Ielper)10Mard10Mard10Addl. Vehicle (Boloero)/24 hours to attend emergency9Additional charges of Hydra for 4 Hrs.7Hiring charges of Hydra for 4 Hrs.7Hiring charges of Tractor for 8 Hrs.6Hiring charges of Tractor for 8 Hrs.6Hiring charges of Tractor for 8 Hrs.6Hiring charges of Tool for 5 Hrs.4Hiring charges of Tool for 5 Hrs.6Hiring charges of Tool for 5 Hrs.6Hir	wapping charges		
c. 250/315/500KVA       15         d. >500KVA       1         Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)       1         a. Concrete pole       70         B. RS Joist pole       50         Vehicle Charges       96         Breakdown Vehicle 12Hrs       96         Breakdown Vehicle 24 Hrs       72         DC Vehicle 12 hrs       64         Maintenance Vehicle 12 Hrs       48         Addlitional Services to attend emergency / natural calamity       448         Addl. Highly Skilled Manpower (Supervisor)       1       Mar         Addl. Unskilled Manpower (U/M)       10       Mar         Addl. Vehicle (Boloerol/12 hours to attend emergency       9       E         Addl. Vehicle (Boloerol/12 hours to attend emergency       1       E         Additional charges of Hydra for 8 Hrs.       8       E         Hiring charges of Tractor for 8 Hrs.       8       E         Hiring charges of Dole Master for 4 Hrs.       4       E         Hiring charges of Pole Master for 8 Hrs.       6       E         Hiring charges of Dole Master for 8 Hrs.       6       E         Hiring charges of Dole Master for 8 Hrs.       6       E         Hiring charges o	o to 25KVA	4	EA
d.>500KVA       1       E         Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)       70       E         a. Concrete pole       70       E         b. R5 Joist pole       50       E         Weincle Charges       96       E         Breakdown Vehicle 12Hrs       96       E         Breakdown Vehicle 12 Hrs       48       E         Additional Services to attend emergency / natural calamity       72       E         Additional Services to attend emergency / natural calamity       48       E         Additional Genero (JM)       10       Mara         Addl. Highly Skilled Manpower (Supervisor)       1       Mara         Addl. Unskilled Manpower (Helper)       10       Mara         Addl. Unskilled Manpower (Helper)       10       Mara         Addl. Vehicle (Boloero)/12 hours to attend emergency       9       E         Additional charges / KMW for equipment       20       E         Hiring charges of Hydra for 8 Hrs.       7       E         Hiring charges of Tractor for 8 Hrs.       4       E         Hiring charges of Dole Master for 8 Hrs.       6       E         Hiring charges of Dole Master for 8 Hrs.       6       E         Hi	3/100KVA	14	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)       70         a. Concrete pole       70       E         b. RS Joist pole       50       E         Vehicle Charges       96       E         Breakdown Vehicle 12Hrs       96       E         DC Vehicle 12 hrs       64       E         Maintenance Vehicle 12 Hrs       64       E         Additional Services to attend emergency / natural calamity       48       E         Addit. Unskilled Manpower (Supervisor)       1       Mar         Addl. Unskilled Manpower (L/M)       10       Mar         Addl. Unskilled Manpower (L/M)       10       Mar         Addl. Vehicle (Boleoro)/24 hours to attend emergency       9       E         Additional charges / KM per vehicle       2000       k         Construction of New plinth for equipment       20       E         Hiring charges of Hydra for 8 Hrs.       7       E         Hiring charges of Tractor for 8 Hrs.       4       E         Hiring charges of Pole Master for 4 Hrs.       4       E         Hiring charges of Pole Master for 8 Hrs.       6       E         Hiring charges of Pole Master for 8 Hrs.       6       E         Hiring charges of Pole Mas	0/315/500KVA	15	EA
clearances)70Ea. Concrete pole70Eb. RS Joist pole50EVehicle Charges96EBreakdown Vehicle 12Hrs96EBreakdown Vehicle 24 Hrs72EDC Vehicle 12 hrs64EAdditional Services to attend emergency / natural calamity48EAdditional Services to attend emergency / natural calamity10MarAdd. Highly Skilled Manpower (LPeper)10MarAdd. Unskilled Manpower (Helper)10MarAdd. Unskilled Manpower (Helper)10MarAdd. Vehicle (Boloero)/12 hours to attend emergency9EAdditional charges / KM per vehicle20000kkConstruction of New pinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 4 Hrs.4EHiring charges of Pole Master for 4 Hrs.6EHiring charges of Dole Master for 4 Hrs.6EHiring charges of Dole Master for 4 Hrs.6EHiring charges of Dole Master for 4 Hrs.3EHiring charges of Tractor for 8 Hrs.6EHiring charges of Tractor for 8 Hrs.6EHiring charges of Die Set 3 phase, 7.5 KVA/Day5EHiring charges of Die Set 3 phase, 7.5 KVA/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - 150 km to 300 k	500KVA	1	EA
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Breakdown Vehicle 24 Hrs72EDC Vehicle 12 hrs64EMaintenance Vehicle 12 Hrs48EAdditional Services to attend emergency / natural calamity1Addl. Highly Skilled Manpower (Supervisor)1MarAddl. Unskilled Manpower (L/M)10MarAddl. Vehicle (Boloero)/12 hours to attend emergency9EAddl. Vehicle (Boloero)/24 hours to attend emergency1EAddl. Vehicle (Boloero)/24 hours to attend emergency1EAddi. Vehicle (Boloero)/24 hours to attend emergency1EAdditonal charges / KM per vehicle2000kKConstruction of New plinth for equipment20EHiring charges of Hydra for 8 Hrs.7EHiring charges of Tractor for 8 Hrs.6EHiring charges of Tractor for 8 Hrs.6EHiring charges of De Master for 4 Hrs.4EHiring charges of DG set 3 phase, 7.5 KVA/Day5EHiring charges of Tactor for 8 Hrs.6EHiring charges of Tactor for 8 Hrs.6EHiring charges of Tactor for 8 Hrs.6EHiring charges of Tactor for 8 Hrs.3EHiring charges of Tactor for 8 Hrs.3EHiring charges of TATA 709 - 150 km3EHiring charges of TATA 709 - 150 km3EHiring charges of TATA 709 - 150 km to 300 km2ECharges for extension of LT feeder/span22400a. Three phase AB cable25		96	EA
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Addl. Unskilled Manpower (Helper)10MarAddl. Vehicle (Boloero)/12 hours to attend emergency9EAddl. Vehicle (Boloero)/24 hours to attend emergency1EAddl. Vehicle (Boloero)/24 hours to attend emergency1EAdditional charges / KM per vehicle2000kkConstruction of New plinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Tractor for 8 Hrs.8EHiring charges of Tractor for 8 Hrs.4EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 4 Hrs.6EHiring charges of Do g et 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km2ECharges for extension of LT feeder/span70Spa. Three phase AB cable25Spb. Single phase bare/AB cable25SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotSub-total for a year (Rs.)GEGGST @ 18%EEE			Manda
Addl. Vehicle (Boloero)/12 hours to attend emergency9EAddl. Vehicle (Boloero)/24 hours to attend emergency1EAddlitional charges / KM per vehicle2000kkConstruction of New plinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Tractor for 4 Hrs.8EHiring charges of Tractor for 8 Hrs.4EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 4 Hrs.6EHiring charges of Dole Master for 8 Hrs.6EHiring charges of Dole Master for 8 Hrs.6EHiring charges of Dol Set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km2EHiring charges for A TA 709 - 150 km to 300 km2ECharges for extension of LT feeder/span225a. Three phase AB cable25Spb. Single phase bare/AB cable25Spcable2400NotSub-total for a year (Rs.)GGGST @ 18%EE			Manda
Addl. Vehicle (Boloero)/24 hours to attend emergency1EAdditional charges / KM per vehicle2000kkConstruction of New plinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Hydra for 4 Hrs.8EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 4 Hrs.6EHiring charges of DG set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - 150 km to 300 km2ECharges for extension of LT feeder/span25a. Three phase AB cable25Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotesSub-total for a year (Rs.)GST @ 18%E			EA
Additional charges / KM per vehicle2000kkConstruction of New plinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Hydra for 8 Hrs.8EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Dole Master for 8 Hrs.6EHiring charges of Dole Master for 8 Hrs.6EHiring charges of Dole Set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of Water Pump 1 phase/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges for ATA 709 - 150 km to 300 km2ECharges for extension of LT feeder/span2Ea. Three phase AB cable25Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotSub-total for a year (Rs.)GST @ 18%EE		1	EA
Construction of New plinth for equipment20EHiring charges of Hydra for 4 Hrs.7EHiring charges of Hydra for 8 Hrs.8EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 8 Hrs.4EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Dole Set 3 phase, 7.5 KVA/Day5EHiring charges of G Set 3 phase, 10 to 25 KVA/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - 150 km to 300 km2ECharges for extension of LT feeder/span2Ea. Three phase AB cable70Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotSub-total for a year (Rs.)GST @ 18%	· / // · · · · · · · · · · · · · · · ·	2000	kM
Hiring charges of Hydra for 4 Hrs.7EHiring charges of Tractor for 4 Hrs.8EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Dole Set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of Mater Pump 1 phase/Day5EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km2ECharges for extension of LT feeder/span2Ea. Three phase AB cable25Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotSub-total for a year (Rs.)EEGST @ 18%EE		20	EA
Hiring charges of Hydra for 8 Hrs.8EHiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Do Set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of Do Set 3 phase, 10 to 25 KVA/Day5EHiring charges of Tampo per Day10EHiring charges of TATA 709 - Upto 150 km3EHiring charges of TATA 709 - Upto 150 km2ECharges for extension of LT feeder/span2Sa. Three phase AB cable25Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotSub-total for a year (Rs.)GST @ 18%AA			EA
Hiring charges of Tractor for 4 Hrs.4EHiring charges of Tractor for 8 Hrs.6EHiring charges of Pole Master for 4 Hrs.4EHiring charges of Pole Master for 8 Hrs.6EHiring charges of Dos et 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 7.5 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of DG set 3 phase, 10 to 25 KVA/Day5EHiring charges of Tampo per Day10EHiring charges of TATA 709 - Upto 150 km3EHiring charges for TATA 709 - Upto 150 km to 300 km2ECharges for extension of LT feeder/span70Spa. Three phase AB cable25Spb. Single phase bare/AB cable70SpCharges for installation of 1 Phase Energy meter for new connection with service cable2400NotGST @ 18%18%14000000000000000000000000000000000000		8	EA
Hiring charges of Tractor for 8 Hrs.6Hiring charges of Pole Master for 4 Hrs.4Hiring charges of Pole Master for 8 Hrs.6Hiring charges of DG set 3 phase, 7.5 KVA/Day5Hiring charges of DG set 3 phase, 7.5 KVA/Day5Hiring charges of DG set 3 phase, 10 to 25 KV4/Day5Hiring charges of Water Pump 1 phase/Day5Hiring charges of TATA 709 - Upto 150 km3Hiring charges of TATA 709 - Upto 150 km2Hiring charges of TATA 709 - 150 km to 300 km2Charges for extension of LT feeder/span		4	EA
Birling charges of Pole Master for 4 Hrs.4Hiring charges of Pole Master for 8 Hrs.6Hiring charges of DG set 3 phase, 7.5 KVA/Day5Hiring charges of DG set 3 phase, 10 to 25 KVA/Day5Hiring charges of Water Pump 1 phase/Day5Hiring charges of Tempo per Day10Hiring charges of TATA 709 - Upto 150 km3Hiring charges of TATA 709 - 150 km to 300 km2Charges for extension of LT feeder/span2a. Three phase AB cable70Spigle phase bare/AB cable70Sub-total for a year (Rs.)2400GST @ 18%18%		6	EA
Hiring charges of Pole Master for 8 Hrs.6Hiring charges of DG set 3 phase, 7.5 KVA/Day5Hiring charges of DG set 3 phase, 10 to 25 KVA/Day5Hiring charges of Water Pump 1 phase/Day5Hiring charges of Tempo per Day10Hiring charges of TATA 709 - Upto 150 km3Hiring charges of TATA 709 - 150 km to 300 km2Charges for extension of LT feeder/span25a. Three phase AB cable70b. Single phase bare/AB cable70Sub-total for a year (Rs.)2400GST @ 18%18%			EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day     5     E       Hiring charges of DG set 3 phase, 10 to 25 KVA/Day     5     E       Hiring charges of Water Pump 1 phase/Day     5     E       Hiring charges of Tempo per Day     10     E       Hiring charges of TATA 709 - Upto 150 km     3     E       Charges for extension of LT feeder/span     2     E       a. Three phase AB cable     25     Sp       b. Single phase bare/AB cable     70     Sp       Charges for installation of 1 Phase Energy meter for new connection with service cable     2400     Not Sp       Sub-total for a year (Rs.)     GST @ 18%     4		6	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day     5     E       Hiring charges of Water Pump 1 phase/Day     5     E       Hiring charges of Tempo per Day     10     E       Hiring charges of TATA 709 - Upto 150 km     3     E       Hiring charges of TATA 709 - Upto 150 km     2     E       Charges for extension of LT feeder/span     2     E       a. Three phase AB cable     25     Sp       b. Single phase bare/AB cable     70     Sp       Charges for installation of 1 Phase Energy meter for new connection with service cable     2400     Notes cable       Sub-total for a year (Rs.)     GST @ 18%     E			EA
Hiring charges of Water Pump 1 phase/Day       5       E         Hiring charges of Tempo per Day       10       E         Hiring charges of TATA 709 - Upto 150 km       3       E         Hiring charges of TATA 709 - 150 km to 300 km       2       E         Charges for extension of LT feeder/span       2       E         a. Three phase AB cable       25       Sp         b. Single phase bare/AB cable       70       Sp         Charges for installation of 1 Phase Energy meter for new connection with service cable       2400       Notestal for a year (Rs.)         GST @ 18%       18%       1       1			EA
Hiring charges of Tempo per Day     10     E       Hiring charges of TATA 709 - Upto 150 km     3     E       Hiring charges of TATA 709 - 150 km to 300 km     2     E       Charges for extension of LT feeder/span     2     E       a. Three phase AB cable     25     Sp       b. Single phase bare/AB cable     70     Sp       Charges for installation of 1 Phase Energy meter for new connection with service cable     2400     Not       Sub-total for a year (Rs.)     GST @ 18%     1			EA
Hiring charges of TATA 709 - Upto 150 km     3     E       Hiring charges of TATA 709 - 150 km to 300 km     2     E       Charges for extension of LT feeder/span     2     E       a. Three phase AB cable     25     Sp       b. Single phase bare/AB cable     70     Sp       Charges for installation of 1 Phase Energy meter for new connection with service cable     2400     No       Sub-total for a year (Rs.)     GST @ 18%     18%		-	EA
Hiring charges of TATA 709 - 150 km to 300 km     2     E       Charges for extension of LT feeder/span     2     E       a. Three phase AB cable     25     Sp       b. Single phase bare/AB cable     70     Sp       Charges for installation of 1 Phase Energy meter for new connection with service cable     2400     No       Sub-total for a year (Rs.)     GST @ 18%     4			EA
Charges for extension of LT feeder/span       25       Sp         a. Three phase AB cable       25       Sp         b. Single phase bare/AB cable       70       Sp         Charges for installation of 1 Phase Energy meter for new connection with service cable       2400       No         Sub-total for a year (Rs.)       GST @ 18%       400       100			EA
a. Three phase AB cable       25       Sp         b. Single phase bare/AB cable       70       Sp         Charges for installation of 1 Phase Energy meter for new connection with service cable       2400       No         Sub-total for a year (Rs.)       55T @ 18%       55T @ 18%       55T @ 18%			
b. Single phase bare/AB cable 70 Sp Charges for installation of 1 Phase Energy meter for new connection with service 2400 No cable 2400 Sub-total for a year (Rs.) GST @ 18%		25	Span
Charges for installation of 1 Phase Energy meter for new connection with service cable       2400       No         Sub-total for a year (Rs.)       ST @ 18%       State cable       State cable			Span
cable     Sub-total for a year (Rs.)       GST @ 18%	ges for installation of 1 Phase Energy meter for new connection with service		Nos.
GST @ 18%			
	-		
Total all-inclusive value for a year (Rs.) Total all-inclusive value for 2 years (Rs.)	l all-inclusive value for a year (Rs.)		ļ

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	60	EA
b. 63/100KVA	100	EA
c. 250/315/500KVA	10	EA
d. >500KVA	2	EA
DT swapping charges		
a. Up to 25KVA	20	EA
b. 63/100KVA	50	EA
c. 250/315/500KVA	10	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory		
clearances)		
a. Concrete pole	350	EA
b. RS Joist pole	250	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	72	EA
Breakdown Vehicle 24 Hrs	72	EA
DC Vehicle 12 hrs	64	EA
Maintenance Vehicle 12 Hrs	48	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	3	Manday
Addl. Skilled Manpower (L/M)	30	Manday
Addl. Unskilled Manpower (Helper)	30	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	165	Span
b. Single phase bare/AB cable	480	Span
Charges for installation of 1 Phase Energy meter for new connection with service		
cable	2700	Nos.
Sub-total for a year (Rs.)		
GST @ 18%		
Total all-inclusive value for a year (Rs.)		
Total all-inclusive value for 2 years (Rs.)		1

	Network operation and maintenance - Manpower charges	12	EA
	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
	a. Up to 25KVA	12	EA
	b. 63/100KVA	65	EA
	c. 250/315/500KVA	20	EA
	d. >500KVA	2	EA
	DT swapping charges		
	a. Up to 25KVA	2	EA
	b. 63/100KVA	4	EA
	c. 250/315/500KVA	2	EA
	d. >500KVA	2	EA
	Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)		
	a. Concrete pole	300	EA
	b. RS Joist pole	60	EA
	Vehicle Charges		1
	Breakdown Vehicle 12Hrs	66	EA
	Breakdown Vehicle 24 Hrs	54	EA
	DC Vehicle 12 hrs	48	EA
	Maintenance Vehicle 12 Hrs	36	EA
	Additional Services to attend emergency / natural calamity		
	Addl. Highly Skilled Manpower (Supervisor)	3	Manday
	Addl. Skilled Manpower (L/M)	30	Manday
CDD2	Addl. Unskilled Manpower (Helper)	30	Manday
0002	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
	Additional charges / KM per vehicle	2000	kM
	Construction of New plinth for equipment	30	EA
	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
	Hiring charges of Tractor for 4 Hrs.	4	EA
	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Hiring charges of Water Pump 1 phase/Day	5	EA
	Hiring charges of Tempo per Day	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 150 km to 300 km	2	EA
	Charges for extension of LT feeder/span		
	a. Three phase AB cable	55	Span
	b. Single phase bare/AB cable	175	Span
	Charges for installation of 1 Phase Energy meter for new connection with service		
	cable	2400	Nos.
	Sub-total for a year (Rs.)		1
	GST @ 18%		1
	Total all-inclusive value for a year (Rs.)		1
	Total all-inclusive value for 2 years (Rs.)		+

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	28	EA
b. 63/100KVA	20	EA
c. 250/315/500KVA	5	EA
d. >500KVA	1	EA
DT swapping charges		
a. Up to 25KVA	2	EA
b. 63/100KVA	2	EA
c. 250/315/500KVA	1	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory		
clearances)		
a. Concrete pole	250	EA
b. RS Joist pole	50	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	66	EA
Breakdown Vehicle 24 Hrs	54	EA
DC Vehicle 12 hrs	48	EA
Maintenance Vehicle 12 Hrs	36	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	2	Manday
Addl. Skilled Manpower (L/M)	20	Manday
Addl. Unskilled Manpower (Helper)	20	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	40	Span
b. Single phase bare/AB cable	110	Span
Charges for installation of 1 Phase Energy meter for new connection with service		
cable	1680	Nos.
Sub-total for a year (Rs.)		1
GST @ 18%		1
Total all-inclusive value for a year (Rs.)		1
Total all-inclusive value for 2 years (Rs.)		+

Network operat	ion and maintenance - Manpower charges	12	EA
DT replacement	charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA		50	EA
b. 63/100KVA		80	EA
c. 250/315/500k	νA	4	EA
d. >500KVA		1	EA
DT swapping ch	arges		
a. Up to 25KVA		1	EA
b. 63/100KVA		2	EA
c. 250/315/500k	VA	1	EA
d. >500KVA		1	EA
	rection charges (For network strengthening or to meet statutory		
clearances)	····· ;		
a. Concrete pole		300	EA
b. RS Joist pole		50	EA
Vehicle Charges			
Breakdown Vehi	cle 12Hrs	60	EA
Breakdown Vehi	cle 24 Hrs	36	EA
DC Vehicle 12 hr	S	32	EA
Maintenance Ve	hicle 12 Hrs	24	EA
Additional Servi	ces to attend emergency / natural calamity		
	ed Manpower (Supervisor)	1	Manday
Addl. Skilled Ma		10	Manday
	Nanpower (Helper)	10	Manday
	ploero)/12 hours to attend emergency	9	EA
	ploero)/24 hours to attend emergency	1	EA
	es / KM per vehicle	2000	kM
	New plinth for equipment	30	EA
	f Hydra for 4 Hrs.	7	EA
	f Hydra for 8 Hrs.	8	EA
	f Tractor for 4 Hrs.	4	EA
	f Tractor for 8 Hrs.	6	EA
	Pole Master for 4 Hrs.	4	EA
	Pole Master for 8 Hrs.	6	EA
	DG set 3 phase, 7.5 KVA/Day	5	EA
	DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Water Pump 1 phase/Day	5	EA
Hiring charges o		10	EA
	TATA 709 - Upto 150 km	3	EA
	TATA 709 - 150 km to 300 km	2	EA
	nsion of LT feeder/span	2	
a. Three phase A		140	Span
b. Single phase b		450	Span
<u> </u>	are/AB cable allation of 1 Phase Energy meter for new connection with service	430	span
charges for inst	anation of a Phase Energy meter for new connection with service	1500	Nos.
Sub-total for a y	ear (Rs.)		
GST @ 18%			1
	e value for a year (Rs.)		
	e value for 2 years (Rs.)		+

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)	)	
a. Up to 25KVA	50	EA
b. 63/100KVA	75	EA
c. 250/315/500KVA	10	EA
d. >500KVA	1	EA
DT swapping charges		
a. Up to 25KVA	1	EA
b. 63/100KVA	2	EA
c. 250/315/500KVA	1	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutor	y	
clearances)		
a. Concrete pole	300	EA
b. RS Joist pole	45	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	120	EA
Breakdown Vehicle 24 Hrs	72	EA
DC Vehicle 12 hrs	64	EA
Maintenance Vehicle 12 Hrs	48	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	1	Manday
Addl. Skilled Manpower (L/M)	10	Manday
Addl. Unskilled Manpower (Helper)	10	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	220	Span
b. Single phase bare/AB cable	660	Span
Charges for installation of 1 Phase Energy meter for new connection with service	<u> </u>	
cable	3300	Nos.
Sub-total for a year (Rs.)		
GST @ 18%		
Total all-inclusive value for a year (Rs.)		

		Network operation and maintenance - Manpower charges	12	EA
		DT replacement charges (for Augmentation or replacement of low IR value DTR)		
		a. Up to 25KVA	150	EA
		b. 63/100KVA	100	EA
		c. 250/315/500KVA	15	EA
		d. >500KVA	1	EA
		DT swapping charges		
		a. Up to 25KVA	1	EA
		b. 63/100KVA	4	EA
		c. 250/315/500KVA	4	EA
		d. >500KVA	1	EA
		Mid/New Pole Erection charges (For network strengthening or to meet statutory		
		clearances)		
		a. Concrete pole	350	EA
		b. RS Joist pole	45	EA
		Vehicle Charges		
		Breakdown Vehicle 12Hrs	96	EA
		Breakdown Vehicle 24 Hrs	72	EA
		DC Vehicle 12 hrs	64	EA
		Maintenance Vehicle 12 Hrs	48	EA
		Additional Services to attend emergency / natural calamity		
		Addl. Highly Skilled Manpower (Supervisor)	1	Manday
		Addl. Skilled Manpower (L/M)	10	Manday
	TED	Addl. Unskilled Manpower (Helper)	10	Manday
nenkanal		Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
		Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
		Additional charges / KM per vehicle	2000	kM
		Construction of New plinth for equipment	30	EA
		Hiring charges of Hydra for 4 Hrs.	7	EA
		Hiring charges of Hydra for 8 Hrs.	8	EA
		Hiring charges of Tractor for 4 Hrs.	4	EA
		Hiring charges of Tractor for 8 Hrs.	6	EA
		Hiring charges of Pole Master for 4 Hrs.	4	EA
		Hiring charges of Pole Master for 8 Hrs.	6	EA
		Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
		Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
		Hiring charges of Water Pump 1 phase/Day	5	EA
		Hiring charges of Tempo per Day	10	EA
		Hiring charges of TATA 709 - Upto 150 km	3	EA
		Hiring charges of TATA 709 - 150 km to 300 km	2	EA
		Charges for extension of LT feeder/span		
		a. Three phase AB cable	180	Span
		b. Single phase bare/AB cable	550	Span
		Charges for installation of 1 Phase Energy meter for new connection with service		
		cable	2880	Nos.
		Sub-total for a year (Rs.)		
		GST @ 18%		
		Total all-inclusive value for a year (Rs.)		
		Total all-inclusive value for a year (Rs.)		

Ľ	Network operation and maintenance - Manpower charges	12	EA
	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
ā	a. Up to 25KVA	110	EA
I	D. 63/100KVA	110	EA
0	c. 250/315/500KVA	15	EA
0	d. >500KVA	1	EA
1	DT swapping charges		
ā	a. Up to 25KVA	1	EA
I	D. 63/100KVA	2	EA
0	c. 250/315/500KVA	2	EA
0	d. >500KVA	1	EA
1	Mid/New Pole Erection charges (For network strengthening or to meet statutory		
	clearances)		
á	a. Concrete pole	350	EA
ī	p. RS Joist pole	50	EA
	/ehicle Charges		1
Ī	Breakdown Vehicle 12Hrs	66	EA
Ī	Breakdown Vehicle 24 Hrs	54	EA
ī	DC Vehicle 12 hrs	48	EA
Ī	Maintenance Vehicle 12 Hrs	36	EA
7	Additional Services to attend emergency / natural calamity		
7	Addl. Highly Skilled Manpower (Supervisor)	1	Manday
7	Addl. Skilled Manpower (L/M)	10	Manday
	Addl. Unskilled Manpower (Helper)	10	Manday
	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
-	Additional charges / KM per vehicle	2000	kM
(	Construction of New plinth for equipment	30	EA
ī	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
1	Hiring charges of Tractor for 4 Hrs.	4	EA
_	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
ī	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
-	Hiring charges of Water Pump 1 phase/Day	5	EA
ī	Hiring charges of Tempo per Day	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 150 km to 300 km	2	EA
	Charges for extension of LT feeder/span		
	a. Three phase AB cable	250	Span
	o. Single phase bare/AB cable	720	Span
	Charges for installation of 1 Phase Energy meter for new connection with service		
	cable	3900	Nos.
	Sub-total for a year (Rs.)		1
	GST @ 18%		1
	Fotal all-inclusive value for a year (Rs.)		
	Fotal all-inclusive value for 2 years (Rs.)		1

		1
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	55	EA
b. 63/100KVA	40	EA
c. 250/315/500KVA	10	EA
d. >500KVA	1	EA
DT swapping charges		
a. Up to 25KVA	1	EA
b. 63/100KVA	2	EA
c. 250/315/500KVA	2	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)		
a. Concrete pole	350	EA
b. RS Joist pole	50	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	144	EA
Breakdown Vehicle 24 Hrs	72	EA
DC Vehicle 12 hrs	48	EA
Maintenance Vehicle 12 Hrs	64	EA
Additional Services to attend emergency / natural calamity	0.	27.
Addl. Highly Skilled Manpower (Supervisor)	5	Manda
Addl. Skilled Manpower (L/M)	50	Manda
Addl. Unskilled Manpower (Helper)	50	Manda
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	100	Span
b. Single phase bare/AB cable	300	Span
Charges for installation of 1 Phase Energy meter for new connection with service	3420	Nos.
cable		+
Sub-total for a year (Rs.)		<u> </u>
GST @ 18% Total al-inclusive value for a year (Rs.)		-

Network operation and maintena	nce - Manpower charges	12	EA
DT replacement charges (for Aug	nentation or replacement of low IR value DTR)		
a. Up to 25KVA		50	EA
b. 63/100KVA		45	EA
c. 250/315/500KVA		10	EA
d. >500KVA		1	EA
DT swapping charges			
a. Up to 25KVA		1	EA
b. 63/100KVA		2	EA
c. 250/315/500KVA		2	EA
d. >500KVA		1	EA
Mid/New Pole Erection charges (	For network strengthening or to meet statutory		
clearances)			
a. Concrete pole		350	EA
b. RS Joist pole		50	EA
Vehicle Charges			
Breakdown Vehicle 12Hrs		48	EA
Breakdown Vehicle 24 Hrs		36	EA
DC Vehicle 12 hrs		32	EA
Maintenance Vehicle 12 Hrs		24	EA
Additional Services to attend emo	ergency / natural calamity		
Addl. Highly Skilled Manpower (Su		5	Manday
Addl. Skilled Manpower (L/M)		50	Manday
Addl. Unskilled Manpower (Helper	.)	50	Manday
Addl. Vehicle (Boloero)/12 hours t	, ,	9	EA
Addl. Vehicle (Boloero)/24 hours t	, , , , , , , , , , , , , , , , , , ,	1	EA
Additional charges / KM per vehic	5 /	2000	kM
Construction of New plinth for eq		30	EA
Hiring charges of Hydra for 4 Hrs.		7	EA
Hiring charges of Hydra for 8 Hrs.		8	EA
Hiring charges of Tractor for 4 Hrs.		4	EA
Hiring charges of Tractor for 8 Hrs.		6	EA
Hiring charges of Pole Master for 4		4	EA
Hiring charges of Pole Master for 8		6	EA
Hiring charges of DG set 3 phase, 7		5	EA
Hiring charges of DG set 3 phase, 2		5	EA
Hiring charges of Water Pump 1 pl		5	EA
Hiring charges of Tempo per Day		10	EA
Hiring charges of TATA 709 - Upto	150 km	3	EA
Hiring charges of TATA 709 - 150 k		2	EA
Charges for extension of LT feede			
a. Three phase AB cable		30	Span
b. Single phase bare/AB cable		90	Span
	Energy meter for new connection with service		
cable		1020	Nos.
Sub-total for a year (Rs.)			
GST @ 18%			
Total all-inclusive value for a year	(Rs.)		
Total all-inclusive value for 2 year	<u>, ,</u>		1

	Network operation and maintenance - Manpower charges	12	EA
	DT replacement charges (for Augmentation or replacement of low IR value DTR)		
	a. Up to 25KVA	50	EA
	b. 63/100KVA	40	EA
	c. 250/315/500KVA	10	EA
	d. >500KVA	1	EA
	DT swapping charges		
	a. Up to 25KVA	1	EA
	b. 63/100KVA	2	EA
	c. 250/315/500KVA	2	EA
	d. >500KVA	1	EA
	Mid/New Pole Erection charges (For network strengthening or to meet statutory		
	clearances)		
	a. Concrete pole	350	EA
	b. RS Joist pole	50	EA
	Vehicle Charges		1
	Breakdown Vehicle 12Hrs	54	EA
	Breakdown Vehicle 24 Hrs	54	EA
	DC Vehicle 12 hrs	48	EA
	Maintenance Vehicle 12 Hrs	36	EA
	Additional Services to attend emergency / natural calamity		
	Addl. Highly Skilled Manpower (Supervisor)	5	Manday
	Addl. Skilled Manpower (L/M)	50	Manday
JED	Addl. Unskilled Manpower (Helper)	50	Manday
120	Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
	Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
	Additional charges / KM per vehicle	2000	kM
	Construction of New plinth for equipment	30	EA
	Hiring charges of Hydra for 4 Hrs.	7	EA
	Hiring charges of Hydra for 8 Hrs.	8	EA
	Hiring charges of Tractor for 4 Hrs.	4	EA
	Hiring charges of Tractor for 8 Hrs.	6	EA
	Hiring charges of Pole Master for 4 Hrs.	4	EA
	Hiring charges of Pole Master for 8 Hrs.	6	EA
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
	Hiring charges of Water Pump 1 phase/Day	5	EA
	Hiring charges of Vater Famp 1 phase bay	10	EA
	Hiring charges of TATA 709 - Upto 150 km	3	EA
	Hiring charges of TATA 709 - 150 km to 300 km	2	EA
	Charges for extension of LT feeder/span		
	a. Three phase AB cable	100	Span
	b. Single phase bare/AB cable	300	Span
	Charges for installation of 1 Phase Energy meter for new connection with service		
	cable	1800	Nos.
	Sub-total for a year (Rs.)		
	GST @ 18%		1
	Total all-inclusive value for a year (Rs.)		
			1

Network operation and maintenance - Manpower charges	12	EA
DT replacement charges (for Augmentation or replacement of low IR value DTR)		
a. Up to 25KVA	50	EA
b. 63/100KVA	40	EA
c. 250/315/500KVA	10	EA
d. >500KVA	1	EA
DT swapping charges		
a. Up to 25KVA	1	EA
b. 63/100KVA	2	EA
c. 250/315/500KVA	2	EA
d. >500KVA	1	EA
Mid/New Pole Erection charges (For network strengthening or to meet statutory		
clearances)		
a. Concrete pole	350	EA
b. RS Joist pole	50	EA
Vehicle Charges		
Breakdown Vehicle 12Hrs	42	EA
Breakdown Vehicle 24 Hrs	54	EA
DC Vehicle 12 hrs	48	EA
Maintenance Vehicle 12 Hrs	36	EA
Additional Services to attend emergency / natural calamity		
Addl. Highly Skilled Manpower (Supervisor)	5	Manday
Addl. Skilled Manpower (L/M)	50	Manday
Addl. Unskilled Manpower (Helper)	50	Manday
Addl. Vehicle (Boloero)/12 hours to attend emergency	9	EA
Addl. Vehicle (Boloero)/24 hours to attend emergency	1	EA
Additional charges / KM per vehicle	2000	kM
Construction of New plinth for equipment	30	EA
Hiring charges of Hydra for 4 Hrs.	7	EA
Hiring charges of Hydra for 8 Hrs.	8	EA
Hiring charges of Tractor for 4 Hrs.	4	EA
Hiring charges of Tractor for 8 Hrs.	6	EA
Hiring charges of Pole Master for 4 Hrs.	4	EA
Hiring charges of Pole Master for 8 Hrs.	6	EA
Hiring charges of DG set 3 phase, 7.5 KVA/Day	5	EA
Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	5	EA
Hiring charges of Water Pump 1 phase/Day	5	EA
Hiring charges of Tempo per Day	10	EA
Hiring charges of TATA 709 - Upto 150 km	3	EA
Hiring charges of TATA 709 - 150 km to 300 km	2	EA
Charges for extension of LT feeder/span		
a. Three phase AB cable	70	Span
b. Single phase bare/AB cable	200	Span
Charges for installation of 1 Phase Energy meter for new connection with service		
cable	2220	Nos.
Sub-total for a year (Rs.)		1
GST @ 18%		
Total all-inclusive value for a year (Rs.)		
Total all-inclusive value for 2 years (Rs.)		1



## Annexure II

# Scope of Work & SLA for 33/11 KV Substation Operation Assistance and 33KV Network AMC

**Title:** Performance Based "Annual Maintenance Contract" (AMC) for Operation and Maintenance of 33 KV feeders, PSS and Operational Assistance of PSSs for a period of 02 years in TPCODL Odisha.

**Schedule of item (Price Schedule)**: Refer Annexure I for 33 kV Schedule of item (Price Schedule)

Part 1 - Scope of the work (Substation Operator) Monitoring, Operation, and watch & ward activities at 33/11 kV Primary PSS

# Part-2 - Scope of the work (33 kV AMC)

Inspection, monitoring, maintenance of 33/11 kV Primary Sub-stations (PSS) and associated 33 kV Feeders



# <u>Part-1</u>

# Scope of the work (<u>33/11 KV Substation Operation Assistance</u>) Monitoring, Operation, and watch & ward activities at <u>33/11 kV Primary PSS</u>

The Service Provider (BA) shall provide manpower for 24x7 monitoring, operation, watch & ward works of 33/11 KV primary sub-station (PSS) by deploying his/her employees at the specified PSS to execute the contract. The Service Provider must ensure that specified numbers of personnel are placed for providing services required for ensuring uninterrupted power supply to consumers. In case of failure in providing service or unsatisfactory performance by the Service Provider, penalty will be imposed as per this agreement.

It shall be noted that all automated PSS shall be gradually unmanned by TPCODL and manpower shall be redeployed at un-automated PSS or manpower spared from primary PSSs shall be trained and redeployed for maintenance activities (within same cluster/other cluster) at discretion of TPCODL.

#### A. Monitoring, Operation and Recordkeeping by SSO

- 1. Observe and adhere to all safety precautions as envisaged in the CEA Regulations, 2011 (Measures relating to safety & electricity supply) regarding safety at site. Ensure safety to man and material and to the PSS equipment.
- 2. Maintain list of all working / spare equipment available in the PSS and quarterly update the "Asset Register".
- 3. Enter tripping / interruption details in "Suraksha Kwach" App and in tripping register.
- 4. Record hourly the Load parameters, Voltage, Current, Energy Meter Readings, operations conducted and enter the same in "Log Book" and in "Suraksha Kwach".
- 5. Record once in a day the oil levels, oil temperature and winding temperature, tap position, operation of cooling fans, condition of silica gel in breathers.
- 6. Take PSS round once in a day with "Check List". Monitor condition of all equipment such as power transformers, circuit breakers, lightning arresters, isolators, current and voltage transformers, battery banks, battery charger, station transformers, ACDB, control and relay panels. Record once in a day the defect noticed of the PSS equipment and their auxiliary devices in the "Defect Register" and in "Suraksha Kwach" and communicate the same to EIC.
- 7. Record status of indication lamps, annunciation etc. and report the failure of indicating lamps to the Electrical- in- Charge (EIC).
- 8. Record hot spot at joints/ jumpers in switchyard once in a day.
- 9. Report status of Switchyard lights.
- 10. For recordkeeping, registers / stationary shall be provided by TPCODL. TPCODL reserves the right to replace the registers / stationary as per business requirement and BA staff shall use the latest registers / stationary to maintain data and information.
- 11. Ensure daily cleaning of entire PSS/control room and switchyard through housekeeping staff. Remove vegetation growth. Clean control Panels. Ensure that 5S system and Red tag areas are maintained.
- 12. Monitor the incoming feeder / PSS equipment / system closely all the times and remain alert.



- 13. Carry out switching / isolation / grounding operations correctly and accurately as per SOPs (Standard Operating Procedure) and in coordination with PSCC / APSCC requirement and record the same in the "Log-book" and in the "Suraksha Kawach" application.
- 14. Carry out emergency operations to protect the equipment and PSS. Inform immediately such operations to PSCC /APSCC and to EIC.
- 15. Enter all breakdowns/tripping's in "Tripping Register" and in "Suraksha Kawach".
- 16. Issue PTW to working party after carrying out switching operations / isolation / grounding as per the SOPs / directions from PSCC/APSCC /EIC. SSO shall issue "Permit to work" only to the persons approved by PSCC/ EIC.
- 17. BA shall prepare "Monthly Report" in the TPCODL prescribed format and submit the same to EIC/ Maintenance Planning Group (MPG) in the first week of subsequent month.
- 18. Attend to all emergencies that may arise such as equipment failures, fire accidents, conductor snapping etc. in coordination with PSCC/APSCC/EIC.
- 19. Attend to all telephone calls and inform PSCC/APSCC/EIC.
- 20. Upkeep of mobile phone and other equipment such as Desk Top with monitor & accessories kept in PSS. BA shall bear the loss on account of theft of mobile phone / repair of mobile phone.
- 21. Check physical condition of all earth pits. Ensure that all earth pits are covered with CC covers.
- 22. Water each earth pits as per the advice/direction of E&MR engineer.
- 23. BA shall be held responsible for any damages occurred due to defective/ improper operation of equipment as well as non-implementation of SOP and shall be made responsible for the loss occurred by TPCODL.
- 24. SSO shall extend full support to TPCODL Engineer in performing various condition monitoring activities inside the PSS within same cluster.

#### B. Mobile Operation Crew (MOC):

Based on organization requirement, Mobile operation crew shall be formed for carrying out switching operation and watch & ward of a cluster of 2-4 automated PSSs located in close proximity. TPCODL reserves right to redeploy the manpower released from fully automated PSSs either in other PSS or in "Mobile Operation Crew" in same cluster or in other circle/cluster or to redeploy for maintenance activities (within same cluster/same circle/other Circle) after due training. The MOC will work in three shifts and shall carry out the required switching operations, isolations, and grounding of equipment in coordination with PSCC/APSCC /EIC. The MOC shall also visit the PSSs during idle time and fill daily check list for onward submission to PSCC. In few of MOC case Operator will be in one cluster but may work in other cluster area depending upon the requirement.

# The BA shall provide one motor cycle (Bike) for each MOC on 24X7 basis along with fuel and vehicle maintenance.

- a. BA must ensure that the bikes are not older than 8 years and have all valid statutory documents.
- b. BA need to maintain logbook for usage of each MOC bike.
- c. These Bikes will have provision for monthly average running of 1700 km (Average of all running MOC Vehicles for the cluster). After 1700 km, vendor may claim per km charges.
- d. MOC shall maintain log of all travels with date and time which need to be vetted by BA supervisor. The same shall be submitted to EIC/HoG Maintenance Planning Group with monthly invoice. The log should contain name of PSCC engineer who directed the crew for movement.



e. BA shall ensure that bikes are replaced within 1 hour in case of bike breakdown. During such event BA shall arrange alternate vehicle to ensure that the operation crew moves without wastage of time. In case of non-availability of vehicle, penalty of Rs. 1000/- per hour shall be levied on BA.

#### C. <u>Standard Operating Procedures:</u>

Please refer Annexure – A for TPCODL PTW & SOP details.

#### D. Manpower Requirement:

## 1. <u>Cluster-wise Manpower Requirement for Monitoring, Operation, and watch & ward</u> <u>activities at 33/11KV Primary PSS:</u>

Cluster	Division	Unskilled	Skilled	Supervisor	Cluster Manpower
1	BCDD-1	0	64	1	139
1	BCDD-2	6	69	T	159
2	BED	1	54	1	188
Ζ	NED	8	125	T	100
3	PED	9	87	1	226
5	KHD	21	109	T	220
4	BaED	0	59	1	217
4	NyED	21	137	Ţ	217
5	CDD-1	0	39	1	126
5	CED	7	90	1	136
6	CDD-2	9	62	1	136
0	SED	6	59	1	120
7	AED	8	103	1	263
7	DED	12	140	1	203
8	AnED	0	97	1	220
8	TED	3	120	1	220
9	KED-1	9	127	1	105
Э	KED-2	2	47	1	185
10	PED	11	58	1	167
10	JED	11	87	1	101
Total		144	1733	10	1877

#### 2. Minimum Qualification required for SSO:

Designation	Minimum Qualification	
Supervisor	Degree/Diploma in electrical engineering with 1/2 year experience and a valid supervisory license. Computer literate with proficiency in MS office.	



	ITI (Electrical Trade) with minimum two year experience in
Lineman	construction or maintenance or Operation of 33 kV system.
	OR Qualification shall be as per CEA regulation clause 7.2
Helper	Helper shall have basic knowledge of working in electrical power
перег	distribution, ability to read and write and emphasis on safety

Note:

- 1. BA shall deploy the above manpower in discussion with TPCODL HR department. Any changes in the manpower deployment shall be made only after written approval of TPCODL HR department.
- 2. BA shall provide Laptop to each Supervisor for maintaining day to day work related activities.
- 3. BA must arrange bike for each supervisor and must give fuel charges considering 3500 km on monthly basis. This cost must be loaded to Main contract charges.

#### E. TPCODL PSS Asset Details:

Please refer Annexure – B for TPCODL PSS Asset Details.

**Note**: The Asset Details may change due to addition or deletion of PSS. All new/future PSS commissioned shall be manned with available manpower only as per the guidance / instructions of TPCODL HR department.

### F. <u>Performance Standards for Monitoring, Operation, and watch & ward activities at 33/11KV</u> <u>Primary PSS:</u>

The performance system shall comprise measurement of BA's performance on the parameters listed below. The total marks for the BA performance will be 100 in a month.

#### a. Safety aspects, Statutory Compliances and Asset Upkeep

- 1. All jobs shall be carried out as per the SOP / PTW guidelines issued by PSCC. SOP / PTW guidelines are attached as Annexure-A.
- 2. BA shall provide PPEs, Safety Equipment and Tools to all SSO as per the specifications mentioned in this contract as safety guidelines/instructions.
- 3. BA shall comply with all statutory compliances as mentioned in attached GCC, CSMS, and applicable laws.
- 4. SSO shall ensure Locking of unmanned automated PSSs.
- 5. BA supervisor shall notify EIC on PSS deficiencies / missing materials / missing covers / damaged doors of PSS and work with TPCODL staff to rectify the same at the earliest.
- 6. Upkeep of PSS (Vegetation removal) and Garbage removal so as to avoid incidents/accidents.

#### b. Supply and Usage of T&P

All the PPEs shall be as per TPCODL approved specifications. BA staff shall keep the PPE/Safety Equipment and tools in neat and clean / ready to use condition at all times.

Following T and P must be available with SSO of BA at each PSS for carrying out the jobs. Immediate replenishment of lost/damaged T&P shall be the responsibility of the BA. Following is the list of T&P required at each PSS:



- 1. Hand Gloves 33 kV 1 pair,
- 2. Hand Gloves LT 1 pair (suitable for working in LT panels & DC systems),
- 3. Helmet 1 for each workman
- 4. Safety Shoe 1 set for each workman
- 5. Rain coat 2 No per PSS
- 6. Rain coat for MOC 2 No per MOC
- 7. T&P 01 set per PSS

Industrial test lamp – 01 No, One set of Screw driver (taparia 840 combination screw driver set (pack of 6), Insulated combination cutting Plier – 01 No, Adjustable Spanners 6" and 10" - 01 No, Painting Brush 4" and 2" – 01 No, Old dhoti full size – 24 No, (2 per month) LT insulation tape – 12 No (1 per month)

#### c. Timely & correct Operation of PSS Equipment

SSO need to acknowledge PSCC/APSCC calls for operation of PSS equipment/Feeders and timely operate the equipment as per PSCC/APSCC requirement. In case of Unmanned SSO should reach in scheduled time and operate the equipment as per instruction of PSCC/APSCC/EIC.

#### d. Upkeep of PSS equipment

Ensure cleaning of control room. Ensure that all trenches are clean and trench covers are intact. Clean the external surface of secondary equipment through air blower Ensure that all equipment front / back door are kept closed/locked Ensure that space heaters are kept ON in the CRP / Indoor breaker panels at all times Ensure that no unwanted material is kept inside control room / on panels / inside panels Ensure that there is no rodent entry in any of the indoor panels

e. Statuatory Compliances:

BA must comply with all statuatory requirements such as ELBO issued certificate, Vehicle compliance and IR compliances.

#### f. Attendance of SSO at PSS

BA shall maintain attendance register at each PSS and SSO shall mark his attendance on daily basis. The attendance register will be available for inspection to DM / SDO / SI / E&MR engineer or any other TPCODL officer on demand.

#### g. Discipline

BA staff while on duty shall be properly dressed and shall maintain decorum.

#### h. Invoice processing and Monthly MIS :

Monthly MIS to be submitted by BA with Monthly Invoice:

- i. Compliance report that data entry have been made to all the relevant registers at PSS.
- ii. Compliance to PPE requirements to SSO at PSS in following format:



S. No.	Name of Employee	Name of Safety Equipment/PPE Received	Signature of Employee

#### iii. Compliance to T&P requirements at PSS

S. No.	Name of PSS	Name of T&P Received	Signature of PSS Supervisor

#### iv. Attendance Record of SSO in following format

S. No.	Name of PSS	Name of staff	No of days in the month	No of days present

#### v. MOC Vehicle utilisation Report

Daily vehicle movement details for MOC verified by PSCC to HOG-MPG on every  $2^{nd}$  day of oncoming month.

- vi. Submission of Consolidated Equipment defect report & Unsafe conditions in PSS
- vii. Submission of Consolidated Equipment defect report & Unsafe conditions in PSS BA shall submit daily consolidated summary report of Defective Equipment & Unsafe conditions in PSS in the prescribed format by TPCODL to PSCC/HOG-MPG.
- viii. Submission of Consolidated Equipment defect report & Unsafe conditions in PSS
- ix. BA shall submit daily consolidated summary report of Defective Equipment & Unsafe conditions in PSS in the prescribed format by TPCODL to PSCC/HOG-MPG.
- Submission of PSS Cleaning status
   BA shall submit monthly Summery for PSS where cleaning not conducted in the prescribed format by TPCODL to PSCC/HOG-MPG.
- xi. Interruption Report
   BA shall submit the daily / monthly report of interruptions to designated officers in the prescribed format along with reason of Interruption.

#### i. <u>Performance Measurement system:</u>

#### Incentives and Penalty for good performance / non-compliances:

Any Safety violation will be governed as per Contractor Safety Management (CSM) of TPCODL. Refer Annexure VII for CSM.

# In addition to deduction made for CSM violation, the following marks will be deducted for non-compliances:

a. <u>Upkeep</u> of TPCODL supplied safety eqpt (Weightage: 15 Marks)



S. No.	Parameter	Sub-Measure	Marks Deduction
1	Availability of discharge rods (supplied by TPCODL) & reporting of damaged / missing discharge rods on time	Non-availability of discharge rod (6 no in each PSS) at 10% of total PSS	5
		Non-availability of discharge rod (6 no in each PSS) at 20% of total PSS or more	10
2	Availbility of Ladder(supplied by TPCODL) & reporting of damaged / missing ladders on time	Non-availability of ladders at 10% of total PSS	5
		Non-availability of ladders at 20% of total PSS or more	10

Note: In case if the BA has informed EIC about non-availability of discharge rod/ Ladders for the given PSS before inspection/observation is made, BA shall not be held responsible for non-compliance.

#### b. Supply of T&Ps (Weightage 15 marks )

S. No.	Parameter	Sub-Measure	Marks Deduction
1	Supply of T&Ps	Availability of T&Ps in all PSS	0
		Unavailability of T&Ps in more than 10% of PSS	2
		Unavailability of T&Ps in more than 20% of PSS	5
		Unavailability of T&Ps in more than 50% of PSS	10

#### c. Correct Operation of PSS Equipment per Cluster (Weightage 20)

S. No.	Measure	Marks Deducted
1	1 incorrect operation during the month	5
2	2 incorrect operation during the month	10
3	>2 incorrect operation during the month	20

#### d. Adherence to Operating Process (20 marks):

S. No.	Measure	Marks Deduction
1	Allowing maintenance work without presence of "Permit to work" holder or issue "Permit to work" without proper isolation / grounding - 2 instances during the month	10



	Allowing maintenance work without presence of "Permit to work"	
2	holder or issue "Permit to work" without proper isolation /	20
	grounding >2 instances during the month	

#### e. Statutory Compliances: (Weightage: 20 Marks):

S. No.	Parameter	Sub-Measure	Marks Deduction	
1	Statutory Compliances	Vehicle related violation	1 mark deduction for each "vehicle related" for each non-compliance ( Max 10 marks)	
		Manpower related1 marks deduction for each employedstatutory violationrelated non-compliance (Max 10 marks)		

#### f. MOC Non-Compliance: (Weightage: 10 Marks):

S.	Measure	Marks
No.		Deduction
1	2 no. of instance of delayed reporting of MOC at concerned PSS upon the instruction of PSCC/EIC.	5
2	More than 2 no. of instance of delayed reporting of MOC at concerned PSS upon the instruction of PSCC/EIC.	10

#### g. Upkeep of PSS equipment:

S. No.	Measure	Bonus Marks
1	Maintaining good housekeeping and cleanliness at PSS as per monthly schedule	5

Note:

- 1. TPCODL reserves the right to change to the list of existing performance base measurements, at any point of time for performance improvement on mutually agreed terms.
- 2. EIC at his discretion will deduct marks for each instance as mentioned above.
- 3. All Workmen of Associate will be trained in TPCODL's Skill Development Centre for 3 to 4 days in a year. During training days, food will be provided to trainees by TPCODL and food cost @ Rs. 200 per head will be recovered from bill of Associates. Conveyance for workmen for travelling to Training Centre will be in scope of BA. Appropriate reliever should be deployed at site by BA during absence of regular worker for training.
- 4. All workmen must undergo Medical Test once in a year and report to be submitted to TPCODL. Cost of Medical test will be borne by respective BA. Tests to be conducted are as follows:



Medical Test - TPCODL - BA ID Cards					
SI No	Medical examinations	For employees working in heights	For All Rest Employees		
Frequency		Once in every 12 months	Once in every 12 months		
1	Haemoglobin	√	$\checkmark$		
2	Random Blood Sugar	√	$\checkmark$		
3	Urine - R/M	√	$\checkmark$		
4	Audiometry (Tuning Fork Test)	$\checkmark$	$\checkmark$		
7	Colour Vision	$\checkmark$			
8	Vertigo Test	$\checkmark$	×		

Format of Medical Fitness Certificate is enclosed in Annexure-H

# <u> Part-2</u>

# Scope of the work & SLA (33 kV AMC)

# Inspection, monitoring, maintenance of 33/11 kV Primary Sub-stations (PSS) and

#### associated 33 kV Feeders

#### A. <u>33 kV feeders</u>

## a. Routine Inspection of feeders

Considering the total length and Tap-off feeders, each 33 kV main feeder will have three parts for inspection and maintenance purpose. Inspection of all industrial/dedicated/Urban/Rural feeders shall be carried out. EIC/Corporate Operation Services team shall release feeder inspection plan every month which BA team to implement till end of the month. BA patroller shall inspect the feeder/s as per plan and submit "Inspection Report" to SDO indicating feeder wise defects, bill of material to attend the defect and required outage duration by last day of same month. BA shall adhere to the inspection plan fully and no deviation shall be permitted.

Inspection shall be carried out to detect:

- 1. Trees and tree branches close to the feeder / above the feeder
- 2. Hotspots / poor joints in the feeder
- 3. Abnormalities in Towers, Poles, Gantry structures, cross arms, insulators, conductors, over sagged wires / Guard wire, earthing system, hardware, stay wire and guard wire, power cable terminations, mounting frames, missing cleats, etc.
- Missing accessories such as tower members, bracings, Insulators, Name plate, Number plate, Danger board, Phase plate, Anti climbing device, stay wires, foundation, lightning arresters, connectors, earth connection, cradle guard, etc.
- 5. Unauthorized construction under/near the line.
- 6. Guywire support to structure at location where not available or wherever damaged.
- 7. Approach pathway to poles for maintenance



- 8. Disconnected cable earth connections
- 9. Missing cable route & joint markers, patrolling of underground cable route for advance intimation of any planned excavation activity, exposure of cable, storage of fire hazardous materials on cables, etc.
- 10. Any other abnormality that will affect safety to people, equipment or smooth functioning of 33 kV feeders.
- 11. Any new Feeder/ part feeder and PSS equipment alteration done needs to be captured and shared with EIC and MPG( Maintenance planning group) for GIS data updation.

#### b. Emergency Inspection of 33 kV Feeders

Emergency inspection of 33 kV feeder shall be carried out by the patroller whenever feeder trips as per the directions of Engineer-in-charge to identify the exact reason of feeder tripping/breakdown. BA may use binocular to identify exact reason of fault. All close inspections shall be done under the guidance and supervision of TPCODL staff.

#### c. Feeder Maintenance Activities

- Trimming of trees /tree branches under/near/above the feeders with mechanised tree pruners (to be provided by BA) as per monthly maintenance plan issued by COS and in coordination with EIC. BA shall maintain most optimized RoW so as to reduce the tree trimming cycles. Creeper removal shall be done before creeper reaches 2.5 meter height so as to avoid feeder outage to clear the same. BA shall also shift the tree wastes to nearby BMC designated garbage storage area.
- Replacement of weak/damaged tower/poles and accessories. For replacement of complete tower/s, separate order will be placed. Faulty feeder however will be restored by BA by installing rail/joist poles as per the instructions of Engineer-incharge.
- 3. Straightening of tilted poles/cross arms/insulators. For installation of new / midspan poles separate order will be placed.
- 4. Replacement of corroded, cracked, flashed insulators (Disc/Pin/Shackle).
- 5. Replacement / Repairing of GO switch / AB switch / line isolators
- 6. Replacement of damaged / weak cross arm.
- Replacement of Binding wire joints by bolted / compression type, loop / wedge connectors. Rectification of hotspots by tightening loose connections, replacing clamps / connectors or replacement of jumpers / other actions.
- 8. Replacement of undersized / burnt / damaged conductors and jumpers. This includes replacement of conductor spans with two or more joints.
- 9. Repairing/replacement of broken or weak guard wire. Provision of guard wire / cradle guard wire beneath conductors at identified locations.
- 10. Repairs and re-tensioning of conductors for attending low vertical / lateral clearance.
- 11. Repairs and re-tensioning of Earth wire. Providing of guard laces & stay wires with stay insulator.



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- 12. Minor repairs to tower footings/stub. Material will be provided by TPCODL.
- 13. Installation of bird guards for reducing transient faults.
- 14. Fabrication and fixing of missing tower member including tag welding up-to bottom cross arm.
- 15. Transportation of all materials required to attend preventive maintenance and breakdowns of OH and UG system.
- 16. Replacement of barbed wire / anti-climbing devices of structures/ towers.
- 17. Painting of poles / towers as per the condition of the structures. Paint shall be supplied by TPCODL.
- 18. Removal of bird nest / cable / internet / telephone wires / hoardings from 33 kV poles as per the specific instructions/directions of EIC.
- 19. Installation of danger boards on poles, tower, and gantry structures
- 20. Installation of cable route / joint markers (Markers will be supplied by TPCODL)
- 21. Numbering / Sign writing on pole/towers using stencils as per TPCODL standard.
- 22. Replacement of burnt / weak CTVT unit.
- 23. Replacement of missing / burnt / weak lightning arresters.
- 24. Installation of insulating sleeves / MVLC / LVLC on bare conductors / installations.
- 25. Fixing/replacement of spacers in HT and LT feeders
- 26. Repairing of faulty cable of size 95 mm2 and below. This includes soil digging, jointing, and refilling of soil/restoration of surface.
- 27. All breakdowns shall be attended promptly within timelines as per the defined service level agreement. BA shall analyse all breakdowns and check the exact reason of breakdown and inform the same to TPCODL. BA shall close all defects observed on 33 kV feeders within the same month by prompting the SDO/SI/E&MR engineers.

#### d. <u>Recordkeeping and Reporting</u>

- 1. BA shall keep record of Inspection Report, Monthly Maintenance Plan versus actual, Defect register and attendance register for his employees.
- 2. BA shall submit "Occurrence report" for 33 kV feeder tripped due to operation of protection relay (even if the feeder is test charged successfully). The report will be submitted within 24 hours for urban feeders and 72 hours for rural feeders to EIC.

#### B. <u>Maintenance and Upkeep of 33/11 kV Primary Sub-Station (PSS)</u>

#### a. PSS upkeep and cleaning

BA shall deploy part time (4 Hr Duration) person on daily basis to clean all operational areas of 33/11 kV PSS with consumables. The work of cleaning would include:

- 1. Cleaning of control room and other rooms within the PSS building including mopping of floor, cleaning of washroom, cleaning of open area and road.
- 2. Cleaning of switchyard (under direct supervision of TPCODL)
- 3. Cleaning of PSS cable trenches (once in a year)



#### b. Vegetation Management

BA shall keep the PSS switchyard and open area free of vegetation. The work of removal of vegetation from PSS switchyard shall be done under direct supervision of TPCODL. However the open area vegetation clearance will be taken up by BA at his own. All material/tools required for PSS cleaning / vegetation removal shall be arranged by BA. Any additional PSSs those will be commissioned during the contract period shall also be cleaned by BA.

#### c. Inspection and Maintenance of 33/11 kV PSS:

BA shall keep all PSSs neat and clean at all times. Maintenance of PSS equipment shall be carried out as per the schedule provided by Engineer-in-charge and under supervision of EIC. BA shall deploy expert technician for maintenance and upkeep of all equipment installed in the PSS including power transformers. The technician deployed for maintenance of PSS should be able to perform preventive & breakdown maintenance, troubleshooting, and replacement of defective equipment/parts as per work requirement.

The work of inspection & maintenance shall include:

- Carry out preventive maintenance as per "Monthly Maintenance Schedule" and attending to breakdown and restoration of all PSS equipment safely by taking required & appropriate action as per the directions of Engineer-in-charge.
- Replacement of failed equipment (except Power Transformer) in PSS including modification of mounting structure/plinth as per instruction from Engineer-incharge.
- 3) Transportation of materials/equipment including loading /unloading to carry out preventive or breakdown maintenance of PSS equipment. Charges for crane/Hydra, if used, will be paid as per scheduled/agreed rates.
- 4) Painting of equipment/mounting structures manually or with the help of air compressor. Paint will be provided by TPCODL.
- 5) All fabrication works involving drilling, welding and gas cutting etc. required for PSS
- 6) Maintenance and restoration of switchyard, control room and other building indoor/outdoor lights.
- 7) Pre-monsoon inspection & repair of guard wire and shield wire in PSS switchyard.
- 8) Replacement of defective power and control cables as envisaged by engineer incharge. Cables will be supplied by TPCODL.
- 9) Inspection and cleaning of solar panels
- 10) Removal of vegetation from switchyard and open space. Removal of vegetation from switchyard shall be done under the supervision of TPCODL staff. Vegetation removal from open space shall be done by BA at his own. Removal and disposal of dry vegetation from PSS.
- 11) Sign writing on equipment at all PSS for implementation of 5S as per TPCODL standards (Paints shall be provided by TPCODL).
- 12) Pre-monsoon maintenance of PSS as per the "Check lists" provided by TPCODL.



- 13) Making arrangements for dewatering of cable trenches in case of water logging / excess rainfall using suitable sized pump & hose.
- 14) As per organisational requirement, BA can divert its resources to other cluster for short term requirement.
- 15) In same cluster during exigency and as per organisational requirement 11KV and 33KV manpower can be grouped at a time to complete specific task.
- 16) As per EIC instruction, Vendor must pull the resources from different division for mass maintenance of feeder in own cluster and must release manpower for mass maintenance in other clusters.

# d. <u>Minor Civil Repair</u> Work

- 1) Minor repair (welding of damaged sheets/ angle/ channel) of doors & shutters of PSS.
- 2) Minor repair to foundations/plinth, construct of small eqpt foundation, Cement plaster, plugging/ Sealing of cable openings at sub-stations.
- 3) Minor repair (Filling of holes) of existing trench covers with CC 1:1.5: 3. Realigning the disturbed trench covers. Minor repair of trench involving brick and plastering of the same

Note: For Minor civil related job, vendor has to arrange material and support services, extra amount will be paid as per actuals as mentioned in Schedule of items.

# C. <u>Proposed structure of minimum Manpower and Vehicle:</u>

Cluster	<b>Cluster Divisions</b>	High Skilled	Skilled	Unskilled	Motor-bike	12 Hr Vehicle (4 Wheeler)
	BCDD-1	1	4	3	1	1
	BCDD-2	1	9	6	1	2
Cluster-1	E&MR-1	1	4	2	0	1
	BED	1	4	3	1	1
	NED	1	9	6	1	2
Cluster-2	E&MR-2	1	4	2	0	1
	BaED	1	5	4	1	1
	NyED	1	9	7	1	2
Cluster-3	E&MR-1	1	3	2	0	1
	KHD	1	9	7	1	2
	PED	1	5	4	1	1
Cluster-4	E&MR-2	1	3	2	0	1
	CDD-1	1	4	3	1	1
	CED	2	9	7	1	2
Cluster-5	E&MR-1	1	2	2	0	1
	CDD-2	1	4	3	1	1
	SED	1	4	3	1	1
Cluster-6	E&MR-2	1	2	2	0	1

i) To achieve the desired maintenance and breakdown tasks, BA shall consider following structure of manpower and vehicles:



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	AnED	1	9	7	1	2
	TED	1	9	7	1	2
Cluster-7	E&MR-1	1	3	2	0	1
	DED	1	9	7	1	2
	E&MR-2 DED	1	2	2	0	1
	AED	2	9	7	1	2
Cluster-8	E&MR-3 AED	0	2	2	0	1
	KED-1	1	9	7	1	2
	KED-2	1	4	4	1	1
Cluster-9	E&MR-1	1	3	2	0	1
	JED	1	4	4	1	1
Cluster-	PDP	1	4	4	1	1
10	E&MR-2	1	3	2	0	1
	Total	32	163	125	20	41

- 1) In addition to above structure, BA shall supply cleaning person for each PSS for 4 hours duration per day.
- 2) BA shall ensure availability of minimum 1 certified welder, 1 fitter and 1 painter in each cluster.
- 3) BA shall ensure availability of skilled & trained lineman capable of working on all type of 33 kV steel towers and poles.
- 4) BA shall ensure availability of sufficient trained linemen for preventive maintenance / trouble shooting of equipment such as power transformer, circuit breaker, CT/VT, control panels, battery and battery charger and industrial wiring etc.
- 5) Operation services will advise on the allocation of BA manpower / vehicles to respective divisions/Sub-Divisions/Sections/E&MR in discussion with respective Circle Heads and Chief Operation Services.

#### ii) Minimum required qualification of Manpower:

Designation	Minimum Qualification		
SupervisorDegree or Diploma in electrical engineering with 2 y experience and a valid supervisory license.			
Lineman	ITI (Electrical Trade) with minimum 2 year experience of working in 33KV maintenance or Qualification shall be as per CEA regulation clause 7.2		
Helper	Ideally 10 <sup>th</sup> standard. Having basic knowledge of working in power distribution, ability to read and write and emphasis on safety		

# iii) Vehicle requirement:

 The vehicles deployed for operation and maintenance shall not be more than Five years old (from date of LOI/PO/renewed PO) with good condition of interior and exterior. All statuary laws/motor vehicle ACT/RTO Rules (mainly RC, Insurance, fitness and pollution control) should be complied. In case of accidents TPCODL has no liability towards Police/RTA authorities, Law Courts, injured parties, damage to the vehicle or



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property etc. The vehicles should be run on authorized fuel like CNG/Petrol/Diesel as endorsed on the vehicle registration certificate. The copies of Registration, Insurance and other statutory documents should be submitted to TPCODL before deployment of the vehicles

- 2. Driver deployed should have valid license. Driver should be medically fit. The information of change in driver/Vehicle to be informed to TPCODL, before making such changes.
- 3. Each vehicle deployed will have limit of running average as below:

Vehicle	Running km/month
12 Hours	3500 km

Each vehicle deployed will have limit of running average as shown above. Further, cumulative average of 3500 km per month of all running 4 Wheeler vehicles utilised per Cluster will be considered for every FY Quarter for excess mileage of any vehicle. Beyond cumulative average of 3500 km, BA may claim per km charges as per schedule of rates.

- 4. Log Book shall be maintained for every vehicle separately in the prescribed format by TPCODL. Daily running of Vehicle should be entered in this diary on daily basis. The total kilometres run by the vehicle will be calculated from this Log Book. Vehicles driver will ensure that each entry should be signed by the user.
- 5. Vehicle (Mahindra Bolero Camper or equivalent) deployed shall have capacity to accommodate 5 passengers and minor loading of material and minimum 2 nos. FRP Ladders in the backside and top carriage respectively. This is basic requirement in the nature of job handled by TPCODL.
- 6. Vehicle should be equipped with one extra tyre as Stepney in the vehicle with all the tools to replace the damaged tyre.
- 7. Vehicle deputed in a cluster must/can be run to any location within the cluster boundary. However, during exigency, the vehicles may be made available to other cluster as instructed by EIC.
- Vehicles are running on authorized fuel like Petrol/Diesel and the same are endorsed on the vehicles RC (Registration Certificate). If any vehicles found without endorsement of authorized fuel in RC payment for the particular month will not be made by TPCODL
- 9. Competency assessment of Supervisor/Lineman and Helper will be carried out by TPCODL officials within two months of deployment and the Lineman in bronze badge category will not be allowed to work on the network until they upgrade their skill and qualifies for Gold or Silver badge category. Those in bronze category however will be allowed to work as helpers.
- 10. In case of accidents, TPCODL has no responsibility whatsoever towards police/ RTA authorities, Law, Courts, injured parties, damages to the vehicle or property etc. All these shall be entirely contractor's sole responsibility. The contractor/agency will obtain comprehensive insurance policy for all the personnel deployed to cover any injury or death to any staff or other person in or around the work premises without



extra cost to TPCODL. TPCODL will not pay and/or reimburse anything on this account over and above the contract considerations.

# D. <u>Performance Standards for Monitoring, Maintenance activities of 33 kV feeders and at</u> <u>33/11KV Primary PSS:</u>

### 1. Service Level Agreement

- I. In the event of any performance based measurement criteria not reported/ reported partially in the appropriate format in monthly MIS, would lead to deduction of 100% marks specific to the criteria and no incentive (of any kind) would be paid.
- II. TPCODL reserves the right to change existing performance based measures, at any point of time during the execution of the contract on mutually agreed terms.
- III. The performance system shall comprise measurement of BA's performance on the parameters listed below. The total marks for the performance will be 100 in a month.

#### b. Safety aspects, Statutory Compliances and Asset Upkeep

- 1. All jobs shall be carried out as per the SOP / PTW guidelines issued by PSCC/APSCC. SOP / PTW guidelines are attached as Annexure-A.
- 2. BA shall provide PPEs, Safety Equipment and Tools to all his workforce as per the specifications mentioned in this contract as safety guidelines/instructions.
- 3. BA shall comply with all statutory compliances as mentioned in attached GCC, CSMS, and applicable laws.
- 4. BA shall ensure upkeep of feeder towers / poles free from posters, loose hanging wires, foreign material.
- 5. All Workmen of Associate will be trained in TPCODL's Skill Development Centre for 3 to 4 days in a year. During training days, food will be provided to trainees by TPCODL and food cost @ Rs. 200 per head will be recovered from bill of Associates.
- 6. All workmen must undergo Medical Test once in a year and report to be submitted to TPCODL. Cost of Medical test will be borne by respective BA. Tests to be conducted are as follows:

	Medical Test - TPCODL - BA ID Cards				
SI No	Medical examinations	For employees working in heights	For All Rest Employees		
	Frequency	Once in every 12 months	Once in every 12 months		
1	Haemoglobin	√	√		
2	Random Blood Sugar	$\checkmark$	√		
3 Urine - R/M		√	√		
4	Audiometry (Tuning Fork Test)	√	√		
7	Colour Vision	√	√		
8	Vertigo Test	√	×		

Format of Medical Fitness Certificate is enclosed in Annexure-H



#### c. Usage of T&P

Please refer Annexure – I for T &P details.

The T&P mentioned in the Annexure – I must be available with BA in the allocated Cluster for carrying out the jobs. At any given point of time regular replenishment is the responsibility of BA.

The list of testing equipment's and tools is not exhaustive in nature. AMC service provider should be able to provide all those instruments and tools which may be needed to carry out any job in the scope of work. BA shall also manage buffer stock of T&P so as to replace any damaged/lost tool within 24 hours failing which marks/payment would be deducted. BA shall ensure service worthiness of all tools and tackles by conducting monthly audit.

#### d. Adherence to Service Level Agreement

The SLA for each of the cause of power supply failure is as mentioned below:

S. No.	Type of Service	Turnaround Time Urban	Turnaround Time Rural	Compensation for non- adherence to turnaround time.
1	Restoration following Interruption / breakdown of TPCODL feeder or PSS or other power distribution equipment	8 hours	12 hours	As detailed in OERC performance standard
2	Duration of scheduled shutdown hours/day	4 hours	6 hours	

#### e. Industrial / Urban Feeders Tripping

BA shall submit an action plan for ensuring zero tripping (or 15% reduction MoM/YoY basis) on identified feeders (list of which shall be provided by corporate operation services team) to TPCODL within 2 month of contract execution. TPCODL shall analyse the action plan and based upon the feasibility shall execute the same.

#### f. Invoice processing and MIS

- 1. Monthly MIS to be submitted by BA with Monthly Invoice:
- i. PPEs issued to staff



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S. No.	Name of Employee	Name of Safety Equipment/PPE Received	Signature of Employee

ii. T&Ps issued to staff

S. No.	Name of PSS	Name of T&P Received	Signature of PSS Supervisor

# iii. Attendance of staff

S. No.	Name of division	Name of staff	No of days in the month	No of days present

Note: BA shall maintain attendance register at each division and BA staff will mark attendance on daily basis for all three shifts. The attendance register will be available for inspection to DM / SDO / SI / E&MR engineer or any other TPCODL officer on demand. BA shall submit the monthly attendance report to TPCODL along with monthly invoice. BA staff while on duty shall be properly dressed.

#### iv. Feeder inspection reports

BA shall submit the feeder inspection report against the monthly inspection schedule provided by TPCODL, to EIC/HOG (Maintenance Planning Group)

# v. Maintenance reports

BA shall submit the report on maintenance activities performed during the month to EIC/HOG (Maintenance Planning Group)

# vi. Interruption Report

BA shall submit the analysis of feeder interruption occurred during the month to designated officers in the prescribed format.

# **2.** Performance Measurement

#### a. Safety Aspects

Any Safety violation will be governed as per Contractor Safety Management (CSM) of TPCODL. Refer Annexure VII for CSM.



#### b. Cleaning & Vegetation Management in PSS( 20Marks)

SL. No.	Parameter	Marks Deducted
1	Non adherence to PSS cleaning schedule (reportage up to 2 cases)	5
2	Non adherence (reportage up to 5 cases)	10
3	Non adherence (reportage more than 5 cases)	20

Note: Non-availability of Cleaning person per PSS per day will attract additional penalty of Rs. 500/day for each cleaning person to maximum Rs. 7000/month/cleaning person.

#### c. Vehicle Compliances: (Weightage: 15marks)

S. No.	Parameter	Marks to be deducted
1	Non- compliance for vehicle	1 mark deduction for each vehicle for each non- compliance for vehicle Insurance, Fitness certificate, Pollution certificate and vehicle life as per contract.
		2 marks will be deducted for each vehicle not reporting on duty for > 4 hrs.

d. Non-availability of T&P (as mentioned above) during maintenance leading to delay in execution of job: (Total Weightage: 10 Marks): EIC at his discretion will deduct marks for each instance as mentioned below:

S. No.	Violation Frequency	Marks to be deducted
1	2 instances of T&Ps Violation during the month	5
2	3-5 instances of T&Ps Violation during the month	10

**e. Feeder Tripping: (Total Weightage: 20 Marks):** EIC at his discretion will deduct marks for each instance as mentioned below: (Urban/town/Industrial feeders)

S. No.	Violation Frequency	Marks Deducted
1	Conductor snapping – each instance	4
2	Jumper parting – each instance	2
3	Overall Tripping increase up to 5% wrt same month of LFY	8
4	Overall Tripping increase up to 10% wrt same month of LFY	10
5	Overall Tripping increase up to 15% wrt same month of LFY	20

f. Restoration time: (Total Weightage: 15 Marks): The marks shall be deducted on the basis of the following:



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S. No.	Violation Frequency	Marks Deducted
1	Failure in Restoration of Interruption / breakdown of a. Urban, Industrial & Town Feeder & PSS within 8 hrs b. Rural feeder & PSS within 12 hrs [2 cumulative instances (a+b)]	5 marks
2	<ul> <li>Failure in Restoration of Interruption / breakdown of</li> <li>a. Urban, Industrial &amp; Town Feeder &amp; PSS within 8 hrs</li> <li>b. Rural feeder &amp; PSS within 12 hrs</li> <li>[3 to 4 cumulative instances (a+b)]</li> </ul>	10 marks
3	<ul> <li>Failure in Restoration of Interruption / breakdown of</li> <li>a. Urban, Industrial &amp; Town Feeder &amp; PSS within 8 hrs</li> <li>b. Rural feeder &amp; PSS within 12 hrs</li> <li>[More than 4 cumulative instances (a+b)]</li> </ul>	15 marks

# g. Quality of Inspection (Total Weightage: 15 Marks):

EIC and OS coordinator will deduct marks based on "Feeder Inspection Report" as mentioned below:

SL NO	Violation Frequency	Marks deducted
1	Creeper reached up to 1 meter below conducto	1
	<ul> <li>– each instance (Maximum upto 5 marks</li> </ul>	
2	Feeder inspection plan non-adherence – each	2
	feeder case (Maximum upto 10 marks)	
3	Non reporting of existing defects each feede	2
	case (Maximum upto 10 marks)	

# h. Submission of MIS (Total Weightage: 5 Marks):

Deduction of 5 marks for non-submission of monthly MIS and Performance Report by 7th date of next month.

#### i. For compliance to monthly 5S schedule for PSS, BA will get 5 bonus marks.

Note:

- 1. TPCODL reserves the right to change to the list of existing performance base measurements, at any point of time for performance improvement on mutually agreed terms.
- 2. EIC at his discretion will deduct marks for each instance as mentioned above.

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TPCØDL	TPCØDL TATA POWER CENTRAL ODISHA DISTRIBUTI LIMITED		WI-05 (10.17.06) Revision: 00
		FED	
	1		Eff. Date 25.05.2022
Name of the Document		7) Issuance by Power System Contro System Control Centre(APSCC)	
Prepared By	Reviewed By	Approved By	Issued By
Chintamani Chitnis	Raj Kumar Rastogi	Raj Kumar Rastogi	Ajit Maleyvar
	Annexure – A P	art -1 (PTW)	
т	TPC P CENTRAL ODISHA DI	STRIBUTION LIMITED	)
	( A Tata Power and Odisha Go	vernment Joint Venture)	
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OPTCL, 33 Control C	PTW for 33kV and 11 3/11kV TPCODL Sub- entre (PSCC) and 3 a Power System Contr	Station under Powe 3/11kV TPCODL Sເ	er System
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WI-05 (10.17.06)



# TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED

**Revision: 00** 

		Eff. Date	25.05.2022
		Centre(PSCC	C) and Area
Power S	System Control Centre(APSCC)		
<b>Reviewed By</b>	Approved By	Issue	d By
Raj Kumar Rastogi	Raj Kumar Rastogi	Ajit Ma	leyvar
	Power S Reviewed By	Power System Control Centre(APSCC)           Reviewed By         Approved By	Reviewed By Approved By Issue

#### 1. AUTHORIZATION

- Only Authorized personnel (name should be there in the Primary /Secondary Tagging list) are allowed to do the operation & work on HV network.
- Authorization to depend on competency , not on designation by default
- Supervisors would be the minimal level to be interviewed for inclusion in Tagging list
- Interview by designated officials is mandatory for Authorization

#### 2. CAUTION ORDER

Caution Order may be issued to authorized personnel when work is being carried out near energized lines or equipment and might incidentally contact or foul the equipment.

A caution order issued neither authorizes to operate the equipment nor does it protect from operation or energizing of the equipment by authorized personnel except when an automatic trip out occurs.

#### **Issuing & Classification of Caution Orders by PSCC**

Caution Order (CO) for STS /Protection / EMR/Automation will be issued to be issued by PSCC /APSCC. Local Caution orders for distribution are not to be issued by PSCC.

#### **Classification of Caution Orders**

Automation

- Working on SCADA Server
- Data Configuration at data concentrator /Bay Control Unit in which no outage required

Protection

- Relay checking & settings for various equipment's
- Relay Data down loading

#### STS /E&MR

- Attending DC Leakage
- Working on ACDB/DCDB
- Working on Battery /Battery Chargers
- Working on Control circuit
- Switching OFF Lines for safety purpose due to exigencies (No work to be carried out)
- Shorting of links for Meter replacement
- All type of work directly to be carried out by E& MR Engineer on the Equipment's

Take a Caution Order when carrying out inspection or work adjacent to an energized equipment or line, so that such equipment is not closed or charged by the operating party subsequent to tripping without obtaining clearance from working party.

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# TATA POWER CENTRAL ODISHA DISTRIBUTION LIMITED

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Name of the Document	Power System Control Centre(APSCC)				
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Chintamani Chitnis	Raj Kumar Rastogi	Raj Kumar Rastogi	Ajit Maleyvar		

#### 3. PERMIT TO WORK

Permit To Work (PTW) means a declaration on the Permit To Work format, issued by the appointed operator or authorized person & issued to authorized personnel in charge of work, informing the latter that the apparatus to be worked on has been de-energized, isolated and earthed as detailed.

PTW system is an essential element in controlling the workplace risks in an effective manner.

If issuing a PTW is considered to be unnecessary for any reason, a risk assessment of the activity should be undertaken to identify the risks. If the activity is assessed to be Low risk then appropriate controls to manage any identified risks must be in place.

Sites should prepare a list of all routine and Low Risk tasks which may be performed without a work permit.

Personnel under Primary tagging are authorized to avail PTWs directly from PSCC/APSCC/OPTCL

Personnel under Secondary Tagging are not authorized to avail direct PTW and can only get PTW's transferred from the Primary Tagging Personnel. (Eg.TPCODL Projects Dept. Personnel). Responsibility of the Job lies with the Primary Tagging Personnel.

Under no circumstances will a PTW be issued to BA or any third party.

#### Issuing & Classification of Permit To Work (PTW) by PSCC

PTW for 33 kV & 11 kV Feeders, Equipments outside or Inside PSS to be issued by PSCC /APSCC /OPTCL for any work involving impact on the System Operations.

#### Ageing of PTW's & Caution Orders

PTW's and CO's would remain valid for 24 Hrs. max. after which a fresh PTW would need to be issued along with valid checks by both PSCC & Divisions

#### Issuing of multiple PTW `s & CO

Multiple PTW's would be issued by PSCC to the same personnel as and when requested by SDO /DM based on the situation. It would be responsibility of the concerned authorized personnel to ensure that safety is not hampered in the process. Other than this any PTW holder can transfer the holding PTW to some other authorized personnel and can take another PTW.

#### PTW for 33 kV & 11 kV Project Works

All the operations towards isolation and grounding prior to the handover would be done following the normal SOP.PTW for project work will be issued to the personnel in Primary Tagging of the particular system element and must be recorded by PSCC /APSCC .Subsequent transferring of PTW to Authorized Project personnel in the secondary tagging mentioning the reason ,date and time.

#### PTW for Multiple Working Party

In case of multiple working parties on the same equipment, distinct & unique PTW would be issued to each working party which would be recorded at PSCC.

#### 33 kV System

33 kV System encompasses of the following:

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- 1. 33 kV Outgoing feeder Isolator at OPTCL Grid End with associated Lightning Arrestors
- 2. 33 kV Outgoing feeder Isolator at 33 kV Switching Station of TPCODL with associated Lightning Arrestors
- 33 kV Feeder after the Outgoing Isolator which includes Overhead Line /Underground Cable ,Ring Main Units (RMU) ,Line Air Break Switches /Isolators ,Lightning Arrestors ,Metering Units ,33 / 0.4 kV Distribution Transformers along with associated Drop Down Fuse Arrangement & AB Switch ,Auto Reclosers ,33 kV Line Breakers , Disc ,Pin Insulators ,Stay arrangement ,Stud Pole arrangement.
- 4. Inside 33 /11 kV Primary Substation ,33 kV Switching Stations which includes Incoming Feeder terminating on Line Side Isolator with associated Lightning Arrestors ,33 / 0.4 kV Station Transformers directly connected to the line with ,Current Transformers ,Potential Transformers,33 kV Isolators ,Lighting Arrestors ,33 kV Breakers , 33 /11 kV Power Transformers , 33 kV Ring Main Units ,33 kV Metering Units ,Relays ,Control & Relay Panel ,RTCC , Battery ,Battery Charger ,33 kV Bus ,Remote Terminal Unit

#### Issue of PTWs on 33 kV System

#### 1. 33 kV Feeders under Central Power System Control Centre (CPSCC)

- a) PSCC will issue PTW's for all 33 kV feeders emanating from OPTCL GSS : Chandaka-A, Chandaka-B, Mancheswar-A, Mancheswar-B, Kesura ,Unit 8 GIS under CPSCC .
- b) PSCC will issue PTW's for all 33 kV Feeders emanating from TPCODL SCADA Integrated PSS / Switching Stations.
- c) PSCC will issue PTW's for all 33 kV Equipment's inside TPCODL SCADA Integrated PSS
- 2. 33 kV Feeders not under Central Power System Control Centre (CPSCC)
  - Respective OPTCL Grid will issue PTW to TPCODL Authorized personnel on all 33 kV Feeders emanating from OPTCL GSS till the same do not come under the purview of Central Power System Control Centre (CPSCC).
  - b) APSCC will issue PTW's for all 33 kV Feeders emanating from TPCODL Non SCADA Integrated PSS /Switching Stations.
  - c) APSCC will issue PTW for all 33 kV Equipment's inside TPCODL Non SCADA Integrated PSS

#### 3. 33 kV Equipments

- a. PSCC will issue PTW's for all 33 kV Equipment's inside TPCODL SCADA Integrated PSS
- b. PSCC will issue PTW's for all 33 kV Equipment's outside TPCODL SCADA Integrated PSS connected to 33 kV Feeders controlled from CPSCC
- c. APSCC will issue PTW for all 33 kV Equipment's inside TPCODL Non SCADA Integrated PSS /Switching Stations.
- d. APSCC will issue PTW's for all 33 kV Equipment's outside TPCODL SCADA Integrated PSS connected to 33 kV Feeders not controlled from CPSCC

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#### 11 kV System

11 kV System encompasses the following:

- 1. 11 kV Outgoing feeder Isolator /Air Break Switch at 33 /11 kV TPCODL Primary Structure with associated Lightning Arrestors
- 11 kV Feeder after the Outgoing Isolator / Air Break Switch which includes Overhead Line /Underground Cable, Aerial Bunched Cable. Ring Main Units (RMU), Line Air Break Switches /Isolators, Lightning Arrestors ,Metering Units, 11 / 0.4 kV Distribution Transformers along with associated Drop Down Fuse Arrangement & AB Switch ,Auto Reclosers, 11 kV Line Breakers, Disc, Pin Insulators, Stay arrangement, Stud Pole arrangement.
- 3. Inside 33 /11 kV Primary Substation which includes 11 kV Incomer terminating Bus Isolator with associated Lightning Arrestors ,11 / 0.4 kV Station Transformers directly connected to the incomer with ,Current Transformers ,Potential Transformers, 11 kV Isolators ,Lighting Arrestors ,11 kV Breakers , 33 /11 kV Power Transformers , 11 kV Ring Main Units ,11 kV Metering Units ,Relays ,Control & Relay Panel , 11 kV Bus ,Remote Terminal Unit

#### Issue of PTWs on 11 kV System

#### 1. 11 kV Feeders under Central Power System Control Centre (PSCC)

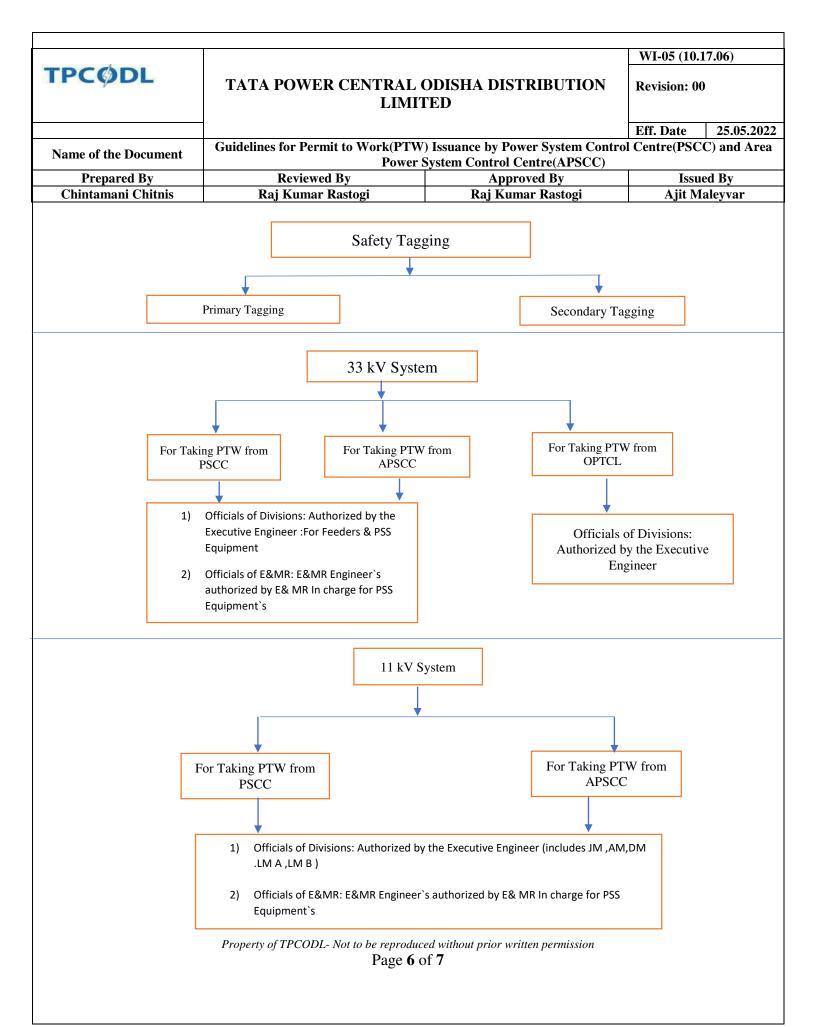
- a) PSCC will issue PTW's for all 11 kV Feeders emanating from TPCODL SCADA Integrated PSS / Switching Stations.
- b) PSCC will issue PTW's for all 11 kV Equipment's inside TPCODL SCADA Integrated PSS

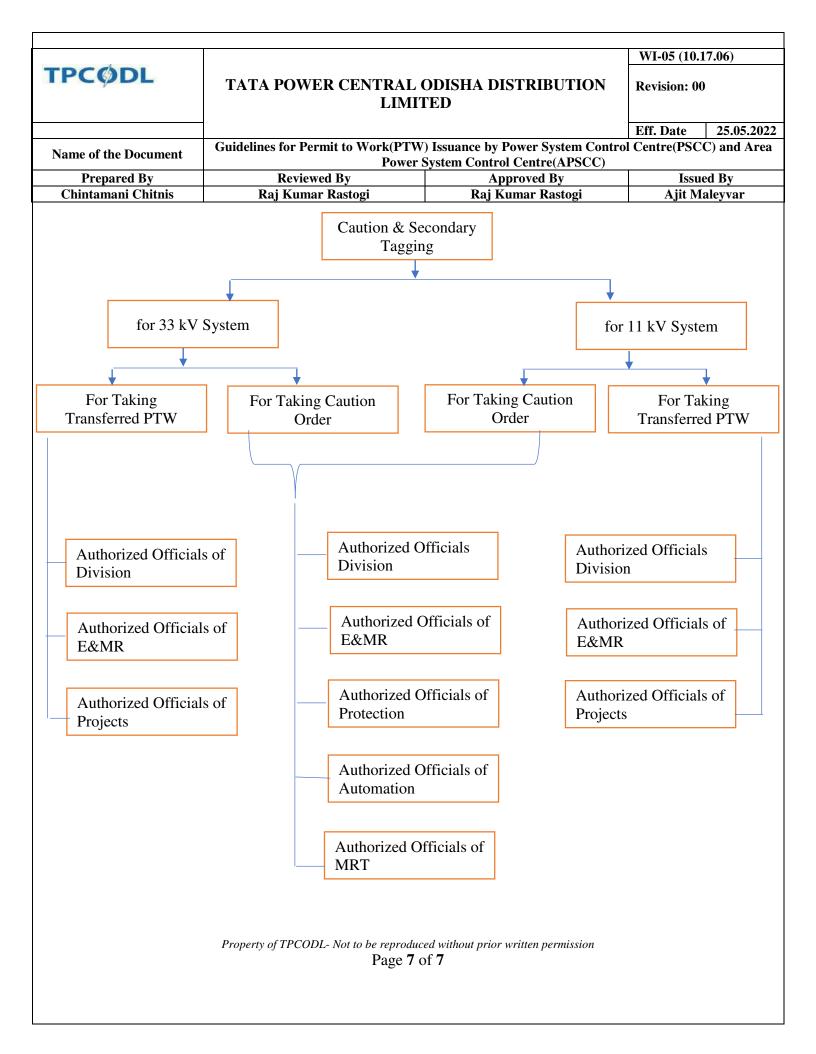
#### 2. 11 kV Feeders not under Power System Control Centre (PSCC)

- a) APSCC will issue PTW's for all 11 kV Feeders emanating from TPCODL Non SCADA Integrated PSS /Switching Stations.
- b) APSCC will issue PTW for all 11 kV Equipment's inside TPCODL Non SCADA Integrated PSS

#### 3. 11 kV Equipment's

- a) PSCC will issue PTW's for all 11 kV Equipment's inside TPCODL SCADA Integrated PSS
- PSCC will issue PTW's for all 11 kV Equipment's outside TPCODL SCADA Integrated PSS connected to 11 kV Feeders controlled from PSCC
- c) APSCC will issue PTW for all 11 kV Equipment's inside TPCODL Non SCADA Integrated PSS /Switching Stations.
- d) APSCC will issue PTW's for all 11 kV Equipment's outside TPCODL SCADA Integrated PSS connected to 11 kV Feeders not controlled from PSCC





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Annexure – A Part -2 (SoP)

# **TPCØDL** TP CENTRAL ODISHA DISTRIBUTION LIMITED

( A Tata Power and Odisha Government Joint Venture)

# **Standard Operating Procedure (SOP)**

For

# Remote Operations & Issue of PTW for 33kV and 11 kV Feeders emanating from 33/11kV TPCODL Sub-Station under Power System Control Centre (PSCC).

# POWER SYTEM CONTROL CENTER

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P.S. Das & R. Tripathy	Dinabandhu Khuntia Chintamani Chitnis Ajit Maleyvar				

# Various Operation Scenarios/Conditions

This document lists out the standard operating procedure (SOP) for communication and remote operation between PSCC, Sub-station operators and Working Party i.e. Ex. Engg./SDO/Section In-charge/ Line Engineer/Line Staff (As Authorized by Supply Engg. i.e. Exe. Engineer) for various system operations at 33 kV and 11 kV Lines and below. The SOP for operation and communication protocol for following Scenario cases are elaborated.

- Outage of 33kV Feeder emanating from 33/11kV Sub-Station: Any work which is done on 33 kV Line / Section emanating from the 33 /11 kV Substations would mandatorily require a Permit To Work (PTW).
- Outage of 11kV Feeder emanating from 33/11kV Sub-Station: Any work which is done on 11kV Line / Section would mandatorily require a Permit To Work (PTW).

# 3. Hand-trip operation requirement of 11 kV Outgoing Feeder:

For Hand-Trip the line is made dead by opening 11kV feeder breaker for opening certain Line AB-Switch / DT AB-Switch and then the line is re-energized by closing 11kV Feeder breaker. Hence based on equipment or work it is further categorized as

- i. Hand-trip operation for opening Line AB-Switch/ GOD
- ii. Hand-trip operation for opening DT AB-Switch/GOD
- 4. Outage of 33kV & 11kV feeder for maintenance in the control room & for switchyard equipment:

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Any work which is done on 33/11 kV substation switch yard inside substation control room would mandatorily require a Permit To Work (PTW). The equipment which needs maintenance listed below:

- (a) 33 kV BUS
- (b) 33kV line PT, 33kV LA, 33kV incoming isolator/ AB switch
- (c) 33kV BUS coupler
- (d) 33kV Bus PT, CT, Breaker, isolators
- (e) 33/11kV Power transformer
- (f) 11kV BUS
- (g) 11kV Breaker/CT/PT
- (h) Indoor switchgear: Incomer/Feeder/ Bus-coupler

# 5. Emergency Operation requirement:

It is to be noted that in all cases of emergency, both substation operator and PSCC can independently OPEN the feeder breaker urgently with immediate intimation and recording either ways.

Following cases would be considered as emergency cases:

- a. Fire reported in vicinity of equipment which might lead to human or equipment damage
- b. Any circumstance is reported which might lead to risk of Human/Animal life & Property.
- 6. Loss of telephonic communication: All operations are to be done as per the SOP based on telephonic communication with PSCC however, in case of loss telephonic communication channel. The station operator/PSCC Executives have to escalate the matter to the concern section officer/SDO/Executive Engg. for conducting subsequent operations i.e. the concern officer will take the entire responsibility for restoration/normalization of the power supply ensuring safe operation procedures.

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- 7. **RTU Network Link failure:** In cases where link of the Sub-station RTU fails and remote operations couldn't be done from PSCC, then all the operations are to be done locally by substation operator in conversation with PSCC Executives along with authorized person taken PTW.
- 8. Load Shedding requirement: On receipt of communication for the requirement of Load Shedding from SLDC/Field Ex. Engineer/SDO in case of demand limitation, generation failure or equipment breakdown at distribution side, the matter would be taken up with the concerned Exe. Engineer. PSCC will also intimate regarding load restriction amount and duration. As per the suggestion of Field Exe. Engineer, PSCC will conduct operation as per requirement with intimation to section in-charge. It might be noted that even when a line is dead due to load shedding, no work is to be done without issues proper PTW from PSCC.
- 9. Test charging of the breaker: In the event of breaker tripping on fault being noticed on SCADA at PSCC, the PSCC Shift Engg. will call the respective substation control room and discuss regarding the same with the control room operator. The Substation operator has to confirm regarding any visible fault in switchyard/control room or nearby or from any other sources. Then the substation operator will discuss with the substation in charge to go for Test Charge and intimate the same to PSCC with a message number after reset Master Relay if required. Then the PSCC Shift Engg will go for the Test Charge minimum after 5 min. of fault trip. If the Breaker Stand then OK, else the line or equipment will be declared under break down and the same will intimated to substation operator/ feeder in charge/substation in charge for the necessary action.

# **Operation Process Elaboration**

1. Outage of 33kV Feeder emanating from 33/11KV Sub-Station which requires PTW:

# 1.1 Outage of 33 kV feeder:

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The following procedure is to be followed for this outage:

- 1.1.1 The authorized person i.e. Ex. Engg. /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) calls PSCC for arranging outage and shares the following details
  - a. Substation/Feeder /Feeder Section/Equipment where work is to be done
  - b. Brief Work Description
  - c. Name of the Authorized person who is asking for PTW
  - d. Number of persons to be engaged in the work place
  - e. Inform regarding the isolation of back feeding if any
  - f. Inform regarding taking parallel shut down of nearby feeder for making safe working zone.
- 1.1.2 PSCC collects the data, make documentation for PTW as per its procedure defined and then calls Substation Operator for arranging the outage. Following procedure is to be followed:
  - a. PSCC will **OPEN** the breaker remotely in conversation with Substation Operator and issue a Reference Number/message Number.
  - b. Once breaker is opened by PSCC, substation operator has to confirm the same (breaker shows open indication and load drops to zero) and then **rack out** the breaker in case of indoor Breaker/switchgear.
  - C. Substation operator removes breaker spring charge fuse for the Feeder.
  - d. After conformation from PSCC about the AB Switch/ GOD number substation operator will open it and then substation Operator closes the Ground GOD /provides local portable earthing and confirms it to PSCC after visually confirm that all the three blades are open.
  - e. The Sub-station Operator will put the Do Not Operate tags on the Breaker Penal and Feeder AB Switch/ Isolator.

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- f. Substation operator will record the same in the sub-station Shutdown register against the above Reference Number and report to the PSCC that **rack out** of the breaker done in case of indoor breaker/switchgear, breaker Spring charge fuse for the Feeder removed, AB Switch/Isolator has been opened, Ground GOD /local portable earthing is provided and Do Not Operated tags are put on the Breaker Panel & CR Penal and Feeder AB Switch/ Isolator with respective message number i.e. date and SI. No of entry in the Shutdown register.
- 1.1.3 PSCC creates a PTW number and put PTW Tag on the Breaker SLD and then shares it with Substation Operator and authorized Person and intimate to make proper local Earthing before executing work as per TPCODL Safety Norms.
- 1.1.2 Substation Operator will record the PTW number against the corresponding shutdown Message Number/ make hard copy of PTW as required and share it with the Working Party.

# 1.2 Normalization of 33kV Feeder:

Following procedure is to be followed:

- 1.2.1 The authorized person i.e. Ex. Engg /SDO/Section In-charge (Authorized by Supply Engg. i.e. Exe. Engineer) who was issued PTW calls PSCC for return of the same and shares the following details
  - a. PTW number that was issued
  - b. Substation/Feeder /Feeder Section/Equipment where work is completed.
  - c. Location where work execution is completed
  - d. Name of the Authorized person who is has taken PTW
  - e. Number of persons withdrawn after completion of work
  - f. All potable grounds (if any) have been removed and all men and T & P, materials are taken out from the line and Sub-station.

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	records the PTW clearing time ation submitted at the time of is		te all the	

- 1.2.3 PSCC calls Substation Operator and issue a reference Number to do the following operations:
  - a. Substation Operator will remove the PTW tags of the Breaker Penal and Feeder AB Switch or Isolator.
  - b. After conformation from PSCC about the AB Switch/ GOD number substation operator will opens the corresponding Ground AB-Switch /removes local portable earthing (if any) and closed the AB Switch/ GOD and visually confirm that all groundings are removed and all three blades of AB Switch/GOD are connected properly.
  - c. Substation operator will put back the breaker Spring charged fuse for the feeder.
  - d. Substation operator will **rack-in** the 33 kV breaker of the feeder in case of indoor breaker/switchgear.
  - e. Substation operator will record the above in the sub-station Shutdown register against the above Reference Number and confirms the PSCC that and PTW tags are removed from the Breaker Penal and Feeder AB Switch/ Isolator, Ground GOD /local portable earthing are removed, AB Switch/Isolator has been closed, Breaker Spring charge fuse put in place with a message number i.e. date and SI. No of entry in the Shutdown register.
- 1.2.4 After confirmation PSCC will **CLOSE** the breaker remotely in conversation with Substation Operator thereby taking the line/equipment back in service.
- 1.2.5 PSCC will confirm the authorized person and the substation operator regarding the restoration/normalization of the feeder in case of feeder stand and shows the healthy electrical parameter or any abnormalities.

# 2 Outage of 11kV feeder emanating from 33/11kV Sub-Station which requires PTW:

# 2.1 Outage of 11 kV feeder:

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The following procedure is to be followed for this outage:

- 2.1.1 The authorized person i.e. Ex. Engg. /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) calls PSCC for arranging outage and shares the following details:
  - a. Substation/Feeder /Feeder Section/Equipment where work is to be done
  - b. Brief Work Description
  - c. Name of the Authorized person who is asking for PTW
  - d. Number of persons to be engaged in the workplace
  - e. Inform regarding the isolation of back feeding if any
  - f. Inform regarding taking parallel shut down of nearby feeder for making safe working zone.
- 2.1.2 PSCC collects the data, make documentation for PTW as per its procedure defined and then calls Substation Operator for arranging the outage. Following procedure is to be followed
  - a. PSCC will **OPEN** the breaker remotely in conversation with Substation Operator and issue a reference number.
  - b. Once breaker is opened by PSCC, substation operator has to confirm the same (i.e. breaker shows open indicator and load drops to zero) and then **rack out** the breaker in case of indoor breaker/switchgear.
  - c. Substation operator removes breaker Spring charge fuse for the Feeder.
  - d. Substation operator confirms the AB Switch/ GOD number to PSCC and will open it and then substation Operator closes the Ground GOD /provides local portable earthing and confirms it to PSCC after all the three blades are open confirm visually.
  - e. The Sub-station Operator will put the PTW tags on the Breaker Penal and Feeder AB Switch/ Isolator
  - f. Substation operator will record the same in the sub-station Shutdown register against the above Reference Number and confirms the PSCC that **rack out** of

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the breaker done, breaker Spring charge fuse for the Feeder removed, AB Switch has been opened, Ground GOD /local portable earthing is provided and PTW tags put on the Breaker Penal and Feeder AB Switch/ Isolator with respective message number i.e. date and SI. No of entry in the Shutdown register.

- 2.1.3 PSCC creates a PTW number put PTW Tag on the Breaker SLD and then shares it with Substation Operator and authorized person and intimate to make proper locals Earthing before executing work as per TPCODL Safety Norms.
- 2.1.4 Substation Operator will record the PTW number against the corresponding shutdown Message Number/ make hard copy of PTW as required, shares it with the Working Party.

# 2.2 Normalization of 11kV Feeder:

Following procedure is to be followed:

- 2.2.1 The authorized person i.e. Ex. Engg /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) who was issued PTW calls PSCC for return of the same and shares the following details
  - a. PTW number that was issued
  - b. Substation/Feeder /Feeder Section/Equipment where work is completed.
  - c. Location where work execution is completed
  - d. Name of the Authorized person who is has taken PTW
  - e. Number of persons withdrawn after completion of work
  - f. All potable grounds (if any) have been removed and all men and T & P materials are taken from the line and Sub-station.
- 2.2.2 PSCC records the PTW clearing time and cross check and validate all the information submitted at the time of issue of PTW.
- 2.2.3 PSCC calls Substation Operator and issue a Reference Number to do the following operations:

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Prepared By	Reviewed By	Approved By	Issue	ed By
P.S. Das & R. Tripathy	Dinabandhu Khuntia	Chintamani Chitnis	Ajit M	aleyvar

- a. Substation Operator will remove the PTW tags of the Breaker Penal and Feeder AB Switch or Isolator.
- b. After conformation from PSCC about the AB Switch/ GOD number substation operator will open the corresponding Ground AB-Switch /removes local portable earthing (if any) and close the AB Switch/ GOD and visually confirm all grounds removed and all three blades of AB Switch/GOD are connected properly.
- C. Substation operator will put back the breaker Spring charged fuse for the feeder.
- d. Substation operator will **rack-in** the 11 kV breaker in case of indoor breaker/switchgear
- e. Substation operator will record the above in the sub-station Shutdown register against the Reference Number and confirms the PSCC that and PTW tags are removed from the Breaker Penal and Feeder AB Switch/ Isolator, Ground GOD /local portable earthing are removed, AB Switch/Isolator has been closed, Breaker Spring charge fuse put in place with respective message number i.e. date and SI. No of entry in the Shutdown register.
- 2.2.4 After confirmation PSCC will **CLOSE** the breaker remotely in conversation with Substation Operator thereby taking the equipment back in service
- 2.2.5 PSCC will confirm the working party and the substation operator regarding the restoration/normalization of the feeder in case of feeder stand and shows the healthy electrical parameter or any abnormalities.

# 3 11kV Feeder Hand-trip Operation Requirement:

# 3.1. <u>11kV Feeder Hand-Trip Operation for opening Line AB Switch/ GOD:</u>

The following procedure is to be followed for this outage:

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- 3.1.1 The authorized person i.e. Ex. Engg. /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) calls PSCC for arranging outage and shares the following details
  - a. Substation/Feeder /Feeder Section/Equipment where work is to be done
  - b. Brief Work Description
  - c. Name of the Authorized person who is asking for PTW
  - d. Number of persons to be engaged in the work place
  - e. Inform regarding the isolation of back feeding if any
  - f. Inform regarding taking parallel shut down of nearby feeder for making safe working zone.
- 3.1.2 PSCC collects the data, make documentation for HANDTRIP and then call Substation Operator for arranging the outage. Following procedure is followed:
- 3.1.3 PSCC will **OPEN** the breaker remotely in conversation with Substation Operator.
- 3.1.4 Once breaker is opened by PSCC, substation operator has to confirm the same (i.e. breaker shows open indication and load drops to zero).
- 3.1.5 The PSCC will call the authorized person about the outage of the feeder and issue a Reference number. The Authorized person has to confirm regarding outage of power supply on the feeder with 11kV line tester.
- 3.1.6 After that, Authorized person **OPEN** the Line AB Switch/GOD and confirms visually that all the three blades are open and make locking and safeguard it for maintaining safe and secure working zone, provide local portable earthing/Closes Ground GOD at both end of the PTW zone, put the necessary PTW Tag and the same has to intimate to PSCC with a message no.
- 3.1.7 PSCC will call the Substation operator to record the same in the sub-station Shutdown register against the above Reference Number.
- 3.1.8 PSCC closes the feeder breaker remotely and same has to be confirmed by substation operator.
- 3.1.9 PSCC will call the authorized person regarding any abnormalities and cross check the outage zone through 11kV line tester for any back feeding or leakage supply and give a message number to PSCC.

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3.1.10 3.1.11	autho Norm PSC( again	d on the message number PSC prized person and intimate for our s. C will call the Substation Opera est the reference number and re of PTW to the authorized perso	execution of work as per TF tor to record the HANDTRIF cord it as feeder section PTV	PCODL Sat	fety ber
	ne follov SDO/Se ssued F PTW Subs Locat Name	eder Hand-Trip Operation for CI wing procedure is to be followed ection In-charge (Authorized by PTW calls PSCC for return of th number that was issued tation/Feeder /Feeder Section/E tion where work execution is co e of the Authorized person who per of persons withdrawn after o	d:3.2.1The authorized person Supply Engg. i.e Exe. Engin e same and shares the follow Equipment where work is cor mpleted is has taken PTW	neer) who v wing details	vas
f.	•	table grounds (if any) have been aken from the line and Sub-stati		「& P mater	ials
3.2.2		C records the PTW clearing ti nation submitted at the time of i		alidate all	the
3.2.3	Subs	alidation, PSCC will <b>OPEN</b> th tation Operator and issue a refe	erence number w.r.t. PTW nu	umber.	
3.2.4	(i.e. b	breaker is opened by PSCC, so preaker shows open indicator ar	nd load drops to zero)		
3.2.5	autho	PSCC will call the authorized p prized person has to confirm r er with 11kV line tester.			
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Dinabandhu Khuntia	Chintamani Chitnis	Ajit Ma	aleyvar
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- 3.2.6 After that, the authorized person **CLOSES** the Line AB Switch/GOD and confirms visually that all the three blades are closed, and the same has to intimate to PSCC with a message number.
- 3.2.7 PSCC will call the substation operator and **CLOSE** the feeder breaker remotely and same has to be confirmed by substation operator and the substation operator records the same against the above PTW number.
- 3.2.8 PSCC will call the authorized person regarding any abnormalities and restoration of the power supply in the PTW Zone PSCC will the call Substation Operator will remove the PTW tags of the Breaker Penal and Feeder AB Switch or Isolator.

# 3.3 <u>11kV Feeder Hand-Trip Operation for opening of DT AB Switch/ GOD:</u>

The following procedure is to be followed for this outage:

- 3.3.1 The authorized person i.e. Ex. Engg. /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) calls PSCC for arranging outage and shares the following details
  - a) Substation/Name of the feeder required hand trip
  - b) Equipment/ Section of work
  - c) Brief Work Description
  - d) Working Party name
  - e) Number of persons to be engaged in the work
  - f) Authorized person to confirm whether PTW is required on the same HT line or any other HT line in vicinity, to carry out the work. If PTW is required then follow the process.
- 3.3.2 PSCC collects the data, make documentation for HANDTRIP and then call Substation Operator for arranging the outage. Following procedure is followed
- 3.3.3 PSCC will **OPEN** the breaker remotely in conversation with Substation Operator and issue a reference number.

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334 Once	breaker is opened by PSCC, s	ubstation operator has to co	nfirm the sa	me

- 3.3.4 Once breaker is opened by PSCC, substation operator has to confirm the same (i.e. breaker shows open indication and load drops to zero).
- 3.3.5 The PSCC will call the authorized person about the outage of the feeder and authorized person has to conform regarding outage of power supply on the feeder with 11kV line tester.
- 3.3.6 After that, the authorized person **OPENs** the DT AB Switch/GOD and confirms visually that all the three blades are open and locks it to safeguard it for maintaining safe and secure working zone, provide local portable earthing/Closes Ground GOD at both end of the PTW zone (LT network), put the necessary Do Not Operate Tag and the same has to intimated to PSCC.
- 3.3.7 The Authorized person will give a message to PSCC to close the respective 11 kV Feeder Breaker.
- 3.3.8 PSCC will call the Substation operator to record the same in the sub-station Shutdown register against the above Reference Number.
- 3.3.9 PSCC will Close the feeder breaker remotely and same has to be confirmed by substation operator.
- 3.3.10 PSCC will call the authorized person regarding any abnormalities and cross check the outage zone through 11kV/LT line tester for any back feeding or leakage supply and give a message number to PSCC.
- 3.3.11 Based on the message number PSCC creates a PTW number and shares it with authorized person for execution of work as per TPCODL Safety Norms.
- 3.3.12 PSCC will call the Substation Operator to record the PTW number against the reference number and record it as DT PTW/issue a Hard copy of PTW to the authorized person as required.

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# 3.4 <u>11kV Feeder Hand-Trip Operation for Closing of DT AB Switch/ GOD:</u>

Following procedure is to followed:

- 3.4.1 The authorized person i.e. Ex. Engg /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) who was issued PTW calls PSCC for return of the same and shares the following details
  - a. PTW number that was issued
  - b. Section/Equipment where work is completed.
  - c. Location where work execution is completed
  - d. Name of the Authorized person who is has taken PTW
  - e. Number of persons withdrawn after completion of work
  - f. All TAGS, Potable grounds (if any) have been removed and all men and T & P materials are taken from the line and Sub-station.
- 3.4.2 PSCC records the PTW clearing time and cross check and validate all the information submitted at the time of issue of PTW.
- 3.4.3 On validation, PSCC will **OPEN** the breaker remotely in conversation with Substation Operator and issue a reference number w.r.t. HANDTRIP PTW number.
- 3.4.4 Once breaker is opened by PSCC, substation operator has to confirm the same (i.e. breaker shows open indication and load drops to zero)
- 3.4.5 The PSCC will call the authorized person about the outage of the feeder and authorized person has to conform regarding outage of power supply on the feeder with LT/11kV line tester.
- 3.4.6 After that, the authorized person **CLOSE** the DT AB Switch/GOD and confirms visually that all the three blades are closed, and the same has to intimate to PSCC with a message number
- 3.4.7 The Authorized person will give a message to PSCC to close the respective 11 kV Feeder Breaker

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- 3.4.8 The PSCC will call the substation operator and **CLOSE** the feeder breaker remotely and same has to be confirm by substation operator and the substation operator record the same against the above PTW number.
- 3.4.9 PSCC will call the authorized person regarding any abnormalities and restoration of the power supply in the PTW Zone.

# 4. Outage of 33kV & 11kV feeder for maintenance of control room & switchyard equipment:

Any work which is done on 33/11 kV substation switch yard or inside substation control room would mandatorily require a Permit To Work (PTW). The equipment which needs maintenance listed below:

- 1. 33 kV BUS
- 2. 33 kV line PT, 33 kV LA, 33 kV incoming isolator/ AB switch
- 3. 33 kV BUS-Coupler
- 4. 33 kV Bus PT, CT, Breaker, Isolators
- 5. 33/11kV Power transformer
- 6. 11kV BUS
- 7. 11kV Breaker/CT/PT
- 8. Indoor switchgear: Incomer/Feeder/ Bus-coupler

# 4.1. Outage for maintenance of control room & switchyard equipment :

- 4.1.1 The authorized person i.e. Ex. Engg. /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) calls PSCC for arranging outage of equipment at 33/11 kV substation (Switchyard and Control Room) and shares the following details
  - a. Equipment name and reference (mention as above)
  - b. Brief Work Description

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- C. Name of the Authorized person who is asking for PTW
- d. Number of persons to be engaged in the workplace.
- e. Inform regarding all sources of the back feeding
- f. Inform regarding taking parallel shut down of nearby live line/ equipment for making safe PTW zone.
- 4.1.2 PSCC will check the above equipment status and electrical parameter.
- 4.1.3 If the outage of equipment requires the outage 33 kV incoming feeder from Grid substation then due process to be the follows for taking PTW from OPTCL Grid substation with intimation to PSCC.
- 4.1.4 Else, PSCC will call the substation operator regarding confirmation of the equipment, upward and downward breaker, isolator and sources of back feeding.
- 4.1.5 PSCC will OPEN all upward and downward breakers and call to the substation operator and issue a Reference Number to open upward and downward isolator/AB switch and to isolate all other sources of back feeding and record in the substation shutdown register and share the corresponding message no. to PSCC.
- 4.1.6 PSCC will call the authorized person regarding reconfirmation of isolation of all upward and downward isolator/AB switch and other sources of back feeding and proper grounding of PTW zone.
- 4.1.7 With reference to the above substation message number PSCC creates a PTW number and shares it with Substation Operator and authorized person and intimate to make proper locals Earthing before executing work as per TPCODL Safety Norms.
- 4.1.8 Substation Operator will record the PTW number against above reference / make hard copy of PTW as required, shares it with the Working Party.

# 4.2. Normalization after maintenance of control room & switchyard equipment:

- 4.2.1 The authorized person i.e. Ex. Engg /SDO/Section In-charge (Authorized by Supply Engg. i.e Exe. Engineer) who was issued PTW calls PSCC for return of the same and shares the following details
  - a. PTW number that was issued
  - b. Equipment name/s

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info 4.2.3 PS foll a. b.	SCC SCC SCC SUD USEC AB S	ocation where work execution is lame of the Authorized person v lumber of persons withdrawn af II TAGS, Potable grounds (if an P materials are taken from the records the PTW clearing time a ation submitted at the time of iss calls Substation Operator and is ng operations: station Operator will remove all d for the PTW. Switch / Isolators/ GOD are to be	who has taken PTW ter completion of work y) have been removed and line and Sub-station. and cross check and validation ue of PTW. ssue a reference Number to the local portable earthing	te all the do the / earth swi	itch
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w e tc 4.2.5 P	vith quip o the PSCC	confirmation PSCC will <b>CLOS</b> Substation Operator and the ment/s back in service. The clos direction of the power flow (i.e. C will confirm the authorized per estoration/normalization of the P	Authorized person there ing of the Breakers should of 33kV to 11kV downward). son and the substation ope	by taking do in sequei	the nce
4.2.6 In	case	e of any abnormalities, the authors are requirement for execution	orized person will once aga	in have to ta	ake

Standard Operating Procedure (SOP) for Remote Operations & Issue of PTW for 33kV         Name of the Document       and 11 kV Feeders emanating from 33/11kV TPCODL Sub-Station under Power System Control Centre (PSCC)         Prepared By       Reviewed By       Approved By       Issued By         PS. Das & R. Tripathy       Dinabandhu Khuntia       Chintamani Chitnis       Ajit Maleyvar         ANNEXURE 1         LIST OF 33 /11 kV SUBSTATIONS UNDER BCDD 1 DIVISION TO BE OPERATED FROM PSCC AS OF 24.08.2020         1.       Airport       2.       Board Colony         3.       Delta       4.       Saheednagar         6.       Unit 3       7.       Unit 4         8.       Unit 6       9.       Unit 8 -Will not be operated from PSCC
P.S. Das & R. Tripathy       Dinabandhu Khuntia       Chintamani Chitnis       Ajit Maleyvar         ANNEXURE 1         LIST OF 33 /11 kV SUBSTATIONS UNDER BCDD 1 DIVISION TO BE OPERATED FROM PSCC AS OF 24.08.2020         1. Airport       2. Board Colony       3. Delta         4. Saheednagar       5. Satyanagar       6. Unit 3         7. Unit 4       8. Unit 6
ANNEXURE 1 LIST OF 33 /11 kV SUBSTATIONS UNDER BCDD 1 DIVISION TO BE OPERATED FROM PSCC AS OF 24.08.2020 1. Airport 2. Board Colony 3. Delta 4. Saheednagar 5. Satyanagar 6. Unit 3 7. Unit 4 8. Unit 6
LIST OF 33 /11 kV SUBSTATIONS UNDER BCDD 1 DIVISION TO BE OPERATED FROM PSCC AS OF 24.08.2020 1. Airport 2. Board Colony 3. Delta 4. Saheednagar 5. Satyanagar 6. Unit 3 7. Unit 4 8. Unit 6
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# ANNEXURE 3 - CHECKLIST

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P.S. Das & R. Ti	ripathy	Dina	abandhu Khuntia	Chintamani Cl	hitnis	Aj	it Mal	eyvar
			<u>11 kV Feeder w</u>	ith Breaker Outage	<u>!S</u>			
PTW No Nature o Working Operato	of Work Party			<u>_ Date</u> _ <u>HO Time</u> _ <u>Clearing Time</u> _ <u>CPSCC</u> 	: : : :			
2) APSCO	C/Substati	on Operator v	ed out in consultation with A vill carry out the operations	as per checklist.				
4) Substa	ation Oper	rator/JE will	ill confirm that, approved JS place LOTO & Safety Tags a p safety guidelines are man	at all Isolating/Grounding				
Isolation 1 2 3 4 5 6 7 8 Handing	11 kV Lir Ground ( 11 kV DT 11 kV Br 11 kV Br Spring ch 11 kV Br	is Side Isolato ne Side Isolato GOD /Portable T's and 11 con eaker C& R Pa eaker Test /Se narging MOTO	or/GOD Ground of Outgoing feeder sumers at Remote End anel					
			I					
Sr.No.	Responsi APSCC	blilty	Will ask 33 /11 kV Substat subject feeder & inform A Will advise JE to isolate th connected on the feeder & fdr & inform to APSCC	PSCC e 11 kV DT`s and 11 kV H	HT consumers		Tick	Time
2	JE /Authr Personne	ozed el of Section	Open 1)All GOD`s of 11 kV HT C alternate feeder if avilable 2)All GOD`s of DT`s conne alternate feeder if avilable Inform APSCC of this isolat	e. octed on the feeder & cha e.	-	r to		
3	33 /11 k Operato	V Substation r	Open 1)The subject 11 kV OG fe breaker in test position. 2)Will open 11 kV Feeder s 3)Will open 11 kV Bus side	eder breaker if not alread	dy open & put	the		
4	APSCC		Will confirm all DNOP tage Isolation points mentioned	s /LOTO locks are placed				
5	APSCC		Confirm all three phase cu to to O/I/G ,the 11 kV Feed	rrents has dropped to ze	ro & give mes			

Will O/I/G the 11 kV feeder and issue PTW on the Feeder TO APSCC

Issue PTW to Authorized personnel thereby handing over the 11 kV

feeder to the working party.

33 /11 kV Substation

Operator

APSCC

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PC	PCØDL 1		<b>ØDL</b> TATA POWER CENTRAL ODISHA DISTRIBUTION		Revision: 00	
				LIMITED	Eff. Date	25.06
ame o	Power System Control Centre (PSCC)		Operating Procedure (SOP) for Remote Operations & I nd 11 kV Feeders emanating from 33/11kV TPCODL Sub Power System Control Centre (PSCC)			
Pr	repared By Reviewed By Approved By		Issu	ied By		
	s & R. T		Di	nabandhu Khuntia Chintamani Chitnis		Ialeyvar
	Sr.No.	Responsit	•	Clearnce from the working party Particulars of Events Clears the PTW and confirms that all grounds, shorts, all men and	Tick	Time
				Taking Back 11 kV feeder in Service		
	<b>Sr.No.</b> 1	JE /Autho	rized	Clears the PTW and confirms that all grounds, shorts, all men and	Tick	Time
		Personne	el	material have been removed , at feeder end , and feeder is ready for charging through message to APSCC		
	2	APSCC		PTW issued by substation operator is cleared and message given to charge the feeder		
	3	33 /11 kV Operator	Substation	Ensure that, all safety /DNOP tags are removed from the isolating points.		
	4	33 /11 kV Operator	Substation	Will Open the Ground GOD /portable Grounds put on the 11 kV feeder side.		
	5	33 /11 kv Operator	' Substation	Will close 11 kV Bus Side and feeder side GOD's		
	6	33 /11 kV Operator	' Substation	Switch ON A.C.and D.C. supply .		
	7	33 /11 kV Operator	Substation	in consultation with APSCC /JE ,operator will close the subject 11 kV Feeder breaker.		
	8	APSCC		Informs 33 /11 kV Substation Operator to check and confirm all the three phase voltages on station meter. On confirmation of all three phase voltages, JE/Authorized personnel is informed of the 11 kV Feeder charging for normalisation.		
	9	JE /Autho	rized	Will close all the GOD's of 11 kV HT consumers and 11/0.4 kV DT's or	ו ו	

the feeder. Normalisation is informed to APSCC.

Personnel

			WI-01 (10.1	WI-01 (10.17.06)		
TPCØDL	TATA POWER CENTRAL ODISHA DISTRIBUTION   Revision: 00			)		
	LIMIT	ENTRAL ODISHA DISTRIBUTION LIMITED	Eff. Date	25.06.2021		
Name of the Document		SOP) for Remote Operations ting from 33/11kV TPCODL S ystem Control Centre (PSCC)	Sub-Station u			
Prepared By	Reviewed By	Approved By	Issu	Issued By		
P.S. Das & R. Tripathy	Dinabandhu Khuntia			Ajit Maleyvar		

# ANNEXURE 4 - 33 kV CHECKLIST

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					WI-01 (10.1	,
ΓΡϹΦΙ	DL	TATA POWER CENTRAL		BUTION	Revision: 0	0
		LIMI	TED		Eff. Date	25.06.202
Name of the D	ocument	ocument Standard Operating Procedure (SOP) for Remo and 11 kV Feeders emanating from 33, Power System Contro		TPCODL S		
Prepared	Bv	Reviewed By	Approved	Bv	Issu	ed By
P.S. Das & R.		Dinabandhu Khuntia				laleyvar
		33 kV Feeder with Breaker C				
		<u>33 KV Teeder with breaker c</u>	utages		7	
PTW No Nature o	-	: <u>Date</u> : HO Time	:			
Working		: <u>Clearing Time</u>	:			
Operato	<u>r</u>	:PSCCShift has been a (2)	:			
		Shift Incharge(P	<u>scc)</u> :			
1) 411 ()	parstions are to be	e carried out in consultation with PSCC/SMC.			-	
		tor will carry out the operations as per checklist.				
		tor will confirm that, approved JSA is available (JSA				
		II place LOTO & Safety Tags at all Isolating/Ground ance to safety guidelines are mandatory.	ing points.			
Pre out	age operating co	nditions / confirmation of load transfer.				
Isolatio	n Points /DNOP:					
1	-	Line Side Isolator/GOD				
2 3	Earth GOD of In	Line Side Isolator/GOD at remote end coming feeder				
4		coming feeder at Remote end				
5 6	33 kV Transform 33 kV Breaker (	ner Side Isolator/GOD C& R Panel				
7	33 kV Breaker T	est /Service Lever				
8 9	Spring charging Secondary Fuse	MOTOR AC supply of Feeder Incoming Breaker.				
10	,	ontrol on SCADA (for Blocking CB command)				
<u>Handing</u>	<u>over</u>					
Sr.No.		Particulars of Ever		Tick Time		
1	PSCC	Will ask 33 /11 kV Substation Operator to o Incoming feeder & change over load if avai				
		inform to PSCC .			_	
2	33 /11 kV Subst Operator	ation Open 1)All 11 kV OG feeders				
	Sperator	2)11 kV Incomer breaker				
		3)Close 11 kV Bus coupler (if available) 4)Will open 11 kV Bus side side GOD if no o	than 11 W course is			
		avialble.	Scher II KV Source is			
3	33 /11 kV Subst Operator	ation Will open 33 kV breaker and open Incomin GOD of 33 kV fdr	g & Outgoing feeder side			
4	33 /11 kV Subst	ation Will inform PSCC, of 33 kV Incomg Breaker	solation & Load has been		1	
	Operator	changed over at 33 /11 kV Substation Oper				
		is available) and fdr is open and isolated at Operator end. (Thru message).	33 /11 kV Substation			
5	SDO /Authrorize		tions .			
6	personnel PSCC	Will confirm all LOTO locks are placed prop mentioned and also A.C. and D.C. supply is			-	
7	PSCC	Confirm all three phase currents has dropped	ed to zero & give message		-	
8	33 /11 kV Subst	to OPTCL to O/I/G ,the 33 kV Feeder at thei ation Will O/I/G the 33 kV feeder and issue PTW			-	
	Operator PSCC	Issue PTW to SDO thereby handing over th	- 22 14/ 5 1 - 1 - 1		4	
9				1		

						WI-0	1 (10.17	7.06)
TPC	ØD	L	TAT	A POWER CENTRAL	ODISHA DISTRIBUTION		ion: 00	
	LIMITED         Name of the Document       Standard Operating Procedure (SOP) for Remote Operations and 11 kV Feeders emanating from 33/11kV TPCODL S Power System Control Centre (PSCC)			LIMIT	red	Eff. I	Date	25.06.2021
Name o								
Pr	epared	pared By Reviewed By Approved By		Approved By		Issue	ed By	
			Pinabandhu Khuntia	Chintamani Chitnis		Ajit Ma	÷	
				Taking Back 33 kV f		Yes	No	
	Sr.No.	Responsib	liltv	Partic	ulars of Events	Tick	Time	
	1	SDO /Auth			at all grounds, shorts, all men and			<u> </u>
		Personnel			t feeder end , and feeder is ready for			
	2	PSCC / SD	0	PTW issued by OPTCL is cleared feeder	d and message given to charge the			
	3	Substatior	o Operator	33 kV Feeder is charged in cons	ultation with PSCC /SDO			
	4	PSCC		-	perator to check and confirm all the meter. On confirmation of all three tation is to be normalised			
	5	33 /11 kV Operator	Substation	Ensure that, all safety /DNOP ta points.	ags are removed from the isolating			
	6	33 /11 kV Operator	Substation	Switch ON A.C.and D.C. supply .				
	7	7 33 /11 kV Substation Operator		Will close 33 kV Incoming side & 33/11 kV Power Transformer side GOD				
	8	33 /11 kV Operator	Substation	kV feeder breaker.				
	9	<u> </u>	Substation					
	10	33 /11 kV Operator	Substation	If 11 kV Bus Coupler is closed ,t Open all the respective 11kV OC Open the 11 kV Bus Coupler Close the respective 11 kV Incou Close the 11 kV Incomer Breake Will confirm all the three 11 kV Close all the respective 11 kV O	G Feeders mer Bus GOD r Voltages on the 11 kV Incomer Breaker			

# ANNEXURE-B Part -1

# CIRCLE WISE PSS ASSSET DETAILS

				PSS Capacity	
S. No	Circle	Division	Name of 33/11KV S/S	(In MVA)	
1			Jatni	1x12.5+2x8	28.5
2			Janla	3x5+1x8	23
3			Khurda I.E.	2X12.5	25
4			Tirumala	2x5	10
5			Chhatabar	2x5	10
6			Sea Food Park	2x12.5	25
7			Baghamari	2x3.15+1x5	11.3
8	-		Jankia	2x3.15+1x5	11.3
9	-		Chhanagiri	2x5	10
10	-		Dadhimachhagadia	2x5	10
11	1		Narangarh	2x5	10
12	1		Sunadeimundia	3x5	15
13	-		Jatamundia	2x5+1x3.15	13.15
14	-		Tulasipur	1x1.6	1.6
15	-	KED,	Harirajpur	2x5+1x3.15	13.15
16		Khurda	Balipada	2x5	10
17			Khurda town	1X8+1x12.5	20.5
18			Gurujanga	2x5	10
19			Rajsunakhala	4x5	20
20	BBSR-2		Hatabasta	2x5	10
21			Parichal	1x3.15+1x5	8.15
22			Malipada	2x5	10
23			Kalapathar	2x3.15	6.3
24			Mendhasala	2x8	16
25			Begunia	2x3.15	6.3
26			Sarua	2x5	10
27			EMC Park Infovalley	2x8	16
28			Jatani Nuagaon	2x5	10
29			Gediapali	2x5	10
30			Baideswar	2x5	10
			Division Total		390.25
31			Nayagarh	2x8	16
32			Itamati	2x8	16
33			Lathipada	2x5	10
34		NED, Nayagarh	Kirialanji	2x5	10
35		ivayagaiii	Machhipada	2x5	10
36			Balugaon	2x5	10
37			Bolagarh	2x5	10

38		Sarankul	1x5+1x8	13
39		Odagaon	1x5+1x8	13
40		Khandapada	1x5+1x8	13
41		Fategarh	1x5+1x3.15+2x1.6	11.35
42		Dhalabandha	2x5	10
43		Kantilo	2x3.15	6.3
44		Daspalla	3x5	15
45		Mahipur	2x1.6+1x5	8.2
46		Haripur	2x5	10
47		Nuagaon	1x3.15+1x5	8.15
48		Gania	1x1.6+2x5	11.6
49		Chhamundia	2x5	10
50		Kurala	2x5	10
51		Godipada	2x5	10
52		Bijipur	2x5	10
53		Barakoli	2x5	10
54		Banigochha	2x5	10
		Division Tota		261.6
55		Delang	1x5+1x8	13
56		Kanasa	3x5	15
57		Sakhigopal	2x5+1x8	18
58		Gabakunda (Suanlo)	2x5	10
59		Chandanpur	1x5+1x8	13
60		Talabania	2x12.5+1x8	33
61		Sriramnagar	2x8	16
62		Charinala	2x8	16
63		Attharanala	2x8	16
64		Satasankha	1x5+1x3.15	8.15
65		Sunamuhi	2x5	10
66	PED, Puri	Brahmagiri	2x8	16
67		Basudeipur	2x3.15	6.3
68		Chalisbatia	2x5	10
69		Kalyanpur	2x5	10
70		Panaspada	2x3.15	6.3
71		Samanga	2x8	16
72		Baliapanda	3X8	24
73		Khajuria	2x3.15	6.3
74		Kacheri	2x8	16
75		Algum	2x5	10
76		Baliguali	2x5	10
		Gadasahi	2x5	10
		Division Tota		309.05
77	BaED,	Balugaon	2x8+1x5	21
78	Balugaon	Nachuni	3x5	15

79			Ankulpadar	2x5	10
80			Gangadharapur	2x5	10
81			INS Chilika	2x3.15	6.3
82			Bhusandapur	2x3.15	6.3
83			Tangi	2x8+1x3.15	19.15
84			Kuhudi	1x5	5
85			Khandisi	2x5	10
86			Chandpur	2x3.15	6.3
87			Darpanarayanpur	2x5	10
88			Ranapur	3x5+1x3.15	18.15
			Division Total		137.2
			Bhubaneswar Circle - II	Total	1088.1
89			College Str	2x8+1x5+1x3.15	24.15
90			Bhapur	1x3.15+1x5	8.15
91			Gundichapada	3x8	24
92			Gondia	3x5+1x3	18
93			Sarangi	2x5	10
94			Nihalprasad	2x3.15	6.3
95			Hindol Road	1x8+1x5+1x3.15	16.15
96			Ghatipiri	2x5	10
97			Khajuriakata	2x3.15+1x5	11.3
98			Hindol	2x5	10
99			Nuabag	2x5	10
100			Pada	2X5	10
101			Kamakshyanagar	1x3.15+3x5	18.15
102		DED,	Jiridamali	2x5	10
103	DKL	Dhenkanal	Badasuanlo	1x5	5
104			Mathakargola	2x3.15	6.3
105			Jiral	2x5	10
106			Pandua	2x5	10
107			Dahanbil	1x3.15	3.15
108			Goda	1x3.15	3.15
109			Bhuban	3x5	15
110			Mahulpal	2x5	10
111			Joranda	2x5	10
112			Kankadahada	2x3.15	6.3
113			Birasal	2x5	10
114			Banasingh	2x5	10
115			Muktapasi	2x5	10
116			Dakhinakali	2x8	16
117			Kaliapani	1x3.15	3.15
118			Babanda	2x5	10
			Division Total		324.25

119		New RCMS	3x12.5	37.5
120		Industrial Estate	1x5+1x8	13
121		Bantala	1x5+1x3.15+1x1.6	9.75
122		Jarapada	2x5+1x3.15	13.15
123		Chhendipada	2x5+1x8	18
124		Kosala	2x5	10
125		Boinda	1x1.6+3x3.15	11.05
126		Anandpur	2x3.15	6.3
127	AnED,	Athamallik	1x3.15+1x5	8.15
128	Angul	Madhapur	1x3.15+1x5	8.15
129		Bamur	1x5	5
130		Nakchi	2x5	10
131		Dhaurapali	2x3.15	6.3
132		Hemsarpada	2x8	16
133		NALCO (Kulad)	2x5	10
134		Badakera	2x5	10
135		Kiakata	2x5	10
136		Khandahata	2x5	10
137		Panchamahala (GIS)	2x5	10
		Division Tota	al	222.35
138		Banarpal	3x8	24
139		Saranga	1x1.6	1.6
140		Parjanga	3x5	15
141		Talcher-1	3X8	24
142		South Balanda	1x3.15+1x5	8.15
143		Samal	2x1.6	3.2
144		Kaniha	2x8+1x1.6+1X5	22.6
1		Karina		22.0
145		Parabil	1x1.6+1X 3.15	4.75
145 146	TED		1x1.6+1X 3.15 1x3.15+1x5	
	TED, Chainpal	Parabil		4.75
146	TED, Chainpal	Parabil Khamar	1x3.15+1x5	4.75
146 147		Parabil Khamar Pallahara	1x3.15+1x5 1X5+1X3.15	4.75 8.15 8.15
146 147 148		Parabil Khamar Pallahara Kantala	1x3.15+1x5 1X5+1X3.15 2X5	4.75 8.15 8.15 10
146 147 148 149		Parabil Khamar Pallahara Kantala Kunjam	1x3.15+1x5         1X5+1X3.15         2X5         2X5	4.75 8.15 8.15 10 10
146 147 148 149 150		Parabil Khamar Pallahara Kantala Kunjam Baruan	1x3.15+1x5         1X5+1X3.15         2X5         2X5         2x1.6	4.75 8.15 8.15 10 10 3.2
146 147 148 149 150 151		Parabil Khamar Pallahara Kantala Kunjam Baruan Rengali	1x3.15+1x5         1X5+1X3.15         2X5         2X1.6         1x3.15	4.75 8.15 8.15 10 10 3.2 3.15
146 147 148 149 150 151 152		Parabil Khamar Pallahara Kantala Kunjam Baruan Rengali Hanumanpur	1x3.15+1x5         1X5+1X3.15         2X5         2X5         2x1.6         1x3.15         2X5	4.75 8.15 8.15 10 10 3.2 3.15 10
146 147 148 149 150 151 152 153		Parabil Khamar Pallahara Kantala Kunjam Baruan Baruan Rengali Hanumanpur Talcher-II Talcher Town	1x3.15+1x5         1x5+1x3.15         2x5         2x5         2x1.6         1x3.15         2x5         1x3.15	4.75 8.15 8.15 10 10 3.2 3.15 10 5
146 147 148 149 150 151 152 153 154		Parabil Khamar Pallahara Kantala Kunjam Baruan Baruan Rengali Hanumanpur Talcher-II Talcher Town (Baghuabul)	1x3.15+1x5         1X5+1X3.15         2X5         2X5         2x1.6         1x3.15         2X5         1x3.15         2x5         2x1.6         1x3.15         2x5         2x5         2x5         2x5         2x5         2x5         1x5         2x8	4.75 8.15 8.15 10 10 3.2 3.15 10 5 16

158			New Saranga	2x5	10
159	-		Meramundali	2x5	10
160			New Banarpal	2x5	10
161			Sanda	2x5	10
162			Mahbir Road	2x5	10
			Division Tota	1	262.95
			Dhenkanal Circle	Total	809.55
163			Unit-VIII	3x12.5	37.5
164			Unit-VI	2x12.5	25
165			Unit-III	2x12.5	25
166			Unit-IV	2x5	10
			Unit-II		
167		BCDD-I, BBSR	(Master Canteen)	- 2x8	16
168		BR2K	Satyanagar	2x8	16
169			Sahid Nagar	2x12.5	25
170			Board Colony	2x12.5	25
171			Airport	2x12.5	25
172			Delta	2x8	16
			Division Tota	1	220.5
173			Nayapalli	2x12.5+1x8	33
174			Baramunda	1x12.5+1x8	20.5
175			SainikSchool	2x8	16
176			Xavier	2x12.5	25
177			CS Pur-I	2x12.5+1x8	33
178			CS Pur-II	2x8+2x12.5	41
179	BBSR-1		Infocity	1x12.5+1x7.5+1x8	28
180			Baranga	2x5	10
181			Bharatpur	2x8+1x5	21
182			Kalinganagar	2x12.5+1x8	33
183			New Baranga	2x8	16
184		BCDD-II,	Kalarahanga	1x8	8
185		BBSR	New Kalarahanga	2x8	16
186			Kanan Vihar	1x8+1x12.5	20.5
187			Khandagiri	1x12.5+1x8	20.5
188			Gothapatna	2x8	16
189			Ranasinghpur	2x5	10
190			IMMT (RRL Campus)	2x5	10
191			Dumduma	2x8	16
191			ESIC	2X8 2X1.6	3.2
192			Sailashree Vihar	2x1.0 2x5	10
193			Vani Vihar	2x8	16
194			Chandaka	2x8	16
195			Niladri Vihar	2 X 5	10

197		Trisulia	2x3.15	6.3
198		Godisahi	2x5	10
199		Mahura	2x5	10
		Division Tota		475
200		Baragada	3x12.5+1x10	47.5
201		Bhimtangi	2x12.5+2x8	41
202		Rasulgarh	1x8+2x12.5	33
203		Mancheswar	1x8+2x12.5	33
204		Phulnakhara	3x5	15
205		Laxmisagar	3x12.5	37.5
206		Naharkanta	2x8	16
207		Bhingarpur	2x5	10
208		Kalpana	2x8	16
209	BED, BBSR	Pradhansahi	2x5	10
210		Mulapadia	2x8	16
211		Kesura	1x8	8
212		Pandra	2x8	16
213		Lingipur	2x8	16
214		Chakeisiani	2x5	10
215		Siula	2X5	10
216		Uttara	2X8	16
217		ltipur	2X8	16
218		Nageswar Tangi	2X8	16
		Division Tota	l	383
219		Nimapara	3x8+2x5	34
220		Charichhaka	2x3.15	6.3
221		Dandipur	2x3.15	6.3
222		Kakatpur	2x5+1x8	18
223		Konark	2x5+1x8	18
224		Bangurigaon	2x5	10
225		Chhaitana	1x5+1x3.15	8.15
226		Jogeswarpur	2x5	10
227		Pipili	3x8	24
228	NED,	Mangalpur	2 X 5	10
229	Nimapara	Bharatipur	2x5	10
230		Astaranga	2x3.15+1x5	11.3
231		Gop (Bayakuda)	2x5	10
232		Patalda	2 X 5	10
233		Madarang (Nagapur)	2x5	10
234		Sutan	2x5	10
235		Bamanal	2x5	10
236		Abhayamukhi	2x5	10
		Khelar	2X5	10
237		Kiiciai	2/10	

239			Banamalipur	2x5	10
235	-		Balakati	1x3.15+2x5	13.15
240	-		Trahi Achyuta Nagar	2X5	10
241	-		Gadasrirampur	2x8	16
242	-		Dighalo	2X5	10
244	-		Betanda	2x8	16
277			Division Total		329.2
		Bhubang	eswar Circle - I Total		1407.7
245		Bhabana	Kendrapara	2x8+2x5	26
245	-		Danpur	2x5	10
240	-		Jahara Barimul		10
247			(D.K.Bhole)	2x5	10
248			Chokada	2x5	10
249			Indupur	1x3.15+1x1.6	4.75
250	-		Pattamundai	2x5	10
251	-		Patrapur	1x5	5
252	-		Gogua	1x5	5
253	-		Dandisahi	2x3.15	6.3
254	-		Adhajori	1x5+1x3.15	8.15
255	-	KED-I	Rajnagar	2x5	10
256	-	Kendra	Kandira	1x5	5
257	-	para	Badadia	2x8	16
258			Rajkanika	2x3.15+1x5	11.3
259	-		Ayatan	2x5	10
260	-		Madhubana	2x5	10
261	PDP		Aul	2x3.15+1x5	11.3
262	-		Duhuria	1x5	5
263			Olaver	1x5	5
264	-		Sahupada	1x5	5
265			Chhagharia	2x3.15	6.3
266			Chaudakulata	2x5	10
267	]		Khamar Keshpur	2x5	10
268	]		Chhata	1x5	5
269			Kandiahaat	2x5	10
			Division Tota		225.1
270	]		Marshaghai	2x5	10
271	-		Pakhada	2x3.15	6.3
272			Korua	2x3.15+1x5	11.3
273			Gaudagaon	2x5	10
274		KED-II, Marshaghai	Bedari	2x8	16
275	]	IVIAISIIdgiidi	Mahakalapara	2x3.15+1x5	11.3
276	]		Luna	3x5+1x1.6	16.6
277	]		Thauri	2x8	16
278			Chhapali	1x5	5

279			Badhi	1x3.15+1x5	8.15
280			Masakani	2x5	10
			Division To	tal	120.65
281			Jagatsinghpur	1x8+1x7.5+1x5	20.5
282			Jogadhari	2x5	10
283			Biridi	2x5+1x3.15	13.15
284			Raghunathpur	2x5	10
285			Balikuda	1x5+1x8	13
286			Sova	1x5+1x3.15	8.15
287			Nabapatna	2x5	10
288		JED,	Markandpur	2x8	16
289		Jagatsingh	Naugaon	2x5	10
290		pur	Derik	2x5	10
291			22Mouza	1x5	5
292			Nuapada	2x5	10
293			Bhatapada	2x5	10
294	-		Balia (Adhanga)	2x5	10
295			Dusbatia	3x5	15
296			Duvalo	2x5	10
297			Chikinia	2x5	10
298	-		Sasanpada	2x3.15	6.3
			Division To	tal	197.1
299			Paradeep	1x8+1x7.5+1x5	20.5
300			Kujanga	2x5+1x8	18
301			Tirtol	3x5	15
302			Krishnandapur	2x5	10
303			Ersama	2x3.15+1x5	11.3
304	-		Rahama	2x5	10
305		PED,	Bijayachandrapur	2x5	10
306		Paradeep	Jhimani	2x5	10
307			Gorada	2x5	10
308			Jagannathpur	2x8	16
309			Gada Bishnupur	2x5	10
310	-		Trilochanpur	2x5	10
311	1		Paruna	1X5	5
312	1		Kanakpur	2x8	16
313	1		Chhatua	2x5	10
			Division To	tal	181.8
			Paradeep Circl	e Total	724.65
314			Jobra	2x12.5	25
315	CTC	CDD-I,	Medical	2x12.5	25
316	СТС	Cuttack	Ranihat	2x8	16
317	1		Shisubhavan	2x12.5	25

318		OLD Jail	2x5	10
319		Kalinga	3x12.5	37.5
320		Sector-VI	2x8	16
321		Sector-III	2x8	16
322		DRDA	2x8	16
323		Matamatha	2x8	16
324		Satichoura	2x8	16
325		Sector-10&11	2x8	16
326		Sector-13	2x8	16
		Division To		250.5
327		Badambadi	2x12.5	25
328		OSAP	2x8	16
329		OGP	1x8+1x12.5	20.5
330		Chauliaganj	2x12.5	25
331		CRRI	2x8	16
332		Jagatpur	3x8+1x5	29
333		Jagatpur (Ipicol)	1x8+1x12.5	20.5
334	CDD-II,	Palamandap	2x5	10
335	Cuttack	Mahanadivihar	2x8	16
336		Kandarpur	2x5	10
337		Bentakar	1x5+1x8	13
338		Matagajpur	2x5	10
339		Sompur	2x5	10
340		Kisannagar	2x3.15+1x5	11.3
341		42MOUZA/ Barala	2x5	10
		Division To	otal	242.3
342		Gopalpur	2x8	16
343		Adaspur	1x3.15+2x5	13.15
344		Niali	1x3.15+1x5+1x8	16.15
345		Kula Kapasi	2x5	10
346		Kasarda	2x3.15	6.3
347		Govindpur	2x5	10
348		Damodarpur	1x3.15+1x8	11.15
349		Tangi	3x5+1x3.15	18.15
350	CED, Cuttack	Sankarpur	2x5	10
351	Cuttack	Choudwar I.E.	1x8+1x5	13
352		Chhatia	2x5+1x3.15	13.15
353		Badachana	1x3.15+2x5	13.15
354		Balichandrapur	1x8+1x5+2x3.15	19.3
355		Kundala	2 X 5	10
356		Kaimatia	2x5	10
357		Choudwar	1x8+1x12.5	20.5
358		Pratapnagari	2x5	10

359		Biswanahakani	2x5	10
360		Udayagiri	2x5	10
361		Manguli (GIS)	2x8	16
		Division T	otal	256
362		Narangabasta	1x5+1x3.15	8.15
363		Khuntuni	2x5	10
364		Athagarh	2x8+1x5	21
365		Sarpeswar	2x5	10
366		Tigiria	2x5+1x8	18
367		Saranda	2x8	16
368		Nuapatna	2x5	10
369		Bandalo	2x5	10
370	AED,	Badamba	3x5	15
371	Athagarh	Gopapur	2x5	10
372		Dhobaninala	2x5	10
373		Kanpur	2x3.15+1x5	11.3
374		Narsinghpur	3x3.15+1x5	14.45
375		Mardamukha	2x5	10
376		Gurudijhatia	1x8	8
377		Khuntakata	1x8	8
378		Sagar	2x5	10
		Division T	otal	199.9
379		Bahugram-I	2x5	10
380		Salipur	2x5	10
381		Mahanga	2x3.15+1x5	11.3
382		Kothpada	1x5+1x3.15	8.15
383		Erkana	2x5	10
384		Nischintkoili	2x5+1x3.15	13.15
385	SED, Salipur	Paldhuapara	1x5	5
386	Sanpur	Asureswar	2x8	16
387		Bahugram-II	2x5	10
388		Raisunguda	2x5	10
389		Japakuda	2x5	10
390		Orikanta	2x5	10
391		Nagaspur	2x5	10
		Division T	otal	133.6
		Cuttack Circl	e Total	1082.3
		TPCODL TOTAL		5112.3

# Annexure- B Part-2

### 33 kV Feeder Asset details

### i. BBSR-1 Circle :

Division	Feeder Name	Type of Feeder	Length (in KM)
BCD1	33 KV NDC FEEDER-1	CABLE	0.45
BCD1	SEC 33 KV UNIT#3 - BOARD COLONY FDR - 1	OH-LINE	2
BCD1	SEC 33KV CHANDAKA - UNIT#8 FEEDER - 1	OH-LINE	17
BCD1	SEC 33KV CHANDAKA - UNIT#8 FEEDER - 2	OH-LINE	17
BCD1	SEC 33KV UNIT#8 - BARAMUNDA FEEDER - 1	OH-LINE	5.2
BCD1	SEC 33KV UNIT#8 - SECRETARIATE FDR - 1	OH-LINE	1
BCD1	SEC 33KV UNIT#8 - SECRETARIATE FDR - 2	OH-LINE	1
BCD1	SEC 33KV UNIT#8 - UNIT#6 FEEDER - 1	OH-LINE	2
BCD1	SEC 33KV UNIT#8 - UNIT#6 FEEDER - 2	OH-LINE	2
BCD1	TPCODL 33 KV MANCHESWAR FEEDER-1	OH-LINE	16.75
BCD1	TPCODL 33 KV MANCHESWAR FEEDER-2	UGOH	19.55
BCD1	TPCODL 33 KV MANCHESWAR FEEDER-3	OH-LINE	4
BCD1	TPCODL 33 KV MANCHESWAR FEEDER-4	OH-LINE	12
BCD1	TPCODL 33 KV RSLGRH PSS-STYNGR PSS UG	CABLE	2.8
BCD1	TPCODL 33 KV UNIT#3 - SATYANAGAR FDR - 1	OH-LINE	2.5
BCD1	TPCODL 33KV KHRVLNGR-STYNGR FDR UG	CABLE	2.7
BCD1	TPCODL 33KV SAHIDNAGAR-AIRPORT FEEDER UG	CABLE	10.6
BCD1	TPCODL 33KV SAHIDNGR-BRD CLNY FDR UG	CABLE	3.2
BCD1	TPCODL 33KV U#6- AIRPORT FEEDER-1	Cable	1.2
BCD1	TPCODL 33KV UN4-BOARD COLONY FDR UG	CABLE	2.9
BCD1	TPCODL 33KV UN8 GIS - UN 8 UG FDR1	CABLE	0.2
BCD1	TPCODL 33KV UN8 GIS - UN 8 UG FDR2	CABLE	0.2
BCD1	TPCODL 33KV UNIT 3-UNIT 4 FEEDER UG	CABLE	1.2
BCD1	TPCODL 33KV UNIT#4 - NIC FEEDER - 1	UGOH	1.02
Total BC	DD-1	·	128.47
BCD2	TPCODL 33 KV CHANDAKA NARAJ FEEDER - 1	UGOH	32.1
BCD2	TPCODL 33 KV CHANDRASEKHARPUR FEEDER-1	UGOH	6.3
BCD2	TPCODL 33 KV ASSOTECH FEEDER - 1	UGOH	5.4
BCD2	TPCODL 33 KV CHANDAKA BARANGA FEEDER - 1	UGOH	25.8
BCD2	TPCODL 33 KV CHANDAKA INFOCITY FEEDER- 1	UGOH	11.83
BCD2	TPCODL 33 KV CHANDAKA KIIT FEEDER - 1	Cable	0.5
BCD2	TPCODL 33 KV CHANDAKA SJ FEEDER - 1	UGOH	5
BCD2	TPCODL 33 KV CHANDAKA TCSFEEDER - 1	UGOH	2.56
BCD2	TPCODL 33 KV CHANDAKA XAVIER FEEDER - 1	UGOH	15.1
BCD2	TPCODL 33 KV CHANDRASEKHARPUR FEEDER - 2	UGOH	5.8
BCD2	TPCODL 33 KV MANCHESWAR ECORAILWAYFDR- 2	OH-LINE	1.85
BCD2	TPCODL 33 KV MANCHESWAR NBCC FEEDER - 1	UGOH	5.21
BCD2	TPCODL 33 KV MANCHESWARECORAILWAYFDR - 1	OH-LINE	5.45
BCD2	TPCODL 33 KV MNCHSWR-VNVHR FDR UG	CABLE	4.8

BCD2	TPCODL 33 KV RANSINGHPUR AIIMS FEEDER -1	Cable	0.6
BCD2	TPCODL 33 KV RANSINGHPUR AIIMS FEEDER -2	Cable	0.6
BCD2	TPCODL 33 KV RANSINGHPUR BARAMUNDA FDR-1	UGOH	27.65
BCD2	TPCODL 33 KV RANSINGHPUR VIPUL FDR - 1	UGOH	11.07
BCD2	TPCODL 33 KV RANSINGHPURNAYAPALLY FDR -1	UGOH	12.6
BCD2	TPCODL 33 KV SIJUA ( ODSSP) FEEDER - 1	Cable	0.5
BCD2	TPCODL 33KV CHNDK(B)-IDCO FDR UG	CABLE	2.5
BCD2	TPCODL 33KV CHNDK(B)-NLDVHR FDR UG	CABLE	6.347
BCD2	TPCODL 33KV CHNDK(B)-SLSRIVHR FDR UG	CABLE	4.427
BCD2	TPCODL 33KV HRRJPUR PSS-BHRTIPUR PSS FDR	OH_LINE	13.5
BCD2	TPCODL 33KV KONARK GRID - KONARK PSS FDR	OH_LINE	0.2
BCD2	TPCODL 33KV KONARK GRID - SUTAN PSS FDR	OH_LINE	19
BCD2	TPCODL 33KV MENDHASALA GOTHAPATNA FEEDER	CBL_OH_LNS	4.6
BCD2	TPCODL 33KV PRTPSSN GRID-BALAKATI FDR	OH_LINE	1.2
BCD2	TPCODL33 KV CHANDAKA NAYAPALLY FEEDER-1	OH-LINE	12.9
Total BC	DD-2		245.394
BED1	33 KV NADIAGURU - PHULNAKHARA FDR - 1	OH-LINE	9.3
BED1	33 KV BHINGARPUR FEEDER - 1	OH-LINE	2.9
BED1	TPCODL 33 KV BADAGADA FEEDER - 1	OH-LINE	11.8
BED1	TPCODL 33 KV BHIMATANGI FEEDER - 1	OH-LINE	12
BED1	TPCODL 33 KV LAXMISAGAR FEEDER - 1	UGOH	6.8
BED1	TPCODL 33 KV LAXMISAGAR FEEDER - 2	UGOH	20.4
BED1	TPCODL 33 KV LINGIPUR FEEDER - 1	Cable	12
BED1	TPCODL 33 KV MANCHESWAR FEEDER-5	UGOH	13.2
BED1	TPCODL 33 KV MANCHESWAR FEEDER-6	OH-LINE	14.6
BED1	TPCODL 33 KV MANCHESWAR FEEDER-7	UGOH	17.45
BED1	TPCODL 33 KV SBI FEEDER - 1	UGOH	5.6
BED1	TPCODL 33 KV UTTARA FEEDER - 1	UGOH	21.3
BED1	TPCODL 33KV BHIMATANGI MULAPADIA FDR - 1	Cable	8
BED1	TPCODL 33KV MNCHSWR-B GIS - MNCHSWR 4P	CABLE	2.6
BED1	TPCODL 33KV MNCHSWR-B GIS - RSLGRH FDR	CBL_OH_LNS	4.3
Total BE	D		162.25
NED1	TPCODL 33KV BANAMALIPUR FEEDER - 1	OH-LINE	10
NED1	TPCODL 33KV DIGHALO BAMANALA FEEDER - 1	OH-LINE	8.96
NED1	TPCODL 33KV DIGHALO KONARK FEEDER - 1	OH-LINE	0.5
NED1	TPCODL 33KV DIGHALO NIMAPARA FEEDER - 1	OH-LINE	6.075
NED1	TPCODL 33KV DIGHALO PIPILI FEEDER - 1	OH-LINE	45.7
NED1	TPCODL 33KV KESURA BALAKATI FEEDER - 1	OH-LINE	11
NED1	TPCODL 33KV NIMAPARA/KONARK GOP FDR -1	OH-LINE	37.6
NED1	TPCODL 33KV BALAKATI - BALIPATNA FDR-1	OH-LINE	9.185
NED1	TPCODL 33KV DIGHALO KAKATPUR FEEDER - 1	OH-LINE	48.6
NED1	TPCODL33KV KONARK BANGURIGAON FEEDER - 1	OH-LINE	5.4
Total NE	D		183.02
Total BE	SR-1		719.134

## ii. BBSR-2 Circle:

Division	Feeder Name	Type of Feeder	Length (in KM)
BGN1	TPCODL 33KV ANKULAPADA FEEDER	OH-LINE	25
BGN1	TPCODL 33KV BALUGAON FEEDER	OH-LINE	9
BGN1	TPCODL 33KV BHUSANDPUR FEEDER	OH-LINE	31
BGN1	TPCODL 33KV CHANDPUR FEEDER	OH-LINE	1.5
BGN1	TPCODL 33KV INS NAVAL FEEDER	OH-LINE	1.6
BGN1	TPCODL 33KV NACHUNI FEEDER	OH-LINE	39
BGN1	TPCODL 33KV RANAPUR FEEDER	OH-LINE	30
BGN1	TPCODL 33KV TANGI KUHUDI FEEDER	OH-LINE	18
Total BaE	D		155.1
KHD1	TPCODL 33KV BANKI FEEDER	OH-LINE	13.7
KHD1	TPCODL 33KV BINODAPADA FEEDER	OH-LINE	9.05
KHD1	TPCODL 33KV BOLAGARH FEEDER	UGOH	16
KHD1	TPCODL 33KV BOLAGARH FEEDER	UGOH	47
KHD1	TPCODL 33KV CHARCHIKA FEEDER	OH-LINE	48
KHD1	TPCODL 33KV CHHATABARA FEEDER	UGOH	17.45
KHD1	TPCODL 33KV COCACOLA FEEDER	UGOH	18.57
KHD1	TPCODL 33KV ICFMD FEEDER	UGOH	20.65
KHD1	TPCODL 33KV IIT FEEDER	Cable	0.9
KHD1	TPCODL 33KV INFOSYS FEEDER	UGOH	22.65
KHD1	TPCODL 33KV JATANI FEEDER	OH-LINE	20
KHD1	TPCODL 33KV KHORDA FEEDER	OH-LINE	0.12
KHD1	TPCODL 33KV MENDHASALA FEEDER	OH-LINE	2
KHD1	TPCODL 33KV NISER FEEDER	Cable	4.5
KHD1	TPCODL 33KV RAILWAY FEEDER	OH-LINE	17.68
KHD1	TPCODL 33KV SUNADEI FEEDER	OH-LINE	22
KHD1	TPCODL 33KV TANGI FEEDER	UGOH	35.97
KHD1	TPCODL 33KV TIRUMALA FEEDER	UGOH	16.05
Total KHD			332.29
NYG1	TPCODL 33KV BHAPUR FEEDER	OH-LINE	19.2
NYG1	TPCODL 33KV BIJIPUR FEEDER	OH-LINE	6
NYG1	TPCODL 33KV DASPALLA FEEDER	OH-LINE	18.1
NYG1	TPCODL 33KV GANIA FEEDER	OH-LINE	32
NYG1	TPCODL 33KV GODIPADA FEEDER	OH-LINE	9.97
NYG1	TPCODL 33KV ITAMATI FEEDER	OH-LINE	5.74
NYG1	TPCODL 33KV KANTILO FEEDER	OH-LINE	15
NYG1	TPCODL 33KV KHANDAPADA FEEDER	OH-LINE	27
NYG1	TPCODL 33KV KURALA FEEDER	OH-LINE	15.8
NYG1	TPCODL 33KV LATHIPADA FEEDER	OH-LINE	1.9
NYG1	TPCODL 33KV MACHHIPADA FEEDER	OH-LINE	5.74
NYG1	TPCODL 33KV NAYAGARH FEEDER	OH-LINE	8
NYG1	TPCODL 33KV NUAGAON FEEDER	UGOH	33.5
NYG1	TPCODL 33KV ODAGAON FEEDER	OH-LINE	32.5

Total NyED			230.45
PED1	TPCODL 33KV ATHARANALA FEEDER	UGOH	7.294
PED1	TPCODL 33KV CHARINALA FEEDER	UGOH	15.1
PED1	TPCODL 33KV KACHERI-BALIAPANDA FEEDER-1	Cable	4.09
PED1	TPCODL 33KV KACHERI-BALIAPANDA FEEDER-2	Cable	4.09
PED1	TPCODL 33KV KACHERI-TALABANIA FEEDER	Cable	4.5
PED1	TPCODL 33KV KANAS FEEDER	OH-LINE	27
PED1	TPCODL 33KV SAMUKA-I FEEDER	UGOH	14.83
PED1	TPCODL 33KV SAMUKA-II FEEDER	UGOH	13.83
PED1	TPCODL 33KV SRIRAMNAGAR FEEDER-1	Cable	6.056
PED1	TPCODL 33KV SRIRAMNAGAR FEEDER-2	Cable	6.056
PED1	TPCODL 33KV SRIRAMNAGAR-KACHERI-1 FEEDER	Cable	4.28
PED1	TPCODL 33KV SRIRAMNAGAR-KACHERI-2 FEEDER	Cable	4.28
PED1	TPCODL 33KV SRIRAMNAGAR-TALABANIA FEEDER	Cable	4.5
PED1	TPCODL 33KV SUNAMUHIN FEEDER	OH-LINE	21.5
PED1	TPCODL 33KV WTP FEEDER	Cable	7.44
PED1	TPCODL SAKHIGOPAL FEEDER	OH-LINE	9.82
PED1	TPCODL SATASANKHA FEEDER	OH-LINE	8
PED1	TPCODL TALABANIA FEEDER	OH-LINE	3.5
PED1	TPCODL TALABANIA-BALIAPANDA FEEDER	OH-LINE	14
Total PE	Total PED		
Total BBS	SR-2		898.006

# iii. Cuttack Circle:

Division	Feeder Name	Type of Feeder	Length (in KM)
AED1	TPCODL 33 KV ATHAGARH NEW FEEDER	OH_LINE	10.357
AED1	TPCODL 33KV ATHAGARH FEEDER	OH-LINE	30
AED1	TPCODL 33KV BADAMBA FEEDER	OH-LINE	24
AED1	TPCODL 33KV BADAMBA-KANPUR FEEDER	OH-LINE	31
AED1	TPCODL 33KV JK LAXMI FEEDER	OH-LINE	8
AED1	TPCODL 33KV KHUNTUNI FEEDER	UGOH	4.5
AED1	TPCODL 33KV MARDAMEKHA FEEDER	OH-LINE	20
AED1	TPCODL 33KV MEGA LI FEEDER-1	OH-LINE	28
AED1	TPCODL 33KV MEGA LI FEEDER-2	OH-LINE	10
AED1	TPCODL 33KV NARANGABASTA FEEDER	OH-LINE	46
AED1	TPCODL 33KV NARSINGHPUR FEEDER	OH-LINE	1.2
AED1	TPCODL 33KV NARSINGHPUR-KANPUR FEEDER	OH-LINE	23.5
AED1	TPCODL 33KV NUAPATNA FEEDER	OH-LINE	1.5
AED1	TPCODL 33KV TIGIRIA FEEDER	OH-LINE	18
Total AE	)		256.057
CDD1	TPCODL 33KV IOCL FEEDER-1	Cable	9
CDD1	TPCODL 33KV IOCL FEEDER-2	Cable	9
CDD1	TPCODL 33KV MEDICAL FEEDER-1	Cable	14.8

Total SED			51.2
			91.2
SED1	TPCODL 33KV SALIPUR FEEDER	OH-LINE	25.2
SED1	TPCODL 33KV ORIKANTA FEEDER	OH-LINE	6
SED1	TPCODL 33KV MAHANGA FEEDER	OH-LINE	49
SED1	TPCODL 33 KV BAHUGRAM LINKING FEEDER	OH_LINE	11
Total CED	·		236.262
CED1	TPCODL 33KV TANGI FEEDER	UGOH	24.5
CED1	TPCODL 33KV TANGI-CHHATIA FEEDER	OH-LINE	16
CED1	TPCODL 33KV SANKARPUR FEEDER	UGOH	10.5
CED1	TPCODL 33KV RSB FEEDER	UGOH	8.06
CED1	TPCODL 33KV NIALI FEEDER	OH-LINE	16.7
CED1	TPCODL 33KV MANIA-KAIMATIA FEEDER	OH-LINE	19
CED1	TPCODL 33KV MANIA-IDCO FEEDER	UGOH	15.03
CED1	TPCODL 33KV KASARDA FEEDER	OH-LINE	9
CED1	TPCODL 33KV KAJALPUR FEEDER	OH-LINE	7.3
CED1	TPCODL 33KV IDCO FEEDER	UGOH	18
CED1	TPCODL 33KV DAMODARPUR FEEDER	OH-LINE	19.4
CED1	TPCODL 33KV CHOUDWAR-CHHATISA FEEDER	OH-LINE	5
CED1	TPCODL 33KV CHOUDWAR FEEDER	OH-LINE	0.7
CED1	TPCODL 33KV BALIKUDA FEEDER	UGOH	7.3
CED1	TPCODL 33KV BALICHANDRAPUR FEEDER	OH-LINE	10.9
CED1	TPCODL 33KV BADACHANA-CHHATIA FEEDER	OH-LINE	15
CED1	TPCODL 33KV BADACHANA FEEDER	OH-LINE	12
CED1	TPCODL 33KV ADASPUR FEEDER	OH-LINE	14.5
CED1	TPCODL 33 KV KUNDALA FEEDER	UGOH	7.372
Total CDD	0-2		100.835
CDD2	TPCODL 33KV RAGHUNATHPUR FEEDER	OH-LINE	26
CDD2	TPCODL 33KV JAGATSINGHPUR RURAL FEEDER-1	UGOH	12
CDD2	TPCODL 33KV JAGATPUR FEEDER	UGOH	12.5
CDD2	TPCODL 33KV CRRI FEEDER-2	OH-LINE	4.025
CDD2	TPCODL 33KV CRRI FEEDER-1	UGOH	4
CDD2	TPCODL 33KV CHAULIAGANJ FEEDER-2 LINK	UGOH	0.71
CDD2	TPCODL 33KV CHAULIAGANJ FEEDER-2	OH-LINE	3
CDD2	TPCODL 33KV CHAULIAGANJ FEEDER-1	UGOH	5
CDD2	TPCODL 33KV BENTAKAR FEEDER	UGOH	9
CDD2	TPCODL 33KV BAHUGRAM FEEDER	UGOH	19
CDD2	TPCODL 33KV BADAMBADI FEEDER-1	OH-LINE	5.6
Total CDD			116.65
CDD1	TPCODL 33KV TULSIPUR FEEDER-2	UGOH	27.8
CDD1	TPCODL 33KV TULSIPUR FEEDER-1	UGOH	21.4
CDD1	TPCODL 33KV SISUBHAVANA FEEDER	UGOH	4.35
CDD1 CDD1	TPCODL 33KV MEDICAL FEEDER-2 TPCODL 33KV SECTOR-6 FEEDER	Cable UGOH	14.8

# iv. Dhenkanal Circle :

Division	Feeder Name	Type of Feeder	Length (in KM)
ANGL	TPCODL 33kV ANGUL-I FEEDER	OHUG	12.5
ANGL	TPCODL 33kV ANGUL-II FEEDER	OHUG	76.8
ANGL	TPCODL 33kV ATHAMALLIK FEEDER	OH-LINE	65.856
ANGL	TPCODL 33kV BAMUR FEEDER	OHUG	22
ANGL	TPCODL 33kV BOINDA FEEDER	OHUG	2.5
ANGL	TPCODL 33kV GANESH SPOUNGE FEEDER	OHUG	10.3
ANGL	TPCODL 33kV HEMASURPADA FEEDER	OH-LINE	0.55
ANGL	TPCODL 33kV RAILWAY FEEDER	OH-LINE	2.3
ANGL	TPCODL 33kV JARAPADA FEEDER	OHUG	51.3
Total An	D		244.106
DKNL	DKNL DAKHINAKALI FEEDER	OH-LINE	9
DKNL	DKNL DHENKANAL FEEDER	OH-LINE	13
DKNL	DKNL DIVISION GUNDICHAPADA-2 FEEDER	OH-LINE	0.1
DKNL	TPCODL 33kV BANASINGH FEEDER	OHUG	14
DKNL	TPCODL 33kV GODA FEEDER	OH-LINE	17.5
DKNL	TPCODL 33kV GONDIA FEEDER	OH-LINE	106
DKNL	TPCODL 33kV KALIAPANI FEEDER	OH-LINE	29.7
DKNL	TPCODL 33kV KAMAKHYANAGAR FEEDER	OH-LINE	3
DKNL	TPCODL 33kV KANKADAHAD FEEDER	OH-LINE	24.5
DKNL	TPCODL 33kV MATHAKARGOLA FFEDER	OH-LINE	19
DKNL	TPCODL 33kV OMC FEEDER	OH-LINE	21
DKNL	TPCODL 33kV PANDUA FEEDER	OHUG	24.5
DKNL	TPCODL 33kV SCAW FEEDER	Cable	1
DKNL	TPCODL 33kV TISCO FEEDER	OH-LINE	4.8
DKNL	TPCODL DKNL MISRILAL MINES FEEDER	OH-LINE	2
DKNL	TPCODL DKNL OPL FEEDER	OH-LINE	6
DKNL	TPCODL DKNL HINDOL FEEDER	OH-LINE	14.2
DKNL	TPCODL KHAJURIAKATA FEEDER	OH-LINE	46.3
Total DEI	)	·	355.6
TLCR	TPCODL 33kV BANARPAL FEEDER	OH-LINE	6
TLCR	TPCODL 33kV CHAINPAL FEEDER	Cable	0.8
TLCR	TPCODL 33kV INDUSTRIAL FEEDER	OHUG	25
TLCR	TPCODL 33kV KANIHA FEEDER	OHUG	54
TLCR	TPCODL 33kV KHAMAR FEEDER	OHUG	103
TLCR	TPCODL 33kV PALLAHARA FEEDER	OH-LINE	33
TLCR	TPCODL 33kV PARJANG FEEDER	OHUG	37.3
TLCR	TPCODL 33kV RENGALI FEEDER	OHUG	31
TLCR	TPCODL 33kV TALCHER FEEDER	OHUG	10
Total TEE	)		300.1
Total DK			899.806

# v. Paradeep Circle

Division	Feeder Name	Type of Feeder	Length (in KM)
KED1	TPCODL 33 KV AUL 1 FEEDER	OH-LINE	25.27
KED1	TPCODL 33 KV AUL 2 FEEDER	OH-LINE	16
KED1	TPCODL 33 KV CHAGHARIA FEEDER	OH-LINE	17.3
KED1	TPCODL 33 KV DANPUR FEEDER	OH-LINE	27.1
KED1	TPCODL 33 KV DUHURIA FEEDER	OH-LINE	0.5
KED1	TPCODL 33 KV GOGUA FEEDER	OH-LINE	19.8
KED1	TPCODL 33 KV INDUPUR FEEDER	OHUG	21.5
KED1	TPCODL 33 KV KENDRAPARA FEEDER	OHUG	4
KED1	TPCODL 33 KV MLIP FEEDER	OH-LINE	15
KED1	TPCODL 33 KV OLAVAR FEEDER	OH-LINE	0.7
KED1	TPCODL 33 KV PATTAMUNDAI FEEDER	OH-LINE	2.6
KED1	TPCODL 33 KV RAJKANIKA FEEDER	OH-LINE	6
KED1	TPCODL 33KV ADHAJORI FEEDER	OH-LINE	75
Total KE	D-1		230.77
KED2	KED2 LUNA FEEDER	OH-LINE	18
KED2	KED2 MAHAKALPADA FEEDER	OHUG	44.1
Total KE	D-1		62.1
PDP1	PDP 33 KV BALIKUDA FEEDER	OH-LINE	28.8
PDP1	PDP 33 KV GORADA FEEDER	OHUG	23
PDP1	PDP 33 KV JAGANNATHPUR FEEDER	OH-LINE	13.5
PDP1	PDP 33 KV JAGATSINGHPUR FEEDER	OH-LINE	5
PDP1	PDP 33 KV NABAPATNA FEEDER	OH-LINE	33.5
PDP1	PDP 33 KV NAUGAON FEEDER	OH-LINE	27.65
PDP1	PDP 33 KV RAHAMA FEEDER	OHUG	24
PDP1	PDP 33 KV TIRTOL FEEDER	OHUG	44.6
PDP1	PDP 33KV BIRIDI FEEDER FROM KANDARPUR	OHUG	10
PDP1	PDP 33KV RAGHUNATHPUR FEEDER FROM SOMPUR	OH-LINE	10.5
PDP1	TPCODL 33KV BIJAYCHANDRAPUR FEEDER	OH-LINE	5
PDP1	TPCODL 33KV HPCL FEEDER	OHUG	10.4
PDP1	TPCODL 33KV PARADEEPGARH FEEDER	OH-LINE	4.7
Total PDI	)		240.65
Total Par	adeep		533.52

Note:

The above is an indicative list. There can be minor variation as per few addition and dismantled of feeder length.

	Annexure I Tools and Tackles , 33KV	AMC	
S. No	Tool/T&P	UoM	Min. Qty. (No's) for 2 divisions
1	Screw Driver Set	Set	4
2	Hammer	No	4
3	Insulated Plier	No	4
4	Clip Plier	No	4
5	Nose Plier	No	4
6	Monkey Plier	No	4
7	Hacksaw with blades	No	4
8	Knife	No	4
9	Ring Spanners Set	Set	4
10	DE Spanner set	set	4
11	Box Spanners Set(Ratchet)	Set	4
12	Adjustable spanners	No	4
13	Chain Pulley	No	1
14	FRP ladder	No	4
15	Industrial Vacuum Cleaning	No	1
16	Air blower	No	2
17	Hot gun	No	2
18	Crimping tool (hydraulic) with all sizes dies	No	2
19	Crimping tool manual	No	2
20	Battery operated Impact wrench	No	2
21	Pressure Torque wrench manual	No	2
22	Gas cutter	No	1
23	Welding machine with rods	No	1
24	Drill machine big	No	1
25	Drill machine hand	No	2
26	Hand grinder	No	2
27	Compressor with painting gun	No	1
28	Portable DG set 5KVA	No	1
29	Measuring tape Big and Small	No	2
30	Motorised oil pump	No	1
31	Hand operated oil pump	No	1

32	Level gauge	No	1
33	Safety Cone with barricading tape	No	16
34	Visor for helmet	No	4
35	Mechanised tree pruner	No	2
36	Manual tree pruner	No	8
37	Nylon rope	No	2
38	File 12" and 8"	No	4
39	Round file and half round file	No	4
40	Gaiti and Spade	No	4
41	Motorised water pump	No	1
42	15KV Digital IR tester with 15mtr leads	No	1
43	10KV Digital IR tester with 15mtr leads	no	1
44	Derrick pole	set	1
45	Chain Pulley Block -3 Ton	set	1
46	Single pulley block 16, 20, 22 mm	set	1
47	Two pulley block 16, 20,22 mm	set	1
48	Three pulley block 16, 20, 22 mm	set	1
49	Messenger block	set	1
50	Come-along for ACSR conductor, Dog, wolf, Goat ,panther & Zebra	set	2
51	Turn buckle 16,20 and 22mm	set	1
52	Compressor machine with all dies suitable for Dog, wolf, Goat, Panther and zebra	set	1
53	Hydraullic Nut cutter	no	2
54	Hydraullic Conductor cutter	no	2

# Annexure-H (FORM OF MEDICAL FITNESS CERTIFICATE)

Name -			
Date of Birth -			
Father/ Spouse`s Name	e -		
Identification Mark -			
Chest Size	Inspiration -	Expiration -	
General Examination	Build -	Height -	Weight -
	Pallor -	Icterus -	Oedema -
CVS	Heart Beat	Rate -	Rhythm -
	Blood Pressure	Sitting-	Standing -
Respiratory System	Breath Sounds		
	Added Sounds -	Yes/ No	
Per Abdomen	Hepatosplenomegaly	Yes/No	Tenderness – Yes/No
	Bowel Sounds		Hernial Orifices -
CNS	Motor System	Power -	Reflexes -
	Sensory System	Paraesthesia -	Pins & Needles -
Vision	VA -	Color Vision -	
Hearing	Tuning Fork Test -		
Present Medication			
Past Medical History			
History of Seizures	Yes/ No. if Yes since _	years	
Vertigo Test	Positive/ Negative		
Investigation Reports	Haemoglobin -	Blood Sugar (R) -	Urine – R/M -
about years, of State deafness, defective vis	Smt. / Kumari Village/ Town: P.S PIN ion (including colour visi ne efficiency of his / her y	Dist and certify that, he / sh on) or any other infirmity	P.O. ne is free from v, mental or physical,

Signature of Candidate:

Signature of Medical Officer:

Name of Medical Officer:

Registration No.

Dated:

Seal

#### ANNEXURE A (Part 1)

1 KV & I	LT Network AMC	Price Sch	edule for	r Manpov	ver													А	В	C=B X No of Workmen	D=A+C	E=D + GST
Package	Division	Fuse Call ( (Meter re DC/	pl + FCC +	DC S	quad	11kV/I	DSS/LT Mainte	enance	33+11 kV B	ireakdown	Proposed Total BA Manpower	Total Manpower rate (Bs/month)			Total Cost Manpower per month (Rs)	Cost other than manpower for the complete scope as per tender(e.g. Tools,PPE,li convepE,di conveyanc e,Overhead & Profits etc)	Total of Other Cost per month (Rs)	Total manpower + Other Cost per month	Total cost/mo th+GST			
		Lineman	Helper	Lineman	Helper	Sup.	Lineman	Helper	Lineman	Helper		Lineman	Helper	Sup	Lineman	Helper	Sup	Per	workmen/m	onth		-
	BCDD I	65	65	3	3	13	12	6	6	6	179	86	80	13								
	BCDD II	80	80	3	3	13	12	6	6	6	209	101	95	13								
1	BED	82	82	2	2	12	8	4	4	4	200	96	92	12								
	NED	106	106	3	3	12	9	6	12	6	263	130	121	12								
·	Total price for Package 1																					$\square$
	NyED	114	114	4	4	16	12	8	16	8	296	146	134	16								-
2	BaED	80	80	2	2	10	6	4	8	4	196	96	90	10								-
	Total price for Package 2																					
	KHD	128	128	5	5	18	15	10	20	10	339	168	153	18								-
3	PED	109	109	4	4	17	12	8	16	8	287	141	129	17								-
	Total price for Package 3																					
	CDD I	70	70	4	4	14	16	8	8	8	202	98	90	14								-
4	CED	108	108	4	4	12	12	8	16	8	280	140	128	12								-
	Total price for Cluster 4																					<u> </u>
_	CDD II	70	70	3	3	10	12	6	6	6	186	91	85	10								-
5	SED	105	105	3	3	10	9	6	12	6	259	129	120	10								-
	Total price for Package 5																					
6	AED	79	79	2	2	8	6	4	8	4	192	95	89	8								-
	DED	140	140	4	4	16	12	8	16	8	348	172	160	16								-
	Total price for Package 6 TED	130	130	4	4	14	12	8	16	8	326	162	150	14								──
7	ANED	130	130	3	4	14	9	6	16	6	251	162 125	150	14								-
-	Total price for Package 7	101	101	3	3	10	9	0	12	0	251	125	110	10								-
	KED I	127	127	4	4	18	12		16	0	324	150	147	10								+
8	KED II	56	127 56	4	4	18	12 6	8	16 8	8	324 145	159 72	147 66	18 7								-
	Total price for Package 8		50	2	2	/	O	4	ő	4	145	12	do	- /		<u> </u>						1
	JED	80	80	3	3	9	9	6	12	6	208	104	95	9		1						+
9	PDP	80	80	3	3	8	9	6	12	6	208	104	95 100	8								-
-	Total price for Package 9	60	60	3	3	0	J	0	12	0	21/	103	100	l °								1
	al for 9 Packages	1915	1915	65	65	247	210	130	230	130	4907	2420	2240	247								+
		-515				_*/	_10			200			2240									1
. 1	Conditions										1											1
	Changes in the manpowe																				l	
ii)	Apart for manpower rate, Manpower indicated abo													ļ								
iii)																						

ANNEXURE A (Part 2)

#### 11 KV & LT Network AMC Price Schedule for Vehicles

SI	Vehicle Type		Pkg 1	Pkg 2	Pkg3	Pkg4	Pkg5	Pkg6	Pkg 7	Pkg 8	Pkg 9	Total	Rate/Mont	Amount (R	GST	Amt with GST	(Rs)/Month
1	Breakdown Vehicle 12	EA	34	17	22	14	12	15	14	16	8	152					
2	Breakdown Vehicle 24	EA	17	9	14	11	11	9	11	9	9	100					
3	DC Vehicle 12 hrs	EA	15	8	12	9	9	8	9	7	8	85					
4	Maintenance Vehicle 1	EA	11	6	9	7	7	6	7	7	6	66					
5	Total		77	40	57	41	39	38	41	39	31	403					

6 Rate for Excess Mileage(Rs/Km) above fixed distance

Conditions:

- i) Fuel, Driver and Maintenance of vehicle will be in scope of Associate
- ii) TPCODL will have the right to convert 12 hrs vehicle into 24hrs vehicle and vice versa.
- iii) For conversion of service hours, as stated above, rate will remain same as finalised for 12 hours and 24 hours
- iv) Vehicle rental service rate will remain fixed in each year of Contract.
- v) Bills of vehicles will be made separately with appropriate GST Rate
- vi) Replacement vehicle to be provided in case of maintenance/breakdown of regular vehicle
- vii) KM for 24 Hr vehicle will be 3500 max and for 12Hr vehicle 2500 max per month
- viii) Above quantites if vehicles are indicative and same will be hired as per site requirement. Unit rates shall be valid irrespective of number of vehicles
- ix) Separate PO shall be placed for vehicles.
- x) Bidder must bid in the above format by putting price through computer typing. Changes in the format and correction by hand will result in disqualification of bid.

#### ANNEXURE A (Part 3)

	11 KV & LT Netwo	ork AMC	Price Sch	edule fo	r Extra Jo	obs
si	Description	Unit	Approx. Qty/Mont h	Rate(Rs)	Amt(Rs)	Amt with GST(Rs)
1	DT replacement charges (for Augmentation or replacement of low IR value DTR)					
	a. Up to 25KVA	EA	88			
	b. 63/100KVA	EA	113			
	c. 250/315/500KVA	EA	24			
	d. >500KVA	EA	3			
2	DT swapping charges		0			
	a. Up to 25KVA	EA	5			
	b. 63/100KVA	EA	12			
	c. 250/315/500KVA	EA	8			
	d. >500KVA	EA	2			
3	Mid/New Pole Erection charges (For network strengthening or to meet statutory clearances)		0			

	a. Concrete pole	EA	462		
	b. RS Joist pole	EA	110		
4			0		
	Addl. Highly Skilled Manpower (Supervisor)	Manday	4		
	Addl. Skilled Manpower (L/M)	Manday	43		
	Addl. Unskilled Manpower (Helper)	Manday	43		
	Addl. Vehicle (Boloero)/12 hours to attend emergency	EA	15		
	Addl. Vehicle (Boloero)/24 hours to attend emergency	EA	2		
	Additional charges / KM per vehicle	kM	3333		
	Construction of plinth for equipment	EA	47		
	Hiring charges of Hydra/Day	EA	25		
	Hiring charges of Tractor/Day	EA	17		
	Hiring charges of Pole Master/Day	EA	17		
	Hiring charges of DG set 3 phase, 7.5 KVA/Day	EA	8		
	Hiring charges of DG set 3 phase, 10 to 25 KVA/Day	EA	8		
	Hiring charges of Water Pump 1 phase/Day	EA	8		
	Hiring charges of Tempo per Day	EA	17		
5	Charges for extension of LT feeder/span		0		
	a. Three phase AB cable	Span	200		
	b. Single phase bare/AB cable	Span	593		

6	Charges for installation of 1 Phase Energy meter for new connection with service cable		4440							
	Total amount									
	Conditions									
i)	Quantities mentione	d above ar	e not guara	anteed. Job	will be ca	rried out a	s and when	required	basis.	
ii)	Rates will remain firr	m and fixed	l for 3 year	s.						
iii)	Bidder must bid in the	above form	at by putting	g price thro	ugh comput	er typing. C	nanges in th	e format an	d correction	by hand will result in disqualification of bid.

#### ANNEXURE A (Part 4)

### 33 KV Network AMC Price Schedule for Manpower

<u>55 KV NC</u>		Jeneduk		power	1	1	1	1		1	1		
									А	В	C=B X No of Workmen	D=A+C	E=D + GS
Package	Cluster	High Skilled	Skilled	Unskilled	Total Manpowe r	Rate High Skilled	Rate Skilled	Rate Unskilled	Total manpowe r cost/mon th	Cost other than manpowe r for the complete scope as per tender(e.g. .Tools,PPE ,licenses, GPA, Medical Test, conveyan ce,Overhe ad & Profits etc)	Cost per month (Rs)	Total manpowe r + Other Cost per month	Total cost/moi th+GST
	BCDD-1	1	4	3	8								
	BCDD-2	1	9	6	16								
Package-1	E&MR-1	1	4	2	7								
Package-1	BED	1	4	3	8								
	NED	1	9	6	16								
	E&MR-2	1	4	2	7								
Total price	for Package 1												
	BaED	1	5	4	10								
Package-2	NyED	1	9	7	17								
	E&MR-1	1	3	2	6								
Total price	for Package 2				0								
	KHD	1	9	7	17								
Package-3	PED	1	5	4	10								
	E&MR-2	1	3	2	6								
Total price	for Package 3				0								
	CDD-1	1	4	3	8								
Package-4	CED	2	9	7	18								
	E&MR-1	1	2	2	5								

Total price	for Package 4				0								
	CDD-2	1	4	3	8								
Package-5	SED	1	4	3	8								
	E&MR-2	1	2	2	5								
Total price	for Package 5				0								
	AnED	1	9	7	17								
Package-6	TED	1	9	7	17								
	E&MR-1	1	3	2	6								
Total price	for Package 6												
	DED	1	9	7	17								
Package-7	E&MR-2 DED	1	2	2	5								
rackage-/	AED	2	9	7	18								
	E&MR-3 AED	0	2	2	4								
Total price	for Package 7												
	KED-1	1	9	7	17								
Package-8	KED-2	1	4	4	9								
	E&MR-1	1	3	2	6								
Total price	for Package 8												
	JED	1	4	4	9								
Package-9	PDP	1	4	4	9								
	E&MR-2	1	3	2	6								
Total price	for Package 9												
	Total	32	163	125	320								
	Conditions												
	Changes in the manpower rate will be pass through as per prevailing Minimum Wages Circular, Govt of Odisha												
	Apart for manpower rate, all other cost component as stated above will remain firm and fixed for 3 years												
	Bidder must bid in the												
iv)	Bidder must bid in the	above form	at by puttin	g price thro	ugh comput	er typing. C	hanges in t	he format ar	nd correctio	n by hand w	ill result in c	lisqualificati	on of bid.

#### ANNEXURE A (Part 5)

#### 33 KV Network AMC Price Schedule for Vehicle

				A		В	C=A+B	D	E=C+D
Package	Cluster	Motor- bike	12 Hr Vehicle(4 W)	Total bikecost/ month	Vehicle rate/mon th	Total vehicle cost/mon th	Total of bike+vehi cle cost/mon th	GST	Total of bike+vehi cle cost/mon th+GST
	BCDD-1	1	1						
Package-1	BCDD-2	1	2						
	E&MR-1	0	1						
	BED	1	1						
	NED	1	2						
	E&MR-2	0	1						
Total price	for Package 1								
	BaED	1	1						
Package-2	NyED	1	2						
	E&MR-1	0	1						
Total price	for Package 2								
	KHD	1	2						
Package-3	PED	1	1						
	E&MR-2	0	1						
Total price	for Package 3								
	CDD-1	1	1						
Package-4	CED	1	2						

	E&MR-1	0	1											
Total price	for Package 4													
	CDD-2	1	1			1								
Package-5	SED	1	1											
	E&MR-2	0	1											
Total price	for Package 5													
	AnED	1	2											
Package-6	TED	1	2											
	E&MR-1	0	1											
Total price	for Package 6													
	DED	1	2											
Package-7	E&MR-2 DED	0	1											
Package-7	AED	1	2											
	E&MR-3 AED	0	1											
Total price	for Package 7													
Package-8	KED-1	1	2											
	KED-2	1	1											
	E&MR-1	0	1											
Total price	for Package 8													
	JED	1	1											
Package-9	PDP	1	1											
	E&MR-2	0	1											
Total price	for Package 9													
	Total	20	41											
	Rate for Excess Milea	ge above 350	00(Rs/Km)											
	Conditions													Γ
i)	Fuel, Driver and Main	tenance of v	ehicle will b	e in scope o	f Associate									Γ
ii)	Vehicle rental service rate will remain fixed in each year of Contract.													
	Bills of vehicles will be made separately with appropriate GST Rate													
iv)	Replacement vehicle	to be provide	ed in case of	maintenan	ce/breakdo	wn of regula	ar vehicle							
v)	KM for 12 Hr vehicle will be 3500 max per month													
vi)	Bidder must bid in the	e above form	at by puttin	g price throu	ugh comput	er typing. C	hanges in th	ne format ar	nd correction	by hand w	ill result in o	disqualificat	ion of bid.	Г

#### ANNEXURE A(Part 6)

#### 33 KV AMC Price Schedule for Extra Jobs

SI	Item	UOM	Approx	Rate(Rs)	Amount(Rs	Amount
			qty/mon			with
			th			GST(Rs)
1	Additional charges p	KM	10000			
	2W(Bike) charges					
	on Monthly basis					
	(including fuel	Month	12			
	considering 2500km					
2	monthly)					
	MOC Bike (					
	including fuel					
	considering avergae	Month	48			
	1700km monthly	WORLD	40			
	running &					
3	statuatory)					
4	Additional charges p	КМ	10000			
5	Pole Erection charge	s including	pole concr	eting worl	(	
	a. H Pole	ea	35			

	b. RS Joist pole	ea	35		
6	Pole cooping charges	ea	67		
	Minor Civil Works		-		
	including supply &				
7	services				
	a. Concreting (1:1.5:3) M20 Grade	m3	12		
	b. Reinforcement required for RCC	Kg	2333		
	c. Brick Masonry work	m3	23	_	
	d. Plastering work (upto 20mm)	m2	233		
8	Addl. one Supervisor	ea	13		
9	Addl. One Lineman t	ea	33		
10	Addl. one Helper to a	ea	33		
11	Add. One Vehicle (12	ea	20		
12	Addl charges to conv	ea	20		
13	Construction of plint	ea	7		
14	Hiring charges of Hyd	day	53		
	Hiring charges of Tra		17		
16	Hiring charges of Pol	day	8		
17	Additional Hiring cha	day	8		
18	AdditionalHiring cha	day	8		
19	Additional Hiring cha	day	8		
	Additional Hiring cha	,	8		
	Additional Hiring cha	,	8		
22	Additional Hiring cha	day	8		
	Total				

	Conditions									
i)	Quantities mentioned above are not guaranteed. Job will be carried out as and when required basis.									
ii)	Rates will remain firr	s.								
iii)	Bidder must bid in the above format by putting price through computer typing. Changes in the format and correction by hand will result in disqualification of bid.									

#### ANNEXURE A(Page 7)

33/11KV	33/11KV PSS Operation Assistance Price Schedule									
								C=B X No of		
						А	В	Workmen	D	D+GST

Package	Division	Unskilled	Skilled	Supervisor	Total Manpower	Rate Unskilled	Rate Skilled	Rate High Skilled	Total manpowe r cost/mon th	Cost other than manpowe r for the complete scope as per tender(e.g. .Tools,PPE ,licenses, GPA, Overhead & Profits etc)	Total of Other Cost per month (Rs)	Total manpowe r + Other Cost per month	Total cost/mon th+GST
	BCDD-1	0	64	1									
1	BCDD-2	6	69		329								
1	BED	1	54	1	525								
	NED	8	125	-									
Total price	for Package 1												
2	PED	9	87	1	227								
	KHD	21	109	-	/								
Total price	for Package 2												
3	BaED	0	59	1	218								
	NyED	21	137										
Total price	for Package 3												
4	CDD-1	0	39	1	1 137								
<b>T</b> - 4 - 1 2	CED	7	90										
l otal price	for Package 4		62										
5	CDD-2 SED	9	62 59	1	137								
Total prico	for Package 5	0	29										
	AED	8	103									1	
6	DED	12	103	1	264								
Total price	for Package 6		2.00									1	
	AnED	0	97										
7	TED	3	120	1	221								
Total price	for Package 7		-	1								1	
	KED-1	9	127		405							İ	
8	KED-2	2	47	1	186								
Total price	for Package 8												
9	PED	11	58	1	168								
	JED	11	87		100								
Total price	for Package 9												
	Total	144	1733	10	1887								
	Conditions			L									
i)	Changes in the manpo			÷ .				-					
ii)	Apart for manpower ra	ate, all other	cost comp	onent as sta	ted above w	vill remain fi	rm and fixe	d for 3 years	S	1		1	1

## ANNEXURE VII

TPCØDL	TP CENTRAL ODISHA DISTRIBU	TP CENTRAL ODISHA DISTRIBUTION LIMITED							
IFCODL	WORK INSTRUCTION /OPERATING GUIDELINES								
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#### 1.0 ORGANIZATIONAL VALUES

The Tata Group has always been a value driven organization. These values continue to direct the Group's growth and businesses. The six core Tata Values underpinning the way we do business are:

**Integrity** - We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.

**Understanding** - We must be caring, respectful, compassionate and humanitarian towards our colleagues and customers around the world and always work for the benefit of India.

**Excellence** - We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of goods and services we provide.

**Unity** - We must work cohesively with our colleagues across the group and with our customers and partners around the world to build strong relationships based on tolerance, understanding and mutual co-operation.

**Responsibility** - We must continue to be responsible and sensitive to the countries, communities and environments in which we work, always ensuring that what comes from the people goes back to the people many times over.

**Agility** - We must work in a speedy and responsive manner and be proactive and innovative in our approach.

#### 2.0 ETHICS

In our effort towards Excellence and in Management of Business Ethics at TPCODL, an Ethics Management Team is constituted.

The main objective of the Ethics Management Team is to:

- 1. Record, address and allay the issues and concerns on ethics raised by different stakeholders like employees, consumers, vendors, Associates etc. by initiating immediate corrective actions.
- 2. Ensure proper communication of the ethics policies and guidelines through prominent displays at all offices of TPCODL and through printed declarations in all concerned documents where external stakeholders are involved.
- 3. Ensure proper framework of policies as preventive measures against any ethics violation recorded by them.
- 4. Prepare and submit MIS of all issues and concerns, corrective and preventive actions on monthly basis to the top management for their information.

All members of Team TPCODL, Associates and Stakeholders are requested to register any grievance on ethics violation to Mr. Rajeev Kharyal, Chief Ethics Counselor.

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## 3.0 CONTRACT PARAMETERS

### 3.1 Issue/ Award of Contract

TPCODL awards the contract to the Associate in writing in the form of Purchase order (PO) or a Rate Contract (RC), hereafter referred as Contract, through in any or all of following modes-physical handover / post / e-mail / web document / fax with all the attachments/enclosures which shall be part of the contract document

On receipt of the contract, the associate shall return to TPCODL copy of the contract document duly signed by legally authorized representative of associate, within two days of Effective Date of Contract for contracts having contract execution time less than 30 days and within five days for all other contracts.

### 3.2 Contract Commencement Date

The date of issue/ award of contract shall be the Effective Date of Contract or Contract Commencement date.

### **3.3 Contract Completion Date**

The date of expiry of Guarantee Period shall be deemed as the Contract Completion Date.

### 3.4 Contract Period/Time

The period from Contract Commencement Date to Contract Completion Date shall be deemed as the Contract Period/Time.

## 3.5 Contract Execution Completion Date

The stipulated date for completing the execution of all items in the schedule of quantities (Supply, Service and or both as applicable) shall be deemed as the Contract Execution Completion Date.

## 3.6 Contract Execution Period/Time

The Period from Contract Commencement Date to Contract Execution Completion Date shall be the Contract Execution Period/Time. Timely Completion of Works/Timely Delivery of Materials is the essence of the contract. The period from effective date of contract to the date stipulated for completion of delivery of all items/completion of all the works/services, as per schedule of quantities of the contract is defined as contract execution completion time. The Delivery of Materials /The Completion of Works, as applicable, should be achieved in all respects as per schedules of quantities and all the terms and conditions of the contract, in the contract execution time.

Any revision/amendment in the originally stipulated contract execution time has to be approved by authorized representative of TPCODL.

#### 3.7 Contract Price /Value

The total all inclusive price/value mentioned in the PO/RC of the contract document is the Contract Price/Value and is based on the quantity, unit rates and prices quoted and awarded and shall be subject to adjustment based on actual quantities supplied/actual measurement of

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work done and accepted and certified by the authorised representative of the company unless otherwise specified in schedule of quantities or in contract documents.

## 3.8 Contract Document

The Contract Document shall mean and include but not limited to the following:

- NIT/Tender Enquiry, QR, Instruction to Bidders, Special Condition of Contract (SCC) of tender, GCC, Technical & Commercial Specifications including relevant annexure and attachments).
- Bids & Proposals Received from Associate including relevant annexure/attachments.
- Letter of Intent (LOI/RC/PO) with agreed deviations from the tender/bid documents.
- All the Inspection and Test reports, Detailed Engineering Drawings.
- Material Dispatch Clearance Certificate (MDCC).
- Minutes of Meeting (MoM)

#### 3.9 Contract Language

All documents, instructions, catalogues, brochures, pamphlets, design data, norms and calculations, drawings, operation, maintenance and safety manuals, reports, labels, on deliveries and any other data shall be in English Language.

The Contract documents and all correspondence between the TPCODL, Third Parties associated with the contract, and the Associate shall be in English language.

However, all signboards required indicating "Danger" and/or security at site and otherwise statutory required shall be in English, Hindi, and local languages.

#### 3.10 Reverse Auction

TPCODL reserves the right to conduct the reverse auction (instead of public opening of price bids) for the products / services being asked for in the tender. The terms and conditions for such reverse auction events shall be as per the Acceptance Form attached in Annexure I. The bidders along with the tender document shall mandatorily submit a duly signed copy of the Acceptance Form as mentioned in the Annexure I as a token of acceptance for the same.

#### 4.0 SCOPE OF WORK

All the activities that are to be undertaken by the Associate to realize the contractual deliverables in completeness form Scope of Work. Following clauses list, but not limited to, major requirements of the scope of work.

The associate shall satisfy himself fully with the details and undertake fully the works as listed in schedule of quantities and conditions, under which the same to be performed. Associate may visit site to equip themselves with all the information required for the execution of work. Unless otherwise stated in the contract, the scope of work shall also include, but not limited to, the following.

The associate shall deliver equipment/material at site/stores, carry out erection, testing and commissioning and put into satisfactory operation as defined in contract. Unloading at site,

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storage, preservation, security and handling of the items at work places till completion of contract is also in scope of work.

The associate shall obtain statutory clearances for the works executed by him.

The associate shall provide comprehensive insurance for entire works for contract value and third party liability insurance to cover all risks till completion of contract.

All transport / lifting/ unloading/ storage/preservation of items at site shall be arranged by the Associate at no extra cost to TPCODL. All these activities shall be performed in line with original equipment manufacturers' recommendations and/or as per best engineering practices, with due consent of TPCODL Engineer-in-charge.

<u>Completeness</u>: Any supplies and services which might have not been specifically mentioned in the Contract but are necessary for the scope mentioned in Special Terms & Conditions and/or completeness of the works at the highest possible level, including any royalties, licence fees & compensation to be paid, whether incurred by the associates or by a third party for the work covered in the scope, regardless of when incurred, shall be supplied/provided by the associate without any extra cost and within the time schedule for efficient , smooth and satisfactory operation and maintenance of the works at the highest possible level under Indian conditions (but according to international standards for facility of this type), unless expressly excluded from the scope of supplies and services in this Contract.

TPCODL have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by submitting a request in writing to the Associate. The Associate shall, within fifteen days of receipt of such request from the TPCODL, provide Purchaser with a reasonably detailed estimate of the cost of the change outlined in the request.

In the event, TPCODL requests a change, the Contract price and time shall be adjusted upwards or downwards, as the case may be and shall be mutually agreed to. The associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes as requested till adjustment of contract price and time schedule where so applicable in terms of or otherwise directed by the TPCODL.

## 4.1 Indemnity

Associates shall undertake to fully indemnify TPCODL (also referred to as the Company in the GCC) against all kinds of liabilities or damages, of whatsoever nature, including compensation arising from any accident to the person or property of those in Associate's employment or to any other person or properties including those of TPCODL, arising due to reasons attributable to any, act, omission of the Associate the Associates, for the entire period of contract including period of guarantee.

Within 7 days of award of work, the Associates shall submit Indemnity Bond in the format as per Annexure-D to Order Issuing Authority.

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In case of Labour /Erection/ Services Contracts having value more than Rs 2 Cr per Annum, Associates shall submit Indemnity Bond on Rs 100/- Non Judicial Stamp Paper in the format as per Annexure- D to Order Issuing Authority.

## 4.2 Display of Notice Boards at Work Sites

The Associate shall put up display notice board at each project site where the works are in progress indicating the information given below:

- Name of the Project.
- Estimated Cost of Project.
- Date of Commencement.
- Expected date of completion.
- Name of Associate and his telephone number.
- Name of Engineer-in-Charge and his telephone number.

## 4.3 Disposal of Waste at Site

Significant quantities of waste are generated during the execution of project and an integrated approach for effective handling, storage, transportation and disposal of the same shall be adopted. This would ensure the minimization of environmental and social impact in order to combat the climate change.

The associates shall follow the below criteria for disposal of waste at site during the execution of project.

- Associate shall ensure that the detailed project plan include the waste management, segregation of all designated waste material (Recyclable/Non-Recyclable), collecting, storing, disposing and transferring the same to pre-arranged facility/destination in timely and safe manner as per environmental legislations during the execution of project. The project plan shall also include the innovative construction practice to eliminate or minimize waste, protect surface/ground water, control dust and other emissions to air and control noise during the execution of project. The copy of same shall be given to EIC before the commencement of project.
- The purchase policy of BA shall encourage the procurement of material with recycled and minimum packaging of goods during delivery. Associate shall provide the appropriate means for site to site transportation of materials to avoid damage and litter generation.
- Associate shall educate and inform to its project team about the requirement and responsibilities for waste minimization and disposal in general and provide training of practices that support this. Waste management should be treated like a safety program.
- In the event that area of contaminated or biological hazard is identified, Associate shall ensure that plant, equipment, personnel and any activity associated with the work is carried out in consultation with EIC of TPCODL.
- Associate shall ensure that the residents living near the site are kept informed about proposed working schedule and shall informed timings and duration of any abnormal noise full activity that is likely to happen.

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 Associate shall ensure the regular maintenance and monitoring of vehicles and equipment for efficient fuel use so that emissions and noise are within acceptable limits to avoid air pollution.

## 4.4 Deployment of Work Force

Associate shall deploy adequate labour, as considered necessary by TPCODL for execution of the contract including Sundays and Holidays whenever required to do so with no extra cost to TPCODL. However, prior permission shall be taken from the site Engineer to carry out the work beyond normal working hours or on Sundays and Holidays. Female employees shall not be deployed beyond normal working hours/days and no child labour shall ever be deployed. Associate shall depute full time qualified and experienced engineers to supervise the work at site. All such staff shall be maintained from commencement to completion of all works to the entire satisfaction of the Engineer-in-Charge. Associate's employees deployed for the works under this contract will not be considered in Company's employment at any time. Associate shall continue to be responsible for all such employees, their safety, all types of statutory compliances related thereto and in any other manner whatsoever. The company will stand indemnified by the Associate in respect of all the above. At the same time Company upon noticing any breach or default on any statutory compliances, may at their sole discretion, decide to act in a manner as deemed fit at the risks and costs of the Associate.

TPCODL shall have the right to instruct the Associate to change the Sub-Associates or skilled /unskilled workers in case the conduct, the workmanship or speed of the work is not satisfactory.

Associates shall submit duly signed undertaking regarding engagement of competent staff / employee commensurate to the nature of job to Engineer–in–charge in the format attached as Annexure – G.

# 4.5 Damages of Properties

The Associates shall take necessary steps to ensure that the equipment and installations of the Company, Third parties, including other utility services like water supply pipelines; open drains telephone cables etc. are not damaged during execution of the works. The Associates shall be responsible for all such damages and shall have to repair/ replace and/or compensate for the entire claims in respect of such damages at its own cost.

## 4.6 Issuance of Materials

The material issued to the Associate shall be in the custody of the Associates who shall be fully responsible for the same. After completion of the works, the Associates will reconcile the material. Any cost of material which is short or damaged/lost will be deducted from Associate bill/ deposits.

## 4.7 Company's Right To Use Works

If Taking Over Certificate is delayed for any reason, for which TPCODL's decision shall be final and binding upon the Associate, the Company shall be entitled to use the works or portion thereof without affecting Associate's responsibility and liability to complete the balance works as

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per company's directives from time to time, though Associate shall be afforded reasonable opportunity by the company to enable Associates to complete all balance works required for issuance of 'Taking Over Certificate' by the company.

## 4.8 Rights of TPCODL to vary the scope work

TPCODL shall have the right, during the performance of the Contract, to change the scope and/or technical character of the Project and/or of the supplies and services stipulated in the Contract by communicating the intent to do so in writing to the Associate. On receipt of such communication the Associate shall, within the time frame specified in the contract shall provide TPCODL with a reasonably detailed estimate of the cost of the change in scope outlined in the TPCODL communication. The change in the Contract price and time shall be revised upwards or downwards, as the case may be, and shall be mutually agreed to. The Associate shall not be entitled to any extension of time unless such changes adversely affect the time schedule.

The Associate shall not proceed with the changes in the scope of work till such time revision of Contract price and time schedule are approved and communicated to the associate by TPCODL.

Any change in the Scope of Work and/or Terms & Conditions of the order shall be intimated by TPCODL through an amendment to the contract. The amendment shall be treated valid only if signed by the authorized signatory of the original contract.

### 4.9 Technical Evaluation

TPCODL reserves the right to assign scores to different parameters including but not limited to the following while evaluating the bids. TPCODL reserves the right to change the parameters and score without prior information to the associates:

S. No.	Evaluation Parameter	Max. Score
Α	For bidders already Registered with TPCODL	100
A.1.	No violation of statutory compliances in last 1 year. Deduction of 2 marks for each instance of violation in last 1 year. Safety	20
A.1.	Deduction of 2 marks for each instance of safety violation in last 1 year. Deduction of 5 marks for each reported Non-Fatal Accident in last 1 year In case of any reported fatal accident: <i>ZERO MARKS</i>	20
A.2.	<b>Timely Execution of Contracts</b> Total Achieved Score = {30 – 3 x (Avg. percentage LD deductions in last 2 years)}	30
A.3.	Legal Issues with TPCODL Zero instances of Arbitration procedures / Court Cases / PBG forfeitures in last 2 years: 30 marks else 'Zero' marks	30
в	Bidders new to TPCODL	100
B.1.	Visits Client Site Visit where the bidder is providing similar services. The visits as above shall be arranged by the bidder. However all costs towards conveyance, lodging, boarding etc. shall be borne by TPCODL. The	30

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S. No.	Evaluation Parameter	Max. Score
	score assigned by TPCODL based on the above visits shall be final and binding on the bidder (Vendor Evaluation form attached as annex L). <b>Safety</b>	
	Score achieved against BA Safety Management System Questionnaire	20
B.2.	<ul> <li>Client Referrals</li> <li>At least 3 nos. Customer References for similar services in last 3 years. All customer references shall be either of the following:</li> <li>Govt. Organizations/ PSUs/ Power Distribution Utilities.</li> <li>Private Organizations with an annual turnover of &gt;= 500 cr.</li> <li>PO copies or Completion Certificates will be admissible.</li> <li>Each reference: 10 marks</li> </ul>	30
В.3.	Blacklisting Information Not blacklisted by any reputed organization/utility in last 2 years: 20 marks else 'Zero' marks	20

 Bidder shall be considered as technically qualified if they are able to achieve a technical score of >70 marks on the above parameters. 'A' or 'B'.

 The bidder must have the PF and ESI registration. In case it is not there (provided the bidder is not exempted from the PF and ESI), bidder shall not be evaluated on the above parameters and will be considered as disqualified.

### 5.0 PRICES/RATES/TAXES

The Prices and Rates are inclusive of cost of materials supplied as per contract terms and for which MDCC is issued by TPCODL and to the extent required for completion of works, cost of service executed as per schedule of quantities, cost of testing as per contract terms, cost of documentations including all relevant test certificates and other supportive documents to be furnished as per contract terms. The rates shall remain firm till actual completion of contract.

The Prices/Rates are inclusive of all taxes, levies, cesses and duties, particularly Goods and Services Tax as applicable. All government levy / taxes shall be paid only when the invoice is submitted according to the relevant act.

The prices shall remain unchanged irrespective of TPCODL making changes in quantum in all or any of the schedules of items of contract.

## 5.1 Changes in Statutory Tax Structure

If rate of any or all of the statutory taxes and duties applicable to the contract changes, such changes shall be incorporated by default if the changes occur within the contract execution time and shall be applicable if the contract is executed by the Associate within the Contract Execution Time.

For execution of contracts beyond contract execution time, where the delay is not attributable to TPCODL no upward revision in tax /duties shall be considered irrespective of changes in the statutory tax structure either within the contract execution time or beyond. However, in such cases, benefits due to any downward revisions in statutory tax rates shall be passed on to TPCODL.

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## 6.0 TERMS OF PAYMENT

### 6.1 Pre-Requisites for Payment

- Associate should have completed execution of that part of contract, for which payment is sought, to the satisfaction of TPCODL's Engineer-in-Charge responsible for the contract and obtained certification for execution of the work.
- Associate has taken C-3 Form
- Associate has undertaken joint measurement of the work executed along with TPCODL's Engineer-in-charge.
- Associate's bills/invoices submitted have been certified by Engineer-In-Charge.

### 6.2 Bills & Invoices

Unless specified otherwise in the special conditions of contract, Associate shall raise not more than one invoice/contract per month for the services rendered in the prescribed Tax Format and the invoice shall be submitted within 15 days of the following month at Invoice Desk, TPCODL Bhubaneswar.

All Bills shall be supported by joint measurement of work done, quality test report and a copy of wage sheet, if applicable (showing proof of having disbursed wages as per applicable law) and a copy of statement substantiating that statutory payments having been affected.

Bills/ invoices shall mention Associate's 'Sales, Service, WCT Tax Registration Number, PAN number as applicable.

Final bill submission after completion of project or execution of job must be within 30 days from the actual date of completion/execution of work awarded.

## 6.3 Payment & Statutory Deductions

Payment shall be released within 30 days from the submission of the bills. The associate shall submit "No Demand Certificate" in the format as per Annexure-D at the time of receipt of full and final payment. In case any non-compliance to contract conditions comes to TPCODL's notice, TPCODL will be entitled to deduct 30% of estimated wages plus 20% of wages as TPCODL's overheads. Associates would be obliged to provide the copy of monthly wage sheet in any case, failing which no payment shall be made. TPCODL at their sole discretion may deposit the PF etc. with statutory authorities. TPCODL will deduct the amounts of TDS as per statutory requirement under the income tax act and the DVAT Act and certificates (wherever applicable) will be issued to associate accordingly

In case of non-submission of PAN No TDS @ 20% shall be deducted from all payable amounts for which no TDS certificate shall be issued. TDS once deducted as above shall not be revised in any condition.

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## 6.3.1 Statutory Deductions

TPCODL will deduct the amounts of TDS, TCS as per statutory requirement under the income tax act, the Goods and Services tax act, BOCW Act, or any other applicable tax act and certificates (wherever applicable) will be issued to associate accordingly.

For consumption of TPCODL's Water and Electricity by Associate for execution of Contract, Associate shall pay 0.5% & 1.0% respectively of contract value and it shall be deducted from the running bills.

The Engineer-in-Charge as stated in the Order shall be responsible for certification of the work executed and the bills. Bills (including original) shall be submitted in triplicate at Bill Inward Receipt Desk (BIRD) located at Third Floor, IDCO Towers, Janpath, Bhubaneswar..

#### 6.4 Guidelines for Raising Running/ Final Bills

Contract Value Up to 5 Lakhs	One Final Bill
Contract Value More than 5 lakhs	Monthly Running Bill & One Final Bill

All Bills shall be processed only when all bank Guarantees are in place and before payments of Final Bill Associate have to furnish No Demand Certificate, as applicable.

#### 6.5 Quantity Variation

Payment will be made on the basis of actual quantity of supplies/actual measurement of works accepted by TPCODL and not on the basis of contract quantity.

#### 6.6 Full and Final Payment

Full & Final Payment in all contracts shall be made subject to the associate submitting "No Demand Certificate", in the format as per Annexure-C.

#### 7.0 MODE OF PAYMENT

Payment shall be made through Cheque or RTGS whichever of the two modes chosen by the Associate, in favour of Associate's Bank Account on TPCODL records, on whose name Contract has been issued. Those Associates opting for the RTGS mode shall submit the details of Bank Account and other details as per annexure J. Further, for any payments made, TPCODL is not responsible for any consequences/disputes Associate have among the owners channel partners, sub-Associates and all such dispute/concerns shall be settled solely by the Associate.

In case of service contracts, mostly the quantities of items indicated are estimated and preliminary. However, payments shall be made on the basis of actual quantity of work carried out and measured jointly by the Company and the Associate. Associates shall be responsible to organize joint measurements of works with TPCODL Engineer-in-Charge before raising any bill of work done. In the event Associate fails to do so, TPCODL at their sole discretion, may take measurements of work done and proceed as deemed fit and in such an event Associate's right to lodge any subsequent claim shall stand forfeited.

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### 8.0 SECURITY CUM PERFORMANCE DEPOSIT

Associates shall submit within 15 days from the effective date of issue of PO/RC, Security cum Performance Bank Guarantee (SPBG) in the format as per Annexure B of this document from banks acceptable to TPCODL for:

(a) 5% of the PO value if purchase order value is more than Rs 5 Crores.

(b) 10% of the PO value if purchase order value is less than Rs 5 Crores.

This shall remain valid till the end of the Guarantee Period of contract, plus one month.

(c) 5% of the RC value in case of Rate Contract. This shall remain valid till the Guarantee period plus one month.

- For PO/RC values less than Rs. 5 lacs, Associate may request for deduction of amount equivalent to SPBG value from their first invoice. Such amount shall be withheld by TPCODL while processing the invoice and shall be released after completion of Guarantee Period plus one month.
- For PO/RC values less than Rs. 3 lacs, the clause (8.0) for Security cum Performance Bank Guarantee (SPBG) shall not be applicable.
- In case of RC (Rate Contract) after the expiry of RC validity, Associate shall have to submit SPBG. However, the Associate has the option to re-submit the SPBG as per actual RO (Release Order) value issued against the RC, valid for Guarantee Period plus one month. The Guarantee Period shall be considered as per the last RO issued against the said RC. The original SPBG as submitted against the RC shall be released on submission of the new SPBG to TPCODL. Alternatively, Associate may extend the validity of original SPBG only till the requisite period, i.e. guarantee period plus one month.

## 9.0 STATUTORY COMPLIANCE

## 9.1 Compliance to Various Acts

Associate should ensure adherence to the Anti-Lobbying, Debarment, Drug-Free, Child Labour, Factories Act and Shop and Establishment Workplace Certification, Registration details under GST, Sales Tax and Works Contract Tax Act.

Associate shall bear the entire responsibility, liability and risk relating to coverage of its workforce under different statutory regulations including Workman's Compensation Act, ESI Act, Factories Act, 1948, the Contract Labour (Regulation and abolition) Act 1970, and any other relevant regulations as the case may be. Associate shall also be solely responsible for the payment of all benefits such as Provident Fund, ESI, Bonus, Leave compensation and other benefits as may be applicable under applicable labour laws, etc. as per the various statutory regulations and shall keep TPCODL indemnified in this regard against any such claim and provide documentary evidences of the same to TPCODL. TPCODL shall be entitled to, if necessary, make such payment and recover the amount from Associate.

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Associate should ensure adherence to all applicable laws, rules and regulation applicable under this contract from time to time. In case of violation any risk, costs etc. shall be in associates account and keep TPCODL indemnified always till completion of contracts.

## 9.2 SA 8000

TPCODL expects its Associates to follow guidelines of SA 8000:2014 on the following aspects

- 1. Child Labour
- 2. Forced or Compulsory Labour
- 3. Health & Safety
- 4. Freedom of Association & Right to Collective Bargaining
- 5. Discrimination
- 6. Disciplinary Practices
- 7. Working Hours
- 8. Remuneration
- 9. Management System

#### 9.3 Affirmative Action

TPCODL appreciate and welcome the engagement/employment of persons from SC/ST community or any other deprived section of society by their business associates.

# Relaxation in Contract Clauses under Affirmative Action for SC/ ST Business Associates\*\*

TPCODL believes that inclusive growth is the key to sustainable development, and to promote the same Policy on Affirmative Action for Scheduled Caste & Scheduled Tribe Communities has been adopted across the company.

Under the same pre-text, and to promote entrepreneurship among SC/ST community TPCODL has taken initiative by proposing relaxations in contract clauses as per below:

S.No.	Initiative	for SC/ ST BA's	Guideline Document
1	Tender Fees	100% waiver for SC/ST community	All Open Tenders
2	Earnest Money Deposit	50 % relaxation of estimated EMD value	All limited and Open Tenders
3	Performance Bank Guarantee	50% relaxation in PBG for order value above 50 lacs else 25% relaxation	All limited and Open tenders
4	Turnover	25% relaxation in company turnover under qualifying requirement criteria	All Open Tenders

\*\*Classification of BA s under SC/ST shall be governed under following guidelines:

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- Proprietorship/ Single Ownership Firm: Proprietor of the firm should be from SC/ST community. Governing document shall be duly audited latest balance sheet bearing name of all the partners.
- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed and duly audited latest balance sheet bearing name of all the partners.
- Private limited company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Memorandum of Understanding (MoU) and/or Article of Association (AoA).

## Certification from SC/ST commission shall be required for deciding upon SC/ST status of a person.

## 9.4 Compliance to Labour Laws

Bidder needs to ensure compliance to applicable labour laws including timely disbursement of wages. In case wages are not disbursed as per the stipulated timelines, then TPCODL shall pay the wages to BA employees on behalf of BA. Apart from deducting the amount of wages paid, TPCODL shall deduct an additional service charge equivalent to 25% of the wages paid from the payment due to BA.

# 9.5 Compliance to Construction and Demolition Waste Management Rules & Environment (Protection) Amendment Rules

BA is liable to follow the Construction and Demolition Waste Management Rules- 2016, Environment (Protection) Amendment Rules- 2018 and Guidelines on dust mitigation measures in handling construction material and C&D wastes issued by CPCB.

Following are some main points of above Rules/Guidelines for Construction work, cable laying jobs etc.

- 1. Barricading to be provided at site to cover complete area.
- 2. Construction material and waste should be inside the closed area made by using barricading.
- 3. Water sprinkling/fine spray from nozzles to be done to suppress the dust.
- 4. The board of Dust mitigation measures shall be displayed at site for public viewing with required details.
- 5. Loose sand or soil and construction material that causes dust shall be covered.
- 6. Transport material that are easily wind borne need to be covered by a sheet made of either jute, tarpaulin, plastic or any other effective material.
- 7. All areas for storing C&D waste/construction material to be demarcated and preferably barricaded particularly those materials that have potential to be dust borne.
- 8. Grinding and cutting of building materials in open area shall be prohibited.
- 9. Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.
- 10. No uncovered vehicles carrying construction material and waste shall be permitted.
- 11. Construction and demolition waste processing and disposal site shall be identified and required dust mitigation measures to be notified at the site.

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#### **10.0 QUALITY**

### **10.1 Knowledge of Requirements**

The Associate shall be deemed to have carefully examined and to have knowledge of the equipment, the general and other conditions, specifications, schedules, drawings, etc. forming part of the Contract and also to have satisfied himself as to the nature and character of the work to be executed and the type of the equipment and duties required including wherever necessary of the site conditions and relevant matters and details. Any information thus procured or otherwise obtained from TPCODL/Consultants shall not in any way relieve the Associate from his responsibility and executing the works in accordance with the terms of contract.

#### **10.2 Adherence to Rules & Regulations**

The Associate shall procure and/or fabricate/erect all materials and equipment in accordance with all requirements of Central and State enactment, rules and regulations governing such work in India and at site. This shall not be construed as relieving the Associate from complying with any requirement of TPCODL as enumerated in the Contract which may be more rigid than and not contrary to the above mentioned rules, nor providing such construction as may be required by the above mentioned rules and regulations. In case of variance of the Technical Specification from the laws, ordinance, rules and regulations governing the work, the Associate shall immediately notify the same to the TPCODL. It is the sole responsibility of the Associate, however, to determine that such variance exists. Wherever required by rules and regulations, the Associate shall also obtain the statutory authorities' approval for the plant, machinery and equipment to be supplied by the Associate.

## **10.3 Specifications and Standards**

The Associate shall follow all codes and standards referred in the Contract Document. Codes and standards of other may be followed by the Associate with the prior written approval of TPCODL, provided materials, supplies and equipment according to the standard are equal to or better than the corresponding standards specified in the Contract.

Brand names mentioned in the Contract documents are for the purpose of establishing the type and quality of products to be used. The Associate shall not change the brand name and qualities of the bought out items without the prior written approval of the TPCODL. All such products and equipment shall be used or installed in strict accordance with original manufacturer's recommendations, unless otherwise directed by the TPCODL. In any circumstances the codes, specimen and standards prescribed by any government agency should not be violated.

## 11.0 SAFETY

All Associates shall strictly abide by the guidelines provided in TPCODL's Contractor Safety Management System (CSMS) as applicable at all stages during the contract period. Associate shall execute the contracts ensuring the following in and as order of priority:

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- Safety of Human Beings.
- Safety of Equipment/Assets.
- Timely Completion of Contract.

Safety related requirements as mentioned in our Contractor Safety Management System is attached as annexure K and is an integral part of this GCC. TPCODL may revise this CSMS document as a when required and the revised version shall be applicable on all contracts – current or future.

## 12.0 GUARANTEE

### 12.1 Guarantee of Performance

Associates shall stand guarantee that the equipment and material supplied/service or work rendered under the contract is free from design, manufacturing, material, construction, erection & installation and workmanship & quality defects and is capable of its due, rated and intended quality performance, as an integrated product delivered under the contract or a specific period termed as Guarantee Period(as elaborated elsewhere in this clause) The Associate should also guarantee that the equipment/material is new and unused except for the usage required for the tests and checks required as part of quality assurance.

### 12.2 Guarantee Period

The Guarantee Period will be equipment/service/work specific and shall be as specified in the Standard Specifications of TPCODL for the equipment/material/service/work and where standard specifications are not part of contract documents or guarantee period is not specified in the standard specifications,, the guarantee period shall be as per the Special Terms and Conditions of the Contract. In case of no mention of the guarantee period in standard specifications or SCC Guarantee Period will be 12 Months from the Date of Commissioning or 24 months from the date of delivery of final lot of supplies made, whichever is earlier.

## 12.3 Failure in Guarantee Period (GP)

If the equipment and material supplied/service or work rendered under the contract fails to perform its due, rated & intended quality performance, during the Guarantee period, the associate is liable to undertake repair/rectify/replace the equipment and material supplied/service or work rendered under the contract within time frame specified in the SCC or elsewhere in the contract documents at associate's cost to make the equipment and material supplied/service or work rendered under the contract of performing its due, rated and intended quality performance. If Associate fails to repair/rectify/replace the equipment or material supplied/service or work rendered under the contract, failed in Guarantee Period, TPCODL will be at liberty to get the same done at Associate's risks and costs and recover all such expenses plus the TPCODL's own charges (@ 20% of expenses incurred), from the Associate or from the "Security cum Performance Deposit" as the case may be.

If during the Warranty/ Guarantee period some parts of the supplies are replaced owing to the defects/ damages under the Warranty, the Warranty period for such replaced parts shall be until the expiry of twelve months from the date of such replacement or renewal or until the end of original Guarantee period, whichever is later.

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Any repairs during the Guarantee Period shall be carried out by the Associate within 30 days of reporting the issue to Associate by TPCODL. However, if replacement of the Equipment is required, Associate shall notify the same to TPCODL within 7 days of reporting the issue by TPCODL. Thereafter, the total time for supply of new equipment/ material shall be equal to the original delivery period of that equipment/ material as specified in the Contract. In case the Associate is not able to rectify/ replace the faulty equipment/ material within the stipulated timelines as mentioned above, penalty shall be levied as per the Liquidated Damages clause mentioned in this document. The penalty amount shall be recovered from the payment due to the vendor or by encashment of the SPBG as the case may be.

### 12.4 Cost of repairs on failure in GP

The cost of repairs/rectification /replacement, apart from the actual cost of repairs/rectification/replacement is also inclusive of all associate costs of required transportation, site inspection /mobilization/dismantling and re-installation costs as applicable. The Associate has to ensure that the interruption in the usage of intended purpose of the equipment is minimized to the maximum extent In lieu of the time taken for repairs/rectification/replacement.

### 12.5 Guarantee period for Goods Outsourced

If the Associate outsources partly equipment/materials/services from third party as mutually agreed upon at the pre award stage of contract, TPCODL shall have the benefit of any additional guarantee period if provided by the third party for the part supplied/executed by them.

#### 12.6 Latent Defect

Hidden defects in manufacturing or design of the product supplied and which could not be identified by the tests conducted but later manifested during operation of the equipment are termed as latent defects. Associates shall further be responsible for 'free replacement' for another period of THREE years from the end of the guarantee period for any 'Latent Defects' if noticed and reported by the Company.

## 13.0 LIQUIDATED DAMAGES

a) For Services which are of standalone use, multiple in quantities and having a single final completion schedule, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPCODL, as described below:

For delay of each week and part thereof from the completion schedule specified in the contract, 1% of contract value corresponding to unexecuted work, provided full execution is done within 130% of the original contract time. If full contractual service/work rendered is not completed within 130% of contract time for execution, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value.

b) For services having phased completion schedule(milestone) as per contract terms, standalone use and multiple in quantities, Liquidated damages shall be levied without prejudice to any of the other contractual rights of TPCODL, as described below:

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For the purpose of calculating and applying LD, each milestone shall be considered separately. For delay of each week and part thereof, from the execution of work schedule specified in the milestone, 1% of the contract value corresponding to the unexecuted work of the milestone, subject to a maximum of 10% of the total contract value of that milestone shall be levied. However, if full contractual service/work rendered is not completed within 130% of contract time for execution, TPCODL has the right to levy LD on the entire contract value, subject to a maximum of 10% of the total contract value. Deduction of LD shall be on landed cost i.e contract value inclusive of taxes and in pursuant statutory compliance GST would be applicable at the stipulated rate and the same shall be borne by Business Associate. In case of LD deduction, a GST invoice shall be issued by TPCODL as a proof of deduction/ recovery.

### 13.1 LD Waiver Request

Any request of LD waiver shall be submitted within thirty (30) days of deducting LD. Request submitted beyond the timeline shall not be entertained.

#### 13.2 Material Recovery

In case of any recoveries for materials or services (for material free issued by TPCODL and not reconciled by BA or for services claimed and paid in excess at the time of running bills), the total cost which shall be recovered from the BA, shall be the gross amount of material or services (i.e. including taxes) plus applicable taxes as prevailing at the time of such recoveries.

### 14.0 ASSIGNMENT OR SUBCONTRACTING

Associates shall not assign/subcontract/outsource the schedule of activities of contract TPCODL enters with the associate, in part or full, without TPCODL's prior written approval. However outsourcing of materials/equipment/services by Associate to make the integrated product for which TPCODL's has placed the contract with the associate from suppliers, makes and agencies which have been mutually agreed upon during contract pre-award stage is permitted subject to following conditions.

In such cases where outsourcing is done by the Associate

- Shall ensure that outsourced suppliers comply with the technical and financial qualification requirements specified by TPCODL in the contract document
- Shall furnish all particulars about the proposed outsourcing agencies and the details of the goods/services/work outsourced to the Associate while seeking approval of TPCODL for inclusion for outsourcing. The Associate shall give approval or shall refuse approval in writing within thirty (30) days of receipt of such request. However the Associate shall not be entitled for any additional contract execution time whatsoever in lieu of the process for approval for outsourcing agencies, and shall be held responsible for any delay in the project execution time.
- Shall remain jointly and severally liable for any action, deficiency, and/or negligence on the part of his outsourcing agencies. The approval extended by the Associate to outsourcing agencies recommended by the Associate shall not discharge the later from his Contract obligations.

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Shall submit to the Associate unpriced copies of purchase orders with technical specifications included in the orders, placed on outsourcing agencies as soon as the respective orders have been placed by the Associate.

### **15.0 UNLAWFUL ACTIVITIES**

The Associate shall have to ensure that none of its employees are engaged in any unlawful activities (whether covered under the scope of the present GCC or not) subversive of the TPCODL's interest failing which appropriate action (legal or otherwise) may be taken against the Associate by the TPCODL, in accordance with the terms of the present GCC.

### **16.0 CONFIDENTIALITY**

Associate and its employees or representatives thereof shall strictly maintain the confidentiality of various information they come across while executing the contract as detailed below.

#### 16.1 Documents

All maps, plans, drawings, specifications, schemes and other documents or information related to the Contract/Project and the subject matter contained therein and all other information given to the Associate by the TPCODL in connection with the performance of the contract shall be held confidential by the Associate and shall remain the property of the TPCODL and shall not be used or disclosed to third parties by the Associate for any purpose other than for which they have been supplied or prepared. The Associate may disclose to third parties, upon execution of confidentiality agreements, such part of the drawings, specifications or information if such disclosure is necessary for the performance of the Work provided such third parties agree in writing to keep such information confidential to the same extent and degree as provided herein, for the benefit of the TPCODL.

## 16.2 Geographical Data

Maps, layouts and photographs of the unit/plant including its surrounding regions showing vital installation for national security of country or those of TPCODL shall not be published or disclosed to the third parties or taken out of the country without prior written approval of the TPCODL and upon execution of confidentiality agreements satisfactory to the TPCODL with such third parties prior to disclosure.

## 16.3 Associate's Processes

Title to secret processes if any developed by the Associate on an exclusive basis and employed in the design of the equipment shall remain with the Associate. TPCODL shall hold in confidence such processes and shall not disclose such processes to the third parties without prior approval of the Associate and execution by such third parties of secrecy agreements satisfactory to the Associate prior to disclosure. Upon completion of contract, such processes shall become the property of the TPCODL. Title to technical specifications, drawings, flow sheets, norms, calculations, diagrams, interpretations of test results, schematics, layouts and such other information, which the Associate has supplied to the TPCODL under the Contract shall be passed on to the TPCODL. The TPCODL shall have the right to use these for

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construction, erection, start-up, Trial Run, operation, maintenance, modifications and/or expansion of the works including for the manufacture of spare parts.

#### 16.4 Exclusions

The provision of Clauses 16.1 to 16.3 shall not apply to information:

- Which at the time of disclosure are in the public domain which later on become part of public domain through no fault of the party concerned, or
- Which were in the possession of the party concerned prior to disclosure to him by the other party, or
- Which were received by the party concerned after the time of disclosure without restriction on disclosure or use, from a third party who did not acquire such information directly or indirectly from the other party or has no obligation of confidentiality for such information.

### 16.5 Violation

In case of violation of this clause, the Associate is liable to pay compensation and damages as may be determined by the competent authority of TPCODL.

### **17.0 INTELLECTUAL PROPERTY RIGHTS**

If, in the course of performance of its functions and duties as envisaged by the scope of the present GCC, the Associate acquires or develops, any unique knowledge or information which would be covered, or, is likely to be covered within the definition of a trademark, copyright, patent, business secret, geographical indication or any other form of intellectual property right, it shall be obliged, under the terms of this present GCC, to share such knowledge or information with the TPCODL. All rights, with respect to, or arising from such intellectual property, as afore mentioned, shall solely vest in TPCODL.

Moreover, the Associate undertakes not to breach any intellectual property right vesting in a third party/parties, whether by breach of statutory provision, passing off, or otherwise. In the event of any such breach, the Associate shall be wholly liable to compensate, indemnify or make good any loss suffered by such third party/parties, or any compensation/damages arising from any legal proceeding/s, or otherwise. No liability of TPCODL shall arise in this respect, and any costs, damages, expenses, compensation payable by TPCODL in this regard to a third party/parties, arising from a legal proceeding/s or otherwise, shall be recoverable from the Associate.

## **18.0 INDEMNITY**

The Associate shall at all times indemnify, keep indemnified and hold harmless the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns against all actions, claims, demands, costs, charges and expenses arising from or incurred by reason of any infringement of patent, trade mark, registered design, copy rights and/or industrial property rights by manufacture, sale or use of the equipment supplied by the Associate whether or not the TPCODL is held liable for by any court judgement. In this connection, the TPCODL shall pass on all claims made against him to the Associate for settlement.

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The Associate assumes responsibility for and shall indemnify and save harmless the TPCODL from all liability, claims, costs, expenses, taxes and assessments including penalties, punitive damages, attorney's fees and court costs which are or may be required to be paid by the TPCODL and its officers, directors, employees, affiliates, agents, successors and assigns arising from any breach of the Associate's obligations under the Contract or for which the Associate has assumed responsibilities under the Contract including those imposed under any local or national law or laws, or in respect to all salaries, wages or other compensation for all persons employed by the Associate or his Sub-Associates or suppliers in connection with the performance of any work covered by the Contract. The Associate shall execute, deliver and shall cause his Sub-Associate and suppliers to execute and deliver, such other further instruments and to comply with all the requirements of such laws and regulation as may be necessary there under to conform and effectuate the Contract and to protect the TPCODL.

The TPCODL shall not be held responsible for any accident or damages incurred or claims arising, due to the Associate's error there from prior to completion of work. The Associate shall be liable for such accidents and after completion of work for such accidents as the case may be due to negligence on his part to carry out Work in accordance with Indian laws and regulations and the specifications set forth herein.

### **19.0 LIABILITY & LIMITATIONS**

### 19.1 Liability

Except for any specific liability which may be identified in the Contract and which may be payable hereunder, Associate shall not be liable for any special, incidental, indirect, or consequential Damages or any loss of business Contracts, revenues or other financial loss (or equivalents thereof no matter how claimed, computed or characterized) arising out of or in connection with the Performance of the Work or supply of Goods **unless caused by Associate's negligence, willful misconduct or breach of contract.** 

If the Associate is a joint venture or consortium, all concerned parties shall be jointly and severally bound to the TPCODL for the fulfillment of the provisions of the Contract. The consortium or the joint venture shall designate one party as their leader, who will be the coordinator between the parties and TPCODL. The constituents & leader of the consortium or joint venture shall not be changed without the prior consent of TPCODL.

TPCODL shall have no liability or any special, incidental, indirect or consequential Damages for any loss of Business Contracts, revenues or other financial loss arising out of this Contract.

## **19.2 Limitation of Liability**

The total liability of Associate against any contract shall be limited to the Total All Inclusive Contract Value.

#### 20.0 FORCE MAJEURE

Force Majeure applies if the performance by either Party ("the Affected Party") of its obligations under Contract is materially and adversely affected.

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"Force Majeure" shall mean any event or circumstance or combination of events or circumstances referred below and their consequences that wholly or partly prevents or unavoidably delays any Party in the performance of its obligations under this Agreement, but only and to the extent that such events and circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided even if the Affected Party had taken reasonable care:

- Act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, embargo, blockade, revolution, riot, bombs, religious strife or civil commotion, etc.
- Politically motivated sabotage, or terrorism, etc.
- Action or Act of Government or Governmental agency for which remedy is beyond the control of the affected parties.
- Any act of God.

Note: Causes like power breakdown/ shortages/fire/strikes, accidents etc. do not fall under Force Majeure.

Time being the essence of the Contract, if either party is prevented from the performance of its obligations in whole or in part due to an event of Force Majeure, then provided Notice of happening of any event by the Affected Party is given to the other party within seven (7) days from the date of occurrence of such event, which DIRECTLY has impact on works and submitted details and quantum of resulting effect, but at the same time had made all possible efforts to mitigate and overcome effects thereof, the Affected Party's performance under this Contract shall be suspended until such event ceases and the Scheduled Completion shall be delayed accordingly.

If Force Majeure event(s) continue for a period of more than three months, the parties shall hold consultation to discuss the further course of action.

Neither party shall be considered to be in default or in breach of its obligation under the Contract to the extent that performance of such obligation by either party is prevented by any circumstances of Force Majeure which arise after effective date of Contract.

Neither party can claim any compensation from the other party on account of Force Majeure.

# 21.0 SUSPENSION OF CONTRACT

# 21.1 Suspension for Convenience

TPCODL may, at any time and at its sole option, suspend execution of all or any portions of the schedule of items of contract to be supplied/work to executed by Associate under the contract by providing to the Associate at least two business days written notice for contracts having contract completion period less than sixty days and at least seven business day notice for all other contracts.

Upon receipt of any such notice, the Associate shall respond as follows as applicable as per contract construction.

 Immediately discontinue further supply of material/goods specified in the suspension notice for supply contracts

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- Immediately discontinue further service/work and supply of materials of those services/materials/work specified in the suspension notice for service /composite contract
- Promptly make every reasonable effort to obtain suspension, upon terms satisfactory to TPCODL, of all orders, outsourcing arrangements, and rental Contracts to the extent that they relate to performance of the portion of Work suspended by the notice.
- Protect and maintain the portion of the service/Work already completed, including the portion of the Work suspended hereunder, unless otherwise specifically stated in the notice.
- Continue delivering/carrying out the supply/service/work items as per contract conditions, which do not fall under purview of the suspension notice.

On receipt of resumption notice from TPCODL, the Associate shall resume execution of contract as specified in the resumption notice, within the time frame specified in the resumption notice.

## 21.2 Suspension for Breach of Contract conditions

TPCODL shall suspend execution of whole/or part thereof the contract till such time Associate complies with the conditions stipulated under section clause 22 for breach/default of contract conditions.

## 21.3 Compensation in lieu of Suspension

If the suspension of the contract in whole or in part is for convenience of TPCODL and not due to any breach of contract conditions by the associate, TPCODL at its discretion shall consider compensating all reasonable additional costs incurred by Associate in lieu of suspension of whole or part of contract, on representation of the Associate providing justified estimates of such additional costs and such estimates are found acceptable and approved by competent authority of TPCODL.

If the suspension of contract in whole or part thereof is due to breach of contract conditions (refer clause 24.3) by the Associate, Associate shall not be entitled for any compensation for any cost incurred in lieu of suspension of whole or part of contract and also shall be liable for compensating all the losses arising to TPCODL in lieu of suspension of contract. Resumption notice shall be subject to the Associate taking corrective action for the breach of contract conditions within the time frame and as per the terms specified in the suspension notice.

## 22.0 TERMINATION OF CONTRACTS

## 22.1 Termination for Default/Breach of Contract

The contract / PO shall be subject to termination by TPCODL in case of breach of the contract by the Associate which shall include but not be limited to the following:

- a. Withdrawal or intimation by the Associate of its intent to withdraw or surrender the execution / completion of the contracted work /PO or failure in ensuring adherence to any delivery schedules, in deviation of the contract/PO
- b. Refusal or neglect on the part of the Associate to supply material/equipment of quantity or quality as specified by TPCODL and within the timeframe as specified in the contract

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document or refusal or neglect to execute the services/work in terms of the agreed standards of quantity or quality and/or within the timeframe specified in the contract/PO.

- c. Failure in any respect to perform any portion of the Work contracted with promptness, diligence, or in accordance with the terms of the contract.
- d. Failure to furnish guarantees as specified and /or failure to comply with the terms thereof.
- e. Failure to furnish such relevant documents or information within the time specified which may be necessary for due execution / completion of the works and documentation.
- f. Liquidation, bankruptcy either voluntary or involuntary OR entering into any composition or compromise with its creditors, or Insolvency.
- g. In case any reasonable information has been received by TPCODL that Associate has adopted/ or attempted to adopt any unethical conduct, action in award of the contract /PO or at any time thereafter.
- h. Failure to comply with applicable statutory provisions as contained in the contract or failure to comply with the applicable laws.
- i. Failure to comply with safety regulations/clauses stipulated in the contract or as may be generally instructed by TPCODL.

If the default or breach as specified under clause 22 (except sub clause g thereof) be committed by the Associate for the first time, TPCODL shall issue, along the with notice of default or breach, a warning notice instructing the associate to take remedial/corrective action within the time frame stipulated in the warning notice and not to repeat the same in future. The timeframe for corrective action by the associate shall be specific to the nature of breach of contract and the same shall not be objected to by the Associate. If the Associate fails to comply with the instructions in the warning notice or in taking corrective action to the satisfaction of TPCODL then TPCODL may terminate the entire or part of contract at its discretion by issuing termination notice without incurring any liability on this ground.

In case the contract is terminated for any breach of the nature specified in clause 24 g stated above, TPCODL shall have the right to terminate all the contracts TPCODL is having with the Associate by issuing termination notice which shall be without prejudice to the other rights of TPCODL available to it under law.

Without prejudice to its right to terminate for breach of contract, TPCODL may, without assigning any reason, terminate the Contract in whole or in part at any time at its discretion while the contract is in force by serving a written notice of two weeks to the Associate.

In the event of TPCODL having proceeded with termination of the contract the associate shall comply and proceed further in the following manner:

- a. Associate shall discontinue the supply, on the expiry of the said period of two weeks.
- b. Associate shall ensure that no further steps are being taken towards discharge of the obligations, terms and conditions as contained in the contract/PO. This shall include initiation of actions not limited to discontinuation of other allied and associated

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arrangements which the associate might have entered into with third parties for due discharge of its obligations under the contract with TPCODL.

- c. The Associate shall perform thereafter such tasks as may be necessary to preserve and protect the terminated portion of the material/service/work in progress and the materials and equipment at TPCODL sites or in transit thereto. However the associate shall continue to fulfill its contractual obligations with regard to the part of contract not terminated.
- d. It shall be open for TPCODL to conduct a joint assessment with the associate of the material ,supplies, equipment ,works or in general as to the subject matter of the contract in regard to which the associate claims having completed its obligations before or during such termination.
- e. It shall be open to TPCODL to seek invocation of the performance bank guarantee or any other guarantee or other security deposit by whatever name called submitted by the associate, which shall not be objected to or protested against by the associate.

In case of termination of the contract the parties agree to be governed inter alia by the following:

- a. In case TPCODL exercises its right of termination as stated above the associate shall not dispute or object to the same.
- b. The Associate shall be entitled to receive and claim only such payments OR sums of money from TPCODL as may be found payable to it in regard to works executed by it under the terms of the contract and no other claim of any nature whatsoever shall be made by the Associate.
- c. All such provisions which the parties have agreed to survive and prevail even after termination of the contract shall remain effective despite the termination.

In the event of such termination, TPCODL may finish the Work by whatever method it may deem expedient, including the hiring of services and /or purchase of material equipment from such third parties as TPCODL may deem fit or may itself provide any labor or materials and perform any part of the Work. The associate undertakes to bear the incremental costs if any paid by TPCODL in such a case attributable to failure on the part of the associate. The Associate in such a case shall not be entitled to receive any further payments and any sums found payable to it may be adjusted by TPCODL against the amount recoverable from him on this ground. The same shall be without prejudice to other rights available to TPCODL under law against the associate.

Upon the termination of any of the contract due to occurrence of any circumstances provided in clauses stated above and constituting repeated breach or misconduct, TPCODL shall be entitled to bar the associates its agents, affiliates from undertaking any negotiation / tendering, bidding, participation activities concerning TPCODL for a period of two years from date of such termination. The same shall be without prejudice to other rights available to TPCODL.

#### 22.2 Termination for convenience of Associate

Associate at its convenience may request for termination of contract, clearly assigning the reason for such request. TPCODL has full right to accept, reject or partially accept such request.

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This convenience will be available to associate only after one year from the contract effective date. For this purpose, associate will provide a notice period of 90 days to TPCODL, Associate will have to pay TPCODL a 'termination convenience fee' equivalent to 5% of unexecuted contract value.

### 22.3 Termination for Convenience of TPCODL

TPCODL at its sole discretion may terminate the contract by giving 30 days prior notice in writing or through email to the Associate. TPCODL shall pay the Associate for all the supplies/ services rendered till the actual date of contract termination against submission of invoice by the Associate to that effect.

#### 23.0 DISPUTE RESOLUTION & ARBITRATION

In case of any dispute or difference the parties shall endeavour to resolve the same through conciliatory and amicable measures within 15 Days failing which the matter may be referred by either party for resolution by the sole arbitrator to be appointed mutually by both the parties. The arbitral proceedings shall be conducted in accordance with Arbitration and Conciliation Act 1996 and the place of arbitration shall be Bhubaneswar. The language to be used at proceedings shall be English and the award of the arbitrator shall be final and binding on the parties. The parties shall bear their respective costs of arbitration. The associate shall continue to discharge its obligations towards due performance of the works as per the terms of the contract during the arbitrator. Further, TPCODL shall continue making such payments as may be found due and payable to the associate for such works.

#### 24.0 Governing laws and jurisdiction

The parties shall be subject to the jurisdiction of the courts of law in Bhubaneswar and any matter arising here from shall be subject to applicable law in force in India.

## 25.0 ATTRIBUTES OF GCC

## 25.1 Cancellation

The Company reserves the right to cancel, add, delete at its sole discretion, all or any terms of this GCC or any contract, order or terms agreed between the parties in pursuance without assigning any reasons and without any compensation to the Associates.

#### 25.2 Severability

If any portion of this GCC is held to be void, invalid, or otherwise unenforceable, in whole or part, the remaining portions of this GCC shall remain in effect.

#### 25.3 Order of Priority

In case of any discrepancies between the stipulations in General Conditions of the Contract (GCC) and Special Conditions of Contract (SCC), the GCC shall stand superseded by the SCC to the extent stipulated hereinabove while balance portion of respective clauses of GCC shall continue to be applicable.

#### **26.0 INSURANCE**

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The Associate shall arrange accident insurance policy for his foreign experts/specialists/personnel deputed to Site and Associate's/his sub-Associates' manufacturing works as well as for his Indian engineers and supervisory staff. The Associate shall also take out for his Indian workmen, where applicable, a separate policy as required under Workmen's Compensation Act.

Associates shall be responsible to suitably insure their entire work-force (to the extent of at least meeting requirements under Workmen Compensation Act) Tools, Plant, Third party liability at the project site, All Risk comprehensive insurance for the entire works (insurance for free issue items will be in TPCODL scope) for total contract value or any other such risks during execution of works, till the works are handed over to the company, in consultation with TPCODL and shall submit copies of such insurances to the Engineer-in-Charge for review / acceptance before commencing the work. Engineer-in-charge must ensure compliance to insurance requirement by Associate before commencement of works. TPCODL shall stand fully indemnified in this respect.

#### 27.0 ERRORS AND OMISSIONS

The Associate shall be responsible for all discrepancies, errors and omissions in the drawings, documents or other information submitted by him, irrespective of whether these have been approved, reviewed or otherwise accepted by the TPCODL or not. However any error in design/drawing arising out of any incorrect data/written information from TPCODL will not be considered as error and omissions on part of the Associate.

#### 28.0 TRANSFER OF TITLES

The title of ownership and property to all equipment, installations, erections, constructions materials, drawings & documents shall pass to the TPCODL is after commissioning and complete handing over-taking over.

However, such passing of title of ownership and property to the TPCODL shall not in any way absolve, dilute or diminish the responsibility and obligations of the Associate under this Contract including loss or damages and all risks, which shall vest with the Associate.

The Associate shall take all corrective measures arising out of discrepancies, errors and omissions in drawings and other information within the time schedule and without extra cost to the TPCODL.

The Associate shall also be responsible for any delay and/or extra cost if any, in carrying out engineering, and site works by other agencies arising out of discrepancies, errors and omissions stated in as well as of any late revision/s of drawings and information submitted by the Associate.

#### 29.0 SUGGESTIONS & FEEDBACK

We welcome all our Business Associates to write to us about their experience with TPCODL; be it our Company, our services or our people. Each and every concern, issue, query and suggestion from you will help us to become a better company to work with and shall help us develop a strong bonding of trust and a long term relationship with you.

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You may send your feedback by filling up our Business Associate Feedback Form enclosed herewith as *Annexure-I*. You can also log on to our website <u>www.tpcentralodisha.com</u> to provide your feedback according to the guidelines mentioned below:

#### **30.0 CONTACT POINTS**

In case Business Associate needs information with respect to payments or has any grievances, same may be lodged by log on to our website www.tpcentralodisha.com.

#### 31.0 LIST OF ANNEXURES

S. No.	Subject	Annexure
1.	Performa for Bid Security Bank Guarantee	A
3.	Performa for Performance Bank Guarantee (CP cum EP)	В
4.	Performa for No Demand Certificate by Associate	С
5.	Performa for Indemnification on Statutory Compliance	D
6.	Performa For Application For Issuance of Consolidated TDS Certificate	E
7.	HR Service Level Agreement	F
8.	Under taking for competence of workmen	G
9.	Business Associate Feedback Form	Н
10.	Acceptance Form For Participation In Reverse Auction Event	I
11.	Form for RTGS Payment	J
12.	Contractor Safety Management System	К
13.	Vendor Appraisal Form	L
Ś	AFRAN	

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## ANNEXURE-A

### PROFORMA FOR BID SECURITY BANK GUARANTEE

#### **TP Central Odisha Distribution Limited**

#### Bhubaneswar

KNOW ALL men by these presents we (Name of the Bank) ...... of (Name of the Country) ...... having our registered office at ...... (hereinafter called "the BANK) are bound unto TP Central Odisha Distribution Limited (TPCODL) in the sum of ..... for which payment well and truly to be made to the TPCODL the Bank binds himself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank this ...... day of ...... 20 .......

The CONDITIONS of this obligation are:

i) If the Bidder withdraws his Bid during the period of bid validity specified in the Proforma of Bid

or

ii) If the Bidder having been notified of the acceptance of his Bid by the TPCODL during the period of bid validity fails or refuses to furnish the Contract Performance Bank Guarantee, in accordance with the Instructions to Bidders.

We undertake to pay the TPCODL upto the above amount upon receipt of its first written demand, provided that in its demand the TPCODL will note that amount claimed by it is due to it owing to the occurrence of one or both conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force upto and including the date (No of days as mentioned in tender enquiry) days after the closing date of submission of bids as stated in the Invitation to Bid or as extended by you at any time prior to this date, notice of which extension to the Bank being hereby waived, and any demand in respect thereof should reach the Bank not later than the above date.

DATE	SIGNATURE OF THE BANK
WITNESS	SEAL
(Signature, Name & Address)	

(At least 2 witnesses)

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## ANNEXURE- B

## PROFORMA FOR PERFORMANCE BANK GUARANTEE (CP cum EP)

### (On Rs.100/- Stamp Paper)

#### Note:

(a) Format shall be followed in toto

(b) Claim period of one month must be kept up

(c) The guarantee to be accompanied by the covering letter from the bank confirming the signature to the guarantee

\_\_\_\_\_

#### **TP Central Odisha Distribution Limited**

Bhubaneswar

CP cum EP BG No.....

Order/Contract No.....dated.....

- 1. You have entered into a Contract No with M/s. (hereinafter referred to as "the Vendor") for the supply erection 1 civil work of cum (hereinafter referred to as" the said Equipment") for the price and on the terms and conditions contained in the said contract.
- 2. In accordance with the terms of the said contract, "the Vendor" agreed to furnish you with an irrevocable, unconditional and acceptable bank guarantee for 10% of the value of contract and to be valid till the end of Guarantee period plus one month towards "Contract cum Equipment performance". For this purpose you have agreed to accept the guarantee.
- 4. You shall have the right to file / make your claim on us under the guarantee for a **further period of one month** from the date of expiry.
- 5. This guarantee shall not be revoked without express consent and shall not be affected by your granting time or any other indulgence to "the Vendor", which shall include but not be limited to, postponement from time to time of the exercise the same in you or any right which you may have against "the Vendor" and to exercise the same in any covenant contained or implied in the said contract or any other course or remedy or security available to you, and our Bank shall not be released from its obligations under this guarantee by your exercising

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any of your rights with reference to matters aforesaid or any of them or by reasons of any other act or forbearance or other acts of omission or commission on your part or any other indulgence shown by you or by any other matter or thing whatsoever which under the law would, but for this provision have the effect of relieving our bank from its obligation under this guarantee.

- 6. We also agree that you shall be entitled at your option to enforce this guarantee against our bank as a principal debtor, in the first instance, notwithstanding any other security or guarantee that you may have in relation to "the Vendor's" liabilities in respect of the premises
- 7. This guarantee shall not be affected by any change in the constitution of our Bank or "the Vendor" or for any other reason whatsoever.
- 8. Any claim / extension under the guarantee can be lodge-able at outstation banks or at Bhubaneswar branch and claim will also be payable at Bhubaneswar Branch (to be confirmed by Bhubaneswar Branch by a letter to that effect in case BG is from the branch outside Bhubaneswar)
- Notwithstanding anything herein contained, our liability under this guarantee is limited to Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_\_ only and the guarantee will remain in force upto and including \_\_\_\_\_\_ (Date) and shall be extended from time to time for such period or period as may be desired by "the Vendor".
- 10. Unless a demand or claim under this guarantee is received by us in writing within one months from \_\_\_\_\_\_ (expiry date) i.e. on or before \_\_\_\_\_\_ (claim period end date), we shall be discharged from all liabilities under this guarantee thereafter.

Dated at	this	day of	200
<u>Witness</u>	G		
7		Bank's rub	ber stamp
1.		Banks full	address
AV.		Designatio	n of Signatory
2.		Bank officia	

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### ANNEXURE-C

### PROFORMA FOR "NO DEMAND CERTIFICATE" BY ASSOCIATE

(On Company's Letter head or with Company Seal)

(To be submitted by the Associate to TPCODL Accounts Department at the time of receipt of full and final payment)

## (Certificate No. CCP/002)

Name of the Project

Order/ Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

We, M/s.\_\_\_\_\_ (Associate) do hereby acknowledge and confirm that we have received the full and final payment due and payable to us from TPCODL, in respect of our aforesaid Order No \_\_\_\_\_\_ dated\_\_\_\_\_ including amendments, if any, issued by TPCODL to our entire satisfaction and we further confirm that we have no claim whatsoever pending with TPCODL under the said contract / W.O.

Notwithstanding any protest recorded by us in any correspondence, documents, measurement books and / or final bills etc., we waive all our rights to lodge any claim or protest in future under this contract.

We are issuing this "NO DEMAND CERTIFICATE" in favour of TPCODL, with full knowledge and with our free consent without any undue influence, misrepresentation, coercion etc.

Dated

Signature

Place

Name

Designation

(Company Seal)

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### <u>ANNEXURE – D</u>

#### PROFORMA FOR "INDEMNIFICATION ON STATUTORY COMPLIANCES"

(To be submitted by the successful Bidder within seven days of award of work)

#### (Certificate No. CCP/001)

Name of the Project

Letter of Award / Contract No.

Dated

Name of the Associate

Scheme No. / Job No.

By this confirmation we,

(Associate) are formally bound to M/s. TPCODL towards any sum which may be imposed, levied or hereinafter recovered by the Provident Fund Organization under the provisions of the Employees of the Provident Fund and Miscellaneous Provisions Act 1952 in respect of employees employed by us.

We well and truly bind ourselves and our heirs executors administrators and representatives jointly severely and respectively for the above payment only to be paid to M/s. TPCODL.

AND WHEREAS we, \_\_\_\_\_\_ (Associate) is making compliance of the Employees Provident Fund and Miscellaneous Provisions Act 1952, have entered into the above written bond for the indemnity to M/s. TPCODL against all losses from the acts or default of the said Associate in respect of compliance of the Provident Fund Act.

Similarly we hereby confirm that we have complied with all statutory and local laws and nothing is outstanding with regard to Local Sales Tax, Labour Laws, Local Municipal dues, Electricity dues etc. We have entered into the above written bond for the indemnity to M/s. TPCODL against all losses from the acts or default of the said Associate in respect of compliance of the Local Sales Tax Laws, Local Laws, Labour Laws, Local Municipal Dues, Electricity dues etc.

NOW THE CONDITION, of the above written bond is as such that if the Associate during the period of this contract commits any default or fails to make payment of Contributions in respect of his employees to the Employees Provident Fund Organization, he shall indemnify the Principal Employer M/s. TPCODL from all and every loss and damage caused to them from any act, omissions or negligence of the said Associate in respect of compliances under the Employees Provident Fund and Miscellaneous Provisions Act, 1952.

IN WITNESS to the above written bond we have here to set our hands, with our free consent.

Place (Company Seal)

Dated

Signature Name Designation

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## ANNEXURE-E

## PROFORMA FOR APPLICATION FOR ISSUANCE OF CONSOLIDATED TDS CERTIFICATE

To be printed on the letterhead

To,

## TP Central Odisha Distribution Limited,

Bhubaneswar

### Sub: Application for issuance of Consolidated TDS Certificate for the FY

Dear Sir,

I / we hereby request / authorize you to issue me / us a consolidate TDS Certificate for the financial year \_\_\_\_\_\_ against tax deducted at source by you from my / our payments / bills during the said year from time to time under Chapter XVII – B of the Income Tax Act, 1961.

For and on behalf of

Signature

Name

Address

Contact No. (Land Line)

(Mobile)

PAN #

Assessing authority

# ATTACH THE COPY OF PAN CARD

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## ANNEXURE - F

## SERVICE LEVEL AGREEMENT

(To be adhered to by Business Associates (BAs) in TPCODL on Human Resource Issues)

1.0 The following shall be adhered to by the Business Associates during his / its association with TPCODL:

## Shall Abide by TPCODL Core Values:

- a) <u>Integrity</u> We must conduct our business fairly, with honesty and transparency. Everything we do must stand the test of public scrutiny.
- b) <u>Understanding</u> We must be caring, show respect, compassion and humanity to our colleagues and customers and always work for the benefit of the communities we serve.
- c) <u>Excellence</u> We must constantly strive to achieve the highest possible standards in our day to day work and in the quality of services we provide.
- d) <u>Unity</u> We must work cohesively with our colleagues across the group and with our customers and partners to build strong relationships based on tolerance, understanding and mutual co-operation.
- e) <u>Responsibility</u> We must continue to be responsible and sensitive to the communities and environments in which we work and always ensuring that what comes from the people; goes back to the people many times over.
- f) <u>Agility-</u> We must work in a speedy and responsive manner and be proactive and innovative in our approach.
- 2.0 The Business Associate / his manager / supervisor who is responsible for managing the project site / performance contract etc. in TPCODL would also ensure adherence of these values by his employees / persons deployed by him in connection with his works undertaken in TPCODL.

# 3.0 TPCODL is a signatory to the United Nation Global Compact as an integral part of its Governance principles / business. The Business Associates are required to:

- a) Support and respect the protection of human rights and make sure that they are not complicit in human right abuses.
- b) Respect freedom of association and effective recognition of the right to collective bargaining.
- c) Not to resort to any form of forced and compulsory labour.
- d) Shall ensure abolition of child labour in his area of work.
- e) There is no discrimination in respect of employment and occupation in respect of his employees.
- f) Support precautionary approach to environmental challenges.
- g) Promote greater environmental responsibility by himself and his employees in his areas of work.
- h) Deploy and defuse environmental friendly technologies while carrying out the works.
- i) Work against corruptions in all its form including extortion and bribery by himself and his employees.

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# 4.0 The Business Associates are required to adhere to all applicable Labour Laws with special reference to the following:

- a) No person below the age of 18 years and no child labour will be engaged directly or indirectly for executing the work connected with the business of TPCODL.
- b) Minimum wages along with other statutory dues like PF, ESI, etc. as applicable to the workers shall be made within the prescribed period of 7<sup>th</sup> / 10<sup>th</sup> day of the following month.
- c) Deduction / deposit / record keeping and all other requirements under Employees PF Act 1952, Employees State Insurance Act 1948 and other applicable acts (if any) shall be adhered to.
- d) Only statutorily authorized deductions (if any) shall be made in accordance with the relevant statutes.
- e) All the provisions of Contract Labour (R&A) Act 1970 shall be complied with in respect of the workers engaged for TPCODL work. The work will be commenced only after completing necessary formalities for obtaining Labour License (if applicable).
- f) Necessary registers / records, filing of returns etc. shall be maintained for verification by Statutory / TPCODL authorities.
- g) Payment of wages shall be made only in presence of and with certification of authorized representative of TPCODL or shall be made in the form of cheque / bank transfer to the employee.
- h) During the period of contract, the Business Associate will arrange for deployment of his supervisor / manager for total supervision and control of the work and their manpower. All the activities related to their manpower e.g. attendance, leave, wage disbursement etc. will be done under the supervision & control of Business Associates, While adhering to the prescribed standard / norms of production / productivity & quality. During execution of the work, Business Associate shall engage only such qualified / skilled manpower as may be envisaged / required for ensuring level of production / service into the contract / work order.
- i) Clearances as follows shall be obtained from IR & Welfare Group:
  - a. Clearance for commencement (before start of the work).
  - b. No Objection Certificate (after completion / before final settlement).
  - c. Copies of PF / ESI Challans shall be deposited with IR & Welfare Group every month
- j) The Business Associate shall indemnify TPCODL from any liabilities under applicable Labour Statutes.
- k) The Business Associate shall ensure safety and health of his employees and shall also maintain hygienic working environment / condition in his area of work.

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- I) The Business Associate and his employee shall abide by Laws of Land and shall not violate any applicable provisions.
- m) The Business Associate appreciates with and acquiesces to the right of TPCODL as principal employer to fulfil any of his legal obligations, if he fails to do so under applicable labour laws and deduct the same from his running bills / final payments / enchasing security deposit / Bank Guarantee as the case may be. If there is any further shortfall TPCODL has the right to recover the same from the Business Associate.
- n) The Business Associate ensures that person employed by him adhere to the moral and legal conduct and shall not violate any standard conduct envisaged in the premise of TPCODL by all such as, Transparency, Safety, Discipline, Integrity etc. The Business Associate or his employees should refrain from corrupt practices, giving or taking bribe in connection with any TPCODL business.
- 5.0 The <u>'Statutory Compliance Enforcement System'</u> in TPCODL is detailed below for adherence by all concerned. Corporate IR & Welfare Group will be the process owner for implementation of the system with the help of concerned Engineer I/c or Officer I/c.
  - a) Statutory Compliance being a professed value in TPCODL Code of Conduct, the concerned Engineer / Officer in charges are requested to adhere to the provisions and advise respective Business Associates in their domain to comply in letter and spirit.
  - b) Immediately after issuance of letter of intent, the authorized representative of the Business Associate will report to Corporate IR & Welfare group for completion of statutory requirements.
  - c) Normally, the work will be started only after 'Clearance for Commencement of Work (CCW) is issued by IR & W group to the Business associate. However in exceptional exigencies in engineer I/c / Officer I/c may direct the Business Associate to start the work and inform IR & W group about the same. Statutory requirements in this case may be completed parallely.
  - d) First monthly bill will be released only after producing CCW to the finance department. Similarly closure of work and final settlement will be affected after issuance of no objection certificate from IR & W group.

### 6.0 <u>Requirements for 'Clearance for Commencement of Work' (CCW):</u>

- a) Submission of filled up Form 'A' for database (Annexure-1).
- b) Copy of PF Code allocation letter.
- c) Copy of ESI Code allocation letter.
- d) Submission of duly filled up Form IV CL(R&A) act (In case more than or equals to 20 workers during the period of contract).
- e) Submission of duly filled up Form VI A (Notice of Commencement).
- f) Copy of insurance cover note under WC Act 1923 (if applicable).
- g) Copy of Contract Agreement.
- h) Copy of indemnity bond (if applicable).

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i) Affidavit with regard to payment of wages through cheque / bank transfer only.

#### 7.0 Requirements during execution of work:

- a) Copy of receipt of application for license / license (if applicable).
- b) Copy of PF Challan (latest by 26<sup>th</sup> day of every Month).
- c) Copy of ESI Challan (latest by 26<sup>th</sup> day of every Month).
- d) Copy of Wage disbursement sheet / Bank statement.
- e) Filing / Maintenance of all statutory registers / reports / returns for inspection by Statutory/ TPCODL authorities.
- f) Certification of wage disbursement by authorized representative of TPCODL.
- g) Copy of 'Labour Welfare Fund' deposit certificate / Challan.
- h) Insuring safe working practices at the work place.

## 8.0 Requirements for 'No Objection Certificate' (NOC) for closure of work:

- a) Submission of duly filled up Form VI A (Notice of Completion).
- b) Copy of Half yearly / Annual return for ESI / PF / CL(R&A).
- c) Consolidated copy of wage sheet of last month indicating full & final settlement of all dues like retrenchment benefit, bonus, leave encashment etc. Copy of individual declaration by employees in Form X regarding termination of employment.
- d) Confirmation certificate regarding filling up of form for transfer / withdrawal of PF by the concerned workers.

# In case any of the above are deviated / not complied with the Letter of Award/Order shall be liable to be withdrawn / cancelled.

#### Enclosure:

- 1) Form A
- 2) Form X
- 3) Form XI
- 4) Form VI A
- 5) Form XXIV

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# FORM (A)

# [To be submitted by the Business Associate to the Principal Employer within a week from LoA issuance]

## A. Details of the Agency

1. 2.	Name of Agency : Nature of work :	
3.	Local Address with Ph. No. :	
	(With Father's name) :	
4.	Permanent Address (Full) :	
5.	PF code no. & Place :	
6.	ESI Code no. & Place	
7.	Name and address of :	
	Sub-contractor (if any)	
<u>B.</u>	etails of Work	
8. 9.	Name of work (as specified in LOI/LOA) : LOI/LOA Nos. & Dates :	
10.	Period of contract (Specify Dates) :	
	[Including Extension period, if any] :	
11.	Work Area [Department / Location] :	
12.	Name / Cell no. of Officer I/c :	
13.	Maximum No. of workers and staff to be engaged on any day during the year.	
	ipervisory Staff : orkers :	
14.	Do you have any other contract in TPCODL : Yes/No	

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If yes, furnish details:

#### 15. Details of Workmen's compensation Policy, if applicable

Name	of	Insurance	Company
		No	Number of persons
covered	Period of coverage:	From To	

If no, I hereby undertake the liability arising out of Workmen's Compensation Act and Rules made there under.

#### C. Details of workers to be engaged

#### No. of Workers

S. No.	Unskilled*	Semi-skilled*	Skilled*	Clerical / Supervisory

#### \* Number to be indicated

I/We shall fulfil all obligations arising from and under all relevant law in force from time to time. I/We undertake to keep the TPCODL indemnified against any loss or liability arising out of failure of my / our abiding the relevant laws.

The name of my / our representatives is ..... to enter the TPCODL Premises on my behalf.

Date:

(Signature of the Business Associate

or his Authorized Representative)

This Business Associate is / will be engaged in TPCODL.

(Signature and seal of

Officer I/c of the Work)

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# <u>Form X</u>

# <u>Undertaking</u>

	Ι		hereby undertake	that all the
	dues in respect of my employment	with M/s		for
	the period of	to		have
	been settled and final payments inclu	uding retrenchment bene	fit have been made to	me in full.
			A	
			C)	
		(	)`	)
		A B		
Date:				
Dute.		0//		
	G			
	18-1			
	GV.			

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# Form XI

# <u>Undertaking</u>

With M/s		contract job a	awarded by M/s T		)disha Distribut	ion Limited to vide
worl		- No	0			
I	ed	on bel		ł	nereby undertal	ke:
1.	that the dues in r payable as per th i. wages/ sa ii. PF & ESI	espect of the v e provisions of Ilary	workmen/ employe f relevant statute p ar Labour Fund	e(s) engage		
2.	has been paid	/settled in full a	and no amount/ co aim is raised by 1	5		o. any dues /
	payments, M/s _ own and	such	liability will	be	will settle the borne	same on its by M/s
3.	That M/s TPCODL from an	y future liability	y i.r.o. any statutor	y obligation		idemnify M/s iid contract.
Date	SUMPR				zed Signatory	)

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# FORM- VI A

# Notice for Commencement /Completion of contract work

							~
I/We, Sh. / M/s _						(Na	me and
Address of	the Contractor	) hereby	intimate	that	the	contract	work
			(n	ame of	work) ir	n establish	ment of
the			(name	e and	address	of the F	Principal
Employer)	for		wh	ich	)		License
No			date	:d			_has
been issued to	me/us by the Lic	ensing Office	er C			(name	of the
Headquarters),	has been	commenced	/ com	npleted	with	effect	from
	date / or	n date.					
	60						
		Signature of	Contractor				
GENE				v	/ith Offi	ce Seal	
nspector							

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### FORM XXIV

### [See Rule 82(1)]

### Return to be sent by the Contractor to the licensing Officer (in duplicate)

Half -Yearly Ending\_\_\_\_\_

- 1. Name and address of the Contractor
- 2. Name and address of the Establishment
- 3. Name and address of the Principal Employer
- 4. Duration of Contract: From \_\_\_\_\_\_to \_\_\_\_\_to \_\_\_\_\_
- 5. No. of days during the half year on which
  - (a) the establishment of the principal employer had worked
  - (b) the contractor's establishment had worked
- 6. Maximum No. of contract labour employed on any day during the half –year:

ſ	Men	Women	Children	Total
			Q	

- 7. (i) Daily hours of work and spread over
  - (ii) (a) whether weekly holiday observed and on what day
    - (b) if so, whether it was paid for
  - (iii) No. of man hours of overtime worked
- 8. No. of man days worked by

Men	Women	Children	Total

9. Amount of wages paid

Men	Women	Children	Total

10. Amount of deductions from wages, if any

Men	Women	Children	Total

Whether the following have been provided -

Rev. No         0         Page 47 of 98           (i)         Canteen         :	Doc. Title	<b>GENERAL CONDITIONS OF CONTRACT - SERVICI</b>	EORDERS
<pre>(ii) Rest rooms :</pre>	Rev. No	0	Page 47 of 98
(iv) Crèches : (v) First Aid : Place Date		s :	
(v) First Aid : Signature of contracto	(iii) Drinking w	ater :	
Place Date	(iv) Crèches	:	$\boldsymbol{\wedge}$
Place Date	(v) First Aid	:	
Date			Signature of contractor
ADITIONS OF CU	Place		
ADITIONS OF CU	Date		
		RAL	

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## <u>ANNEXURE – G</u>

## UNDERTAKING FOR COMPETENCE OF WORKMEN

Name of Associate :			
Tender No. :			
Item :			RA
With reference to the tender me	entioned above, I/W	e	
hereby undertake that	the workmen/	employee(s)	engaged by M/s
	for the job against	said tender sha	all be competent in all
respect, commensurate to the nat	ure of job.	50%	
Date:			)
	Au	uthorized Signatory	/
EP	Fc	or M/s	
GER.	Se	al	

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#### ANNEXURE-H

#### **BUSINESS ASSOCIATE FEEDBACK FORM**

With an objective to improve our internal processes and systems, and serve you better, we solicit your valuable feedback & suggestions. It is estimated that it will take about 10 minutes to complete this survey. We assure you that your feedback shall be kept confidential. Please send the duly filled feedback form in the "TPCODL addressed - attached envelop"

You are associated with us as □ OEMs □ Service Contractor □ Material Suppliers □ Material & Manpower Supplier
You are associated with us for □ Less than 1 year □ More than 1 year but less than 3 years □ More than 3 years
Your office is located at ☐ Bhubaneswar ☐ Within 200 kms from Bhubaneswar Bhubaneswar
Your nearly turnover with TPCODL □ Less than 25 Lacs □ 25 Lacs to 1 Crore □ More than 1 Cr.
Additional information
Your Name
Your Designation
Your Organization
Contact Nos.

We once again thank you for your participation in this survey. Please spare 10 minutes to give your feedback on following pages (Section A to E)

Email

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# <u>SECTION - A</u>

(Please  $\sqrt{}$  mark in the relevant box and give your remarks / suggestions / information for our improvement.).

		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
1	You receive all relevant queries / tenders from us in timely manner.						$\langle \langle \rangle$
2	We provide you enough lead time to respond to our queries / tenders.					0	
3	We provide you adequate support (drawings, documents, clarifications, briefing etc.) to enable you meet our requirements.				5	C	
4	All following elements of our contract / purchase order are rational :						
4.1	Scope of Work		$\bigcirc$				
4.2	Delivery / Execution Schedule	$\langle \langle \rangle$					
4.3	Payment Terms	5					
4.4	Liquidated Damages						
4.5	Performance Guarantee						
5	Our purchase orders / contracts are simple, specific & easy to understand						
6	TPCODL demonstrate willingness to be flexible in administration of Contract / Purchase Order						
7	We provide timely responses / clarifications to your queries						
<b>C</b>	TPCODL representative you						
8	interact / coordinate with is adequately empowered to support you in meeting contractual obligations						
9	TPCODL provide you all necessary infrastructure support for timely and quality completion of work (including AMC)						

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		1	2	3	4	5	
S. No.	Parameters	Do Not Agree	Slightly in Agreement	In Fair Agreement	Mostly in Agreement	Fully Agree	Remarks/ Suggestion
10	TPCODL Engineer-in-Charge timely certifies the jobs executed/ material supplied						
11	TPCODL Engineer-in-Charge efficiently supervises the job execution for timely completion of job						R
12	BIRD (Bill Inward Receipt Desk) initiative has improved payment disbursement process				(	Ő.	
13	Our approach for Inspection and Quality Assurance effective to expedite project completion?				$\langle \cdot \rangle$		
14	TPCODL never defaults on contractual terms				)		
15	In TPCODL Contracts closure is done within set time limit			5			
16	Our material receiving procedures are well defined and efficiently deployed to reduce mutual inconvenience	X	(0)				
17	Bank Guarantees are released in time bound manner	5					
18	Our processes related to payment / account settlement are effective.						
19	You get payments on time						
20	TPCODL Employees follow Ethical behavior						
Ċ	Ethical behavior						

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# SECTION - B

SECTION – B	(Please rate the following parameters on a scale of 1 to 5, where 1 - Minimum; 5
- Maximum)	

SN	Parameters	1	2	3	4	5	Remarks/ Suggestion
1	How do you rate courtesy/ empathy/ attitude level and warmth of TPCODL employees you interact with from following team?						S S
1.1	Project Engineering						.0.5
1.2	District / Zones						
1.3	Projects/HOG (TS &P)						
1.4	Inspection & Quality Assurance				C		
1.5	Stores			<		-	
1.6	Metering & Billing			$\mathbf{O}$			
1.7	Accounts / Finance		C	2			
1.8	Administration		0				
1.9	IT & Automation		$\mathcal{O}^{*}$				
2	How would you rate TPCODL in comparison to your other clients in terms of <b>fairness of treatment and</b> <b>transparency</b> with its Business Associates?						
3	How would you rate TPCODL in comparison to your other clients in terms of <b>processes and systems to</b> <b>manage partnership</b> with its Business Associates						
4	How would you rate TPCODL in comparison to your other clients in terms of <b>building long term &amp;</b> <b>mutually relations</b> hip with its Business Associates						

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# <u>SECTION – C</u>

Please  $\sqrt{}$  mark in the relevant box and give your remarks / suggestions / information for our improvement.

S. No.	Parameters	Certainly NO	Probably NO	Probably YES	Certainly YES	Remarks/ Suggestion
1	Based on your experience with TPCODL, would you like to continue your relationship with TPCODL?					
2	If someone asks you about TPCODL, would you talk "positively" about TPCODL?			(	-0	
3	Would you refer TPCODL name to others in your community, fraternity and society as a professional & dynamic organization?			5		

# SECTION - D

If we ask you to rate us on a scale of 1 to 10, how will you rate TPCODL, that truly represents your overall satisfaction with us (please tick appropriate box) –

1 2 3	4 5	6	7 8	9	10
G					
SERV					
GEN					

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# <u>SECTION – E</u>

# <u>Please $\sqrt{\text{mark in the relevant box and give your remarks / suggestions / information for our improvement.</u>}</u></u>$

<u>Please spare your thoughts for TPCODL's improvement in particular areas of weaknesses, particularly relating to some great practices, attitudes that you have seen elsewhere in Indian and International Organizations, which you recommend TPCODL to adopt. Please give your valuable salient recommendations.</u>

Please spare your thoughts for TPCODL's improvement in particular areas of major concerns for you. We also welcome your suggestions to adopt any best practices, altitudes that you have observed / experienced elsewhere in Indian/ International organization.

Recommendation	Please tick ( $\checkmark$ ) your top 5 expectations out of the following 10 points listed below -
(Please list down improvement you expect from TPCODL)	Timely payment
1	Flexibility in Contracts/PO
	Clarity in PO,s & Contracts
2	Timely response to quarries
	Timely certification of works executed
3	Clarity in Specs, drawings, other docs etc.
	Adequate information provided on website for tender notification, parties qualified etc.
4	Timely receipt of material at site for execution
	Performance Guarantee/EMD released in time
5	Inspection & quality assurance support for timely job completion

We thank you for your time and courtesy!!



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### ANNEXURE - I

#### ACCEPTANCE FORM FOR PARTICIPATION IN REVERSE AUCTION EVENT

#### (To be signed and stamped by the bidder prior to participation in the auction event)

In a bid to make our entire procurement process more fair and transparent, TPCODL intends to use the reverse auctions through SAP-SRM tool as an integral part of the entire tendering process. All the bidders who are found as technically qualified based on the tender requirements shall be eligible to participate in the reverse auction event.

# The following terms and conditions are deemed as accepted by the bidder on participation in the bid event:

- 1. TPCODL shall provide the user id and password to the authorized representative of the bidder. (Authorization Letter in lieu of the same shall be submitted along with the signed and stamped Acceptance Form).
- 2. TPCODL will make every effort to make the bid process transparent. However, the award decision by TPCODL would be final and binding on the supplier.
- 3. The bidder agrees to non-disclosure of trade information regarding the purchase, identity of TPCODL, bid process, bid technology, bid documentation and bid details.
- 4. The bidder is advised to understand the auto bid process to safeguard themselves against any possibility of non-participation in the auction event.
- 5. In case of bidding through Internet medium, bidders are further advised to ensure availability of the entire infrastructure as required at their end to participate in the auction event. Inability to bid due to telephone line glitch, internet response issues, software or hardware hangs, power failure or any other reason shall not be the responsibility of TPCODL.
- 6. In case of intranet medium, TPCODL shall provide the infrastructure to bidders. Further, TPCODL has sole discretion to extend or restart the auction event in case of any glitches in infrastructure observed which has restricted the bidders to submit the bids to ensure fair & transparent competitive bidding. In case an auction event is restarted, the best bid as already available in the system shall become the start price for the new auction.
- 7. In case the bidder fails to participate in the auction event due any reason whatsoever, it shall be presumed that the bidder has no further discounts to offer and the initial bid as submitted by the bidder as a part of the tender shall be considered as the bidder's final no regret offer. Any offline price bids received from a bidder in lieu of non-participation in the auction event shall be outrightly rejected by TPCODL.
- 8. The bidder shall be prepared with competitive price quotes on the day of the bidding event.
- 9. The prices as quoted by the bidder during the auction event shall be inclusive of all the applicable taxes, duties and levies and shall be FOR at TPCODL site.
- 10. The prices submitted by a bidder during the auction event shall be binding on the bidder.
- 11. No requests for time extension of the auction event shall be considered by TPCODL.
- 12. The original price bids of the bidders shall be reduced on pro-rata basis against each line item based on the final all inclusive prices offered during conclusion of the auction event for arriving at Contract amount.

#### Signature & Seal of the Bidder

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#### **ANNEXURE - J**

To,

DGM (Finance)

**TP Central Odisha Distribution Limited** Bhubaneswar

# Sub: e-Payments through National Electronic Fund Transfer (NEFT) OR Real Time **Gross Settlement System (RTGS)**

Dear Sir,

We request and authorize you to affect e-payment through NEFT/RTGS to our Bank Account as per the details given below:-

Vendor Code

Title of Account in the Bank

Account Type

(Please mention here whether account is Savings/Current/Cash Credit)

Bank Account Number	:		2												
Name & Address of Bank	:														
Bank Contact Person's Names	:														
Bank Tele Numbers with STD Code	:														
Bank Branch MICR Code	:														
GENE		(Plea This chec								·			-		
Bank Branch IFSC Code	:														
		(You	can	oh	tain	thia	fro	m h	ron	ch	wh	oro	VO		

(You can obtain this from branch where you have your account)

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2

2

Email Address of accounts person (to send payment information)

Name of the Authorized Signatory

Contact Person's Name Official Correspondence Address

We confirm that we will bear the charges, if any, levied by our bank for the credit of NEFT/RTGS amounts in our account. Any change in above furnished information shall be informed to TPCODL well in time at our own. Further, we kept TPCODL indemnified for any loss incurred due to wrong furnishing of above information.

Thanking you,

For \_\_\_\_\_

(Authorised Signatory)

(Signature with Rubber Stamp)

### **Certification from Bank:**

We confirm that we are enabled for receiving NEFT/RTGS credits and we further confirm that the account number (specify Bank a/c no.) of (Please mention here name of the account holder), the signature of the authorised signatory and the MICR and IFSC Code of our branch mentioned above are correct.

This also is certified that the above information is correct as per Bank record

(Manager's/ Officers Signature under Bank Stamp)

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# ANNEXURE - VIII

#### CONTRACTOR SAFETY MANAGEMENT SYSTEM

#### 1. OBJECTIVE

The objective of the Contractor Safety Management System is to lay down clear guidelines for all Business Associates (including their associates, staff and agents) which would facilitate them to observe all statutory rules and regulations, comply with applicable standards of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010 & (safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations,2011, TPCODL Safety Manual and Guidelines and thus, ensure creation of safe working environment for all stakeholders of our network.

#### 2. SCOPE

All contracts (minor and major) will be subject to the provisions of this document. **Minor Contracts**: Contracts which satisfy all the criteria listed under the head "Minor Contracts".

**Major Contracts**: Contracts which satisfy any two or more criteria listed under the head "Major Contracts"

Criteria	Minor Contracts	Major Contracts
Value of Contract	< Rs. 1500000/- (less than Rs. Fifteen Lac)	>= Rs. 1500000/- (Equal or more than Rs. Fifteen Lac)
Period	Period less than 1 year	Any period
Working on energized electrical equipment	No	Yes
Working on height (above 1.8 Mtrs from ground)	No	Yes
Work involving construction activity	No	Yes
Working with hazardous goods or chemicals	No	Yes
Work involving danger to general public	No	Yes

**Note:** Exceptions for major and minor contract are – in house software development, supply of material or equipment but no direct or indirect installation of the same material, administration contracts (courier, water supply, printing, security, transport, etc.), minor civil work like plastering at ground level or flooring, etc. The facility management (housekeeping) contract will always be treated as a minor contract.

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# 3. INFORMATION REQUIRED AT TIME OF VENDOR REGISTRATION OR BEFORE COMMENCEMENT OF CONTRACT

- 3.1 Business Associate is required to fill the Safety Management System Questionnaire as per *annexure 1* and submit along with the vendor registration process / bid / tender document. The filled questionnaire will be scrutinized by Engineer In-charge / indenting group and recommend suitability of the BA with respect to safety requirements. The fulfilment of statutory requirements for vendor registration pertaining to labour laws etc. shall be done by BA Cell on being referred to it.
- 3.2 Business Associate is required to take suitable risk control measures mentioned against the identified Hazards and Risk document provided for all contracts as per *annexure* 2. The primary objective of this is to evaluate the understanding of the BA towards risk mitigation and employment of safe work procedures. BA is required to conduct the Hazard identification and Risk Assessment study as per the procedure and deploy more or other measures if deemed necessary.
- 3.3 Business Associate shall comply with **Statutory Requirements related to Safety** and **Occupational Health** and submit the "Safety Undertaking" as per *annexure 4*.

#### 4. GENERAL SAFETY CONDITIONS REQUIRED TO BE FULFILLED BY BUSINESS ASSOCIATES

The requirements of the contractor safety management system applicable to the minor or major contracts related to various groups are as following –

- 4.1 Maintenance of Distribution Network Annexure 3.1
- 4.2 Distribution Projects Annexure 3.2
- 4.3 EHV Projects Annexure 3.3
- 4.4 Maintenance of Sub transmission network Annexure 3.4
- 4.5 Civil / Generation Projects Annexure 3.5
- 4.6 Meter Management Group (MMG), Revenue Recovery Group (RRG), Energy Auditing Group, AMI, MRG, etc. *Annex3.6*
- 4.7 Maintenance and Operation of Street Light. Annexure 3.7
- 1. Please note that hydra cranes used by any dept should be ACE Model No. FX 150 ACE SX 150, Escorts Model No. TRX 1550 or contemporary. Use of old generation hydra cranes like ACE 14XW or ACE 12 XW, etc are prohibited.

#### (Details as per Annexure attached)

**Note:** For minor contracts, the BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver all duties and responsibilities of Safety Supervisor as detailed in this document.

The Business Associate (BA) having major contract will appointing Safety supervisor, engineer / manager for the TPCODL work. The BA shall make all necessary arrangements for getting their workforce safety trained and competency checked from the DOSEC of TPCODL before deployment in the field. BA Cell shall recommend the suitability after competency checked by Engineer In-charge and SAFETY group (or his representative) of TPCODL. After getting the clearance from DOSEC, BA cell and receiving temporary I-card issued by TPCODL, Business Associate shall commence the working.

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Safety Representative of Business Associates will formally become the nodal point for safety concerns for TPCODL. BA shall not frequently transfer or terminate the services of any of the safety representatives appointed for TPCODL work site. BA needs to ensure that Safety representative is available at all points of time; failing which the work being carried out in the interim (period when Safety representative is not available) shall be treated as working under improper supervision and due penal provisions shall be initiated against the BA. BA will be required to provide all applicable infrastructure and power to ensure smooth working of the safety representative to maintain a sound safety management system. In all contracts safety representative will not be assigned any other activity at site apart from the works related to safety management. The duties are detailed in clause 5.5 of this document. TPCODL will be auditing the facilities provided to the BA's safety team time to time.

The Safety Representative of the BA shall be required to meet and follow the instructions of the Engineer In-charge and SAFETY Group of TPCODL. He shall be responsible for providing the MIS and/or any other relevant information, as and when desired, within the stipulated time frame as per the requirements of TPCODL. Any non-conformance to safety will lead to the negative marking or issue of safety violation challan/ tokens which shall affect the monthly evaluation and performance of BA.

All contracts where BA has to depute vehicle for their staff and equipment to move from one location to other, the BA shall ensure that vehicle complies all required statutory clearances and requirement as per The Motor Vehicle Act, 1988 as well as TPCODL Road Safety Policy and are in good & safe state of working.

# 5. QUALIFICATION AND EXPERIENCE OF THE SAFETY AND SITE PERSONNEL

Qualification and experience required for the safety and site personnel are as following:

- **5.1 Safety Supervisor:** It is mandatory that educational qualification of safety supervisor be ITI (of relevant trade) / Diploma (Any branch of engineering) and he has a working experience on electrical system / relevant field of work at least 5 yrs for ITI and 3 years for Diploma holder. Having formal experience of the safety systems will be an added advantage
- **5.2 Safety Engineer:** It is mandatory that educational qualification of safety engineer be at least Diploma (relevant branch) and he has working experience on electrical system of at least 3 yrs. Having the formal experience of the safety systems will be an added advantage.
- **5.3 Safety Manager:** The educational qualification of safety manager should be graduate engineer with working experience on electrical system / network of at least 3 yrs. OR Diploma in Industrial Safety with working experience of 05 years including at least 02 years on electrical network.

However, clause 5.1, 5.2 and 5.3 are not applicable for minor contracts. In such cases, BA shall assign the duties of Safety Representative to the Work Supervisor. Work Supervisor will deliver required duties of Safety Representative (as per clause 5.5) in addition to other duties without diluting the importance of safety.

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**5.4 Site Skilled Personnel:** For all responsibility related to site activities and operations, the BA shall employ only qualified and skilled persons and shall comply the provisions of section 19 & 29 of Central Electricity Authority (Measures relating to safety and electric supply) Regulations, 2010. Persons holding valid approvals only by any Government approved agency or a competency assessment panel or a team set up by TPCODL shall be allowed to perform the High Risk / High Hazard activities (refer page 1). The skill / qualification required for the electrician and electrical supervisor are given in *annexure 5*. The contracts related to maintenance of Distribution Network, Distribution Projects, Extra High Voltage Projects, maintenance and operation of street lights, shall preferably have at least 20 per cent of ITI qualified electricians in the first year of the contract. This figure shall preferably be incremented by 15 per cent every subsequent year.

Note: For the competency assessment may please refer the work instructions. An employee shall have to necessarily undergo the competency assessment check once in every eighteen months.

#### 5.5 Requirements from the Safety Representative(s) of the Business Associate:

- 5.5.1 Safety training of 2 hrs/employee/month and one day of safety induction training to all new employees joining the BA will be conducted by the BA as per Safety training modules of TPCODL.
- 5.5.2 Safety Talk / tool box talk before start of shift to BA employees.
- 5.5.3 Ensuring the availability & proper usage of the standard safety equipment (PPE)
- 5.5.4 Periodic inspection of PPE to ensure their serviceability and maintaining the 10% buffer stock of standard PPEs.
- 5.5.5 Ensuring the adherence to standard operating procedures of TPCODL as mentioned in TPCODL Safety standard and O & M and concerned function's manual.
- 5.5.6 Safety inspections / audits as per the process of TPCODL
- 5.5.7 Working in close coordination Safety Group of TPCODL.
- 5.5.8 Reporting of unsafe acts, unsafe conditions, near miss, incident or accident to Engineer In-Charge and Safety Group of TPCODL immediately after its occurrence.
- 5.5.9 Regular HIRA at site and comply the control measures as stated in the detailed HIRA as per the *annexure 2*. Also deployment of JSA based checklist shall be ensured.
- 5.5.10 Ensuring compliance with safety and other laws as may be applicable and providing for safety assurance.
- **5.6 Training and Syllabus:** The BA shall not deploy any person at work place / site or send newly recruited personnel directly to DOSEC for competency assessment without Safety Induction Training.

5.6.1 All new BA employees have to necessarily undergo one and half days Safety training and Competency assessment at training centre of BA cell. This training will be conducted once in a week. After the completion of Safety training & Competency assessment I-card will be issued to all competent BA employees

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5.6.2 BA is expected to initially train and judge the capability of the workman at his own end before further recommending the workmen for Competency assessment. If any BA workman sent for competency assessment. In case any BA workman fails in the Competency test at DOSEC, it will be deemed that BA has not imparted sufficient training at his end and actual cost of training ₹ 7500/ BA employee/ failed attempt will be recovered.

5.6.3 The workers who have imparted Safety Training and issued I-Cards of TPCODL, are not deployed at TPCODL worksites/ voluntarily left the job by workers/ used somewhere else other than TPCODL by the BA, in that case Management reserves the rights to intervene and recover the actual cost of training i.e. ₹ 7500/BA employee. (Exempted for attrition rate of BA workers less than or equal to 10% of total workforce deployed at TPCODL)

5.7 It is desired that Safety representative of the BA to impart the general safety training to each employee of duration 2 hrs per month. The training will be organized at BA level and the record to be sent to engineer in-charge and SAFETY group of TPCODL every month. Please refer schedule and syllabus in *annexure* 6.

List of Personal Protective Equipment (PPE) and Maintenance schedule: BA shall commence the project or any work only when the required PPE are made available to the team of employees involved in the work. Each PPE of BA shall be checked / inspected by the safety representative / supervisor at zone before the work start or as prescribed in the list. Safety representative shall regularly check the healthiness of each PPE allocated to lineman. Suitable record shall be maintained at zone. Defective PPE shall be immediately replaced or within 24 hours by the BA. In no case linemen or any other official of BA may be allowed to work with defective PPE. It is preferred that BA ensures minimum stock of each PPE at zone for immediate replacement with defective one. The PPE shall be IS / BS / CE marked and exactly as per the standard or specification mentioned in the annexure 7. Working without PPE / nonstandard PPE shall be treated as safety violation and penalty as stated in section 6.0 of this document. If TPCODL finds that BA has not provided the adequate / appropriate PPE to their staff, TPCODL reserves the rights to stop the work and call the BA to provide appropriate PPEs at the risk. If the BA fails to provide the required PPEs at the risk then the same shall be provided by TPCODL at the actual cost of the PPE. The amount shall be charged to BA and same shall be first recovered from the current bill of BA or any future payment to be made to BA. In the event of any balance amount still left for recovery, the same shall be adjusted against retention amount or by invoking bank guarantee submitted by BA.

- 5.8 Safety Audit / Inspection & HIRA: The BA shall get the required safety inspection / audit conducted by his technical team comprising of safety representative as per the *annexure* 8. The safety representative will be required to conduct the HIRA (Hazard Identification and Risk Assessment) *as per annexure* 2 of the process and work undertaken at least two times in a year or every time if a new process / activity / machine is introduced or whenever an accident take place. The risk identified to be addressed suitably with
  - Engineering Control
  - Management Control, and
  - Personal Protective Equipment.

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The safety representative of BA shall inform and educate for the identified risk and hazard control methods to employees, supervisor and engineer as well as the engineer in-charge and SAFETY group of TPCODL.

- **5.9 Safety Performance and Safety MIS:** The BA shall maintain good practice of safety all through the contract duration. Safety shall always be of paramount importance during the contract period. Safety performance will be monitored on yearly basis throughout the period and no relaxation will be given for bad performance. BA with good track record and excellent performance will be rewarded suitably as per clause 6.0 of this document. The BA has to provide monthly "Performance Report Safety" to engineer in-charge and SAFETY group TPCODL this shall be part of monthly bill along with training details. Performa of the report is enclosed as *annexure 9*.
- **5.10** Pre Employment Medical Check-up and Fitness of employees engaged for the critical works: The BA shall submit the health fitness certificate for all those workers involved in climbing the pole or working at height for following diseases:
  - 5.10.2 Epilepsy
  - 5.10.3 Colour blindness
  - 5.10.4 Deafness
  - 5.10.5 Vertigo & height phobia

Every year BA will give an undertaking stating that all the employees are fit to work and have not developed aforesaid diseases. The Record of such medical check-ups shall be submitted to BA Cell before issue of temporary identity card. The records shall be maintained at BA Cell. All such medical check-ups shall be repeated once in a year for all workers involved in climbing the pole or working on electrical network.

# 6. REWARD AND PUNITIVE MEASURES

**6.1** To support the enforcement of good SHE & DM practices by the Business Associate and to eliminate repeated or continuing safety violations, use of appropriate reward and punitive measures shall be made. Each unsafe act or violation of the safety guidelines as described in the Safety Manual of the TPCODL will be audit criteria of this system. Broadly the measures identified are following:

- 6.1.1 Working without PPE/ Safety Gadgets
- 6.1.2 Working without proper tools and tackles, barricading, Poor condition of Crane / Hydra / Vehicle, using without certification / Licence, Incompetent driver/ Helper
- 6.1.3 Working without creation of effective safety zone
- 6.1.4 Improper Supervision at worksite, Lineman/ Supervisor working without competency
- 6.1.5 Working without adherence to PTW process or authorization/ not adherence to SOPs / W.I. of TPCODL.
- 6.1.6 Improper Working at height equal to or above 1.8 mtrs without taking proper fall protection measures/ Poor condition of Ladder

### 6.2 Measures of Reward and Punitive Measures

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The Engineer In-Charge, NSO, SC, ASOs, CSI / SIs and SHE &DM group will conduct the surprise audits of the work / project and if any non-conformance is found the same will be booked and entered in the format "Safety Violation Record" *annexure 10*. The flow of the information is given below:

ActionResponsibilitySafety Violation form has been filled and counter foil sent to SAFETY team for information. The main form is to be given to BA supervisor / Engineer in-charge. (Automatically generated if Site audit done through Mobile App.)Engineer In-charge/ NSO / SC / SAFETY Group /CSI/ ASO/ Any authorised TPCODL official.Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.).SAFETY GroupForwarding the information Centralized Account bill of the BA, if any.Engineer In-chargeHoG (Safety - II) & HoG (Safety & Quality - Commercial) and CAPS to generate the MIS of the violations and the amount deducted.SAFETY Group with approval of CFO/Chief (O & S) /CE0&MD	Safety Violation Escalation & Monite	oring process
sent to SAFETY team for information. The main form is to be given to BA supervisor / Engineer in-charge. ( <i>Automatically generated if Site audit done through</i> <i>Mobile App.</i> ) Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). ( <i>Automatically generated if</i> <i>Site audit done through Mobile App.</i> ). Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> . HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees.	Action	Responsibility
to be given to BA supervisor / Engineer in-charge. (Automatically generated if Site audit done through Mobile App.) Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.). Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> . HoG (Safety - II) & HoG (Safety & Quality - Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. Any authorised TPCODL official. SAFETY Group	Safety Violation form has been filled and counter foil	Engineer In-charge/ NSO / SC
(Automatically generated if Site audit done through Mobile App.)       official.         Image: Application of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.).       SAFETY Group         Image: Application of the information centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, if any.       Image: Application of the amount deducted.         Image: Application of the amount deducted.       Image: Application of the amount deducted.       SAFETY Group         Image: Application of the amount generated after the deduction to be utilized in safety welfare of BA employees.       SAFETY Group with approval of CFO/Chief (O & S)	sent to SAFETY team for information. The main form is	/ SAFETY Group /CSI/ ASO/
Mobile App.)       ↓         Entry of the violation in the master record and sending the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.).       SAFETY Group         Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, if any.       Engineer In-charge         HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted.       SAFETY Group with approval of CFO/Chief (O & S)	to be given to BA supervisor / Engineer in-charge.	Any authorised TPCODL
the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.). Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> . HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)		official.
the information to concerned Manager, HoG, HoD, Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.). Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> . HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)	$\downarrow$	
Head and Chief (O &S). (Automatically generated if Site audit done through Mobile App.).       Image: Comparison of the information centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, if any.       Engineer In-charge         Image: HoG (Safety - II) & HoG (Safety & Quality - Commercial) and CAPS to generate the MIS of the violations and the amount deducted.       SAFETY Group         Image:	Entry of the violation in the master record and sending	SAFETY Group
Site audit done through Mobile App.).         Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> .       Engineer In-charge         HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted.       SAFETY Group         Image: Comparison of the amount generated after the deduction to be utilized in safety welfare of BA employees.       SAFETY Group with approval of CFO/Chief (O & S)		
Forwarding the information Centralized Account Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any</i> . HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. Barbara Account Forwarding the information Centralized Account SAFETY Group with approval of CFO/Chief (O & S)	Head and Chief (O &S). (Automatically generated if	$\sim$
Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any.</i> HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)	Site audit done through Mobile App.).	
Payable (CAPS) for amount deduction from the current bill of the BA, <i>if any.</i> HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)	↓	
bill of the BA, <i>if any.</i> HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)	5	Engineer In-charge
HoG (Safety – II) & HoG (Safety & Quality – Commercial) and CAPS to generate the MIS of the violations and the amount deducted. The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)		
Commercial) and CAPS to generate the MIS of the violations and the amount deducted.	bill of the BA, <i>if any.</i>	
Commercial) and CAPS to generate the MIS of the violations and the amount deducted.		
violations and the amount deducted. The pool of the amount generated after the deduction be utilized in safety welfare of BA employees. SAFETY Group with approval of CFO/Chief (O & S)		SAFETY Group
↓ The pool of the amount generated after the deduction to be utilized in safety welfare of BA employees. of CFO/Chief (O & S)		
to be utilized in safety welfare of BA employees. of CFO/Chief (O & S)	violations and the amount deducted.	
to be utilized in safety welfare of BA employees. of CFO/Chief (O & S)	$\downarrow$	
/CEO&MD	to be utilized in safety welfare of BA employees.	
		/CEO&MD

The safety violations have been rated from 1 to 5 (figure 6.3) as per the gravity of the violation. If the same violation is repeated it may escalate into a higher penalty. If a particular Business Associate employee violates safety norms three times, he shall not be allowed to work in TPCODL for a period of one year from the date of the 3<sup>rd</sup> violation.

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# 6.3 Safety Violation Escalation Matrix 6.3.1

	Consequence of Safety Violation Observed (Not related to Incident/ Accident)			Violation	ו	
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	А	В	С	D	
2	Improper Working at Height	А	В	С	D	Will attract the same penality as applicable in
3	Working without proper tools and tackles	А	В	С	D	the 4th violation.
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	А	В	С	D	
5	Violation of SOP/ WI	В	с	D	E	
6	Working without adherence to PTW process or authorization/ Safety Zone	С	D	E		]
Legend	Action to be taken	Respor	sibility	Penality Am	ount (in Rs.)	The number of
А	Warning letter	Engineer Inc	charge	N	lil	violations are to
В	Levy of Penalty	Engineer Incharge		2,0	000	be calculated cumulatively
с	Memo to BA & Levy of Penalty	Head of Group 4,000		over the		
D	Memo to BA & Levy of Penalty	Head of Department		10,	000	contract period
Ε	Memo to BA, Levy of Penalty and termination of Contract			and not on monthly basis.		

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	Consequence of Safety Violation Observed (Not related to Incident/ Accident)			Violatio	n	
S.No.	Safety Violation	1st	2nd	3rd	4th	Subsequent Violations
1	Working without PPE (Helmet/Gloves/Safety Harness/ Safety Shoes etc.)	В	С	D	D	Will attract the
2	Improper Working at Height	В	С	D	D	same penality as applicable in the 4th
3	Working without proper tools and tackles	А	В	С	D	violation.
4	Poor condition of Crane/Hydra/ Vehicle/Incompetent driver/ Helper	В	С	D	E	
5	Violation of SOP/ WI	С	D	E		S
6	Working without adherence to PTW process or authorization/ Safety Zone	С	D	E		
Legend	Action to be taken	Respo	nsibility	Penality Am	ount (in Rs.)	The number of
А	Levy of Penalty	Engineer In	charge	5,0	000	violations are to
В	Memo to BA & Levy of Penalty	Engineer Incharge		10,	000	be calculated cumulatively
с	Memo to BA & Levy of Penalty	Head of Group 25,000		over the		
D	Memo to BA & Levy of Penalty	Head of Department		50,	000	contract period
E	Memo to BA, Levy of Penalty and termination of Contract				and not on monthly basis.	
	Figure 6.3 (1b)-Penality Matrix for Saf	ety violation (	Applicable for	or Major Conti	racts)	

Once the BA reaches the "BLACK" (color – "5") category, i.e. highest level of safety violation, "Termination" notice to BA will be issued from the office of the Head of Department (equivalent to AddI GM/ GM/ Sr. GM level) and further, *if required*, continuation / extension of contract will only be initiated by Functional Head of the department (equivalent to Sr. GM / VP level) and approved by CEO & MD. Till the extension, the contract will remain suspended.

TPCODL encourages the reportage of the safety violation during the contract work by BA. Any TPCODL employee can register a safety violation against the BA in the "Safety Violation Form" *annexure 10.* Initially the observer has to fill the form and handover the counterfoil (lower portion) of the document to the supervisor of the BA, inform the site engineer of TPCODL and send the top portion of the Safety Violation Form to SAFETY group for the further necessary action against the BA. <u>The cumulative nos. of Safety Violations pertaining to any particular</u> <u>BA shall be calculated on yearly basis.</u>

Safety violations resulting in incident / accident will be treated as per gravity of the injury / fatality and its impact as well as type i.e. minor or Major. Consequences of incident / accident are shown in the matrix (figure 6.3(2) for major and 6.3(3) for minor) below. In case of any accident, findings and recommendations of Accident Enquiry Committee will be final and binding and will supersede the arbitration clause of GCC.

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Co	onsequence Of an Incident / Accident (In case of <u>MAJOR</u> contract)	Incident / Accident				Action Required
SI. No	Type of the injury	1st	2nd	3rd	4th	on ired
1	Slight injury (First Aid Case)	(Strengthening of pr	ocess through conti	<b>F</b> nuous improvement in th	e work procedure)	Take r m
2	Minor injury (No or Hospitalization less then 48 Hrs)	F	G	G	н	Take risk reduction measures
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	G	G	н	1	uction s
4	Single fatality	J	к		C	Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	ĸ			2	rable
Legend	Action to be taken	Responsibility	·	Penalty (in Rs.)		·
F	Memo to BA and levy of penalty	Engineer Incha	rge	5,000/-		
G	Memo to BA and levy of penalty	Head of Group		20,000/-	The numb	
н	Memo to BA and levy of penalty	Head of Group		50,000/-	<ul> <li>violations are calculate</li> </ul>	ed
I	Memo to BA and levy of penalty	Head of Department		2,00,000/-	cumulatively contract peri	od and
J	Memo to BA and levy of penalty	Head of Department		5,00,000/	not on month	iy basis.
к	Memo to BA, levy of penalty, termination of contract and black listing of BA	Functional Head		10,00,000/-		
	Figure 6.3 (2) - Penalty Mat	rix for Incident /	Accident in Maj	or Contracts		

(For example: In major contracts, if there is first incidence of major injury say bone injury (Cat. 3) where worker was hospitalized for more than 48 hrs then a penalty of amount Rs.20000/- will be deducted from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 50,000/- on subsequent incidents as per the above matrix)

Co	onsequence Of an Incident / Accident (In case of <u>MINOR</u> contract)		Incident	/ Accident		Action Required
SI. No	Type of the injury	1st	2nd	3rd	4th	ired
1	Slight injury (First Aid Case)	(Strengthening of p	process through cont	L inuous improvement in th	e w ork procedure)	Take r m
2	Minor injury (No or Hospitalization less then 48 Hrs)	L	М	м	N	Take risk reduction measures
3	Major injury (Bone injury or burn or Hospitalization more then 48 Hrs)	М	М	N	0	uction s
4	Single fatality	Р	Q			Intolerable
5	Multiple fatalities (Two or more fatalities during one event)	Q		-		erable
Legend	Action to be taken	Responsibility		Penalty (in Rs.)		·
L	Memo to BA and levy of penalty	Engineer Incha	arge	5,000/-		
м	Memo to BA and levy of penalty	Engineer Incha	arge	10,000/-	The numb	
N	Memo to BA and levy of penalty	Head of Group	)	25,000/-	violations are calculate	
0	Memo to BA and levy of penalty	Head of Depar	rtment	1,00,000/-	cumulatively contract peri	od and
Р	Memo to BA and levy of penalty	Head of Department 3,00,000/		not on month	ly basis.	
Q	Memo to BA, levy of penalty, termination of contract and black listing of the BA	Functional Hea	ad	5,00,000/-	1	
	Figure 6.3 (3) - Penalty Mat	rix for Incident	Accident in Min	or Contracts		

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(For example: In minor contracts, if a worker meets with a non-fatal accident say bone injury (Cat. 3) where he was hospitalized for more than 48 hrs then a penalty of amount Rs. 10,000/-, will be charged from the current bill produced for the payment. This penalty will be similar for first two incidents. However, it will increment to next higher category i.e. Rs. 25,000/- on subsequent incidents as per the above matrix.)

In case of single or multiple fatalities described under legends J&K of 6.3(2) and P&Q of 6.3(3), the concerned BA may be debarred from extension of contract or participate in new contract. In such event the approval of Chief (O & S) will be necessary for extension or award of new contract to concerned BA.

#### 6.3.2 COMPENSATION FOR BA PERSONNEL

In the event of any untoward incident/ accident, the Business Associate shall ensure prompt medical assistance such as treatment, sickness benefit, etc. is provided to the victim(s) as per the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable. Also, the BA will be required to take adequate measures for compensating the victim(s) or his/her/their kin as follows:

#### I. For Death or Permanent / Total Disablement

The BA shall take an insurance coverage of at least Rs. 15 lakhs for each engaged employee, to cover any incidence of Death or Permanent / Total Disablement (Permanent/Total Disability shall be considered as defined under Employees' Compensation Act, 1923). In the event of any such unfortunate incident, the BA would ensure that adequate compensation is paid immediately to the family of the victim(s) from his own resources. This compensation shall be covered under the insurance policy subscribed by the BA mentioned earlier and the arrangement should be such that it would get reimbursed to the BA by the insurance agency subsequently.

#### II. For Permanent Partial Disablement and Temporary Total Disablement

The compensation in this case will be as per provisions of the Employees' Compensation Act, 1923 or Employees' State Insurance Act, 1948, as applicable.

Accordingly, the BA shall obtain a suitable Insurance Policy on award of Contract and submit documentary evidence of the policy to the BA Cell before commencement of work. The BA shall ensure that the Insurance policy is active at all times and all employees are covered in all respects till the conclusion of contract period or till working with TPCODL. The BA shall submit a copy of the policy after periodic renewals to the BA Cell.

However, on occurrence of such unfortunate incident, if it is found that the victim(s) is/are not covered under any insurance policy, the BA shall be liable to pay the entire sum of Rs. 10 lakhs from his own resources.

Further, in case of an accident resulting in Death or Permanent / Total Disablement while on duty, the appointed BA Nodal Officer will ensure that the BA complies with all statutory

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provisions and benefits i.e. PF, Compensation, Gratuity etc., and that all these are made available to the employees' nominee(s) as per the stipulated timelines.

**6.3.3** TPCODL rewards the BA with good track record of safety management. It is proposed that BA complying with Contractors Safety Management, Safety Manual and Safety process will be rewarded suitably as per the procedure, rule and regulations of the TPCODL. In any case major accident is reported during an assessment period BA will not be eligible for this reward scheme. Assessment of contracts will be once in year. Generally the assessment cycle is calendar year and guidelines will be declared time to time.

ntral Odisha Distribution Limited		
Business Associate		
d Identification & Risk Assessment		
afety Analysis		
High Voltage		
, Occupation Health, Environment & Disaster		
gement		
Management Group		
y Audit Group		
nal Protective Equipment		
ard Operating Procedures		
Safety In-charge / Safety In-charge		
Safety Officer		
Nodal Safety Officer		
Coordinator		
of Group / Head of Department		
ant General Manager / General Manager / Vice President		
Finance Officer / Chief (Operating & Safety) / Chief		
Executive Officer & Managing Director		
Corporate Operation Services		
Centralized Account Payable System		
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al Conditions of Contract.		

#### Abbreviations Used in the Document

<u>.</u>

- END -

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# Annexure 1 (Refer Para 3.1)

# Business Associate Safety Management System Questionnaire

C	Certification						
	The information provided in this questionnaire is a summary of the company's occupational health and safety management system.						
C	Company Name:						
Turnover and e	xperience:		Name	of top officer:			$\bigcirc$
Date:			Positio	on			
C	Contract Details					X	
Contract Name		Contract Number:					
Business Ass Questionnaire	sociates Safety Manag	gement	System	Marks	Yes	No	Score achieved
Safety Policy a	nd Management						
- Is there a wri	tten company Safety po	licy?		1			
- If yes provide Note 1.	e a copy of the policy, if	No plea	se refer	5			
system	ompany have an Safe		gement	1			
manual or plar	company Safety Mana 1? a copy of the content pag	-	-	2			
refer Note 1.		-(-),					
clearly identif staff?	nd occupational health ied for all levels of M details, if No please refer	anagemo		2			
Safe Work Prac	tices and Procedures						
- Has the procedures or	company prepared specific safety instruct		perating evant to	1			

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Certification				
its operations and relevant work as per contract?				
- If yes provide a summary listing of procedures or instructions, if No please refer Note 2.				
- Comments				
- Is there a register of injury or accident? - If yes provide a copy (format)	1		90	2
- Is there a documented incident or accident investigation procedure?	1	0		
- If yes provide a copy of a standard incident report form, if No please refer Note 2.		0		
- Comments				
	3			
Safety Training				
- Describe how occupational health and safety training is conducted in your company	2			
If No please refer Note 1.				
- Is a record maintained of all training and induction programs undertaken for employees in your company?	1			
- If yes provide examples of safety training records, if No please refer Note 2.				
- Are regular safety inspections / audits are undertaken at worksites?	1			
-If yes provide details (formats), if No please refer Note 3.				

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Certification				
- Is there a procedure by which employees can report hazards at workplaces?	1			
- If yes provide details if No please refer Note 1.				
Safety Monitoring				
- Is there an officer / supervisor responsible for monitoring workplace / worksite safety?	1		R	
- If yes provide details		6		
		5		
Safety Performance Monitoring				
- Are employees regularly provided with information on company health and safety performance?	21			
- If yes provide details				
<ul> <li>Has the company ever been convicted of an occupational health and safety offence?</li> <li>If yes provide details</li> </ul>	NO Marks (Negative mark ONE for each case)			
- Has there been any major accident of employee at TPCODL site in past	NO Marks (Negative mark ONE for each case			
<ul> <li>Has there been any fatal accident of employee at TPCODL site in past.</li> <li>(Note: Bid evaluation committee has to take cognizance of the incident and shall evaluate the bid only after formal approval of competent authority i.e. CTO.</li> <li>In case of yes please refer Note 4.</li> </ul>	NO Mark (Negative mark FIVE for each case)			

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Certification				
Minimum of 75% marks is required for qualification.		Total Marks achieved		
Company Reference				
<ol> <li>Name of company</li> <li>Name of company</li> </ol>				$\leq$

#### Note

1: If company does not have formal procedure on Safety Management System than vendor may submit proposed Safety road map along with safety action plan and brief safety policy on his letter head signed by head of the organization.

2: The vendor may submit the same in the Safety Action Plan.

3: The vendor may utilize the same format of TPCODL or on request SAFETY group will assist the vendor in developing the audit system. For other points also vendor may take the assistance of SAFETY group for development of Safety management system.

4: The vendor may submit the Safety Improvement Plan and Safety Action Plan for his employees based on following points.

- i. Action plan for enhancing safety awareness
- *ii.* Action plan for safety training of employee
- iii. Action plan for increasing safety audit in field
- iv. Action plan for provision and utilization of safety PPE.
- v. Action plan for fatality reduction.
- vi. Action plan for enhanced supervision at site
- vii. Action plan for making employee more responsible and accountable for safety.
- viii. Action plan for availability and utilization of all required tool and equipment.
- *ix.* Safety Improvement done in last two years, specially highlighting those which have been taken after the fatal accident along with results.
- x. Safety initiatives planed or started recently.
- xi. Any other point.

Based on above points and documentary evidences vendor will be required to submit a detailed report in support of his bid. The bid evaluation committee and competent authority will scrutinize the facts and the evidence submitted. If found satisfactory competent authority i.e. CTO may accord his approval for bid opening otherwise his tender shall be disqualified.

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# Annexure 2 (Refer Para 3.2 and 5.8)

# Risk Assessment Form

Business Associate:	
Scope of the work:	
BA's Representative:	
Telephone:	
Signature: Date:	(1)
Date:	

Specific Task/Activity	Potential Hazards/Conseque nces	Class of Risk	Control Measures
Working at Height	Fall from height	2	<ol> <li>Mandatory usage of JSA checklist prior to start of work</li> <li>Use appropriate ladder</li> <li>Use full body safety harness having double lanyard.</li> <li>Use Electrical Safety Shoes if working on electrical network otherwise use safety shoes.</li> <li>Use Safety helmet.</li> <li>Use PPE as per the annexure 7 of this CSM document</li> <li>Refer Work instruction related to Working at Height for other details</li> <li>Use of metal scaffold to be ensured in height work (cup lock type)</li> <li>Deploy competent workforce who are</li> </ol>
Working on electrical equipment / network	Electric flash / electrocution	3	<ol> <li>medically fit</li> <li>Mandatory usage of JSA checklist prior to start of work</li> <li>Use Electrical Safety Shoes while working on electrical network.</li> <li>Use Electrical Safety gloves of appropriate voltage rating.</li> <li>Use face shield / visor attached with helmet.</li> <li>Use Safety helmet.</li> <li>Use PPE as per the annexure 7 of this CSM document</li> <li>Mandatory usage of Insulated tools &amp; tackles on electrical system</li> <li>Mandatory compliance for Lock Out &amp; Tag out system. Refer Work instruction related to Working on electrical equipment / network for other details</li> </ol>

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Specific Task/Activity	Potential Hazards/Conseque nces	Class of Risk	Control Measures
Excavation / Civil work	Collapse of soil, Fall in excavated pit leading to Injury	2	<ol> <li>Use safety shoes.</li> <li>Use Safety helmet.</li> <li>Use PPE as per the annexure 7 of this CSM document</li> <li>Hard Barricading of the worksite.</li> <li>Refer Work instruction related to excavation / civil work for other details</li> </ol>
Material lifting & Mechanical Erection work	Fall of material/object, Topple of crane,	2	<ol> <li>Mandatory compliance of crane checklist</li> <li>Visual condition check of lifting tools and tackles such as wire rope sling,belt sling, chain, pulley block, D-shackles, etc. shall be ensured.</li> <li>The operator's physical fitness and alertness should be judged by sup. / EIC.</li> <li>Use PPE as per the annexure 7 of this CSM document</li> <li>Refer Work instruction related to Material lifting &amp; Mechanical Erection work</li> </ol>
Road Safety	Road Accidents	3	1. Mandatory compliance of TPCODL Road Safety policy W07(COR-P-12)

with annexure 4 of the CSM document.

#### Guidelines for filling the Risk Assessment Form

- Specific Task/Activity The documentation of each major task associated with the contract.
- *Potential Hazards* The identification of hazards associated with each activity or task to be carried out.
- *Class of Risk* Each hazard should be evaluated as a level of risk, described as Risk Class 1, 2 or 3 defined above.
- Control Measure The identification and documentation of actions required to eliminate or reduce the hazards that could lead to accident or injury.

Hazard / Risks shall be classified according to the following schedule:

- Class 1: Potential to cause injury treatable with first aid
- Class 2: Potential to cause death or permanent injury
- Class 3: Potential to cause more than one or more lost time injuries.

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# Annexure 3.1 (Refer Para 4.0)

## **General Safety Conditions for the Maintenance of Distribution Network Contracts:**

A BA awarded a contract (O&M) work of maintenance of distribution network will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in *annexure 7*.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in a district. In case the BA has been awarded work in more than one district, then the following safety structure will be adopted.



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#### Annexure 3.2 (Refer Para 4.0)

#### **General Safety Conditions for the Distribution Projects Major Contracts:**

A BA awarded a major contract work of TS&P in area of a circle will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1.
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.



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#### Annexure 3.3 (Refer Para 4.0)

#### General Safety Conditions for the major EHV Projects Contracts:

A BA awarded a major contract work of EHV projects will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system in the area. In case the BA has been awarded work in more than one circle, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPCODL Safety Manual for details.



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#### Annexure 3.4 (Refer Para 4.0)

#### <u>General Safety Conditions for the Maintenance of Sub – Transmission Network</u> <u>Contracts:</u>

A BA awarded a major contract work of maintenance of sub – transmission network in area of a power system will be required to fulfil the following conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Coordinator for managing a complete safety management system in the area. In case the BA has been awarded work in more than one area power system, then the following safety structure will be adopted.



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#### Annexure 3.5 (Refer Para 4.0)

#### General Safety Conditions for the major contract work in Civil / Generation Projects:

A BA awarded a major contract work of / in civil or Generation project will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor (for workforce upto 100 at site) / a safety engineer (for workforce upto 250 at site) / safety manager (for more than two safety engineers) for managing a complete safety management system at the project site. In case the BA has been awarded more than one major contracts, then the following safety structure will be adopted.
- BA shall refer Construction Safety Manual in TPCODL Safety Manual for details.



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#### Annexure 3.6 (Refer Para 4.0)

#### <u>General Safety Conditions for the major contract work in Commercial Department like -</u> <u>MMG, RRG, EAG, etc.:</u>

A BA awarded a major contract work in meter management group & energy auditing group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment (PPE) as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work as per the following safety structure.
- The BA for the RRG work shall depute one Safety supervisor.



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#### Annexure 3.7 (Refer Para 4.0)

#### General Safety Conditions for the major contract work in O&M of street light group:

A BA awarded a major contract work in operation and maintenance of street light group will be required to fulfil the following safety conditions:

- BA shall provide Safety Policy and safety objectives of their company.
- BA shall comply with all statutory requirements like: applicable acts, regulations, codes of practice, OHSAS Standards, etc.
- BA shall provide the filled safety management questionnaire as per Annexure 1
- BA shall conduct a job risk assessment and provide information as per Annexure 2
- BA shall abide by Safety manuals, guidelines of TPCODL.
- BA shall provide its organisation structure & responsibilities in terms of Safety Management to TPCODL.
- BA shall document the work practices and procedures in terms of Safety Management.
- BA shall ensure safety training and induction program for the employees
- BA shall conduct safety audits & inspections as per TPCODL procedures provided by SAFETY group.
- BA shall provide and ensure the proper usage of the safety equipment PPE as per the TPCODL approved list in annexure 7.
- BA shall ensure periodic inspection of PPE to ensure its serviceability as per the specification given by TPCODL.
- BA shall ensure the adherence to standard operating procedures or guidelines laid down by TPCODL.
- BA shall ensure reporting of any unsafe act, unsafe conditions, near miss, incident or accident to engineer in-charge and SAFETY team of TPCODL.
- BA shall provide safety performance and Safety MIS (*annexure 9*) to engineer in-charge and SAFETY group periodically. Based on any non-confirmation to the safety procedures and guidelines, BA is liable to be negatively marked for his performance and suitable penalty will be imposed.
- Each BA shall ensure to depute a Safety Supervisor for managing a complete safety management system for the work awarded as per the below structure.



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# Annexure 4 (Refer Para 3.3)

#### Safety Undertaking by way of Affidavit

ls/o	R/o	(AUTHORIZED
REPRESENTATIVE/PARTNER/DIRECTOR	PROPRIETOR	R ) of M/S(name of
company/firm) having its office at (Comple	ete address of	Company), authorized vide power of
attorney dated/Board resolution dated	/letter of author	ority dated, hereinafter referred to
as Contractor [or Business Associate (BA	()] which expres	ssion shall, unless it be repugnant to
or inconsistent with the meaning or context	thereof, be dee	emed to include its heirs, executors,
administrators, and assigns do hereby affirm	and undertake	as under :

- The present undertaking shall remain in force from the date of execution of contract awarded by TPCODL and shall be valid till the date of termination of the said contract by either parties. The undertaking is binding on me (contractor) as well as my subcontractor and its employees, representatives etc.
- That I(the contractor) will be responsible and liable to comply and abide by all the safety rules, instructions and regulations as may be specified and laid down by TP Central Odisha Distribution Limited (TPCODL) so as enable TPCODL to achieve its goal of Zero On site incidences.
- 3. That the Contractor shall be fully responsible for ensuring occupational health and safety of its employees, representatives, agents as well as of its subcontractor's employees, at all times during the discharge of their respective obligations under the contract including any methods adopted for performance of their tasks / work.
- 4. That Contractor shall ensure ,at its own expense to arrange for and procure, implement all requisite accident prevention tools, first aid boxes, personal protective equipment, fire extinguisher, safety training, Material Safety Data Sheet, pre-employment medical test, etc. for operations & activities including as & when so specified by TPCODL specifically. , failing which TPCODL shall be entitled, but not obliged, to provide the same and recover the actual cost thereof from the Contractor's payments.
- 5. That the Contractor shall engage adequate and competent Safety Supervisor / Engineer / Manager / Skilled persons at site as per the Para 5 (Qualification and experience of safety personnel) and Annexure 3 of Contract Safety Management.

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- 6. That the Contractor shall engage the competent Site Supervisor with each group of workers for safe and correct workmanship, proper co-ordination of material and site work as per contract.
- 7. That the Contractor shall immediately replace supervisor in case it is found to be not up to the level of skill and experience required as in skill and experience required in *annexure 5* of this document, but any such replacement shall be only with the prior concurrence of TPCODL.
- 8. That the Contractor and its subcontractors shall abide by all the safety guidelines as per Safety Manual, Contract Safety Management and other guidelines issued from time to time by TPCODL during the contract period.
- 9. That in case the Contractor and/or any of its Subcontractor fail to ensure the compliance as required in terms of this undertaking the Contractor shall keep and hold TPCODL / its directors / officers / employees indemnified against any / all losses / damage / expense / liability / fines / compensation / claims / action / prosecutions or the like which might be suffered by TPCODL or to which TPCODL might get exposed to as a result of any breach /wilful negligence /deliberate default on the part of the Contractor /Subcontractor in complying with the same. Contractor shall also furnish any press release, clarification etc. if sought by TPCODL for any near miss or safety violations, accidents, which are attributable to fault of Contractor.

#### DEPONENT

#### VERIFICATION

Verified at Bhubaneswar on this \_Day of \_\_\_\_\_20\_\_ that the contents of the above affidavit are true and correct and nothing material has been concealed therefrom

DEPONENT

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# Annexure 5 (Refer Para 5.4)

# SKILL / QUALIFICATION REQUIRED FOR ELECTRICIAN AND ELECTRICAL SUPERVISOR

Skill / Qualifications Required for Electrician (Certificate of Competency Class-II):

1. Formal education in ITI – Wireman/ Electrician trade.

OR

- 2. Working experience of minimum three years of practical wiring.
  - OR
- 3. Have completed three years apprenticeship course through Apprenticeship Advisor, Govt. of NCT of Odisha / other state Govt. in the trade of Lineman / Wireman / Electrician.
- 4. A candidate must have attained the age of Eighteen years.

Skill / Qualifications Required for Electrical Supervisor (*Certificate of Competency Class-*I):

1. Have at least five years' experience of practical wiring after passing the certificate of competency class-II i.e. electrician.

OR

2. Recognized Degree or Diploma or equivalent qualification in Electrical Engineering from any Technical institute / College or University recognized by the Board.

AND

Must have completed the training/job in rectifying the common defects in electrical line and power installation for a period of one and three years after passing Degree or Diploma respectively

OR

THE

 Possessing the valid certificate of certificate of competency class – 1 (Electrical Supervisor)

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# Annexure 6 (Refer Para 5.6)

## Training Module for BAs Worker & Supervisor

#### Training for BA Supervisor

#### Duration – 02 Hrs / Month

Methodology: Lecture and Practical Demonstration of Safety Zone Creation

#### Session: 1

# Topic: Electrical Safety Aspects

# Sub Topics:

- 1. Learning specifics of HT & LT Network of zone
- 2. Major type of HT / LT / service lines / street light maintenance works
- 3. Understanding the need of Safety
- 4. Understanding the safe process of maintenance :
  - Planning of the maintenance job
  - Availability of men, material & machine, PPEs, Safety gear and approved PTW
  - Briefing of the job by the supervisor of the TPCODL
  - Identification of Risks associated with the maintenance work and planning for controlling measures by TPCODL supervisor
  - Creation of safety zone by TPCODL supervisor and satisfying that the network is dead Use of Neon Tester, Shorting Chain and Safety Tagging
  - Start of the work Right person for the right job
  - Alert supervision
  - Completion of the job Check points
  - Energization of network
  - Actions to be taken in case of some accident

# Session: 2

<u>Topic</u>: Use of Electrical Testing Equipment

Methodology: Lecture and Practical Demonstration

#### Sub Topics:

1. Meggar, Hi Pot, Clamp On Meter, Neon Tester, Discharge Rod, Line tester etc.

# Session: 3

#### Topic:

#### Awareness of Electrical Safety Aspects

- A. Understanding the need of this Training and Safety
- B. Learning specifics of HT & LT Network
- C. Major type of work to be carried out in zones
- D. Switching Operations (Do's & Don'ts) including Street Light Switching
- E. Working on Height (practical demo also)
- F. Understanding the Safe Process of Maintenance / Working:
  - Planning of the job
  - Availability of men, material & machine, PPEs, Safety gear and approved PTW
  - Briefing of the job by the supervisor

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- Permit to Work
- Safety Tagging and Lock Out Tag out
- Identification of Risks associated with the work to be carried out and planning for controlling measures by proper supervision
- Concept of "Safety Zone"
- Identification and use of Neon Tester, Shorting Chain, Clamp On Meter, Hi Pot, Meggar etc.
- Completion of the job Check points
- Accident Theory & Incident Reporting
- Actions to be taken in case of some accident

#### Session: 4

<u>Topic</u>: Identification, Demonstration and Usages of Tools, PPEs and other Safety Gears and demonstration of working on HT pole

# Session: 5

Topic: Practical demonstration of Safety Zone creation

# FREQUENCY

#### **Regular Safety Training Program**

• It will be conducted for all field & supervisor staff of BA in such a manner that all BA Personnel attend at least two hours safety training during every month.

#### **One Day Induction Safety Training Programs:**

 This training will be for the new BA's personnel, who have been cleared by the Cross Functional Panel to undergo Safety training and who are likely to be deployed at various work sites of TPCODL by the BA, as a part of AMC / Work Contract.

#### **Duration / Periodicity:**

• Duration and periodicity has been defined above. However, this is subject to change at the discretion of TPCODL.

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# Annexure 7 (Refer Para 5.7)

# LIST OF PERSONAL PROTECTIVE EQUIPMENT AND TESTING FREQUENCY

SI. No.	Name of PPE	IS / EN Standard	Testing Frequency	Remarks	Ref Brand & Model
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298 (Part-2)	Monthly and visual check every day for any crack or damage in the leather or sole.		BATA (Model No Endura L/C) Liberty (Model No. – 7198-01 HT Barton Black – Warrior)
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	Monthly and visual check every day for any crack in shell.	CON	Karam (PN Safetech ) Joseph Leslie Accent Industries Honeywell
03	Full body harness (Safety belt)	EN 361	Monthly and visual check every day of the bends and the harness.		Karam (PN Safetech ) Joseph Leslie Accent Industries
04	Electrical Safety Gloves	EN: 60903 CE marked	Weekly and visual check for any crack and blow test before every work.	Manufactured not beyond 12 months.	Make Sparian / Sumitech / CATU supplied with inner cotton glove with over glove of split leather.
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	Monthly and visual check every day for any crack in shell.	Clear acrylic visor attached with safety helmet.	Karam (PN Safetech ) Joseph Leslie Accent Industries Honeywell
06	Fire Proof jacket for chest protection		Monthly and visual check every day.		
07	Safety Chain for shorting cum earthing.	As per TPCODL standard	Weekly and visual check before every work.	Made of brass, Total length – 5.5 meters and made of 12 SWG.	
Not	Note:				

1. Any other Personal Protection Equipment required beyond above list will be according to BIS or EN Standards.

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- 2. All Personal Protection Equipment will be checked by the engineer in-charge or SAFETY group of TPCODL.
- 3. Safety Representative of the BA has to maintain the record of the availability, condition and checking of the PPEs.
- 4. All tools required as per the contract must be according to respective IS / EN standards.
- 5. TPCODL may revise or add the above list of PPE and their specifications as and when feel necessary. The information about new specifications /models will be circulated by the Engineer In-charge (EIC), which shall adhere by the business associated in the shortest possible time. The EIC shall issue a memo / instruction to BA with timeline for implementation. Any delay will be treated as non- compliance / safety violations. Refer picture of each PPE given in next page.

#### Pictures of PPE for reference purpose.

SI. No.	Name of PPE	IS / EN Standard	Picture
01	Leather Safety Shoes (Color – Black) with PU toe cap.	IS:15298(Part- 2) and with test report of electrical resistance.	
02	HDPE Safety helmet with chin strap and ratchet type for adjustment.	IS:2925-1984	
03	Full body harness (Safety belt) The straps at shoulder and thigh shall have full pad for comfort. The back shall be so designed that harness straps do not tangle with each other.	EN 361:2002 EN 358 : 2000 IS: 3521:1991/2002	

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04	Electrical Safety Gloves – Composite type Soft electrical gloves as per size of individual.	EN: 60903 CE marked	
05	Full face visor with safety helmet	EN: 166 CE marked (Visor)	S
06	Fire Proof jacket for chest protection	~	
07	Safety Chain for shorting cum earthing.	As per TPCODL standard	
08	Reflective jacket to each workmen	As per TPCODL standard	rpose only. Actual product may differ.

*Note : Picture shown are for indicative purpose only. Actual product may differ.* 

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# Annexure 8 (Refer Para 5.8) LIST OF AUDITS TO BE CONDUCTED

Audits	Responsibility	Freq.	Ref. Doc.
Permit to Work & Field Audit		Weekly	F04 (COR P - 12)
Tool Bag & PPE's Audit		Weekly	F06 (COR P - 12)
First Aid Box Maintenance Record		Fortnightly	F08 (COR P - 12)
Fire Extinguisher Record	BA Safety		2
(Applicable for the BA involved in major construction works and have storage of flammable material at worksite)	Representative	Monthly	F09 (COR P - 12)
Safety Talk Register	25	Weekly	F18 (COR P - 12)
Site Safety Audit		Daily	F29A (COR P - 12)

Note:

GENERAL

 (BA Safety Representative has to use the formats as per Safety process COR – P – 12 of TPCODL)

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# Annexure 9 (Refer Para 5.9)

#### PERFORMANCE REPORT – SAFETY

# FOR THE MONTH OF.....

Name of BA :			
Name of the Project and Pur	rchase order No:		
Date of commencement of w	vork:		
Man Hour Worked in this me	onth (No. of employees	x 8 Hrs + Overtime):	
Cumulative Man Hour worke	ed:		
Total Number of			2.
Minor Injury (this month):		Minor Injury (Total)	
Major Injury (this month):		Major Injury (Total):	

# Detail of the Incident / Sub Standard Acts and Condition

Activity	This Month	Cumulative (Total)	Day Lost (this month)	Days Lost (Cumulative)
No. of the Incident		6		
No. of lost time injuries		$\sim$		
No. of dangerous occurrences				
No. of near miss reported	7			
Substandard Act/Conditions observed			Attach details of of this month	observation
Safety Violation Notice received (from TPCODL)	No.	No.	No. of violation letter received and compliance report for the TPCODL.	
(both in numbers and in Rs.)	Rs.	Rs.		

Note: Cumulative means total from date of commencement of work according to the contract.

Detail of the Accident / Near Miss Incidents:

Date and Time	Type of the incident	Name of Employee	Brief Description	Corrective and Preventive actions recommended

Details of the Safety Violations:

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Date and Location	Brief Description	Name of employee involved	Action Taken

Detail of the Safety Talk / Tool Box Talk / Safety Training

Date and Location	Topic (s)	Total Number of employees (Worker / Supervisor)	Number of participants (Worker / Supervisor)

Detail of the Safety Meeting

Date and Location	Number of participants	Topics discussed	Major Observations / Innovation
			2

Detail of the Safety Inspection /Audit: (as per TPCODL site audit checklist F29A(COR-P-12)

Date	Area / Location	Major Observations	Recommendations	Action Taken

Any other Safety, Occupational Health, Environment & Disaster Management Promotional Activity (During this month):

Date	Location	Activity	Level of Participation	Number of participation

Signature of the BA Safety Representative HoG

Signature of ZM /

Name, E. No. and Date

Name, E. No. Date.

Note: The original form to be deposited with Engineer in-charge and a copy to SAFETY group on or before 5<sup>th</sup> of every month along with bill. List of training of the current month and status of PPE to be also mentioned individual wise.

BA may include additional lines if required. The TPPDL may revise the format as and when deemed required.

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# ANNEXURE-L

# VENDOR APPRAISAL FORM

TO BE	SUBMIT	TED BY VENDOR (To be filled as applicable)	
VENDOR:			
1.0	DETAIL	S OF THE FIRM	$\sim$
	1.1	NAME (IN CAPITAL LETTERS)	:
	1.2	TYPE OF CONCERN (PROPRIETARY) Partnership, Pvt. Ltd., Public Ltd. etc.	- 22
	1.3	YEAR OF ESTABLISHMENT	$\sim$
	1.4	LOCATION OF OFFICE POSTAL ADDRESS TELEGRAPHIC ADDRESSES, TELEX NO. FAX NO.	) :
	1.5	LOCATION OF MANUFACTURING UNITS	:
		i) UNITS 1	:
		ii) OTHER UNITS	:
2.0	PRODU	CTS MANUFACTURED	:
3.0		VER DURING THE LAST 3 YEARS (TO BE VERIFIED HE LATEST PROFIT & LOSS STATEMENT).	:
4.0	VALUE	OF FIXED ASSETS	:
5.0	NAME	& ADDRESS OF THE BANKERS	:
6.0	BANK	GUARANTEE LIMIT	:
7.0	CREDIT	I LIMIT	:
8.0	TECHNICAL		
Ċ	8.1	NO. OF DESIGN ENGINEERS (INDICATE NO. OF YEARS EXPERIENCE IN RELATED FIELDS)	:
	8.2	NO. OF DRAUGHTSMAN	:
	8.3	COLLABORATION DETAILS (IF ANY)	:
		8.3.1 DATE OF COLLABORATION	:

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		8.3.2 NAME OF COLLABORATOR	:
		8.3.3 RBI APPROVAL DETAILS	:
		8.3.4 EXPERIENCE LIST OF COLLABORATOR	:
		8.3.5 DURATION OF AGREEMENT	:
	8.4	AVAILABILITY OF STANDARDS / DESIGN PROCEDURES / COLLABORA-TOR'S / DOCUMENTS (CHECK WHETHER THESE ARE LATEST/CURRENT	÷ Č
	8.5	TECHNICAL SUPPORT, BACK-UP GUARANTEE, SUPERVISION, QUALITY CONTROL BY COLLABORATOR (WHEREVER ESSENTIAL). (THIS CLAUSE IS RELEVANT WHEN VENDOR'S EXPERIENCE IS INADEQUATE)	1Pr
	8.6	QUALITY OF DRAWINGS	
9.0	MANUF	ACTURE	
	9.1	SHOP SPACE, LAYOUT LIGHTING, VENTILATION, ETC.	:
	9.2	POWER (KVA)	:
		MAINS INSTALLED	:
		UTILIZED	:
		STANDBY POWER SOURCE	:
	9.3	MANUFACTURING FACILITIES (ATTACH LIST OF EQUIPMENT AS APPLICABLE)	:
		9.3.1 MATERIAL HANDLING	:
		9.3.2 MACHINING	:
		9.3.3 FABRICATION	:
	1	9.3.4 HEAT TREATMENT	:
		9.3.5 BALANCING FACILITY	:
0		9.3.6 SURFACE TREATMENT PRIOR TO PAINTING/ COATING, POLISHING, PICKLING, PASSIVATION, PAINTING, ETC.	:
	9.4	SUPERVISORY STAFF	:
	9.5	ADEQUACY OF SKILLED LABOURS (MACHINISTS, WELDERS, ETC.)	:

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	9.6	NO. OF SHIFTS	
	9.0		•
	9.7	TYPE OF MATERIAL HANDLED (SUCH AS CS, SS, ETC.)	
	9.8	WORKMANSHIP	:
	9.9	MATERIAL IN STOCK AND VALUE	:
	9.10	TRANSPORT FACILITIES	:
	9.11	CARE IN HANDLING	
10.0	INSPEC	TION / QC / QA / TESTING	
	10.1	NUMBER OF PERSONNEL (INDICATE NO. OF YEARS OF EXPERIENCE)	2
	10.2	INDEPENDENCE FROM PRODUCTION	
	10.3	AVAILABILITY OF PROCEDURAL WRITE UP/QUALITY PLAN	:
	10.4	INCOMING MATERIAL CONTROL AND DOCUMENTATION	:
	10.5	RELIABILITY/REPUTATION OF SUPPLY SOURCES	:
	10.6	STAGE INSPECTION AND DOCUMENTATION	:
	10.7	SUB-ASSEMBLY & DOCUMENTATION	:
	10.8	FINAL INSPECTION AND DOCUMENTATION	:
	10.9	PREPARATION OF FINAL DOCUMENTATION PACKAGE	:
	10.10	TYPE TEST FACILITIES	:
	10.11	ACCEPTANCE TEST FACILITIES	:
	10.12	CALIBRATION OF INSTRUMENTS AND GAUGES (WITH TRACEABILITY TO NATIONAL STANDARDS) (ATTACH LIST)	:
	10.13	STATUTORY APPROVALS LIKE BIS, IBR, ETC.(AS APPLICABLE)	:
0	10.14	SUB-VENDOR APPROVAL SYSTEM AND QUALITY CONTROL	:
	10.15	DETAILS OF TESTS CARRIED OUT AT INDEPENDENT RECOGNIZED LABORATORIES	:
		i) FURNISH LIST OF TESTS CARRIED OUT AND THE NAME OF THE LABORATORY WHERE THE TESTS WERE CONDUCTED	:

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r		1
	ii) CHECK AVAILABILITY OF CERTIFICATES AND REVIEW THESE WHEREVER POSSIBLE	:
11.0	EXPERIENCE (INCLUDING CONSTRUCTION / ERECTION / COMMISSIONING) TO BE FURNISHED IN THE FORMAT INDICATED IN APPENDIX)	:
12.0	SALES, SERVICE AND SITE ORGANIZATIONAL DETAILS	:
13.0	CERTIFICATE FROM CUSTOMERS (ATTACH COPIES OF DOCUMENTS)	:
14.0	POWER SITUATION	
15.0	LABOUR SITUATION	: QY
16.0 *	APPLICABILITY OF SC/ST RELAXATION (Y/N) IF YES, SUPPORTING DOCUMENTS TO BE ATTACHED	2
17.0	<ul> <li>ORGANIZATIONAL DETAILS <ol> <li>PF NO</li> <li>ESI NO</li> <li>INSURANCE FOR WORK MAN COMPENSATION ACT NO</li> <li>ELECTRICAL CONTRACT LIC NO</li> <li>ITCC / PAN NO</li> <li>SALES TAX NO</li> <li>WC TAX REG. NO</li> </ol> </li> </ul>	
18.0	<ul> <li>DOCUMENTS TO BE ENCLOSED: <ol> <li>FACTORY LICENCE</li> <li>ANNUAL REPORT FOR LAST THREE YEARS</li> <li>TYPE TEST REPORT FOR THE ITEM</li> <li>PAST EXPERIENCE REPORTS</li> <li>ISO CERTIFICATE -QMS, EMS, OHAS, SA</li> <li>REGISTRATION OF SALES TAX</li> <li>COPY OF TIN NO.</li> <li>COPY OF SERVICE TAX NO.</li> <li>REGISTRATION OF CENTRAL EXCISE</li> <li>COPY OF INCOME TAX CLEARANCE.</li> <li>COPY OF FREGISTRATION</li> <li>COPY OF ESI REGISTRATION</li> <li>COPY OF INSURANCE FOR WORK MAN COMPENSATION ACT NO</li> <li>COPY OF ELECTRICAL CONTRACT LIC NO</li> <li>COPY OF PAN NO</li> <li>COPY OF WC TAX REGISTRATION</li> <li>BODY OF WC TAX REGISTRATION</li> </ol> </li> </ul>	

\* Classification of BA s under SC/ST shall be governed under following guidelines:

• **Proprietorship/ Single Ownership Firm:** Proprietor of the firm should be from SC/ST community. Governing document shall be Proprietorship Deed.

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- Partnership Firm: Only such firms shall qualify which have SC/ST partners holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall be Partnership Deed.
- Private Limited Company: Only such firms shall qualify which have SC/ST directors holding equal to or more than 50% of the total ownership pattern of the firm. Governing document shall

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Document No. TPSMS/GSR/STC/009 REV 02



Safety Terms and Conditions

Date of Issue: 19/01/2019

# **Safety Terms and Conditions**

Confidential & Proprietary – The Tata Power Company Limited

Document No. TPSMS/GSR/STC/009 REV 02



Safety Terms and Condition

Date of Issue: 19/09/2019

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# 1. Definitions

- 1.1 **Order Manager**: Order Manager is the Tata Power representative, who has the ownership of the given job under the signed contract.
- 1.2 **Service Provider/Contractor/vendor:** An individual or an organization that provides services to Tata Power under a signed contract.
- 1.3 **Site Safety Management Plan:** It is the safety plan agreed between Contractor /service provider & Tata Power. It will contain the entire job specific safety requirement and will be signed by the service provider.
- 1.4 **High Risk Job:** Any job which has significant health and safety risk associated to it. The list of high risk jobs has been identified at Tata Power level.
- 1.5 **Emergency:** a serious, unexpected, business discontinuity and often dangerous situation resulting loss of revenue/property and requiring immediate action.

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# 2. Safety Policy



# HEALTH AND SAFETY POLICY

Tata Power is committed to provide safe and healthy working environment for the prevention of work related injuries and ill-health. Safety is one of our core values. We strive to be a leader in safety excellence in the global power and energy business. In pursuit of this, we are committed to the following:

- Maintain and continually improve our management systems to eliminate hazards and reduce health & safety risks to all our stakeholders.
- Incorporate appropriate health & safety criteria into business decisions for selection of plant and technology, performance appraisal of individuals and appointments in key positions.
- Comply and endeavour to exceed all applicable health & safety legal and other requirements
- Integrate health & safety procedures and best practices into every operational activity with assigned line-functional responsibilities at all levels.
- Involve our employees and business associates in maintaining a safe and healthy work environment through consultation and participation
- Inculcate safety culture by visible leadership and empowerment.
- Ensure required competency to enable our employees and business associates for working safely.
- Promptly report incidents, investigate, share crucial learnings and prevent recurrences.
- Influence our business associates in enhancing their health and safety standards and align with Tata Power's health & safety codes and practices.
- Set safety & health metrics as indicators of excellence, monitor progress and continually improve health and safety performance.

We shall ensure the availability of appropriate resources at all times to fully implement and communicate this policy to all stakeholders by suitable means and periodically review its relevance in continuously changing business environment.

(Praveer Sinha) CEO & Managing Director

Date: 11<sup>th</sup> March, 2019 TATA POWER Lighting up Lives!

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# 3. Safety Organization & Responsibilities

4.1 Contractor Site Management and Supervision

Each Contractor will be responsible for fulfilling all statutory and safety requirements as per the laws of the land and not limited to Factory Act, Electricity Act, Electricity Rules and Regulations, Shop and Establishment Act etc.

Each Contractor shall provide at least one competent full time safety supervisor for workforce of less than 100 numbers. When workforce ranges from 100 to 1000, the contractor has to provide at least one qualified safety officer and safety supervisors (reporting to the safety officer) in the ratio 1:100. For every 1000 addition in workforce, the contractor has to add 1 safety officer. The Tata Power Project Safety Manager will review and approve the appointment of all safety supervisors. Contractor/Subcontractor safety supervisors/officers will work with Tata Power Safety Managers and align themselves with Tata Power safety requirements.

Each Contractors'/Subcontractors' Site Manager is responsible, and will be held accountable, for the safety of their sub contractors and workforce and for ensuring that all equipment, materials, tools and procedures remain in safety compliance at job site, including:

- 4.1.1 Holding officer/supervisors accountable for safety and actively promote safe work performance.
- 4.1.2 Participate in and cooperate with all safety program requirements to be implemented in order to meet Tata Power safety objectives.
- 4.1.3 Ensure timely reporting of safety incidents, near misses, unsafe acts and conditions.
- 4.1.4 Identify the training needs of its employees and maintain all safety training documents.
- 4.1.5 Provide safety performance report at an agreed frequency.
- 4.1.6 Stopping of unsafe work (acts and/or conditions) immediately, until corrective action be taken.

#### 4.2 Contractor Supervisors and General Staff

Contractors' site supervisors and general staff members in charge of job site functions such as field engineering, warehousing, purchasing, cost and scheduling, etc. are responsible for the safe performance of the work of those they supervise. They must set an example for their fellow employees by being familiar with applicable sections of the Site Safety program and ensuring that all site activities are performed with SAFETY as the primary objective.

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Each site supervisor is responsible and will be held accountable for identifying, analyzing and eliminating or controlling all hazards through implementation of an aggressive, pro-active Health, Safety and Environmental Program from project inception through project completion. Each supervisor will proactively participate in the SHE program by observing, correcting unsafe acts, and recording these observations.

#### 4.3 Contractor Workforce

Contractor workforce must make safety a part of their job by following safety rules and regulations and by using all safeguards and safety equipments. They must take an active part in the Site Safety program to ensure their own safety and injury-free employment as well as being alert to unsafe practices of their fellow employees.

Every member of the workforce is expected to report for work without influence of any Drug/Alcohol. All employees are expected to report any hazardous conditions practices and behaviors in their work areas and correct where ever possible.

Workforce is responsible for active participation in safety and health programs, suggestion systems, trainings and in immediate reporting of all injuries, any unsafe practices, conditions or incidents to their supervisors.

#### 4.4 Vendor/Contractor

Vendors/Contractor shall at all times comply with, and ensure that their workforce comply with all site safety rules and regulations. Specifically, with applicable provisions of the Tata Power Site Safety Management Plan, and all statutory safety rules and regulations.

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# 4. Site Safety Rules and Procedures:

The work in the safest possible manner can only happen when it has been carefully planned and all applicable procedures are followed. The Tata Power Safety Procedures are derived from Tata Power best practices and the applicable Government acts regulations. In each case, the most stringent regulation is used.

Following is the list of Tata Power's critical Safety Rules and Procedures. Contractor shall refer to approved Rules and Procedures for detailed requirements and ensure conformance.

# 5.1 Lock Out and Tag Out Procedure

This procedure is intended to be used for the protection of Personnel while servicing or performing maintenance on equipment / pipeline / vessel / process systems. This is a general procedure that shall be used as the minimum requirements for isolation of equipment, pipelines, machines, system from all possible sources of hazardous energy and / or material such as Steam, Hot Water, Compressed Air, any other process fluid / chemical energy /Mechanical energy or Electrical energy. For complete procedure kindly refer Procedure Document No. TPSMS/CSP/LOTO/001 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.2 Excavation Safety (Shoring and Sloping) Procedure

This procedure is developed to cover the safe practices required for shoring and sloping in excavation and trenching jobs. This procedure is developed to establish mandatory requirements for practices to protect personnel, property and equipment from hazards associated with above activities. For complete procedure kindly refer Procedure Document No TPSMS/CSP/EXS/002 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.3 Confined Space Entry Procedure

This procedure outlines the steps required to perform the confined space entry and to protect personnel from the hazards of entering and conducting operations in confined spaces. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/CSE/003 REV 01 available on official website of Tata Power (www.tatapower.com)

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#### 5.4 Working at Height Procedure

This procedure describes the rules and procedures to protect employees from the hazards of working at heights.

This procedure is developed to cover the safe practices required for Working at Heights. This procedure is developed to establish mandatory requirements for practices to protect personnel from hazards associated in this area. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/WAH/004 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.5 Heavy Equipment Movement Safety Procedure

Heavy equipment lifting and movement is an activity involving loading, unloading, storage and movement from one place to another including lifting and erection or repairing of equipment with cranes or hoists. Material, machinery and equipment handling operations are being carried out by large capacity cranes and hoists, which make the job safer and faster. This procedure addresses the hazards and precautions associated with such equipment and their use. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/HEMS/005 REV 01 available on official website of Tata Power (www.tatapower.com)

#### 5.6 Mobile Crane Safety Procedure

Mobile cranes are responsible for many incidents, injuries. Falling loads from mobile cranes pose a severe hazard to operators and nearby workers and property. Many types of cranes, hoists, and rigging devices are used for lifting and moving materials. To maintain safe, appropriate standards has to be adhered to and only qualified and licensed individuals shall operate these devices. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/MCS/006 REV 01.

#### 5.7 Scaffold Safety Procedure

This procedure is developed to provide information on the safe erection, use, dismantling and maintenance of access scaffolding in the workplace. It is developed to establish mandatory requirements for practices to protect personnel from hazards associated with erection, use and dismantling of scaffolds. For complete procedure kindly refer Procedure Document No – TPSMS/CSP/SCAF/007 REV 01 available on official website of Tata Power (www.tatapower.com)

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#### 5.8 Electrical Safety Procedure

The objective of these standards is to specify minimum mandatory requirements and advisory guidance for identifying and controlling hazards to ensure 'Zero Harm' with regard to operation maintenance and testing of electrical equipment. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/ELEC/010 REV 01 available on official website of Tata Power (www.tatapower.com)

#### 5.9 Job Safety Analysis (JSA) Procedure

This objective of this procedure is to have a task based risk assessment process in place that identifies, evaluates and controls the risks associated with work activities, and as a result, prevents those involved in the task or those potentially affected by the task, from being harmed. For complete procedure kindly refer Procedure Document No- TPSMS/CSP/JSA/009 REV 01 available on official website of Tata Power (www.tatapower.com)

#### 5.10 Fire Safety Management Procedure

Objective of This standard is to specify the minimum mandatory requirements and advisory guidelines to ensure prevention of fire related incidents and managing / controlling their impacts if they do occur. For complete procedure kindly refer Procedure Document No-TPSMS/CSP/FSM/011 REV 01

#### 5.11 Permit To Work Procedure

Given the inherent hazards of the power generation and distribution industry, a significant number of TATA POWER operations and installations are critical. Work Permit (WP) System is an essential element in controlling the workplace risks in an effective manner. For complete procedure kindly refer Procedure Document No –TPSMS/CSP/PTW/008 REV 01 available on official website of Tata Power (www.tatapower.com)

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#### 5.12 Lift (Elevator) Safety Procedure

To provide safe operating procedure for taking control of lift car before entering and existing the pit of OTIS make elevators. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/LIFT/001 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.13 Working on conveyor belt Procedure

This procedure is developed to cover the safe practices required for Working on live equipment and to protect personnel from hazards associated with it. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CONV/002 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.14 Handling Hazardous Materials Procedure

This Procedure is developed to provide procedure for recycling and / or safe disposal of used / waste batteries in compliance with all legislation. For complete procedure kindly refer Procedure Document No-TPSMS/GSP/HAZM/003 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.15 Material Handling and Storage Procedure

The purpose of this document is to provide procedures to assist the safe handling of materials (manual handling and mechanical handling). For complete procedure kindly refer Procedure Document No – TPSMS/GSP/MATL/004 REV 01 available on official website of Tata Power (www.tatapower.com)

# 5.16 Contractor Safety Management Procedure

The purpose of this document is to engage with contractors in a way to create safe work environment for everyone working for Tata Power. For complete procedure kindly refer Procedure Document No – TPSMS/GSP/CSM/015 REV 01 available on official website of Tata Power (www.tatapower.com)

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The above procedures will be updated periodically and the updated version of the procedures as well as any additional critical procedure will be available on official website of Tata Power (www.tatapower.com) for your reference.

## 5. Training and Capability Building

Safety Training and capability building of workforce is a major component of safety management program. All training required must be provided and documented as specified by Tata Power and Indian Regulations. Tata Power Safety Manager will audit contractors training and related documentation to assure its adequacy.

### 6.1 Tata Power Site Safety Orientation

All Tata Power contractor and subcontractor workforce is required to attend Tata Power Site Safety Orientation Training to receive a Safety Training Card, which is required to obtain a Gate Pass to the site, prior to entry.

This Safety Orientation Course will be for duration of minimum half day. The information provided during the orientation will include, but is not limited to following:

- 1. Job rules, personal safety and conduct
- 2. Hazards reporting
- 3. Reporting of injuries
- 4. Emergency procedures
- 5. Safety Activities and Program including disciplinary measure and incentives.
- 6. Critical safety procedure relevant to the job

### 6.2 Capability Building

Appropriate training such as L1, L2 & L3 is given to ensure that a jobholder, either supervisor or worker, is competent to do his/her job safely. The skill training is provided through TPSDI and other agencies authorized by Tata Power on the list of 15 procedures mentioned under safety procedure.

Contractor shall ensure that concerned workmen are provided with adequate training before he/she is allowed to execute the work.

An evaluation test will be conducted after the completion of the training. Those workmen employee who meet the minimum required competency will be provided with Gold Card which is valid for 3 years, post which the workmen has to reappear for the assessment. If the workman is not able to qualify the assessment, he/she will be given 3 additional attempts to clear in 3 month timeframe failing which he/she will not be allowed to work on high risk jobs.

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# 6. Pre Employment and Periodic Medical check up

Contractor shall arrange to conduct a pre employment and periodic medical check-up for its entire workforce by Tata Power medical officer or Tata Power authorized medical officer. The contractor shall be able to produce the certificate prior to the employment. The contractor shall also organize to conduct periodical medical checkup (six monthly) for the following category of employees:

- Drivers (Check for Vision & Hearing)
- Equipment Operators (Check for Vision & Hearing)
- Workforce working at Height (Check for Vision, Hearing, Vertigo & Height Phobia)
- Workforce Handling the hazardous substances (Coal, ash and chemicals)
- Workforce in high decibel area (> 90 Decibel, Check for Hearing)
- Workforce, working in specific areas requiring specific medical attention should conduct the medical test as laid down in the respective Site Safety Management Plan.

# 7. Safety Performance Evaluation and Penalties

8.1 A certain percentage of the bill value will be retained against every running bill as safety performance retention. The amount will be released with the last invoice based on "Safety Performance score" attached in CSM-F-3 of CSM procedure. The amount is based on following table

Contract Value	Retention
	Amount(%)
Upto 10 Lakhs	2.5
10 – 50 lakhs	2
0.5 to 10 Cr	1.5
>10 Cr	1

- 8.2 Safety performance Score will be monitored by the Order Manager every month.
- 8.3 For the contract value of more than Rs 1 Cr or contract duration more than 12 months, the retention amount shall be released half yearly based on safety performance. For all remaining contracts, the retention amount will be released with the final bill.
- 8.4 In case of job stoppage due to safety violations/ unsafe observations at the site, no time extension shall be given to the contractor, if such delays are attributable to contractor.

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- 8.5 In case of fatality, limb loss or loss of property, vendor has to pay for liability, legal, statutory and additional mutually agreed settlement charges imposed by the appointed committee. This charge is over and above the retention amount.
- 8.6 The committee will finalize an amount between 5 -50 lakhs based on factors such as advise by statutory authorities, contract value and impact of accident etc.
- 8.7 Safety performance bonus 1% (limiting to 50 lakhs) of the invoice value will be considered at the end of the job if the contractual safety performance score is 100%.
- 8.8 During the progress of the work, concerned Supervisor/Engineer will visit and inspect the work site regularly and evaluate the safety performance of the contractor based on matrix attached herewith.
- 8.9 Order Manager, divisional chief and SBU head have the authority to terminate the contract in case of three consecutive serious violations.

	Lead Indicators	Unit Of measurement	Target	weight age
1	% of Employee certified in TPSDI/Authorized agency	%	50	10
2	CFSA score (Annexure 6.1)	Average Severity of Violations	1.49	20
3	Monthly inspection completed for Critical Equipments, lifting Tools & Tackles and hand tools used at site	%	80	5
4	Condition of tools, tackles and equipments	%	100	15
	Lag Indicators			
1	Number of Fatalities	No.	0	30
2	Number of Lost work day case ( LWDC)	No.	0	10
3	Man-days Lost	No.	0	10

### Safety Performance Evaluation - CSM-F-3



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In addition to above evaluation criteria, for specific violations penalty shall be imposed on the contractors under following circumstances:

Sr No	Description of violation	Severity	Penalty /
1.	Working without Permit	5	5000/-
2.	Untrained (TPSDI) worker on high-risk jobs.	5	5000/-
3.	Unhygienic/Bad condition of PPE	2	250/-
4.	Not following Tata Power Procedure & Standard	4	2000/-
5.	Unsafe Act/Condition of Severity 4	4	2000/-
6.	Unsafe Act/Condition of Severity 5	5	5000/-
7.	No Earthling of Electrical equipment	5	5000/-
8.	Damaged welding cable	5	5000/
9.	Violation of Positive Isolation Procedure (LOTO Not followed)	5	5000/
10.	ELCB of more than 30 mA/ELCB not working	5	5000/
11.	On/Off switch of welding m/c not working	5	5000/
12.	Electric cable tied with metal wire	5	5000/
13.	Leakage found DA hose / cylinder	5	5000/
14.	Use of LPG	5	5000/
15.	Use of Three-wheeler at the work site.	5	5000/
16.	Starting the job without Tool Box Talk	5	5000/
17.	Spatter falling on DA hose / Gas-line/ pathways / Equipment	5	5000/
18.	No safety latch in crane hook	5	5000/
19.	Load raised or swung over people or occupied areas of buildings	5	5000/
20.	Persons standing in swing area of construction equipments.	5	5000/
21.	Using damaged slings.	5	5000/
22.	Unstable scaffolding/non standard Scaffolding in use	5	5000/
23.	Handrails and mid-rails are missing	5	5000/
24.	Safety Harness not anchored with lifeline/fixed structure	5	5000/
25.	Fall arrestor not provided/ Not being used.	5	5000/
26.	Double life line not used for working at height	5	5000/
27.	No rubber mat in DB room	4	2000/-
28.	Water found accumulated in DB room/near welding machine.	4	2000/
29.	Inserting electric cables into socket, without using plug.	4	2000/
30.	Use of damaged electrical cable/two core cables.	4	2000/
31.	Inflammable material found in D.B Room./ welding areas.	4	2000/
32.	Loose material falling into excavated pit	4	2000/
33.	Water logging into excavated pit	4	2000/
34.	No / inadeguate Barricade	4	2000/

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Sr No	Description of violation	Severity	Penalty /
35.	Undercut / cave-in found on sides of excavated pits	4	2000/
36.	Grinding wheel/ Coupling/ Piling winch/other rotating parts without guard	4	2000/
37.	The HMV/Mobile Crane operator does not having a valid HMV driving license.	4	2000/
38.	The loading area is not leveled properly.	4	2000/
39.	Ladder not anchored at top	4	2000/
40.	Opening found in working platform of scaffolding/floor	4	2000/
41.	Inadequate illumination at the working area	4	2000/
42.	Loose material lying on Gantry ,platform	4	2000/
43.	Cleaning body with Compressed Air.	3	500/-
44.	Gas Cylinders using without cap.	3	500/
45.	Gas Cylinders stored without securing	3	500/
46.	Bringing inside any other chemicals, apart from approved by Safety dept.	3	500/
47.	Using drum for sitting or accessing height.	3	500/
48.	Misusing emergency facilities like fire hydrant line/ hose box/ spray system/ eye wash etc.	3	500/
49.	No provision of Safety net where falling materials or tools may occurs	3	500/
50.	Taking electrical supply from non designated outlet (other than socket).	3	500/
51.	Restricted gangways due to unwanted materials.	3	500/
52.	Not reporting incident.	3	500/
53.	Entering into restricted area like switch yard/ hazardous storage etc.	3	500/
54.	Work without supervision	3	500/
55.	Parking of vehicle without applying wheel choke at right front-front and left rear-rear wheels other than passengers cars.	3	500/
56.	Vehicle without helper or co-driver.	3	500/
57.	Not wearing florescent safety jacket at site.	3	500/
58.	People travelling in load body of vehicle.	3	500/
59.	Parking of vehicles at non designated area.	3	500/
60.	Shifting heavy materials without guide ropes.	3	500/
61.	Using other than 24V lamp inside the confined space/Use of other than 24V lamps.	3	500/
62.	Angular/ starch loading/ lifting with Crane or hoist.	3	500/
63.	By passing the limit switch/ Safety Interlock.	3	500/
64.	Housekeeping activities on road without proper barricade.	3	500/

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Sr No	Description of violation	Severity	Penalty /
65.	Trying to board or alit from running vehicle.	3	500/
66.	Cylinder Valves of Gas cylinders not closed when not in use.	3	500/
67.	Flash-back arrester not used.	3	500/
68.	Trolley wheel found damaged.	3	500/
69.	Guy ropes of required length on both sides of object are not used during movement with load.	3	500/
70.	Scotch block/wedge not provide when the vehicle is parked.	3	500/
71.	Suitable Trolley not provided to hold the cylinders.	3	500/
72.	Locked First Aid box	3	500/
73.	Caution boards, danger signs (luminescent /red) along with emergency contact number are not found displayed.	3	500/
74.	Person found jumping barricading tape	3	500/
75.	Stacking of pipes, pile casing , drums without chock blocks/wedges	3	500/
76.	The terrain on which Heavy Equipment/Machinery moves is not reasonably hard.	3	500/
77.	Without Safety Helmet at working sites	4	250/-
78.	Without Crash Helmet (on bikes)	4	500/-
79.	Without Full body double lanyard Safety Harness (for work at height)	5	5000/-
80.	Without Hand gloves - Material Handling, Welding, Cutting,	4	100/-
81.	Without Safety goggles/ face shield - Welding/Cutting /Grinding	5	5000/-
82.	Handling Chemical without PVC Apron	5	5000/-
83.	Smoking in prohibited area (Closed Go-downs, Storage of flammable material, Storage of Gas cylinders)	5	1000/-
84.	Sleeping at Work Place	3	100/-
85.	Driving beyond speed limit	3	1000/-
86.	Seat Belt While Driving (for front seat passengers and driver)	3	500/-
87.	Driving without license	4	1000/-
88.	Heavy Commercial vehicles without reverse horn	3	500/-
89.	Non functional Head light/ tail light and side indicators	3	100/-
90.	Using Mobile Phone During Driving	5	5000/-
91.	Poor visibility of registration number/ without registration number	3	100/-
92.	Broken/ without Side view mirror	3	100/-
93.	Over speeding above specified limit	3	500/-
94.	Broken/ Without Pressure gauge on Oxygen/ LPG / Acetylene cylinder.	3	500/-

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Sr No	Description of violation	Severity	Penalty /
95.	Without Flash back arrestor on Industrial Acetylene & Oxygen cylinders.	5	5000/-
96.	Spillage of hazardous material/chemicals during transportation	4	2000/-
97.	Electrical equipment without Earthing/ ELCB/ Double Insulation Cable.	5	5000/-
98.	Lifting Tools & Tackles used without/ expired Test Certificates.	5	5000/-
99.	Housekeeping repeatedly not maintained		i.
100.	First Time	3	Warning
101.	Second Time	4	1000/-
102.	Third Time	5	5000/-
103.	Serious Violation Of House Keeping (after 1 <sup>st</sup> or 2 <sup>nd</sup> warning to be decided by Project Manager depending on the severity)		Rs.10000/- and above
104.	Repeat Violation of same nature	5	5X Violation





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ANNEXURE X

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## **LEADERSHIP THAT INSPIRES**

For over 100 years, the Tata group has been led by visionaries who have stayed true to the vision of the founder, Jamsetji Tata. A vision that placed the greater good of society at par with business growth. A vision that put into practice pioneering social initiatives that changed the way responsible business was run. And a vision that brought into the group a strong social conscience.





We do not claim to be more unselfish, more generous or more philanthropic than other people. But we think we started on sound and straightforward business principles, considering the interests of the shareholders our own, and the health and welfare of the employees, the sure foundation of our success.

> Jamsetji Tata Founder of the Tata group Chairman (1868 – 1904)

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### FOREWORD

Tata companies have consistently adhered to the values and ideals articulated by the Founder for over 150 years. The Tata Code of Conduct was first formalized by Mr Ratan Tata. It articulates the Group's values and ideals that guide and govern the conduct of our companies as well as our colleagues in all matters relating to business. Today, the Code is a bedrock on which we base our individual, as well as leadership commitments to core Tata values.

The Tata Code of Conduct outlines our commitment to each of our stakeholders, including the communities in which we operate, and is our guiding light when we are sometimes faced with business dilemmas that leave us at ethical crossroads. The Code is also dynamic in that it has been periodically refreshed in order to remain contemporary and contextual to the changes in law and regulations. However it remains unaltered at its core.

Our stellar reputation and success as a business entity has been defined by the powerful commitment and adherence to the core values and principles expressed in this Code, by all our employees, directors and partners. I trust every Tata colleague and Tata company will continue to not only comply with the laws and regulations that govern our business interests around the world, but will continue to set new standards of ethical conduct that will generate deep respect and inspire emulation by others.

**N. Chandrasekaran** 21<sup>st</sup> February, 2017





TATA has always been values-driven. The five core values that underpin the way we conduct our business activities are:

#### INTEGRITY

We will be fair, honest, transparent and ethical in our conduct; everything we do must stand the test of public scrutiny.

#### UNITY

We will invest in our people and partners, enable continuous learning, and build caring and collaborative relationships based on trust and mutual respect.

#### RESPONSIBILITY

We will integrate environmental and social principles in our businesses, ensuring that what comes from the people goes back to the people many times over.

#### PIONEERING

We will be bold and agile, courageously taking on challenges, using deep customer insight to develop innovative solutions.

#### EXCELLENCE

We will be passionate about achieving the highest standards of quality, always promoting meritocracy.

These universal values serve as the foundation for the Tata Code of Conduct. They find expression within the value system of every Tata company.



## **B. SCOPE AND PURPOSE OF THIS CODE**

- 1. This Code sets out how we behave with:
  - our employees, or those who work with us;
  - our customers;
  - the communities and the environment in which we operate;
  - our value-chain partners, including suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents;
  - our joint-venture partners or other business associates;
  - our financial stakeholders;
  - the governments of the countries in which we operate; and
  - our group companies.

- 2. In this Code, "we or us" means our company, our executive directors, officers, employees and those who work with us, as the context may require.
- The term "our group companies" in this Code typically means companies Tata Sons intends for this Code to apply to, and / or to whom Tata Sons has issued this Code.
- 4. This Code sets out our expectations of all those who work with us. We also expect those who deal with us to be aware that this Code underpins everything we do, and in order to work with us they need to act in a manner consistent with it.

### REMEMBER...

It is our commitment to protect our reputation and our brand equity by adhering to the values and principles set out in this Code. By doing so, we strengthen our unique culture and identity.

# **OUR CORE PRINCIPLES**



The Tata philosophy of management has always been, and is today more than ever, that corporate enterprises must be managed not merely in the interests of their owners, but equally in those of their employees, of the consumers of their products, of the local community and finally of the country as a whole.

> J.R.D. Tata Chairman, Tata Sons (1938 – 1991)



## C. OUR CORE PRINCIPLES

- We are committed to operating our businesses conforming to the highest moral and ethical standards. We do not tolerate bribery or corruption in any form. This commitment underpins everything that we do.
- We are committed to good corporate citizenship. We treat social development activities which benefit the communities in which we operate as an integral part of our business plan.
- We seek to contribute to the economic development of the communities of the countries and regions we operate in, while respecting their culture, norms and heritage. We seek to avoid any project or activity that is detrimental to the wider interests of the communities in which we operate.
- 4. We shall not compromise safety in the pursuit of commercial advantage. We shall strive to provide a safe, healthy and clean working environment for our employees and all those who work with us.
- 5. When representing our company, we shall act with professionalism, honesty and integrity, and conform to the highest moral and ethical standards. In the countries we operate in, we shall exhibit culturally appropriate behaviour. Our conduct shall be fair and transparent and be perceived as fair and transparent by third parties.
- 6. We shall respect the human rights and dignity of all our stakeholders.

- We shall strive to balance the interests of our stakeholders, treating each of them fairly and avoiding unfair discrimination of any kind.
- 8. The statements that we make to our stakeholders shall be truthful and made in good faith.
- 9. We shall not engage in any restrictive or unfair trade practices.
- We shall provide avenues for our stakeholders to raise concerns or queries in good faith, or report instances of actual or perceived violations of our Code.
- We shall strive to create an environment free from fear of retribution to deal with concerns that are raised or cases reported in good faith. No one shall be punished or made to suffer for raising concerns or making disclosures in good faith or in the public interest.
- 12. We expect the leaders of our businesses to demonstrate their commitment to the ethical standards set out in this Code through their own behaviour and by establishing appropriate processes within their companies.
- 13. We shall comply with the laws of the countries in which we operate and any other laws which apply to us. With regard to those provisions of the Code that are explicitly dealt with under an applicable law or employment terms, the law and those terms shall take precedence. In the event that the standards prescribed under any applicable law are lower than that of the Code, we shall conduct ourselves as per the provisions of the Code.

### REMEMBER...

"Good faith" means having a reasonable belief that the information you have provided is truthful. It does not mean having 'all the evidence' about the potential violation or case reported.

# **OUR EMPLOYEES**



Once you got the best people, the people who shared our values and ideals, we left them free to act on their own. We do not fetter them. We encourage them and give them opportunities for leadership.

> J.R.D. Tata Chairman, Tata Sons (1938 – 1991)



### **D. OUR EMPLOYEES**

#### Equal opportunity employer

- We provide equal opportunities to all our employees and to all eligible applicants for employment in our company. We do not unfairly discriminate on any ground, including race, caste, religion, colour, ancestry, marital status, gender, sexual orientation, age, nationality, ethnic origin, disability or any other category protected by applicable law.
- When recruiting, developing and promoting our employees, our decisions will be based solely on performance, merit, competence and potential.
- We shall have fair, transparent and clear employee policies which promote diversity and equality, in accordance with applicable law and other provisions of this Code. These policies shall provide for clear terms of employment, training, development and performance management.

# Q&A

A job requirement entails extensive travel. One of the candidates has excellent relevant experience and qualifications. However, this candidate is a single parent. As a result, I feel such a situation would significantly hinder this candidate's ability to cope with the job requirement. What should I do?

In accordance with the Code, the decision to recruit an employee should be based upon merit. We cannot make a presumption that the candidate would not be able to meet the travel requirements of the job. All eligible candidates should be provided with equal opportunity to demonstrate or justify that they can cope with the travel requirements of the job. Being a single parent cannot be a ground to be discriminated against at any stage of recruitment or ongoing employment in our company.

#### **REMEMBER...**

We do not tolerate harassment in any form and therefore we expect every employee to discourage such misdemeanours in the workplace.

#### **Dignity and respect**

- Our leaders shall be responsible for creating a conducive work environment built on tolerance, understanding, mutual cooperation and respect for individual privacy.
- Everyone in our work environment must be treated with dignity and respect. We do not tolerate any form of harassment, whether sexual, physical, verbal or psychological.
- We have clear and fair disciplinary procedures, which necessarily include an employee's right to be heard.
- We respect our employees' right to privacy. We have no concern with their conduct outside our work environment, unless such conduct impairs their work performance, creates conflicts of interest or adversely affects our reputation or business interests.

#### **Human rights**

- 8. We do not employ children at our workplaces.
- 9. We do not use forced labour in any form. We do not confiscate personal documents of our employees, or force them to make any payment to us or to anyone else in order to secure employment with us, or to work with us.

#### **Bribery and corruption**

10. Our employees and those representing us, including agents and intermediaries, shall not, directly or indirectly, offer or receive any illegal or improper payments or comparable benefits that are intended or perceived to obtain undue favours for the conduct of our business.

### REMEMBER...

Violation by even a single employee of any law relating to anti-bribery, anti-corruption, anti-competition, data privacy, etc. could result in severe financial penalties and cause irreparable reputational damage to the company.



#### **Gifts and hospitality**

11. Business gifts and hospitality are sometimes used in the normal course of business activity. However, if offers of gifts or hospitality (including entertainment or travel) are frequent or of substantial value, they may create the perception of, or an actual conflict of interest or an 'illicit payment'. Therefore, gifts and hospitality given or received should be modest in value and appropriate, and in compliance with our company's gifts and hospitality policy.

#### **Freedom of association**

12. We recognise that employees may be interested in joining associations or involving themselves in civic or public affairs in their personal capacities, provided such activities do not create an actual or potential conflict with the interests of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

#### REMEMBER...

As a general rule, we may accept gifts or hospitality from a business associate, only if such a gift:

- has modest value and does not create a perception (or an implied obligation) that the giver is entitled to preferential treatment of any kind;
- would not influence, or appear to influence, our ability to act in the best interest of our company;
- would not embarrass our company or the giver if disclosed publicly.

The following gifts are never appropriate and should never be given or accepted:

- gifts of cash or gold or other precious metals, gems or stones;
- gifts that are prohibited under applicable law;
- gifts in the nature of a bribe, payoff, kickback or facilitation payment\*;
- gifts that are prohibited by the gift giver's or recipient's organisation; and
- gifts in the form of services or other non-cash benefits (e.g. a promise of employment).

(\*'Facilitation' payment is a payment made to secure or speed up routine legal government actions, such as issuing permits or releasing goods held in customs.)

#### Working outside employment with us

13. Taking employment, accepting a position of responsibility or running a business outside employment with our company, in your own time, with or without remuneration, could interfere with your ability to work effectively at our company or create conflicts of interest. Any such activity must not be with any customer, supplier, distributor or competitor of our company. Our employees must notify and seek prior approval for any such activity as per the 'Conflicts of Interest' clause of this Code and in accordance with applicable company policies and law.

#### Integrity of information and assets

- 14. Our employees shall not make any wilful omissions or material misrepresentation that would compromise the integrity of our records, internal or external communications and reports, including the financial statements.
- 15. Our employees and directors shall seek proper authorisation prior to disclosing company or business-related information, and such disclosures shall be made in

accordance with our company's media and communication policy. This includes disclosures through any forum or media, including through social media.

- 16. Our employees shall ensure the integrity of personal data or information provided by them to our company. We shall safeguard the privacy of all such data or information given to us in accordance with applicable company policies or law.
- 17. Our employees shall respect and protect all confidential information and intellectual property of our company.
- 18. Our employees shall safeguard the confidentiality of all third party intellectual property and data. Our employees shall not misuse such intellectual property and data that comes into their possession and shall not share it with anyone, except in accordance with applicable company policies or law.
- Our employees shall promptly report the loss, theft or destruction of any confidential information or intellectual property and data of our company or that of any third party.

# Q&A

I am an accountant in the finance department of my company. Due to my artistic skills, I received an offer to pen cartoons for a children's publication for which I would receive compensation. I plan to undertake this activity during week-ends. What should I do before accepting this offer?

Before accepting the offer, you should ascertain whether the company policies and rules require you to make a disclosure to your supervisor so that the company may determine whether your undertaking this activity adversely affects our company's interests. On confirmation from the company that it does not do so, you would be free to take up the activity. It is also your duty to bring to the attention of the company whenever there is any change in the situation you have disclosed.



- 20. Our employees shall use all company assets, tangible and intangible, including computer and communication equipment, for the purpose for which they are provided and in order to conduct our business. Such assets shall not be misused. We shall establish processes to minimise the risk of fraud, and misappropriation or misuse of our assets.
- 21. We shall comply with all applicable anti-money laundering, anti-fraud and anti-corruption laws and we shall establish processes to check for and prevent any breaches of such laws.

#### **Insider trading**

22. Our employees must not indulge in any form of insider trading nor assist others, including immediate family, friends or business associates, to derive any benefit from access to and possession of price sensitive information that is not in the public domain. Such information would include information about our company, our group companies, our clients and our suppliers.

# Q&A

Our company has recently announced the launch of a new business initiative. In connection with this, your friend who is a journalist with a leading business newspaper has asked you to provide some information that he could cover in his forthcoming article. He has promised not to quote you, or reveal your identity. Should you be giving him this information?

No. You should not be sharing information of this nature with the media, even if it is assured that the source would remain anonymous. Only authorised personnel in the company are permitted to speak to the media and provide information of this nature.

# Our company has a "Use of Social Media" policy that lays down the "dos and don'ts" for use of social media even if you may access such media on your own time. Why is there such a policy?

External communication is a serious matter. It must be carefully managed because information put out with reference to our company or its businesses needs to be clear, truthful and not violate any undertakings we have given to other parties. In each business there are managers nominated to authorise and make different types of statements to the outside world. These managers should be consulted about any request for information you may receive or information you think we should give out. In using social media, in particular blogs or social networking sites, you should exercise great caution while talking about our company or the business we do. It may feel like you are chatting with friends or expressing a personal opinion but even while doing so you cannot share any confidential information of our company.

#### **REMEMBER...**

We must respect the property rights of others by never misusing their assets, intellectual property or trade secrets, including the copying or downloading of unauthorised software, trademarks, copyrighted material or logos. We should never make unauthorised copies of computer software programs or use unlicensed personal software on company computers.

#### **Prohibited drugs and substances**

23. Use of prohibited drugs and substances creates genuine safety and other risks at our workplaces. We do not tolerate prohibited drugs and substances from being possessed, consumed or distributed at our workplaces, or in the course of company duties.

#### **Conflicts of interest**

**0**&A

- 24. Our employees and executive directors shall always act in the interest of our company and ensure that any business or personal association *including close personal relationships* which they may have, does not create a conflict of interest with their roles and duties in our company or the operations of our company. Further, our employees and executive directors shall not engage in any business, relationship or activity, which might conflict with the interest of our company or our group companies.
- 25. Should any actual or potential conflicts of interest arise, the concerned person must immediately report such conflicts and seek approvals as required by applicable law and company policy. The competent authority shall revert to the employee within a reasonable time as defined in our company's policy, so as to enable the concerned employee to take necessary action as advised to resolve or avoid the conflict in an expeditious manner.
- 26. In the case of all employees other than executive directors, the Chief Executive Officer / Managing Director shall be the competent authority, who in turn shall report such cases to the Board of Directors on a quarterly basis. In case of the Chief Executive Officer / Managing Director and executive directors, the Board of Directors of our company shall be the competent authority.

You are responsible for maintaining our company's customer database. One of your friends is starting a business venture and requests you to share a few particulars from this database for marketing purposes of his business. He assures you that he would keep the data as well as his source confidential. Should you do so?

No. You should respect the confidentiality of customer information and not share any part of the database with any person without due authorisation.

You have access to revenue numbers of different business units of our company. While having a conversation with you over evening drinks, your friend enquires about the financial performance of our company. You do not share detailed information with your friend, but share approximate revenue figures. Is this conduct of yours correct?

No, it is not. You are not permitted to share financial information of our company with others who do not need to know this information. Financial information should always be safeguarded and disclosed only on a need-to-know basis after obtaining requisite approvals. Sharing of any price sensitive information that is not generally available with the public could also lead to violation of applicable insider trading laws.



27. Notwithstanding such or any other instance of conflict of interest that exists due to historical reasons, adequate and full disclosure by interested employees shall be made to our company's management. At the time of appointment in our company, our employees and executive directors shall make full disclosure to the competent authority, of any interest leading to an actual or potential conflict that such persons or their immediate family (including parents, siblings, spouse, partner, children) or persons with whom they enjoy close personal relationships, may have in a family business or a company or firm that is a competitor, supplier, customer or distributor of, or has other business dealings with, our company.

### **REMEMBER...**

A conflict of interest could be any known activity, transaction, relationship or service engaged in by an employee, his/her immediate family (including parents, siblings, spouse, partner, and children), relatives or a close personal relationship, which may cause concern (based upon an objective determination) that the employee could not or might not be able to fairly perform his/her duties to our company.

#### **Examples of Potential Conflicts of Interest**

A conflict of interest, actual or potential, arises where, directly or indirectly, an employee or executive director:

- engages in a business, activity or relationship with anyone who is party to a transaction with our company;
- (b) is in a position to derive an improper benefit, personally or for any family member or for any person in a close personal relationship, by making or influencing decisions relating to any transaction;
- (c) conducts business on behalf of our company or is in a position to influence a decision with regard to our company's business with a supplier or customer where a relative of, or a person in close personal relationship with, an employee or executive director is a principal officer or representative, resulting in a personal benefit or a benefit to the relative;
- (d) is in a position to influence decisions with regard to award of benefits such as increase in salary or other remuneration, posting, promotion or recruitment of a relative or a person in close personal relationship employed in our company or any of our group companies;
- (e) undertakes an activity by which the interest of our company or our group companies can be compromised or defeated; or
- (f) does anything by which an independent judgement of our company's or our group companies' best interest cannot be exercised.

28. If there is a failure to make the required disclosure and our management becomes aware of an instance of conflict of interest that ought to have been disclosed by an employee or executive director, our management shall take a serious view of the matter and consider suitable disciplinary action as per the terms of employment. In all such matters, we shall follow clear and fair disciplinary procedures, respecting the employee's right to be heard.

# Examples of activities normally approved (post-disclosure) as per applicable company policy

Acceptance of a position of responsibility (whether for remuneration or otherwise) in the following cases would typically be permitted, provided the time commitments these demand do not disturb or distract from the employee's primary duties and responsibilities in our company, and are promptly disclosed to the relevant competent authority:

- (a) Directorships on the Boards of any of our group companies, joint ventures or associate companies.
- (b) Memberships/positions of responsibility in educational/professional bodies, where such association will promote the interests of our company.
- (c) Memberships or participation in government committees/bodies or organisations.

# You are in a relationship with a colleague who has been recently moved into your team and would now be reporting to you. What should you do?

Romantic or close personal relationships with another employee where a reporting relationship exists and one is responsible for evaluating the other's performance, is likely to create a conflict of interest. In such a situation, you would need to report the potential conflict to your supervisor.

Your company is submitting a proposal to a company in which you were previously employed. You have confidential information pertaining to your previous employer, which you believe will help your present employer in winning the contract. Should you share this information?

No. You should not share this information with your company since it relates to confidential information of a third party. Your company respects its employees' duty to protect confidential information that they may have relating to their previous employers.

You are the purchasing manager in the procurement department of your company. You receive an invitation from a supplier to attend a premier sporting event as her guest. This particular supplier is one of the vendors who has submitted a proposal for an open tender issued by your company. Should you accept the invitation?

No. You should not accept the invitation in this instance. Since you are in a key decision-making role for the tender, any unusual benefit that you receive could be perceived as an inducement that could compromise your objectivity.

**O&A** 



# **OUR CUSTOMERS**



We have continued to enjoy prosperity, even with adverse times to fight against. Our relations with all concerned are the most friendly. We have maintained the same character for straight-forward dealing with our constituents and customers. Our productions have continued to be of the same high quality, and therefore command the best reputation and realise the highest prices. ... I mention these facts only to point out that with honest and straight-forward business principles, close and careful attention to details, and the ability to take advantage of favourable opportunities and circumstances, there is a scope for success.

## Jamsetji Tata

Founder of the Tata group Chairman, Tata Sons (1868 – 1904)

## **E. OUR CUSTOMERS**

#### **Products and services**

- We are committed to supplying products and services of world-class quality that meet all applicable standards.
- The products and services we offer shall comply with applicable laws, including product packaging, labelling and after-sales service obligations.
- We shall market our products and services on their own merits and not make unfair or misleading statements about the products and services of our competitors.

#### **Export controls and trade sanctions**

4. We shall comply with all relevant export controls or trade sanctions in the course of our business.

#### **Fair competition**

- We support the development and operation of competitive open markets and the liberalisation of trade and investment in each country and market in which we operate.
- We shall not enter into any activity constituting anti-competitive behaviour such as abuse of market dominance, collusion, participation in cartels or inappropriate exchange of information with competitors.
- We collect competitive information only in the normal course of business and obtain the same through legally permitted sources and means.

#### **Dealings with customers**

- 8. Our dealings with our customers shall be professional, fair and transparent.
- We respect our customers' right to privacy in relation to their personal data. We shall safeguard our customers' personal data, in accordance with applicable law.





You are the Regional Sales Manager of our company. You have become a member of an "informal group", on an instant messaging service, whose members are the regional sales heads of our company's competitors. The administrator of the group has requested an in-person meeting to informally discuss market conditions and brainstorm on "pricing strategy" from an industry perspective. What should you do?

Any meeting with competitors, especially to discuss "pricing strategy", could be an attempt to promote an anti-competitive practice or manipulate prices. You should respond by declining this invitation and exiting the "informal group". You should also report this incident to your supervisor and your Legal department.

# You are attending a customer meeting with a colleague, and your colleague makes an untruthful statement about the company's services. What should you do?

You should assist your colleague in correcting the inaccuracy during the meeting if possible. If this is not possible, raise the issue with your colleague after the meeting to enable him/her or the company to correct any misrepresentation made to the customer.

While working on a customer project, you receive a call from your colleague. He used to manage that customer account before you took over his role. He recalls that he had worked with the customer on developing a new ordering system which he thinks would be beneficial for another customer and requests you to send him the project details. What should you do?

You must not share this information without specific approval of the customer; you are not permitted to use a customer's assets, including software, for another customer or for any personal use.

#### REMEMBER...

Striving for excellence in the standards of our work and in the quality of our goods and services is a core Tata value. It is the unwavering practice of this value that builds and sustains customer trust in our brand.

# OUR COMMUNITIES AND THE ENVIRONMENT



In a free enterprise, the community is not just another shareholder in business but is in fact the very purpose of its existence.

> Jamsetji Tata Founder of the Tata group

Chairman, Tata Sons (1868 – 1904)



## **F. OUR COMMUNITIES AND THE ENVIRONMENT**

#### Communities

- We are committed to good corporate citizenship, and shall actively assist in the improvement of the quality of life of the people in the communities in which we operate.
- We engage with the community and other stakeholders to minimise any adverse impact that our business operations may have on the local community and the environment.
- We encourage our workforce to volunteer on projects that benefit the communities in which we operate, provided the principles of this Code, where applicable, and in particular the 'Conflicts of Interest' clause are followed.

#### The environment

- In the production and sale of our products and services, we strive for environmental sustainability and comply with all applicable laws and regulations.
- 5. We seek to prevent the wasteful use of natural resources and are committed to improving the environment, particularly with regard to the emission of greenhouse gases, consumption of water and energy, and the management of waste and hazardous materials. We shall endeavour to offset the effect of climate change in our activities.

# OUR VALUE-CHAIN PARTNERS



If we had done some of the things that some other groups have done, we would have been twice as big as we are today. But we didn't, and I would not have it any other way.

### J.R.D. Tata

Chairman, Tata Sons (1938 – 1991)

(on the pace of expansion of the Tata group in the 1960s and 70s)



## G. OUR VALUE-CHAIN PARTNERS

- 1. We shall select our suppliers and service providers fairly and transparently.
- We seek to work with suppliers and service providers who can demonstrate that they share similar values. We expect them to adopt ethical standards comparable to our own.
- Our suppliers and service providers shall represent our company only with duly authorised written permission from our company. They are expected to abide by

the Code in their interactions with, and on behalf of us, including respecting the confidentiality of information shared with them.

- We shall ensure that any gifts or hospitality received from, or given to, our suppliers or service providers comply with our company's gifts and hospitality policy.
- 5. We respect our obligations on the use of third party intellectual property and data.

Q&A

You head the procurement function in our company. You have tight budgetary constraints for a project that you are working on. In order to complete the project within the targeted costs, you intend to request your supplier to provide you an exceptional discount on this project order on the understanding that you would "make it up to him" in future orders. Would you be violating the Code?

Yes, you would. Inducement in any form, including future benefits to the supplier, could compromise your ability to act objectively and in the best interests of the company and therefore must be avoided.

### REMEMBER...

Our value-chain partners would include our suppliers and service providers, distributors, sales representatives, contractors, channel partners, consultants, intermediaries and agents; joint-venture partners and other business associates.

# OUR FINANCIAL STAKEHOLDERS



Ethical behaviour in business – in every sphere and with all constituents – has been the bedrock on which the Tata group has built, and operates, its enterprises. This has been an article of faith for the group ever since its inception, a fundamental element of our cherished heritage and the essence of our way of life.

> Ratan Tata Chairman, Tata Sons (1991 – 2012)



## H. OUR FINANCIAL STAKEHOLDERS

- We are committed to enhancing shareholder value and complying with laws and regulations that govern shareholder rights.
- We shall inform our financial stakeholders about relevant aspects of our business in a fair, accurate and timely manner and shall disclose such information in accordance with applicable law and agreements.
- We shall keep accurate records of our activities and shall adhere to disclosure standards in accordance with applicable law and industry standards.

# **GOVERNMENTS**



Business, as I have seen it, places one great demand on you; it needs you to impose a framework of ethics, values, fairness and objectivity on yourself at all times. It is not easy to do this; you cannot impose it on yourself forcibly because it has to become an integral part of you.

> Ratan Tata Chairman, Tata Sons (1991 – 2012)



### I. GOVERNMENTS

#### **Political non-alignment**

 We shall act in accordance with the constitution and governance systems of the countries in which we operate. We do not seek to influence the outcome of public elections, nor to undermine or alter any system of government. We do not support any specific political party or candidate for political office. Our conduct must preclude any activity that could be interpreted as mutual dependence/favour with any political body or person, and we do not offer or give any company funds or property or other resources as donations to any specific political party, candidate or campaign.

> Any financial contributions considered by our Board of Directors in order to strengthen democratic forces through a clean electoral process shall be extended only through the Progressive Electoral Trust in India, or by a similar transparent, duly-authorised, nondiscriminatory and non-discretionary vehicle outside India.

#### **Government engagement**

- We engage with the government and regulators in a constructive manner in order to promote good governance. We conduct our interactions with them in a manner consistent with our Code.
- We do not impede, obstruct or improperly influence the conclusions of, or affect the integrity or availability of data or documents for any government review or investigation.

**TCOC** 2015

# **OUR GROUP COMPANIES**



I do not think anyone was on par with Jamsetji as an industrial visionary. But that is not the sole reason why I have been an admirer of Jamsetji. The major reason was his sense of values, sterling values, which he imparted to this group. If someone were to ask me, what holds the Tata companies together, more than anything else, I would say it is our shared ideals and values which we have inherited from Jamsetji Tata.

> J.R.D. Tata Chairman, Tata Sons (1938 – 1991)



### J. OUR GROUP COMPANIES

- We seek to cooperate with our group companies, including joint ventures, by sharing knowledge, physical resources, human and management resources and adopting leading governance policies and practices in accordance with applicable law including adherence to competition law, where relevant.
- We shall strive to achieve amicable resolution of any dispute between us and any of our group companies, through an appropriate dispute resolution mechanism so that it does not adversely affect our business interests and stakeholder value.
- We shall have processes in place to ensure that no third party or joint venture uses the TATA name/brand to further its interests without proper authorisation.
- Our Board of Directors shall consider for adoption policies and guidelines periodically formulated by Tata Sons and circulated to group companies.



You are in the process of selecting potential vendors for an IT project in our company. In the final shortlist of two companies, one is a new start-up with limited references and a lower price-quotation, while the other is a Tata company with thirty years of implementation experience and good references, but a marginally higher quote for the same job. With all other parameters of choice being nearly equal, which company should you select for the job?

While price is undoubtedly an important criterion for decision making, it is clearly not the only one to be evaluated. You may also need to consider good customer references, proven track record and shared value systems in order to decide on your IT partner.

You are in the process of selecting potential vendors for a project. One of the three finalists is a group company. In reviewing the final proposals, you rank the group company second out of the three proposals based on pricing and total cost of ownership, and select the first-ranked vendor. Is this the right decision?

Yes. You should select the vendor that, on its own merits, is the vendor that is most appropriate for your company's requirements. You should not select a group company only because of its affiliation.

#### **TCOC** 2015

### **RAISING CONCERNS**

We encourage our employees, customers, suppliers and other stakeholders to raise concerns or make disclosures when they become aware of any actual or potential violation of our Code, policies or law. We also encourage reporting of any event (actual or potential) of misconduct that is not reflective of our values and principles.

Avenues available for raising concerns or queries or reporting cases could include:

- immediate line manager or the Human Resources department of our company
- designated ethics officials of our company
- the 'confidential reporting' third party ethics helpline (if available)
- any other reporting channel set out in our company's 'Whistleblower' policy.

We do not tolerate any form of retaliation against anyone reporting legitimate concerns. Anyone involved in targeting such a person will be subject to disciplinary action.

If you suspect that you or someone you know has been subjected to retaliation for raising a concern or for reporting a case, we encourage you to promptly contact your line manager, the company's Ethics Counsellor, the Human Resources department, the MD/CEO or the office of the group's Chief Ethics Officer.

# Q&A

#### My supervisor has asked me to do something which I believe may be illegal. I am afraid if I do not do what I am told, I could lose my job. Should I do it?

No. Breaking the law is never an option. Discuss the situation with your supervisor to be certain that you both understand the facts. If your concerns are not resolved, contact a higher level supervisor, the Ethics Counsellor, the Legal department or report them via the company's confidential reporting system, if available.

#### I feel that my supervisor is treating me unfairly for reporting a concern to the Ethics Counsellor. What should I do?

Retaliation against anyone who raises a concern is a violation of the Code. You should therefore promptly report this action of your supervisor to the Ethics Counsellor or the MD/CEO of your company or via the company's confidential reporting system, if available.



This Code is more than a set of prescriptive guidelines issued solely for the purpose of formal compliance. It represents our collective commitment to our value system and to our core principles.

Every person employed by us, directly or indirectly, should expect to be held accountable for his/her behaviour. Should such behaviour violate this Code, they may be subject to action according to their employment terms and relevant company policies.

When followed in letter and in spirit, this Code is *'lived'* by our employees as well as those who work with us. It represents our shared responsibility to all our stakeholders, and our mutual commitment to each other.

#### SPEAK UP...

If you are unsure whether a particular action you are about to take is consistent with the principles set forth in the Code, ask yourself:

- Could it directly or indirectly endanger someone or cause them injury?
- Is it illegal/unlawful or out of line with our policies and procedures?
- Does my conscience reject it? Does it conflict with my personal values?
- Would I feel uncomfortable if the story appeared in the media? Would it shame my company, spouse, partner, parent or child?
- Does it 'feel' wrong?

If the answer to any of these questions is "Yes", please stop and consult your reporting manager, the Ethics Counsellor, the Human Resource department, the Legal department or any member of the senior management team, to assist you in making the decision.

When faced with a dilemma: Stop, Think, Act Responsibly



The Code does not provide a comprehensive and complete explanation of all expectations from a company standpoint or obligations from a stakeholder standpoint.

Our employees have a continuing obligation to familiarise themselves with all applicable law, group-level advisories and policies, company-level policies, procedures and work rules as relevant. For any guidance on interpretation of the Code, we may seek support from our company's Ethics Counsellor or from the group's Chief Ethics Officer, as appropriate.

All joint ventures are encouraged to adopt the Tata Code of Conduct (TCOC) or a code of conduct that incorporates all elements of the TCOC.

This version of the Tata Code of Conduct supersedes all earlier versions and associated documents and stands effective from 29<sup>th</sup> July, 2015.

For any query or clarification on the Code, please contact the office of the group's Chief Ethics Officer via email at: ethicsoffice@tata.com.



### TATA CODE OF CONDUCT – 2015

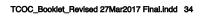
I acknowledge that I have received the Tata Code of Conduct.

I have read the Tata Code of Conduct and I acknowledge that as a Tata employee, I am required to comply with the guidelines described therein and failure to do so may subject me to action as per my employment terms and relevant company policies.

If I have a concern about a violation, or a potential violation of the Tata Code of Conduct, I understand that there are channels available to me in my company to report such concerns. By making use of these channels when necessary, I will play my part in maintaining the high ethical standards to which we hold ourselves.

Signature:	-
Date:	
Name:	
Department:	
Address:	

(Please submit this declaration to your Ethics Counsellor or the Human Resource department of your company.)



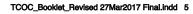
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For further information on the Code please contact: The Ethics Office, Tata Sons Ltd., Bombay House, 24, Homi Mody Street, Mumbai – 400001, India. Email: ethicsoffice@tata.com

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# **CORPORATE SUSTAINABILITY POLICY**

At Tata Power, our Sustainability Policy integrates economic progress, social responsibility and environmental concerns with the objective of improving quality of life. We believe in integrating our business values and operations to meet the expectations of our customers, employees, partners, investors, communities and public at large

- We will uphold the values of honesty, partnership and fairness in our relationship with stakeholders
- We shall provide and maintain a clean, healthy and safe working environment for employees, customers, partners and the community
- We will strive to consistently enhance our value proposition to the customers and adhere to our promised standards of service delivery
- We will respect the universal declaration of human rights, International Labour Organization's fundamental conventions on core labour standards and operate as an equal opportunities employer
- We shall encourage and support our partners to adopt responsible business policies, Business Ethics and our Code of Conduct Standards
- We will continue to serve our communities:
  - By implementing sustainable Community Development Programmes including through public/private partnerships in and around our area of operations
  - By constantly protecting ecology, maintaining and renewing bio-diversity and wherever necessary conserving and protecting wild life, particularly endangered species
  - By encouraging our employees to serve communities by volunteering and by sharing their skills and expertise
  - By striving to deploy sustainable technologies and processes in all our operations and use scarce natural resources efficiently in our facilities
  - We will also help communities that are affected by natural calamities or untoward incidence, or that are physically challenged in line with the Tata Group's efforts

The management will commit all the necessary resources required to meet the goals of Corporate Sustainability.



## (Praveer Sinha) CEO & Managing Director

Date: 15<sup>1</sup> June 2018

**TATA** POWER Lighting up Lives!





# CORPORATE ENVIRONMENT POLICY

Tata Power is committed to a clean, safe and healthy environment, and we shall operate our facilities in an environmentally sensitive and responsible manner. Our commitment to environmental protection and stewardship will be achieved by:

- Complying with the requirements and spirit of applicable environmental. laws and striving to exceed required levels of compliance wherever feasible
- Ensuring that our employees are trained to acquire the necessary skills to meet environmental standards.
- Conserving natural resources by improving efficiency and reducing. wastage
- Making business decisions that aim towards sustainable development.
- Engaging with stakeholders to create awareness on sustainability.

## Date: 15<sup>th</sup> June, 2018

# (Praveer Sinha) CEO & Managing Director

# TATA POWER Lighting up Lives!